SCANNED

Columbia County New Building Permit Application

For Office Use Only Application # 43789 Date Received 10/11/19 By LH Permit # 38922

Zoning Official LW/LH Date 10-15-19 Flood Zone X Land Use Ag Zoning A-3

FEMA Map # _____ Elevation _____ MFE _____ River _____ Plans Examiner _____ Date _____

Comments _____

☑ NOC ☑ EH ☐ Deed or PA ☑ Site Plan ☐ State Road Info ☑ Well letter ☑ 911 Sheet ☐ Parent Parcel # _____

☐ Dev Permit # _____ ☐ In Floodway ☐ Letter of Auth. from Contractor ☐ F W Comp. letter

☐ Owner Builder Disclosure Statement ☐ Land Owner Affidavit ☐ Ellisville Water ☑ App Fee Paid ☑ Sub VF Form

Septic Permit No. 19-8828 OR City Water ☐ Fax _____

Applicant (Who will sign/pickup the permit) Mark Ganskop or Kevin Bedenbaugh Phone 386-867-0269 or 386-365-5264

Address 657 NW Savannah Circle Lake City, FL 32055

Owners Name Mark Ganskop & Lauren Ganskop Phone 386-867-0269

911 Address 736 SW Arbor Ln Lake City, FL 32024

Contractors Name Plumb Level Construction Phone 386-365-5264

Address 232 NW Chadley Lane, Lake City, FL 32055

Contractor Email plumblevelconstruction@gmail.com ***Include to get updates on this job.

Fee Simple Owner Name & Address _____

Bonding Co. Name & Address _____

Architect/Engineer Name & Address _____

Mortgage Lenders Name & Address N/A

Circle the correct power company ☑ FL Power & Light ☐ Clay Elec. ☐ Suwannee Valley Elec. ☐ Duke Energy

Property ID Number 31-3S-16-02417-000 Estimated Construction Cost $350,000.00

Subdivision Name N/A Lot ____ Block ____ Unit ____ Phase ____

Driving Directions from a Major Road US HWY W to Thomas Terrace, 1st right on to Arbor Lane 3/4 of a mile on left.

Construction of New home ☐ Commercial OR ☑ Residential

Proposed Use/Occupancy Residence Number of Existing Dwellings on Property 0

Is the Building Fire Sprinkled? No If Yes, blueprints included ____ Or Explain ____

Circle Proposed ☐ Culvert Permit or ☐ Culvert Waiver or ☐ D.O.T. Permit or ☑ Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 1,000 ft Side (W) 220 ft Side (E) 910 ft Rear 4,100 ft

Number of Stories 1 Heated Floor Area 4437 S.F. Total Floor Area 6428 S.F. Acreage 1.165

Zoning Applications applied for (Site & Development Plan, Special Exception, etc.) _____

Columbia County Building Permit Application

CODE: Florida Building Code 2017 and the 2014 National Electrical Code.

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

TIME LIMITATIONS 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 pursued in good faith or a permit has been issued.

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

OWNERS CERTIFICATION: I CERTIFY THAT ALL THE FOREGOING INFORMATION IS ACCURATE AND THAT ALL WORK WILL BE DONE IN COMPLIANCE WITH ALL APPLICABLE LAWS REGULATING CONSTRUCTION AND ZONING.

NOTICE TO OWNER: There are some properties that may have deed restrictions recorded upon them. These restrictions may limit or prohibit the work applied for in your building permit. You must verify if your property is encumbered by any restrictions or face possible litigation and or fines.

Mark Ganskop
Print Owners Name

Owners Signature

****Property owners must sign here before any permit will be issued.**

****If this is an Owner Builder Permit Application then, ONLY the owner can sign the building permit when it is issued.**

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

Contractor's License Number CGC1516042
Columbia County Competency Card Number 377

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 11 **day of** Oct **20** 19.

Personally known Y **or Produced Identification** _____

State of Florida Notary Signature (For the Contractor)

SEAL:

LAURIE HODSON
MY COMMISSION # FF 976102
EXPIRES: July 14, 2020
Bonded Thru Notary Public Underwriters

SUBCONTRACTOR VERIFICATION

APPLICATION/PERMIT # _____ JOB NAME _____

THIS FORM MUST BE SUBMITTED BEFORE A PERMIT WILL BE ISSUED

Columbia County issues combination permits. One permit will cover all trades doing work at the permitted site. It is REQUIRED that we have records of the subcontractors who actually did the trade specific work under the general contractors permit.

NOTE: *It shall be the responsibility of the general contractor to make sure that all of the subcontractors are licensed with the Columbia County Building Department.*
Use website to confirm licenses: http://www.columbiacountyfla.com/PermitSearch/ContractorSearch.aspx

NOTE: If this should change prior to completion of the project, it is your responsibility to have a corrected form submitted to our office, before that work has begun.

Violations will result in stop work orders and/or fines.

			Need
ELECTRICAL ☐ CC# 811	Print Name Ryan Beville	Signature Ryan Beville 352-339-0369	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: RBI ELECTRICAL CONTRACTING		
	License #: EC13004236	Phone #: 352-339-0369	
MECHANICAL/ A/C ☐ CC# 770	Print Name Timothy Shatto	Signature Tim Shatto	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: Shatto Heating & A.C., INC.		
	License #: CAC057875	Phone #: 386-496-8224	
PLUMBING/ GAS ☐ CC# 623	Print Name Mark Ganskop	Signature MG	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: Express Plumbing, Inc.		
	License #: CFC1428040	Phone #: 386-867-0269	
ROOFING ☐ CC# 1056	Print Name KEVIN BEDENBAUGH	Signature KB	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: Plumb Level Construction		
	License #: CCC1329482	Phone #: 386-365-5264	
SHEET METAL ☐ CC# _____	Print Name _____	Signature _____	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: _____		
	License #: _____	Phone #: _____	
FIRE SYSTEM/ SPRINKLER ☐ CC# _____	Print Name _____	Signature _____	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: _____		
	License#: _____	Phone #: _____	
SOLAR ☐ CC# _____	Print Name _____	Signature _____	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: _____		
	License #: _____	Phone #: _____	
STATE SPECIALTY ☐ CC# _____	Print Name _____	Signature _____	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: _____		
	License #: _____	Phone #: _____	

Ref: F.S. 440.103; ORD. 2016-30

Inst. Number: 201912001435 Book: 1376 Page: 1513 Page 1 of 2 Date: 1/16/2019 Time: 4:01 PM
P.DeWitt Cason Clerk of Courts, Columbia County, Florida Doc Deed: 4,419.10 Doc Mort: 0.00 Int Tax: 0.00

Prepared by and return to:
Brent E. Baris
For the Firm
Brent E. Baris, P.A.
18731 NW US Highway
High Springs, FL 32643
386-454-0688
File Number: **18-222**

Portion of Parcel Identification Nos. **31-3S-16-02417-000**
06-4S-16-02784-000
31-3S-16-02416-000

[Space Above This Line For Recording Data]

Warranty Deed

(STATUTORY FORM - SECTION 689.02, F.S.)

This Indenture made this **14th** day of **January, 2019** between **Darryl Duffe', a single man, individually and as Trustee of the Faye R. Kirkland Living Trust dated Oct. 30, 1987** whose post office address is **3537 Amethyst Court, Deland, FL 32724** of the County of **Volusia**, State of **Florida**, grantor*, and **Mark Ganskop and Lauren L. Ganskop, husband and wife** whose post office address is **PO Box 1993, Lake City, FL 32056** of the County of **Columbia**, State of **Florida**, grantee*,

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Columbia County, Florida**, to-wit:

COMMENCE at the Southwest corner of Section 31, Township 3 South, Range 16 East, Columbia County, Florida, being also the Northwest corner of Section 6, Township 4 South, Range 16 East, Columbia County, Florida and run thence South 00°39'29" West along the West line of the North 1/2 of the Northwest 1/4 of Section 6 a distance of 1325.31 feet to the Southwest corner of said North 1/2 of the Northwest 1/4 of Section 6; thence South 89°48'19" East along the South line of said North 1/2 of the Northwest 1/4 of Section 6 a distance of 1871.16 feet to the POINT OF BEGINNING; thence North 06°03'45" West a distance of 3516.69 feet; thence North 03°17'16" East a distance of 1750.28 feet to a point on the Southerly maintained Right-of-Way line of SW Arbor Lane; thence South 88°10'56" East along said Southerly maintained Right-of-Way line of SW Arbor Lane a distance of 1376.79 feet; thence South 04°55'32" West a distance of 1655.64 feet; thence South 04°52'08" West a distance of 1419.13 feet; thence South 04°57'34" West a distance of 429.90 feet; thence South 00°12'01" West a distance of 383.91 feet to the Northeast corner of the North 1/2 of the Northwest 1/4 of Section 6, Township 4 South, Range 16 East, Columbia County, Florida; thence South 00°09'46" West along the East line of said North 1/2 of the Northwest 1/4 of Section 6 a distance of 1327.73 feet to the Southeast corner of said North 1/2 of the Northwest 1/4 of Section 6; thence North 89°48'19" West along the South line of said North 1/2 of the Northwest 1/4 of Section 6 a distance of 800.19 feet to the POINT OF BEGINNING.

Subject to taxes for 2019 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of record, if any.

and said grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

* "Grantor" and "Grantee" are used for singular or plural, as context requires.

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

Signed, sealed and delivered in our presence:

Witness Name: Brent Baris

Witness Name: Toby R Davis Jr

Witness Name: Brent Baris

Witness Name: Toby R Davis Jr

Darryl Duffe', Trustee of the Faye R. Kirkland Living Trust dated Oct. 30, 1987

Darryl Duffe'

State of Florida
County of Alachua

The foregoing instrument was acknowledged before me this 14th day of January, 2019 by Darryl Duffe', individually and as Trustee of the Faye R. Kirkland Living Trust dated Oct. 30, 1987 who [ ] is personally known or [x] has produced a driver's license as identification.

[Notary Seal]

BRENT EDWARD BARIS
MY COMMISSION # GG 127380
EXPIRES: August 3, 2021
Bonded Thru Notary Public Underwriters

Notary Public

Printed Name: Brent Baris

My Commission Expires: 8/3/21

Columbia County Property Appraiser

Jeff Hampton

2019 Preliminary Certified Values

updated 8/14/2019

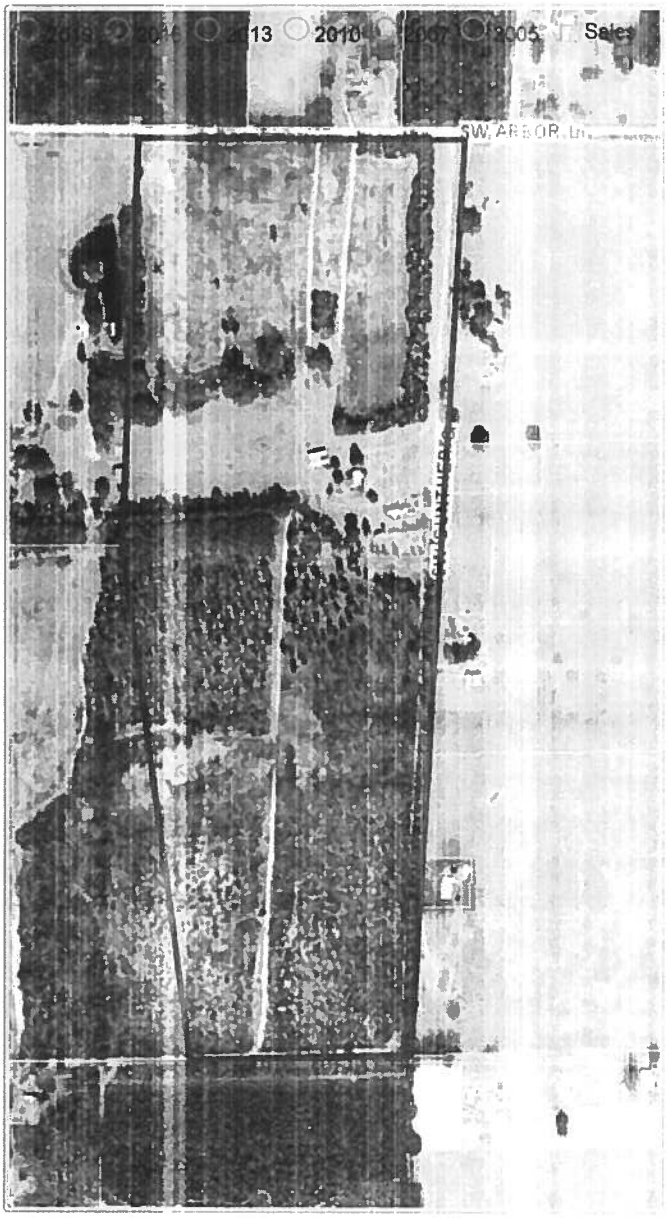
Parcel: << **31-3S-16-02417-000** >>

Owner & Property Info

Owner	**GANSKOP MARK &** LAUREN L GANSKOP P O BOX 1993 LAKE CITY, FL 32056		
Site	379 LACROSSE CT, LAKE CITY		
Description*	THAT PORTION OF THE FOLLOWING DESC PROP LYING IN SEC 31: COMM AT SW COR OF SEC, RUN S 1325.31 FT, E 1871.16FT TO POB N 6 DEG W 3516.69 FT, N 3DEG E 1750.28 FT, E 1376.79 FT, S 4 DEG W 1655.64 FT, S 4 DEG W 1419.13 FT, S 4 DEG W 429.9 FT S 383.91 FT, S 1327 ...more>>>		
Area	111.62 AC	S/T/R	31-3S-16
Use Code**	IMPROVED A (005000)	Tax District	3

*The Description above is not to be used as the Legal Description for this parcel in any legal transaction.
**The Use Code is a FL Dept. of Revenue (DOR) code and is not maintained by the Property Appraiser's office. Please contact your city or county Planning & Zoning office for specific zoning information.

Aerial Viewer | Pictometery | Google Maps



Property & Assessment Values

2018 Certified Values		2019 Preliminary Certified	
Mkt Land (8)	$136,106	Mkt Land (8)	$138,571
Ag Land (2)	$15,414	Ag Land (2)	$18,627
Building (3)	$121,381	Building (2)	$137,641
XFOB (4)	$3,130	XFOB (4)	$3,130
Just	$389,139	Just	$401,010
Class	$276,031	Class	$297,969
Appraised	$276,031	Appraised	$297,969
SOH Cap [?]	$0	SOH Cap [?]	$0
Assessed	$276,031	Assessed	$297,969
Exempt	$0	Exempt	$0
Total Taxable	county:$276,031 city:$276,031 other:$276,031 school:$276,031	Total Taxable	county:$297,969 city:$297,969 other:$297,969 school:$297,969

Sales History

Sale Date	Sale Price	Book/Page	Deed	V/I	Quality (Codes)	RCode
1/14/2019	$631,300	1376/1513	WD	I	Q	05 (Multi-Parcel Sale) - show
7/30/2013	$100	1259/1139	QC	I	U	11

Building Characteristics

Bldg Sketch	Bldg Item	Bldg Desc*	Year Blt	Base SF	Actual SF	Bldg Value
Sketch	1	SINGLE FAM (000100)	1952	1224	1939	$59,991
Sketch	2	SINGLE FAM (000100)	1957	1693	2645	$77,650

*Bldg Desc determinations are used by the Property Appraisers office solely for the purpose of determining a property's Just Value for ad valorem tax purposes and should not be used for any other purpose.

Extra Features & Out Buildings (Codes)

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
0040	BARN,POLE	0	$1,530.00	1.000	53 x 77 x 0	(000.00)

Legend

SRWMD Wetlands

2018 Flood Zones
- 0.2 PCT ANNUAL CHANCE
- A
- AE
- AH

Parcels

Roads
- Roads
- others
- Dirt
- Interstate
- Main
- Other
- Paved
- Private

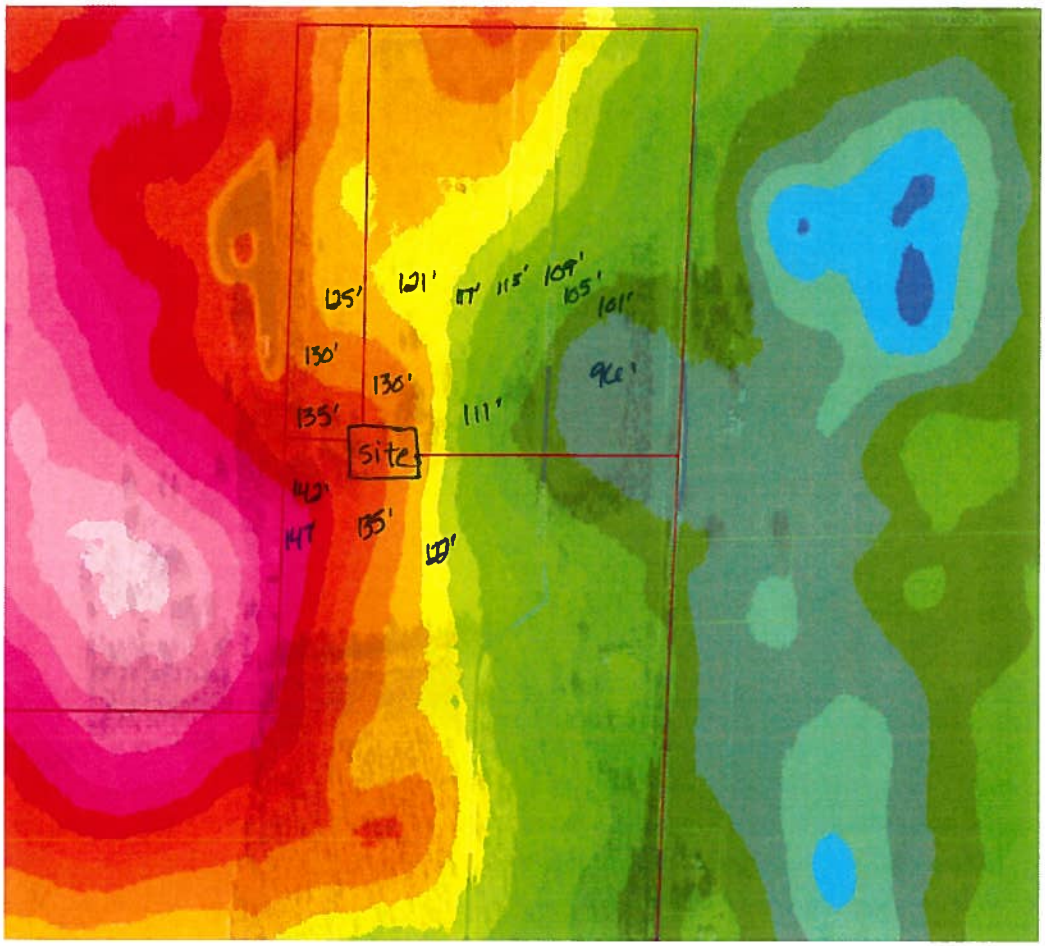
SectionTownshipAndRange

2018Aerials

LidarElevations

Columbia County, FLA - Building & Zoning Property Map

Printed: Tue Oct 15 2019 12:23:52 GMT-0400 (Eastern Daylight Time)



Parcel Information

Parcel No: 31-3S-16-02417-000

Owner: DUFFE' DARRYL SUCCESSOR TRST

Subdivision:

Lot:

Acres: 111.495659

Deed Acres: 111.5 Ac

District: District 2 Rocky Ford

Future Land Uses: Agriculture - 3

Flood Zones:

Official Zoning Atlas: A-3

2:49 PM Fri Sep 27

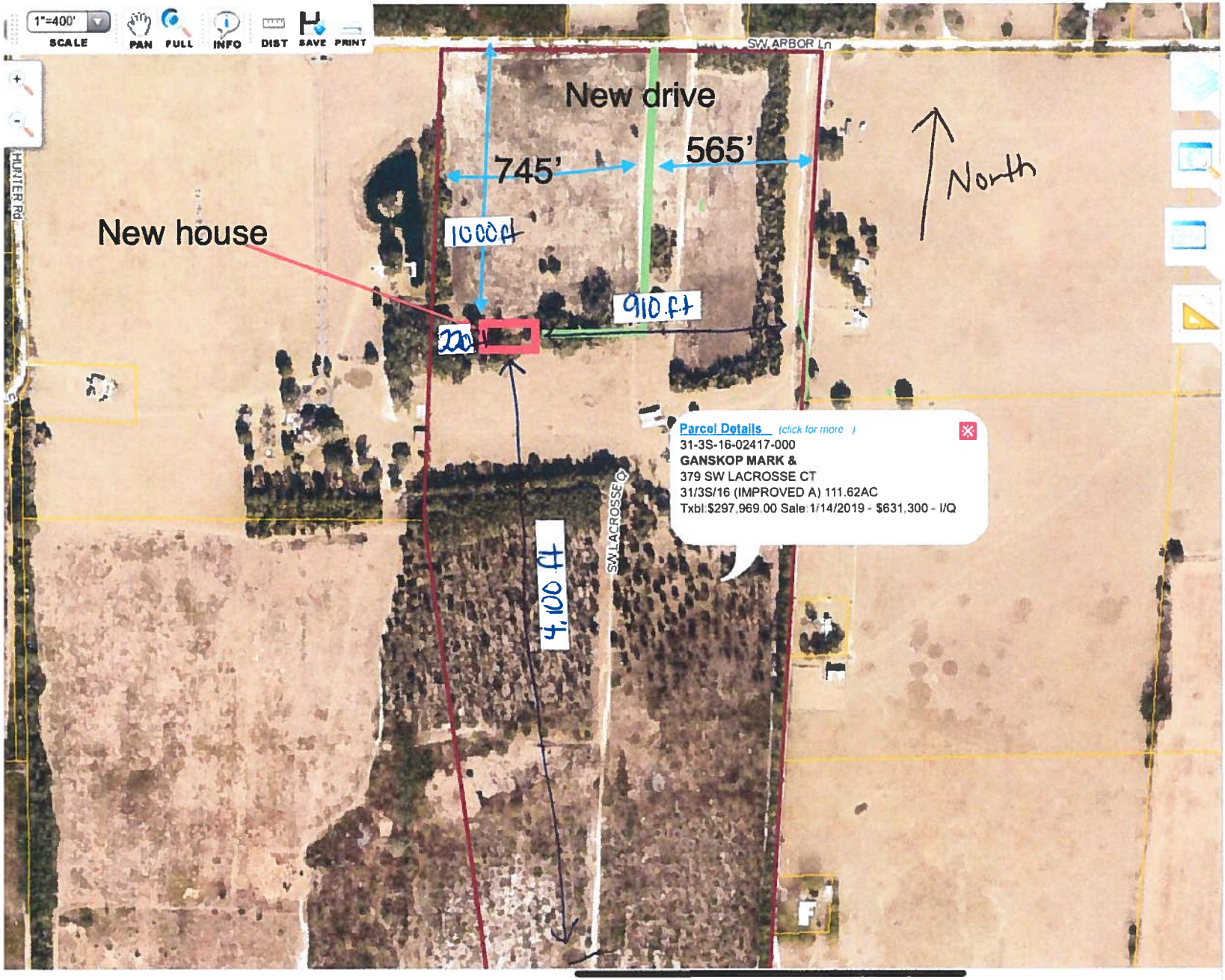
34%

Not Secure — columbia.floridapa.com

HOME

Record Search | Search Results | Parcel Details | GIS Map

1"=400' SCALE | PAN | FULL | INFO | DIST | SAVE | PRINT



Parcel Details

External Map Links

Pictometry 3D Oblique Aerials
GoogleEarth KML export
GoogleMaps by Address Polygon
Bing Maps 2D Aerial Bird's eye

Owner Info

<< zoom 31-3S-16-02417-000 ()

GANSKOP MARK &
LAUREN L GANSKOP
P O BOX 1993
LAKE CITY, FL 32056

Site 379 LACROSSE CT, LAKE CITY
Use IMPROVED A (005000) | 111.62 AC
Desc 31-3S-16 | THAT PORTION OF THE FOLLOWING DESC PROP LYING IN SEC 31; COMM AT SW COR OF SEC,

2019 Preliminary Certified

Mkt Lnd (8)	$138,571	Appraised	$297,969
Ag Lnd (2)	$18,627	Exempt	$0
Bldg (2)	$137,641	Assessed	$297,969
XFOB (4)	$3,130	county:	$297,969
Just	$401,010	Total city:	$297,969
Class	$297,969	Taxable other:	$297,969
		school:	$297,969

Sales

1/14/2019	$631,300	1376/1513	WD	I / Q
7/30/2013	$100	1259/1139	QC	I / U

Building Characteristics

Item	Desc	Year Blt	Heated SF	Actual SF	Value
Sketch 1	SINGLE FAM (000100)	1952	1224	1939	$59,991
Sketch 2	SINGLE FAM (000100)	1957	1693	2645	$77,650

Extra Features & Out Buildings

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
0040	BARN,POLE	0	$1,530.00	1.000	53 x 77 x 0	(000.00)
0294	SHED WOOD/	0	$200.00	1.000	0 x 0 x 0	(000.00)
0190	FPLC PF	0	$1,200.00	1.000	0 x 0 x 0	(000.00)
0166	CONC PAVMT	2014	$200.00	1.000	0 x 0 x 0	(000.00)

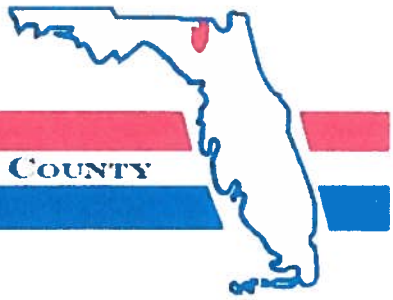
Land Breakdown

Land Code	Desc	Units	Adjustments	Eff Rate	Land Value
000100	SFR (MKT)	1.000 AC	1.00/1.00 1.00/1.00	$2,203	$2,203
000100	SFR (MKT)	1.000 AC	1.00/1.00 1.00/1.00	$2,203	$2,203
000200	MBL HM	0.500	1.00/1.00	$2,203	$1,101

1 of 0

District No. 1 - Ronald Williams
District No. 2 - Rocky Ford
District No. 3 - Bucky Nash
District No. 4 - Toby Witt
District No. 5 - Tim Murphy

BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY



Address Assignment and Maintenance Document

To maintain the county wide 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 addressing 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 Services 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/Time Issued:	**10/4/2019 6:37:33 PM**
Address:	**736 SW ARBOR Ln**
City:	**LAKE CITY**
State:	**FL**
Zip Code	**32024**
Parcel ID	**02417-000**

REMARKS: Address for proposed structure on parcel.

NOTICE: THIS ADDRESS WAS ISSUED BASED ON LOCATION AND ACCESS INFORMATION RECEIVED FROM THE REQUESTER. SHOULD, AT A LATER DATE, THE LOCATION AND/OR ACCESS INFORMATION BE FOUND TO BE IN ERROR OR CHANGED, THIS ADDRESS IS SUBJECT TO CHANGE.

Address Issued By: **Signed:/ Matt Crews**

Columbia County GIS/911 Addressing Coordinator

COLUMBIA COUNTY
911 ADDRESSING / GIS DEPARTMENT
263 NW Lake City Ave., Lake City, FL 32055 Telephone: (386) 758-1125
Email: gis@columbiacountyfla.com

NOTICE OF COMMENCEMENT

Clerk's Office Stamp

Inst: 201912023505 Date: 10/10/2019 Time: 1:46PM
Page 1 of 1 B: 1396 P: 513, P.DeWitt Cason, Clerk of Court Colum County, By: KV
Deputy Clerk

Tax Parcel Identification Number:

31-3S-16-02417-000

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

1. Description of property *(legal description)*: _____
   a) Street *(job)* Address: 736 SW Arbor Ln Lake City, FL 32024
2. General description of improvements: New construction house
3. Owner Information or Lessee information if the Lessee contracted for the improvements:
   a) Name and address: Mark Ganskop 736 SW Arbor Ln Lake City, FL 32024
   b) Name and address of fee simple titleholder (if other than owner) _____
   c) Interest in property Owner
4. Contractor Information
   a) Name and address: Plumb Level Construction 232 NW Chadley Ln Lake City, FL 32055
   b) Telephone No.: 386-365-5264
5. Surety Information (if applicable, a copy of the payment bond is attached):
   a) Name and address: N/A
   b) Amount of Bond: _____
   c) Telephone No.: _____
6. Lender
   a) Name and address: N/A
   b) Phone No. _____
7. Person within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7., Florida Statutes:
   a) Name and address: _____
   b) Telephone No.: _____
8. In addition to himself or herself, Owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(l)(b), Florida Statutes:
   a) Name: _____ OF _____
   b) Telephone No.: _____
9. Expiration date of Notice of Commencement **(the expiration date will be 1 year from the date of recording unless a different date is specified)**: _____

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

STATE OF FLORIDA
COUNTY OF COLUMBIA

10. _____
Signature of Owner or Lessee, or Owner's or Lessee's Authorized Office/Director/Partner/Manager

Mark Ganskop - owner
Printed Name and Signatory's Title/Office

The foregoing instrument was acknowledged before me, a Florida Notary, this 9th day of October, 20 19, by:

Mark Ganskop (Name of Person) as owner (Type of Authority) for Mark Ganskop (name of party on behalf of whom instrument was executed).

Personally Known ✓ OR Produced Identification _____ Type _____

Notary Signature: Sherri Lee

Notary Stamp or Seal:

Notary Public State of Florida
Sherri Lee
My Commission GG 191633
Expires 03/01/2022

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

PERMIT NO. 19-8818
DATE PAID: 11/13/19
FEE PAID: 510.00
RECEIPT #: 1452858

APPLICATION FOR:
[X] New System [ ] Existing System [ ] Holding Tank [ ] Innovative
[ ] Repair [ ] Abandonment [ ] Temporary [ ] _____

APPLICANT: Mark Ganskop

AGENT: ROCKY FORD, A & B CONSTRUCTION TELEPHONE: 386-497-2311

MAILING ADDRESS: 546 SW Dortch Street, FT. WHITE, FL, 32038

TO BE COMPLETED BY APPLICANT OR APPLICANT'S AUTHORIZED AGENT. SYSTEMS MUST BE CONSTRUCTED BY A PERSON LICENSED PURSUANT TO 489.105(3)(m) OR 489.552, FLORIDA STATUTES. IT IS THE APPLICANT'S RESPONSIBILITY TO PROVIDE DOCUMENTATION OF THE DATE THE LOT WAS CREATED OR PLATTED (MM/DD/YY) IF REQUESTING CONSIDERATION OF STATUTORY GRANDFATHER PROVISIONS.

PROPERTY INFORMATION

LOT: NA BLOCK: NA SUB: NA PLATTED: _____

PROPERTY ID #: 31-3S-16-02417-000 ZONING: / I/M OR EQUIVALENT: [Y / (N)]

PROPERTY SIZE: 111.62 ACRES WATER SUPPLY: [X] PRIVATE PUBLIC [ ]<=2000GPD [ ]>2000GPD

IS SEWER AVAILABLE AS PER 381.0065, FS? [Y / (N)] DISTANCE TO SEWER: NA FT

PROPERTY ADDRESS: 736 SW Arbor Lane, Lake CIty, Fl

DIRECTIONS TO PROPERTY: Head W on NE Franklin St. toward NE Calhoun Ave, TL onto NW main Blvd, TR onto US-90 W, TL onto SW Thomas Rd, TR onto SW Arbor Ln.

BUILDING INFORMATION [X] RESIDENTIAL [ ] COMMERCIAL

Unit No	Type of Establishment	No. of Bedrooms	Building Area Sqft	Commercial/Institutional System Design Table 1, Chapter 64E-6, FAC
1	SF Residential	4	4437	
2				
3				

[ ] Floor/Equipment Drains [ ] Other (Specify) _____

SIGNATURE: Rocky D Ford DATE: 11/7/2019

DH 4015, 08/09 (Obsoletes previous editions which may not be used)
Incorporated 64E-6.001, FAC

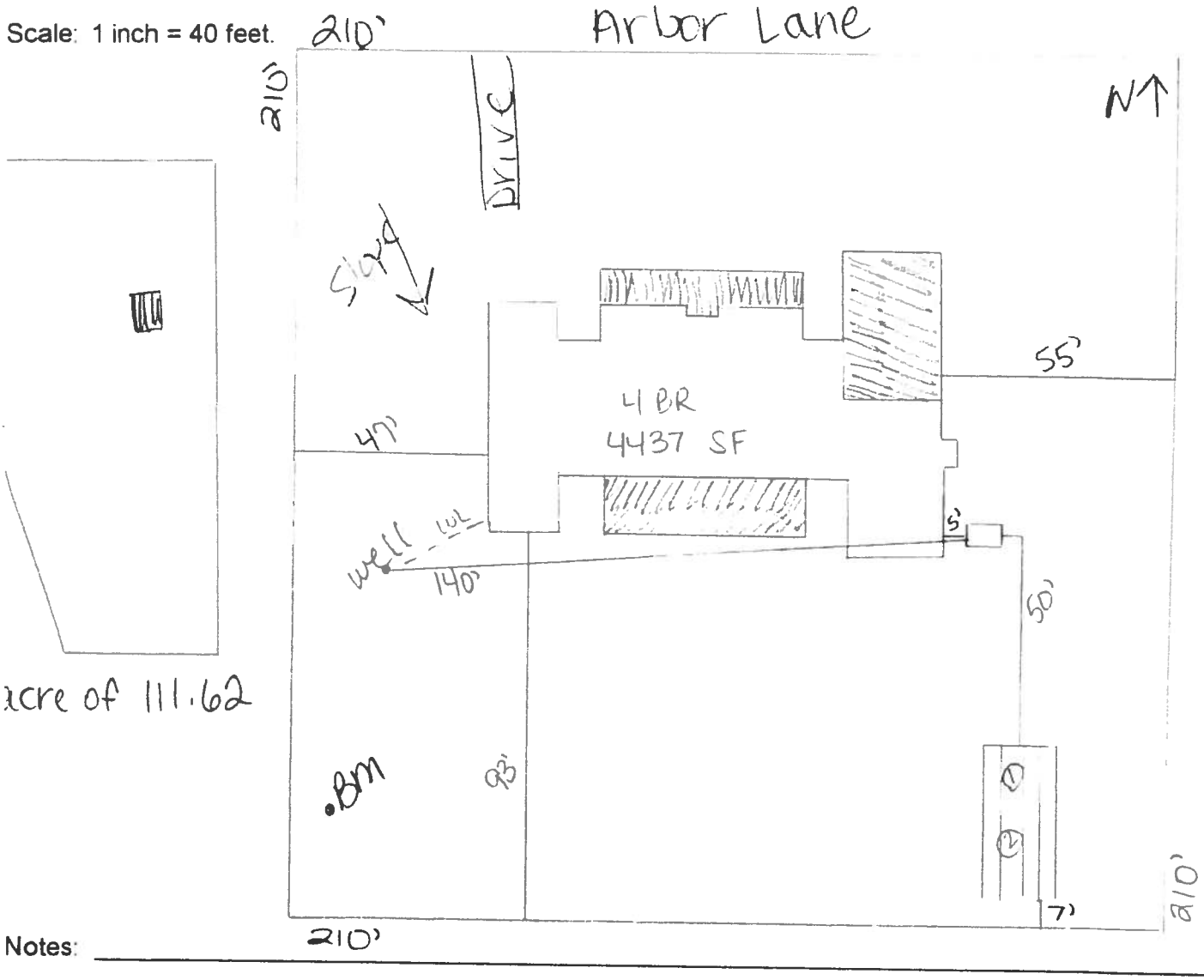
STATE OF FLORIDA
DEPARTMENT OF HEALTH
APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 19-8828

Ganskop

PART II - SITEPLAN

Scale: 1 inch = 40 feet.



Notes: 1 acre of 111.62

Site Plan submitted by: Rocky D 7 D

Plan Approved P Not Approved ____

By Columbia 11/18/19 County Health Department

MASTER CONTRACTOR

Date 11-7-19

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST

MINIMUM PLAN REQUIREMENTS: FLORIDA BUILDING CODE RESIDENTIAL 2017 EFFECTIVE 1 JANUARY 2018 AND THE NATIONAL ELECTRICAL 2014 EFFECTIVE 1 JANUARY 2018

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

ALL BUILDING PLANS MUST INDICATE COMPLIANCE WITH THE CURRENT FLORIDA BUILDING CODES RESIDENTIAL AND THE NATIONAL ELECTRICAL CODE. 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, FBC 1609.3.1 THRU 1609.3.3.

FOR DESIGN PURPOSES THE FOLLOWING BASIC WIND SPEEDS ARE PER FLORIDA BUILDING CODE FIGURE 1609-A THROUGH 1609-C ULTIMATE DESIGN WIND SPEEDS FOR RISK CATEGORY AND BUILDINGS AND OTHER STRUCTURES
Revised 7/1/18

Website: http://www.columbiacountyfla.com/BuildingandZoning.asp

GENERAL REQUIREMENTS:
APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL

Items to Include- Each Box shall be Circled as Applicable
Select From Drop down

1	Two (2) complete sets of plans containing the following:				
2	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void				
3	**Condition space (Sq. Ft.)** 4437 sq ft	**Total (Sq. Ft.) under roof** 6428 sq ft	Yes	No	NA

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 107.1.

Site Plan information including:

4	Dimensions of lot or parcel of land	136 acres		
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.	-		
7	Provide a full legal description of property.	-		

Wind-load Engineering Summary, calculations and any details are required.

GENERAL REQUIREMENTS:
APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL

Items to Include- Each Box shall be Circled as Applicable

		Yes	No	NA
8	**Plans or specifications must show compliance with FBCR Chapter 3**			

Select From Drop down

9	Basic wind speed (3-second gust), miles per hour	- ✓		
10	(Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated)	- ✓		
11	Wind importance factor and nature of occupancy	- ✓		
12	The applicable internal pressure coefficient, Components and Cladding	- ✓		
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.	- ✓		

Elevations Drawing including:

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

Floor Plan Including:

21	Dimensioned area plan showing rooms, attached garage, breeze ways, covered porches, deck, balconies	- ✓		
22	Raised floor surfaces located more than 30 inches above the floor or grade	-		✓
23	All exterior and interior shear walls indicated	- ✓		
24	Shear wall opening shown (Windows, Doors and Garage doors)	- ✓		
25	Show compliance with Section FBCR 310 Emergency escape and rescue opening shown in each bedroom (net clear opening shown) and Show compliance with Section FBC 1405.13.2 where the opening of an operable window is located more than 72 inches above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches above the finished floor of the room in which the window is located. Glazing between the floor and 24 inches shall be fixed or have openings through which a 4-inch-diameter sphere cannot pass.	- ✓		
26	Safety glazing of glass where needed	-		✓
27	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 and chapter 24 of FBCR)	-		✓
28	Show stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails	-		✓
29	Identify accessibility of bathroom (see FBCR SECTION 320)	- ✓		

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 plans
(see Florida product approval form)

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable

FBCR 403: Foundation Plans

Select From Drop down

30	Location of all load-bearing walls footings indicated as standard, monolithic, dimensions, size and type of reinforcing.	- ✓		
31	All posts and/or column footing including size and reinforcing	- ✓		
32	Any special support required by soil analysis such as piling.	- ✓		
33	Assumed load-bearing valve of soil 2000 Pound Per Square Foot	- ✓		
34	Location of horizontal and vertical steel, for foundation or walls (include # size and type) For structures with foundation which establish new electrical utility companies service connection a Concrete Encased Electrode will be required within the foundation to serve as an grounding electrode system. Per the National Electrical Code article 250.52.3	- ✓		

FBCR 506: CONCRETE SLAB ON GRADE

35	Show Vapor retarder (6mil. Polyethylene with joints lapped 6 inches and sealed)	- ✓		
36	Show control joints, synthetic fiber reinforcement or welded fire fabric reinforcement and Supports	- ✓		

FBCR 318: PROTECTION AGAINST TERMITES

37	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)

38	Show all materials making up walls, wall height, and Block size, mortar type	- ✓		
39	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

40	Floor truss package shall including layout and details, signed and sealed by Florida Registered Professional Engineer	-		
41	Show conventional floor joist type, size, span, spacing and attachment to load bearing walls, stem walls and/or priers	-		
42	Girder type, size and spacing to load bearing walls, stem wall and/or priers	-		
43	Attachment of joist to girder	-		
44	Wind load requirements where applicable	-		
45	Show required under-floor crawl space	-		
46	Show required amount of ventilation opening for under-floor spaces	-		
47	Show required covering of ventilation opening	-		
48	Show the required access opening to access to under-floor spaces	-		
49	Show the sub-floor structural panel sheathing type, thickness and fastener schedule on the edges & intermediate of the areas structural panel sheathing	-		
50	Show Draftstopping, Fire caulking and Fire blocking	-		
51	Show fireproofing requirements for garages attached to living spaces, per FBCR section 302.6	-		
52	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
		Select from Drop down
53	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls	- ✓
54	Fastener schedule for structural members per table FBC-R602.3.2 are to be shown	- ✓
55	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	- ✓
56	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	- ✓
57	Show sizes, type, span lengths and required number of support jack studs, king studs for shear wall opening and girder or header per FBC-R602.7.	- ✓
58	Indicate where pressure treated wood will be placed	- ✓
59	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	- ✓
60	A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail	- ✓

FBCR :ROOF SYSTEMS:

61	Truss design drawing shall meet section FBC-R 802.10. 1 Wood trusses	- ✓		
62	Include a layout and truss details, signed and sealed by Florida Professional Engineer	- ✓		
63	Show types of connector's assemblies' and resistance uplift rating for all trusses and rafters	- ✓		
64	Show gable ends with rake beams showing reinforcement or gable truss and wall bracing details	- ✓		
65	Provide dead load rating of trusses	- ✓		

FBCR 802:Conventional Roof Framing Layout

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

FBCR 803 ROOF SHEATHING

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

ROOF ASSEMBLIES FRC Chapter 9

72	Include all materials which will make up the roof assembles covering	-	✓		
73	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,** *N1100.1.1.1 As an alternative to the computerized Compliance Method A, the Alternate Residential Point System Method hand calculation, Alternate Form 600A, may be used. All requirements specific to this calculation are located in Sub appendix C to Appendix G. Buildings complying by this alternative shall meet all mandatory requirements of this chapter. Computerized versions of the Alternate Residential Point System Method shall not be acceptable for code compliance.*

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable			
					Select from Drop Down
74	Show the insulation R value for the following areas of the structure	-	✓		
75	Attic space	-	✓		
76	Exterior wall cavity	-	✓		
77	Crawl space	-			✓

HVAC information

78	Submit two copies of a Manual J sizing equipment or equivalent computation study	-	✓		
79	Exhaust fans shown in bathrooms **Mechanical exhaust capacity of 50 cfm intermittent or 20 cfm continuous required**	-	✓		
80	Show clothes dryer route and total run of exhaust duct	-	✓		

Plumbing Fixture layout shown

81	All fixtures waste water lines shall be shown on the foundation plan	-	✓		
82	Show the location of water heater	-	✓		

Private Potable Water

83	Pump motor horse power	-			✓
84	Reservoir pressure tank gallon capacity	-			✓
85	Rating of cycle stop valve if used	-			✓

Electrical layout shown including

86	Show Switches, receptacles outlets, lighting fixtures and Ceiling fans	-	✓		
87	Show all 120-volt, single phase, 15- and 20-ampere branch circuits outlets required to be protected by **Ground-Fault Circuit Interrupter (GFCI) Article 210.8 A**	-	✓		
88	Show the location of smoke detectors & Carbon monoxide detectors	-	✓		
89	Show service panel, sub-panel, location(s) and total ampere ratings	-	✓		
90	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. **For structures** with foundation which establish new electrical utility companies service connection a Concrete Encased Electrode will be required within the foundation to serve as an Grounding electrode system. Per the National Electrical Code article 250.52.3	-	✓		
91	Appliances and HVAC equipment and disconnects	-	✓		
92	Show all 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas shall be protected by a listed **Combination arc-fault circuit interrupter,** Protection device.	-	✓		

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 performed.

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable

****ITEMS 95, 96, & 98 Are Required After APPROVAL from the ZONING DEPT.**** *Select from Drop down*

93	**Building Permit Application** A current Building Permit Application is to be completed, by following the Checklist all supporting documents must be submitted. There is a **$15.00** application fee. The completed application with attached documents and application fee can be mailed.	- ✓		
94	**Parcel Number** The parcel number (Tax ID number) from the Property Appraisers Office (386) 758-1083 is required. A copy of property deed is also required. www.columbiacountyfla.com	- ✓		
95	**Environmental Health Permit or Sewer Tap Approval** A copy of a approved Columbia County Environmental Health (386) 758-1058	- ✓		
96	**City of Lake City** A City Water and/or Sewer letter. Call 386-752-2031	-		✓
97	**Toilet facilities shall be provided for all construction sites**	- ✓		
98	**Town of Fort White** (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.	-		✓
99	**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 (Municode.com)	-		✓
100	**CERTIFIED FINISHED FLOOR ELEVATIONS** will be required on any project where the approved FIRM Flood Maps show the property is in a AE, Floodway, and AH flood zones. Additionally One Foot Rise letters are required for AE and AH zones. In the Floodway Flood zones a Zero Rise letter is required.	-		✓
101	A Flood development permit is also required for AE, Floodway & AH. Development permit cost is **$50.00**	-		✓
102	**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. County Public Works Dept. determines the size and length of every culvert before instillation and completes a final inspection before permanent power is granted. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver (**$50.00**) Separate Check when issued. If the project is to be located on an F.D.O.T. maintained road, then an F.D.O.T. access permit is required.	- ✓		
103	**911 Address:** An application for a 911address must be applied for and **received** through the Columbia County Emergency Management Office of 911 Addressing Department (386) 758-1125.	- ✓		

Ordinance Sec. 90-75. - Construction debris. (e) It shall be unlawful for any person to dispose of or discard solid waste, including construction or demolition debris at any place within the county other than on an authorized disposal site or at the county's solid waste facilities. The temporary storage, not to exceed seven days of solid waste (excluding construction and demolition debris) on the premises where generated or vegetative trash pending disposition as authorized by law or ordinance, shall not be deemed a violation of this section. The temporary storage of construction and demolition debris on the premises where generated or vegetative trash pending disposition as authorized by law or ordinance shall not be deemed in violation of this section; provided, however, such construction and demolition debris must be disposed of in accordance with this article prior to the county's issuance of a certificate of occupancy for the premises. The burning of lumber from a construction or demolition project or vegetative trash when done so with legal and proper permits from the authorized agencies and in accordance with such agencies' rules and regulations, shall not be deemed a violation of this section. No person shall bury, throw, place, or deposit, or cause to be buried, thrown, placed, or deposited, any solid waste, special waste, or debris of any kind into or on any of the public streets, road right-of-way, highways, bridges, alleys, lanes, thoroughfares, waters, canals, or vacant lots or lands within the county. No person shall bury any vegetative trash on any of the public streets, road right-of-way, highways, bridges, lanes, thoroughfares, waters, canals, or lots less than ten acres in size within the county.

Disclosure Statement for Owner Builders:

If you as the Applicant will be acting as your own contractor or owner/builder under section 489.103(7) Florida Statutes, you must submit the required notarized Owner Builder Disclosure Statement form.

****This form can be printed from the Columbia County Website on the Building and Zoning page under Documents. Web address is - http://www.columbiacountyfla.com/BuildingandZoning.asp**

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 or unless 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 of 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 null 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.

Notification:

When the application is approved for permitting the applicant will be notified by phone as to the status by the Columbia County Building & Zoning Department.

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and approval numbers on the building components listed below if they will be utilized on the construction project for which you are applying for a building permit. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. Statewide approved products are listed online @ www.floridabuilding.org

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
1. EXTERIOR DOORS			
A. SWINGING	MASONITE	INSWING & Outswing, Fiberglass	FL 8228-R7
B. SLIDING			
C. SECTIONAL/ROLL UP			
D. OTHER			
2. WINDOWS			
A. SINGLE/DOUBLE HUNG	MAGNOLIA	Vinyl 400 Single Hung	FL 16475-R5
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING	ALLURA or Nyseen	Cement Board Lap Siding	FL 17682-R2
B. SOFFITS	Kaycan	Vinyl / PVC & Aluminum Soffit	FL 16503
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES	CERTAINTEED	Asphalt Shingles	FL-5444
B. NON-STRUCTURAL METAL			
C. ROOFING TILE			
D. SINGLE PLY ROOF			
E. OTHER			
5. STRUCTURAL COMPONENTS			
A. WOOD CONNECTORS	Simpson	LSTA / MSTA / SPH4	FL 13872 R2
B. WOOD ANCHORS			
C. TRUSS PLATES			
D. INSULATION FORMS			
E. LINTELS			
F. OTHERS			
6. NEW EXTERIOR ENVELOPE PRODUCTS			

The products listed below did not demonstrate product approval at plan review. I understand that at the time of inspection of these products the following information must be available to the inspector on the jobsite, 1) copy of the product approval, 2) performance characteristics with the product was tested and certified to comply with, 3) copy of the applicable manufacturers installation requirements.

Further, I understand these products may have to be removed if approval can not be demonstrated during inspection.

Contractor OR Agent Signature _____ Date _____ NOTES: _____

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 95

The lower the Energy Performance Index, the more efficient the home.

1. New home or, addition	1. New (From Plans)
2. Single-family or multiple-family	2. Single-family
3. No. of units (if multiple-family)	3. 1
4. Number of bedrooms	4. 5
5. Is this a worst case? (yes/no)	5. No
6. Conditioned floor area (sq. ft.)	6. 4354
7. Windows, type and area	
a) U-factor:(weighted average)	7a. 0.300
b) Solar Heat Gain Coefficient (SHGC)	7b. 0.200
c) Area	7c. 766.8
8. Skylights	
a) U-factor:(weighted average)	8a. NA
b) Solar Heat Gain Coefficient (SHGC)	8b. NA
9. Floor type, insulation level:	
a) Slab-on-grade (R-value)	9a. 0.0
b) Wood, raised (R-value)	9b.
c) Concrete, raised (R-value)	9c.
10. Wall type and insulation:	
A. Exterior:	
1. Wood frame (Insulation R-value)	10A1. 13.0
2. Masonry (Insulation R-value)	10A2.
B. Adjacent:	
1. Wood frame (Insulation R-value)	10B1. 13.0
2. Masonry (Insulation R-value)	10B2.
11. Ceiling type and insulation level	
a) Under attic	11a. 30.0
b) Single assembly	11b.
c) Knee walls/skylight walls	11c.
d) Radiant barrier installed	11d. No

12. Ducts, location & insulation level	
a) Supply ducts	R 6.0
b) Return ducts	R 6.0
c) AHU location	Attic
13. Cooling system:	Capacity 84.5
a) Split system	SEER 14.0
b) Single package	SEER
c) Ground/water source	SEER/COP
d) Room unit/PTAC	EER
e) Other	
14. Heating system:	Capacity 84.5
a) Split system heat pump	HSPF 8.4
b) Single package heat pump	HSPF
c) Electric resistance	COP
d) Gas furnace, natural gas	AFUE
e) Gas furnace, LPG	AFUE
f) Other	
15. Water heating system	
a) Electric resistance	EF 0.95
b) Gas fired, natural gas	EF
c) Gas fired, LPG	EF
d) Solar system with tank	EF
e) Dedicated heat pump with tank	EF
f) Heat recovery unit	HeatRec%
g) Other	
16. HVAC credits claimed (Performance Method)	
a) Ceiling fans	
b) Cross ventilation	No
c) Whole house fan	No
d) Multizone cooling credit	
e) Multizone heating credit	
f) Programmable thermostat	Yes

*Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.

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

Builder Signature: _____ Date: 10-9-19

Address of New Home: 736 SW Arbor Lane City/FL Zip: Lake City, FL 32024

2017 - AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

TABLE 402.4.1.1
AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

				CHECK
Project Name:	Ganskop project	Builder Name:		
Street:		Permit Office:		
City, State, Zip:	Lake City , FL ,	Permit Number:		
Owner:	Ganskop Residence	Jurisdiction:		
Design Location:	FL, Gainesville			

COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA	
General requirements	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material.	
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.	
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of R-3 per inch minimum. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.	
Windows, skylights and doors	The space between window/door jambs and framing, and skylights and framing shall be sealed.		
Rim joists	Rim joists shall include the air barrier.	Rim joists shall be insulated.	
Floors (including above-garage and cantilevered floors)	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.	
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace	
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.		
Narrow cavities		Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity spaces.	
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.		
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the drywall.	Recessed light fixtures installed in the building thermal envelope shall be air tight and IC rated.	
Plumbing and wiring		Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.	
Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.	
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.		
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the sub-floor or drywall.		
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.		

a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.

Florida Building Code, Energy Conservation, 6th Edition (2017)
Mandatory Requirements for Residential Performance, Prescriptive and ERI Methods

ADDRESS:	Permit Number:
Lake City , FL ,	

MANDATORY REQUIREMENTS See individual code sections for full details.

√

SECTION R401 GENERAL

☐ **R401.3 Energy Performance Level (EPL) display card (Mandatory).** The building official shall require that an energy performance level (EPL) display card be completed and certified by the builder to be accurate and correct before final approval of the building for occupancy. Florida law (Section 553.9085, Florida Statutes) requires the EPL display card to be included as an addendum to each sales contract for both presold and nonpresold residential buildings. The EPL display card contains information indicating the energy performance level and efficiencies of components installed in a dwelling unit. The building official shall verify that the EPL display card completed and signed by the builder accurately reflects the plans and specifications submitted to demonstrate code compliance for the building. A copy of the EPL display card can be found in Appendix RD.

☐ **R402.4 Air leakage (Mandatory).** The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections R402.4.1 through R402.4.5.

Exception: Dwelling units of R-2 Occupancies and multiple attached single family dwellings shall be permitted to comply with Section C402.5.

☐ **R402.4.1 Building thermal envelope.** building thermal envelope shall comply with Sections R402.4.1.1 and R402.4.1.2. The sealing methods between dissimilar materials shall allow for differential expansion and contraction.

☐ **R402.4.1.1 Installation.** The components of the building thermal envelope as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.

☐ **R402.4.1.2 Testing.** The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding seven air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7), Florida Statutes, or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

Exception: Testing is not required for additions, alterations, renovations, or repairs, of the building thermal envelope of existing buildings in which the new construction is less than 85 percent of the building thermal envelope.

During testing:
1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, if installed at the time of the test, shall be open.
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.

☐ **R402.4.2 Fireplaces.** New wood-burning fireplaces shall have tight-fitting flue dampers or doors, and outdoor combustion air. Where using tight-fitting doors on factory-built fireplaces listed and labeled in accordance with UL 127, the doors shall be tested and listed for the fireplace. Where using tight-fitting doors on masonry fireplaces, the doors shall be listed and labeled in accordance with UL 907.

☐ **R402.4.3 Fenestration air leakage.** Windows, skylights and sliding glass doors shall have an air infiltration rate of no more than 0.3 cfm per square foot (1.5 L/s/m2), and swinging doors no more than 0.5 cfm per square foot (2.6 L/s/m2), when tested according to NFRC 400 or AAMA/ WDMA/CSA 101/I.S.2/A440 by an accredited, independent laboratory and listed and labeled by the manufacturer.

Exception: Site-built windows, skylights and doors.

MANDATORY REQUIREMENTS - (Continued)

☐ **R402.4.4 Rooms containing fuel-burning appliances.** In Climate Zones 3 through 8, where open combustion air ducts provide combustion air to open combustion fuel burning appliances, the appliances and combustion air opening shall be located outside the building thermal envelope or enclosed in a room, isolated from inside the thermal envelope. Such rooms shall be sealed and insulated in accordance with the envelope requirements of Table R402.1.2, where the walls, floors and ceilings shall meet not less than the basement wall R-value requirement. The door into the room shall be fully gasketed and any water lines and ducts in the room insulated in accordance with Section R403. The combustion air duct shall be insulated where it passes through conditioned space to a minimum of R-8.

Exceptions:

1. Direct vent appliances with both intake and exhaust pipes installed continuous to the outside.
2. Fireplaces and stoves complying with Section R402.4.2 and Section R1006 of the Florida Building Code, Residential.

☐ **R402.4.5 Recessed lighting.** Recessed luminaires installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces. All recessed luminaires shall be IC-rated and labeled as having an air leakage rate not more than 2.0 cfm (0.944 L/s) when tested in accordance with ASTM E283 at a 1.57 psf (75 Pa) pressure differential. All recessed luminaires shall be sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.

SECTION R403 SYSTEMS

R403.1 Controls.

☐ **R403.1.1 Thermostat provision (Mandatory).** At least one thermostat shall be provided for each separate heating and cooling system.

☐ **R403.1.3 Heat pump supplementary heat (Mandatory).** Heat pumps having supplementary electric-resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load.

☐ **R403.3.2 Sealing (Mandatory)** All ducts, air handlers, filter boxes and building cavities that form the primary air containment passageways for air distribution systems shall be considered ducts or plenum chambers, shall be constructed and sealed in accordance with Section C403.2.9.2 of the Commercial Provisions of this code and shall be shown to meet duct tightness criteria below.

Duct tightness shall be verified by testing in accordance with ANSI/RESNET/ICC 380 by either individuals as defined in Section 553.993(5) or (7), Florida Statutes, or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i), Florida Statutes, to be "substantially leak free" in accordance with Section R403.3.3.

☐ **R403.3.2.1 Sealed air handler.** Air handlers shall have a manufacturer's designation for an air leakage of no more than 2 percent of the design airflow rate when tested in accordance with ASHRAE 193.

☐ **R403.3.3 Duct testing (Mandatory).** Ducts shall be pressure tested to determine air leakage by one of the following methods:

1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manu air handler enclosure if installed at the time of the test. All registers shall be taped or otherwise sealed during the test.
2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.

Exceptions:

1. A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.
2. Duct testing is not mandatory for buildings complying by Section 405 of this code.

A written report of the results of the test shall be signed by the party conducting the test and provided to the code official.

☐ **R403.3.5 Building cavities (Mandatory).** Building framing cavities shall not be used as ducts or plenums.

☐ **R403.4 Mechanical system piping insulation (Mandatory).** Mechanical system piping capable of carrying fluids above 105°F (41°C) or below 55°F (13°C) shall be insulated to a minimum of R-3.

☐ **R403.4.1 Protection of piping insulation.** Piping insulation exposed to weather shall be protected from damage, including that caused by sunlight, moisture, equipment maintenance and wind, and shall provide shielding from solar radiation that can cause degradation of the material. Adhesive tape shall not be permitted.

☐ **R403.5.1 Heated water circulation and temperature maintenance systems (Mandatory)** Heated water circulation systems shall be in accordance with Section R403.5.1.1. Heat trace temperature maintenance systems shall be in accordance with Section R403.5.1.2. Automatic controls, temperature sensors and pumps shall be accessible. Manual controls shall be readily accessible.

☐ **R403.5.1.1 Circulation systems.** Heated water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return pipe or a cold water supply pipe. Gravity and thermosiphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall start the pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water.

☐ **R403.5.1.2 Heat trace systems.** Electric heat trace systems shall comply with IEEE 515.1 or UL 515. Controls for such systems shall automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping in accordance with the times when heated water is used in the occupancy.

MANDATORY REQUIREMENTS - (Continued)

☐ **R403.5.5 Heat traps (Mandatory).** Storage water heaters not equipped with integral heat traps and having vertical pipe risers shall have heat traps installed on both the inlets and outlets. External heat traps shall consist of either a commercially available heat trap or a downward and upward bend of at least 3 ½ inches (89 mm) in the hot water distribution line and cold water line located as close as possible to the storage tank.

R403.5.6 Water heater efficiencies (Mandatory).

☐ **R403.5.6.1.1 Automatic controls.** Service water-heating systems shall be equipped with automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use. The minimum temperature setting range shall be from 100°F to 140°F (38°C to 60°C).

☐ **R403.5.6.1.2 Shut down.** A separate switch or a clearly marked circuit breaker shall be provided to permit the power supplied to electric service systems to be turned off. A separate valve shall be provided to permit the energy supplied to the main burner(s) of combustion types of service water-heating systems to be turned off.

☐ **R403.5.6.2 Water-heating equipment.** Water-heating equipment installed in residential units shall meet the minimum efficiencies of Table C404.2 in Chapter 4 of the Florida Building Code, Energy Conservation, Commercial Provisions, for the type of equipment installed. Equipment used to provide heating functions as part of a combination system shall satisfy all stated requirements for the appropriate water-heating category. Solar water heaters shall meet the criteria of Section R403.5.6.2.1.

☐ **R403.5.6.2.1 Solar water-heating systems.** Solar systems for domestic hot water production are rated by the annual solar energy factor of the system. The solar energy factor of a system shall be determined from the Florida Solar Energy Center Directory of Certified Solar Systems. Solar collectors shall be tested in accordance with ISO Standard 9806, Test Methods for Solar Collectors, and SRCC Standard TM-1, Solar Domestic Hot Water System and Component Test Protocol. Collectors in installed solar water-heating systems should meet the following criteria:

1. Be installed with a tilt angle between 10 degrees and 40 degrees of the horizontal; and
2. Be installed at an orientation within 45 degrees of true south.

☐ **R403.6 Mechanical ventilation (Mandatory).** The building shall be provided with ventilation that meets the requirements of the Florida Building Code, Residential, or Florida Building Code, Mechanical, as applicable, or with other approved means of ventilation including: Natural, Infiltration or Mechanical means. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

☐ **R403.6.1 Whole-house mechanical ventilation system fan efficacy.** When installed to function as a whole-house mechanical ventilation system, fans shall meet the efficacy requirements of Table R403.6.1.

Exception: Where whole-house mechanical ventilation fans are integral to tested and listed HVAC equipment, they shall be powered by an electronically commutated motor.

☐ **R403.6.2 Ventilation air.** Residential buildings designed to be operated at a positive indoor pressure or for mechanical ventilation shall meet the following criteria:

1. The design air change per hour minimums for residential buildings in ASHRAE 62.2, Ventilation for Acceptable Indoor Air Quality, shall be the maximum rates allowed for residential applications.
2. No ventilation or air-conditioning system make-up air shall be provided to conditioned space from attics, crawlspaces, attached enclosed garages or outdoor spaces adjacent to swimming pools or spas.
3. If ventilation air is drawn from enclosed space(s), then the walls of the space(s) from which air is drawn shall be insulated to a minimum of R-11 and the ceiling shall be insulated to a minimum of R-19, space permitting, or R-10 otherwise.

R403.7 Heating and cooling equipment (Mandatory).

☐ **R403.7.1 Equipment sizing.** Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on the equipment loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies, based on building loads for the directional orientation of the building. The manufacturer and model number of the outdoor and indoor units (if split system) shall be submitted along with the sensible and total cooling capacities at the design conditions described in Section R302.1. This Code does not allow designer safety factors, provisions for future expansion or other factors that affect equipment sizing. System sizing calculations shall not include loads created by local intermittent mechanical ventilation such as standard kitchen and bathroom exhaust systems. New or replacement heating and cooling equipment shall have an efficiency rating equal to or greater than the minimum required by federal law for the geographic location where the equipment is installed.

TABLE R403.6.1
WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM FAN EFFICACY

FAN LOCATION	AIRFLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY [a] (CFM/WATT)	AIRFLOW RATE MAXIMUM (CFM)
Range hoods	Any	2.8 cfm/watt	Any
In-line fan	Any	2.8 cfm/watt	Any
Bathroom, utility room	10	1.4 cfm/watt	<90
Bathroom, utility room	90	2.8 cfm/watt	Any

For SI: 1 cfm = 28.3 L/min. a. When tested in accordance with HVI Standard 916

MANDATORY REQUIREMENTS - (Continued)

☐ **R403.7.1.1 Cooling equipment capacity.** Cooling only equipment shall be selected so that its total capacity is not less than the calculated total load but not more than 1.15 times greater than the total load calculated according to the procedure selected in Section 403.7, or the closest available size provided by the manufacturer's product lines. The corresponding latent capacity of the equipment shall not be less than the calculated latent load.

The published value for AHRI total capacity is a nominal, rating-test value and shall not be used for equipment sizing. Manufacturer's expanded performance data shall be used to select cooling-only equipment. This selection shall be based on the outdoor design dry-bulb temperature for the load calculation (or entering water temperature for water-source equipment), the blower CFM provided by the expanded performance data, the design value for entering wet-bulb temperature and the design value for entering dry-bulb temperature.

Design values for entering wet-bulb and dry-bulb temperatures shall be for the indoor dry bulb and relative humidity used for the load calculation and shall be adjusted for return side gains if the return duct(s) is installed in an unconditioned space.

Exceptions:

1. Attached single- and multiple-family residential equipment sizing may be selected so that its cooling capacity is less than the calculated total sensible load but not less than 80 percent of that load.
2. When signed and sealed by a Florida-registered engineer, in attached single- and multiple-family units, the capacity of equipment may be sized in accordance with good design practice.

R403.7.1.2 Heating equipment capacity.

☐ **R403.7.1.2.1 Heat pumps.** Heat pump sizing shall be based on the cooling requirements as calculated according to Section R403.7.1.1, and the heat pump total cooling capacity shall not be more than 1.15 times greater than the design cooling load even if the design heating load is 1.15 times greater than the design cooling load.

☐ **R403.7.1.2.2 Electric resistance furnaces.** Electric resistance furnaces shall be sized within 4 kW of the design requirements calculated according to the procedure selected in Section R403.7.1.

☐ **R403.7.1.2.3 Fossil fuel heating equipment.** The capacity of fossil fuel heating equipment with natural draft atmospheric burners shall not be less than the design load calculated in accordance with Section R403.7.1.

☐ **R403.7.1.3 Extra capacity required for special occasions.** Residences requiring excess cooling or heating equipment capacity on an intermittent basis, such as anticipated additional loads caused by major entertainment events, shall have equipment sized or controlled to prevent continuous space cooling or heating within that space by one or more of the following options:

1. A separate cooling or heating system is utilized to provide cooling or heating to the major entertainment areas.
2. A variable capacity system sized for optimum performance during base load periods is utilized.

☐ **R403.8 Systems serving multiple dwelling units (Mandatory).** Systems serving multiple dwelling units shall comply with Sections C403 and C404 of the IECC—Commercial Provisions in lieu of Section R403.

☐ **R403.9 Snow melt and ice system controls (Mandatory)** Snow- and ice-melting systems, supplied through energy service to the building, shall include automatic controls capable of shutting off the system when the pavement temperature is above 50°F (10°C), and no precipitation is falling and an automatic or manual control that will allow shutoff when the outdoor temperature is above 40°F (4.8°C).

☐ **R403.10 Pools and permanent spa energy consumption (Mandatory).** The energy consumption of pools and permanent spas shall be in accordance with Sections R403.10.1 through R403.10.5.

☐ **R403.10.1 Heaters.** The electric power to heaters shall be controlled by a readily accessible on-off switch that is an integral part of the heater mounted on the exterior of the heater, or external to and within 3 feet (914 mm) of the heater. Operation of such switch shall not change the setting of the heater thermostat. Such switches shall be in addition to a circuit breaker for the power to the heater. Gas-fired heaters shall not be equipped with continuously burning ignition pilots.

☐ **R403.10.2 Time switches.** Time switches or other control methods that can automatically turn off and on according to a preset schedule shall be installed for heaters and pump motors. Heaters and pump motors that have built-in time switches shall be in compliance with this section.

Exceptions:

1. Where public health standards require 24-hour pump operation.
2. Pumps that operate solar- and waste-heat-recovery pool heating systems.
3. Where pumps are powered exclusively from on-site renewable generation.

☐ **R403.10.3 Covers.** Outdoor heated swimming pools and outdoor permanent spas shall be equipped with a vapor-retardant cover on or at the water surface or a liquid cover or other means proven to reduce heat loss.

Exception: Where more than 70 percent of the energy for heating, computed over an operation season, is from site-recovered energy, such as from a heat pump or solar energy source, covers or other vapor-retardant means shall not be required.

☐ **R403.10.4 Gas- and oil-fired pool and spa heaters.** All gas- and oil-fired pool and spa heaters shall have a minimum thermal efficiency of 82 percent for heaters manufactured on or after April 16, 2013, when tested in accordance with ANSI Z 21.56. Pool heaters fired by natural or LP gas shall not have continuously burning pilot lights.

☐ **R403.10.5 Heat pump pool heaters.** Heat pump pool heaters shall have a minimum COP of 4.0 when tested in accordance with AHRI 1160, Table 2, Standard Rating Conditions-Low Air Temperature. A test report from an independent laboratory is required to verify procedure compliance. Geothermal swimming pool heat pumps are not required to meet this standard.

☐ **R403.11 Portable spas (Mandatory).** The energy consumption of electric-powered portable spas shall be controlled by the requirements of APSP-14.

SECTION R404

ELECTRICAL POWER AND LIGHTING SYSTEMS

☐ **R404.1 Lighting equipment (Mandatory).** Not less than 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps or not less than 75 percent of the permanently installed lighting fixtures shall contain only high-efficacy lamps.

Exception: Low-voltage lighting.

R404.1.1 Lighting equipment (Mandatory). Fuel gas lighting systems shall not have continuously burning pilot lights.

FORM R405-2017

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Ganskop project	Builder Name:	
Street:		Permit Office:	
City, State, Zip:	Lake City , FL ,	Permit Number:	
Owner:	Ganskop Residence	Jurisdiction:	
Design Location:	FL, Gainesville	County:	Columbia (Florida Climate Zone 2)

1. New construction or existing	New (From Plans)			
2. Single family or multiple family	Single-family			
3. Number of units, if multiple family	1			
4. Number of Bedrooms	5			
5. Is this a worst case?	No			
6. Conditioned floor area above grade (ft²)	4354			
Conditioned floor area below grade (ft²)	0			
7. Windows(766.8 sqft.)	Description	Area		
a. U-Factor:	Dbl, U=0.30	766.75 ft²		
SHGC:	SHGC=0.20			
b. U-Factor:	N/A	ft²		
SHGC:				
c. U-Factor:	N/A	ft²		
SHGC:				
d. U-Factor:	N/A	ft²		
SHGC:				
Area Weighted Average Overhang Depth:		1.000 ft.		
Area Weighted Average SHGC:		0.200		
8. Floor Types (4354.0 sqft.)		Insulation	Area	
a. Slab-On-Grade Edge Insulation		R=0.0	4354.00 ft²	
b. N/A		R=	ft²	
c. N/A		R=	ft²	

9. Wall Types (3528.0 sqft.)	Insulation	Area	
a. Frame - Wood, Exterior	R=13.0	3186.00 ft²	
b. Frame - Wood, Adjacent	R=13.0	342.00 ft²	
c. N/A	R=	ft²	
d. N/A	R=	ft²	
10. Ceiling Types (4354.0 sqft.)	Insulation	Area	
a. Under Attic (Vented)	R=30.0	4354.00 ft²	
b. N/A	R=	ft²	
c. N/A	R=	ft²	
11. Ducts		R	ft²
a. Sup: Attic, Ret: Attic, AH: Attic		6	200
12. Cooling systems	kBtu/hr	Efficiency	
a. Central Unit	84.5	SEER:14.00	
13. Heating systems	kBtu/hr	Efficiency	
a. Electric Heat Pump	84.5	HSPF:8.40	
14. Hot water systems			
a. Electric		Cap: 40 gallons	
		EF: 0.950	
b. Conservation features			
None			
15. Credits		Pstat	

Glass/Floor Area: 0.176

Total Proposed Modified Loads: 100.58

Total Baseline Loads: 106.03

PASS

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

PREPARED BY: David Marrs

DATE: 10/7/19

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

OWNER/AGENT:

DATE: 10-9-19

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

BUILDING OFFICIAL:

DATE:

- Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.3.2.1.

- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 5.00 ACH50 (R402.4.1.2).

- Compliance with a proposed duct leakage Qn requires a Duct Leakage Test Report confirming duct leakage to outdoors, tested in accordance with ANSI/RESNET/ICC 380, is not greater than 0.030 Qn for whole house.

FORM R405-2017 **INPUT SUMMARY CHECKLIST REPORT**

PROJECT

Title:	Ganskop project	Bedrooms:	5	Address Type:	Street Address
Building Type:	User	Conditioned Area:	4354	Lot #	
Owner Name:	Ganskop Residence	Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:		Rotate Angle:	0	Street:	
Permit Office:		Cross Ventilation:	No	County:	Columbia
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	Lake City , FL ,
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
_____	FL, Gainesville	FL_GAINESVILLE_REGI	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	4354	40492.2

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	4354	40492.2	Yes	6	5	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	353.9 ft	0	4354 ft²	___	0	0	1

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Gable or Shed	Metal	4869 ft²	1090 ft²	Medium	N	0.9	N	0.9	No	0	26.6

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	150	4354 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	30	Blown	4354 ft²	0.1	Wood

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

WALLS

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
____	1	NE	Exterior	Frame - Wood	Main	13	83	0	9	0	747.0 ft²	0	0.25	0.8	0
____	2	SE	Exterior	Frame - Wood	Main	13	89	0	9	0	801.0 ft²	0	0.25	0.8	0
____	3	SW	Exterior	Frame - Wood	Main	13	69	0	9	0	621.0 ft²	0	0.25	0.8	0
____	4	NW	Exterior	Frame - Wood	Main	13	113	0	9	0	1017.0 ft²	0	0.25	0.8	0
____	5	-	Garage	Frame - Wood	Main	13	38	0	9	0	342.0 ft²	0	0.25	0.8	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
_____	1	SE	Wood	Main	None	.39	6		7		42 ft²
_____	2	-	Wood	Main	None	.39	3		8		24 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	1	ne	1	Metal	Low-E Double	Yes	0.3	0.2	N	8.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	2	ne	1	Metal	Low-E Double	Yes	0.3	0.2	N	90.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	3	ne	1	Metal	Low-E Double	Yes	0.3	0.2	N	35.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	4	se	2	Metal	Low-E Double	Yes	0.3	0.2	N	16.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	5	se	2	Metal	Low-E Double	Yes	0.3	0.2	N	12.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	6	se	2	Metal	Low-E Double	Yes	0.3	0.2	N	75.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	7	se	2	Metal	Low-E Double	Yes	0.3	0.2	N	35.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	8	se	2	Metal	Low-E Double	Yes	0.3	0.2	N	36.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	9	se	2	Metal	Low-E Double	Yes	0.3	0.2	N	24.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	10	sw	3	Metal	Low-E Double	Yes	0.3	0.2	N	11.3 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	11	sw	3	Metal	Low-E Double	Yes	0.3	0.2	N	75.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	12	sw	3	Metal	Low-E Double	Yes	0.3	0.2	N	23.5 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	13	nw	4	Metal	Low-E Double	Yes	0.3	0.2	N	84.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	14	nw	4	Metal	Low-E Double	Yes	0.3	0.2	N	30.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	15	nw	4	Metal	Low-E Double	Yes	0.3	0.2	N	36.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	16	nw	4	Metal	Low-E Double	Yes	0.3	0.2	N	48.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
_____	17	NW	4	Metal	Low-E Double	Yes	0.3	0.2	N	128.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None

GARAGE

√	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
_____	1	504 ft²	504 ft²	64 ft	9.3 ft	0

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000295	3374.3	185.25	348.38	.1181	5

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump/	Split	HSPF:8.4005	84.5 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit/	Split	SEER: 14	84.5 kBtu/hr	0 cfm	0.733136	1	sys#1

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	None	Garage	0.95	40 gal	80 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
_____	None	None			ft²		

DUCTS

√	#	Supply Location	Supply R-Value	Supply Area	Return Location	Return Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	HVAC # Cool
_____	1	Attic	6	200 ft²	Attic	100 ft²	Prop. Leak Free	Attic	— cfm	130.6 cfm	0.03	0.50	1	1

TEMPERATURES

Programable Thermostat: Y

Ceiling Fans:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X]	[X]	[ ]	[ ]	[ ]
Heating	[X]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]
Venting	[ ]	[ ]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[ ]

INPUT SUMMARY CHECKLIST REPORT

Thermostat Schedule: HERS 2006 Reference		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	80	80	80	80
	PM	80	80	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66
Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft²	0 ft	0.3	Main

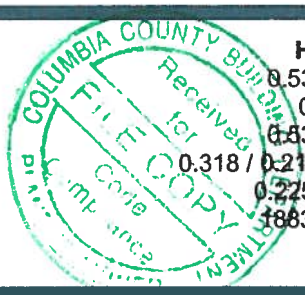
wrightsoft

Duct System Summary

Job:
Date: Sep 26, 2019
By: JLB

Project Information

For: Ganskop Residence
Lake City, FL



	Heating	Cooling
External static pressure	0.53 in H2O	0.53 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0.53 in H2O	0.53 in H2O
Supply / return available pressure	0.318 / 0.212 in H2O	0.318 / 0.212 in H2O
Lowest friction rate	0.225 in/100ft	0.225 in/100ft
Actual air flow	1883 cfm	1883 cfm
Total effective length (TEL)	236 ft	

Supply Branch Detail Table

Name		Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Dining	h	2978	128	127	0.261	8.0	0x 0	VlFx	32.2	90.0	st2
Dining-A	h	2978	128	127	0.258	8.0	0x 0	VlFx	33.5	90.0	st2
Foyer	h	1447	62	31	0.240	6.0	0x 0	VlFx	42.8	90.0	st2
Great RM	c	3838	127	160	0.240	8.0	0x 0	VlFx	43.0	90.0	st3
Great RM-A	c	3837	127	160	0.225	8.0	0x 0	VlFx	51.7	90.0	st3
Great RM-B	c	3837	127	160	0.241	8.0	0x 0	VlFx	42.3	90.0	st3
Great RM-C	c	3837	127	160	0.225	8.0	0x 0	VlFx	51.4	90.0	st3
Kitchen	h	2694	115	112	0.291	6.0	0x 0	VlFx	19.6	90.0	st1
Kitchen-A	h	2694	115	112	0.286	6.0	0x 0	VlFx	21.2	90.0	st1
Laundry	c	1094	30	46	0.291	6.0	0x 0	VlFx	19.6	90.0	st1
Lav	c	68	2	3	0.292	4.0	0x 0	VlFx	19.1	90.0	st1
M Bath	h	3068	132	110	0.292	8.0	0x 0	VlFx	19.0	90.0	st4
M WIC	h	2273	97	81	0.271	6.0	0x 0	VlFx	27.4	90.0	st4
Master Bed RM	h	5783	248	225	0.280	9.0	0x 0	VlFx	23.6	90.0	st4
Master Bed RM-A	h	5783	248	225	0.286	9.0	0x 0	VlFx	21.4	90.0	st4
Storage	h	1653	71	45	0.247	6.0	0x 0	VlFx	38.8	90.0	st2

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st4	Peak AVF	725	641	0.271	519	16.0	0 x 0	VinlFlx	
st1	Peak AVF	263	272	0.286	498	10.0	0 x 0	VinlFlx	
st2	Peak AVF	388	330	0.240	494	12.0	0 x 0	VinlFlx	
st3	Peak AVF	507	641	0.225	599	14.0	0 x 0	VinlFlx	

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb7	0x 0	570	638	94.1	0.225	597	14.0	0x 0		VlFx	
rb6	0x 0	556	556	51.9	0.407	520	14.0	0x 0		VlFx	
rb2	0x 0	757	689	36.5	0.579	542	16.0	0x 0		VlFx	

wrightsoft **Project Summary**

Job:
Date: Sep 26, 2019
By: JLB

Project Information

For: Ganskop Residence
Lake City, FL

Notes:

Design Information

Weather: Gainesville Rgnl, FL, US

Winter Design Conditions

Outside db	33	°F
Inside db	70	°F
Design TD	37	°F

Summer Design Conditions

Outside db	92	°F
Inside db	75	°F
Design TD	17	°F
Daily range	M	
Relative humidity	50	%
Moisture difference	47	gr/lb

Heating Summary

Structure	37369	Btuh
Ducts	6555	Btuh
Central vent (0 cfm) (none)	0	Btuh
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	43924	Btuh

Sensible Cooling Equipment Load Sizing

Structure	37386	Btuh
Ducts	7722	Btuh
Central vent (0 cfm) (none)	0	Btuh
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	0.97	
Equipment sensible load	43710	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	2879	2879
Volume (ft³)	25908	25908
Air changes/hour	0.23	0.12
Equiv. AVF (cfm)	100	53

Latent Cooling Equipment Load Sizing

Structure	2094	Btuh
Ducts	1623	Btuh
Central vent (0 cfm) (none)	0	Btuh
Equipment latent load	3716	Btuh
Equipment Total Load (Sen+Lat)	47426	Btuh
Req. total capacity at 0.70 SHR	5.2	ton

Heating Equipment Summary

Make	Goodman Mfg.
Trade	GOODMAN
Model	GSZ140601K
AHRI ref	201652594

Efficiency	8.5 HSPF	
Heating input		
Heating output	59000	Btuh @ 47°F
Temperature rise	29	°F
Actual air flow	1883	cfm
Air flow factor	0.043	cfm/Btuh
Static pressure	0.53	in H2O
Space thermostat		
Capacity balance point = 27 °F		

Backup:
Input = 13 kW, Output = 44207 Btuh, 100 AFUE

Cooling Equipment Summary

Make	Goodman Mfg.
Trade	GOODMAN
Cond	GSZ140601K
Coil	ASPT61D14A
AHRI ref	201652594

Efficiency	11.5 EER, 14 SEER	
Sensible cooling	39550	Btuh
Latent cooling	16950	Btuh
Total cooling	56500	Btuh
Actual air flow	1883	cfm
Air flow factor	0.042	cfm/Btuh
Static pressure	0.53	in H2O
Load sensible heat ratio	0.92	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

wrightsoft **Project Summary**

Job:
Date: Sep 26, 2019
By: JLB

Project Information

For: Ganskop Residence
Lake City, FL

Notes:

Design Information

Weather: Gainesville Rgnl, FL, US

Winter Design Conditions

Outside db	33	°F
Inside db	70	°F
Design TD	37	°F

Summer Design Conditions

Outside db	92	°F
Inside db	75	°F
Design TD	17	°F
Daily range	M	
Relative humidity	50	%
Moisture difference	47	gr/lb

Heating Summary

Structure	25563	Btuh
Ducts	2335	Btuh
Central vent (0 cfm) (none)	0	Btuh
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	27898	Btuh

Sensible Cooling Equipment Load Sizing

Structure	22054	Btuh
Ducts	2828	Btuh
Central vent (0 cfm) (none)	0	Btuh
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	0.97	
Equipment sensible load	24111	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	1475	1475
Volume (ft³)	13274	13274
Air changes/hour	0.38	0.20
Equiv. AVF (cfm)	83	45

Latent Cooling Equipment Load Sizing

Structure	2013	Btuh
Ducts	554	Btuh
Central vent (0 cfm) (none)	0	Btuh
Equipment latent load	2567	Btuh
Equipment Total Load (Sen+Lat)	26677	Btuh
Req. total capacity at 0.80 SHR	2.5	ton

Heating Equipment Summary

Make	Goodman Mfg.
Trade	GOODMAN
Model	GSZ140301K
AHRI ref	201642081

Efficiency	8.2 HSPF	
Heating input		
Heating output	27800	Btuh @ 47°F
Temperature rise	27	°F
Actual air flow	933	cfm
Air flow factor	0.033	cfm/Btuh
Static pressure	0.53	in H2O
Space thermostat		
Capacity balance point = 35 °F		

Backup:
Input = 8 kW, Output = 28379 Btuh, 100 AFUE

Cooling Equipment Summary

Make	Goodman Mfg.
Trade	GOODMAN
Cond	GSZ140301K
Coil	ARUF31B14A
AHRI ref	201642081

Efficiency	12.0 EER, 14 SEER	
Sensible cooling	22400	Btuh
Latent cooling	5600	Btuh
Total cooling	28000	Btuh
Actual air flow	933	cfm
Air flow factor	0.037	cfm/Btuh
Static pressure	0.53	in H2O
Load sensible heat ratio	0.91	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Project Information

For: Ganskop Residence
Lake City, FL

	Heating	Cooling
External static pressure	0.53 in H2O	0.53 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0.53 in H2O	0.53 in H2O
Supply / return available pressure	0.362 / 0.168 in H2O	0.362 / 0.168 in H2O
Lowest friction rate	0.293 in/100ft	0.293 in/100ft
Actual air flow	933 cfm	933 cfm
Total effective length (TEL)	181 ft	

Supply Branch Detail Table

Name		Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Bath 2	h	1289	43	32	0.315	4.0	0x 0	VlFx	24.8	90.0	st6
Bath 3	c	876	28	33	0.293	4.0	0x 0	VlFx	33.3	90.0	st5
Bath 4	h	1286	43	25	0.325	4.0	0x 0	VlFx	21.2	90.0	st5
Bed RM 2	h	6745	226	222	0.463	9.0	0x 0	VlFx	8.1	70.0	
Bed RM 3	c	2690	95	101	0.472	6.0	0x 0	VlFx	6.6	70.0	
Bed RM 4	h	8125	272	257	0.300	10.0	0x 0	VlFx	30.7	90.0	st5
Power	c	55	1	2	0.325	4.0	0x 0	VlFx	21.2	90.0	st6
S WIC	h	1920	64	44	0.317	6.0	0x 0	VlFx	24.1	90.0	st6
Study	c	4701	116	176	0.297	8.0	0x 0	VlFx	31.8	90.0	st6
WIC 2	h	515	17	7	0.487	4.0	0x 0	VlFx	4.3	70.0	
WIC 3	c	96	3	4	0.442	4.0	0x 0	VlFx	11.8	70.0	
WIC 4	c	801	25	30	0.325	4.0	0x 0	VlFx	21.2	90.0	st5

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st5	Peak AVF	368	346	0.293	469	12.0	0 x 0	VinlFlx	
st6	Peak AVF	225	254	0.297	466	10.0	0 x 0	VinlFlx	

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb4	0x 0	286	261	40.7	0.413	524	10.0	0x 0		VIFx	
rb3	0x 0	182	222	57.4	0.293	408	10.0	0x 0		VIFx	
rb5	0x 0	125	137	35.9	0.470	393	8.0	0x 0		VIFx	
rb1	0x 0	340	313	53.5	0.314	433	12.0	0x 0		VIFx	

wrightsoft **Manual S Compliance Report**

Job:
Date: Sep 26, 2019
By: JLB

Project Information

For: Ganskop Residence
Lake City, FL

Cooling Equipment

Design Conditions

Outdoor design DB:	91.9°F	Sensible gain:	45108	Btuh	Entering coil DB:	76.0°F
Outdoor design WB:	76.2°F	Latent gain:	3716	Btuh	Entering coil WB:	63.0°F
Indoor design DB:	75.0°F	Total gain:	48824	Btuh		
Indoor RH:	50%	Estimated airflow:	1883	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP				
Manufacturer:	Goodman Mfg.		Model: GSZ140601K+ASPT61D14A		
Actual airflow:	1883	cfm			
Sensible capacity:	49945	Btuh	111% of load		
Latent capacity:	6173	Btuh	166% of load		
Total capacity:	56118	Btuh	115% of load	SHR:	89%

Heating Equipment

Design Conditions

Outdoor design DB:	33.4°F	Heat loss:	43924	Btuh	Entering coil DB:	69.5°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP					
Manufacturer:	Goodman Mfg.		Model: GSZ140601K+ASPT61D14A			
Actual airflow:	1883	cfm				
Output capacity:	59000	Btuh	134% of load		Capacity balance:	27 °F
Supplemental heat required:	0	Btuh			Economic balance:	-99 °F

Backup equipment type:	Elec strip				
Manufacturer:		Model:			
Actual airflow:	1883	cfm			
Output capacity:	13.0	kW	101% of load	Temp. rise:	50 °F

Meets all requirements of ACCA Manual S.

Project Information

For: Ganskop Residence
Lake City, FL

Cooling Equipment

Design Conditions

Outdoor design DB:	91.9°F	Sensible gain:	24882	Btuh	Entering coil DB:	75.9°F
Outdoor design WB:	76.2°F	Latent gain:	2567	Btuh	Entering coil WB:	62.9°F
Indoor design DB:	75.0°F	Total gain:	27449	Btuh		
Indoor RH:	50%	Estimated airflow:	933	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP			
Manufacturer:	Goodman Mfg.		Model: GSZ140301K+ARUF31B14A	
Actual airflow:	933	cfm		
Sensible capacity:	22400	Btuh	90% of load	
Latent capacity:	5600	Btuh	218% of load	
Total capacity:	28000	Btuh	102% of load	SHR: 80%

Heating Equipment

Design Conditions

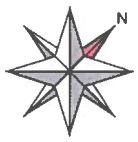
Outdoor design DB:	33.4°F	Heat loss:	27898	Btuh	Entering coil DB:	69.6°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

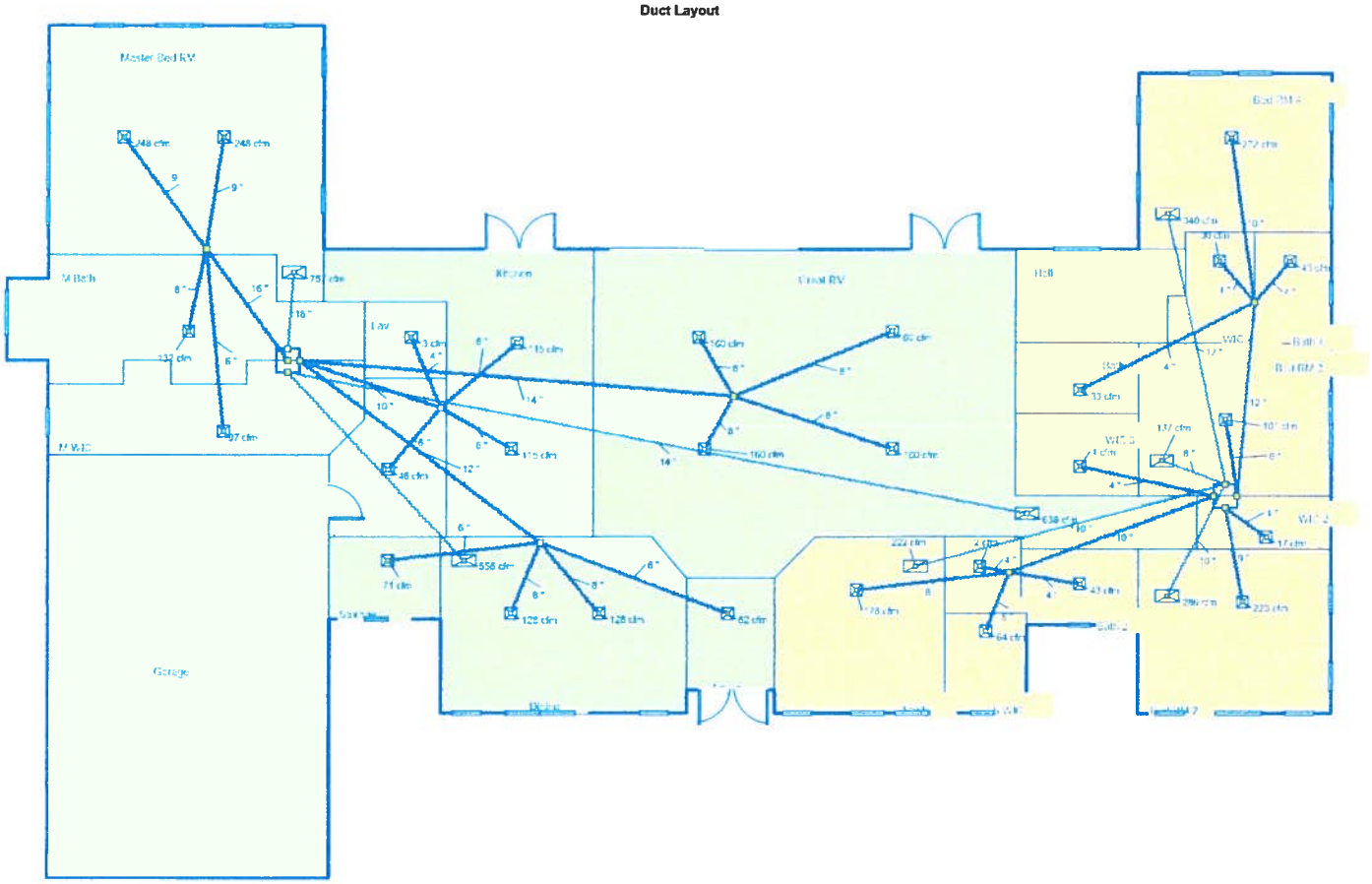
Equipment type:	Split ASHP					
Manufacturer:	Goodman Mfg.		Model: GSZ140301K+ARUF31B14A			
Actual airflow:	933	cfm				
Output capacity:	27800	Btuh	100% of load		Capacity balance:	35 °F
Supplemental heat required:	98	Btuh			Economic balance:	-99 °F

Backup equipment type:	Elec strip				
Manufacturer:		Model:			
Actual airflow:	933	cfm			
Output capacity:	8.3	kW	102% of load	Temp. rise:	50 °F

Meets all requirements of ACCA Manual S.



Duct Layout



Job #:
Performed by JLB for:
Ganskop Residence

Lake City, FL

Scale: 1 : 189

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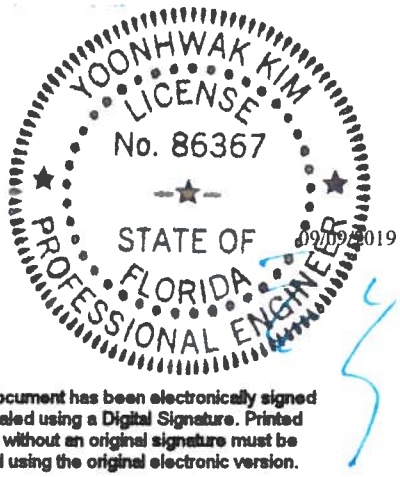

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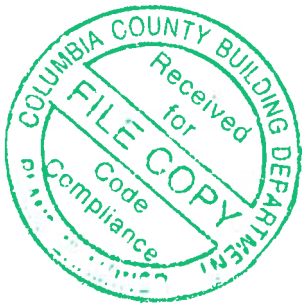


Site Information:	Page 1:
Customer: W. B. Howland Company, Inc.	*Job Number:* 19-3463
Job Description: /MARK GANSKOP RES. /Contractor	
Address: FL	

Job Engineering Criteria:	
Design Code: FBC 2017 RES	*IntelliVIEW Version:* 18.02.01 *JRef #:* 1WOd2150003
Wind Standard: ASCE 7-10 *Wind Speed (mph):* 130	*Roof Load (psf):* 20.00-10.00- 0.00-10.00 *Floor Load (psf):* None

This package contains general notes pages, 33 truss drawing(s) and 6 detail(s).

Item	Seal #	Truss
1	252.19.1440.13650	A01
3	252.19.1440.52283	A03
5	252.19.1441.19400	B02
7	252.19.1441.46313	C02
9	252.19.1442.04053	D02
11	252.19.1442.16537	D04
13	252.19.1442.30793	H01
15	252.19.1443.23310	K01
17	252.19.1443.31317	K03
19	252.19.1443.42970	L02
21	252.19.1443.47460	P01
23	252.19.1444.11393	R01
25	252.19.1444.39840	R03
27	252.19.1444.44110	R05
29	252.19.1444.47813	R07
31	252.19.1444.53467	R09
33	252.19.1445.06273	R11

Item	Seal #	Truss
2	252.19.1440.24207	A02
4	252.19.1440.53923	B01
6	252.19.1441.23967	C01
8	252.19.1441.59423	D01
10	252.19.1442.11793	D03
12	252.19.1442.23730	D05
14	252.19.1443.21657	H02
16	252.19.1443.28777	K02
18	252.19.1443.33200	L01
20	252.19.1443.45827	L03
22	252.19.1443.48810	P02
24	252.19.1444.36973	R02
26	252.19.1444.41973	R04
28	252.19.1444.45930	R06
30	252.19.1444.50307	R08
32	252.19.1444.57953	R10

General Notes

Truss Design Engineer Scope of Work, Design Assumptions and Design Responsibilities:
The design responsibilities assumed in the preparation of these design drawings are those specified in ANSI/TPI 1, Chapter 2; and the National Design Standard for Metal Plate Connected Wood Truss Construction, by the Truss Plate Institute. The truss component designs conform to the applicable provisions of ANSI/TPI 1 and NDS, the National Design Specification for Wood Construction by AF&PA. The truss component designs are based on the specified loading and dimension information furnished by others to the Truss Design Engineer. The Truss Design Engineer has no duty to independently verify the accuracy or completeness of the information provided by others and may rely on that information without liability. The responsibility for verification of that information remains with others neither employed nor controlled by the Truss Design Engineer. The Truss Design Engineer's seal and signature on the attached drawings, or cover page listing these drawings, indicates acceptance of professional engineering responsibility solely for the truss component designs and not for the technical information furnished by others which technical information and consequences thereof remain their sole responsibility.

The suitability and use of these drawings for any particular structure is the responsibility of the Building Designer in accordance with ANSI/TPI 1 Chapter 2. The Building Designer is responsible for determining that the dimensions and loads for each truss component match those required by the plans and by the actual use of the individual component, and for ascertaining that the loads shown on the drawings meet or exceed applicable building code requirements and any additional factors required in the particular application. Truss components using metal connector plates with integral teeth shall not be placed in environments that will cause the moisture content of the wood in which plates are embedded to exceed 19% and/or cause corrosion of connector plates and other metal fasteners.

The Truss Design Engineer shall not be responsible for items beyond the specific scope of the agreed contracted work set forth herein, including but not limited to: verifying the dimensions of the truss component, calculation of any of the truss component design loads, inspection of the truss components before or after installation, the design of temporary or permanent bracing and their attachment required in the roof and/or floor systems, the design of diaphragms or shear walls, the design of load transfer connections to and from diaphragms and shear walls, the design of load transfer to the foundation, the design of connections for truss components to their bearing supports, the design of the bearing supports, installation of the truss components, observation of the truss component installation process, review of truss assembly procedures, sequencing of the truss component installation, construction means and methods, site and/or worker safety in the installation of the truss components and/or its connections.

This document may be a high quality facsimile of the original engineering document which is a digitally signed electronic file with third party authentication. A wet or embossed seal copy of this engineering document is available upon request.

Temporary Lateral Restraint and Bracing:
Temporary lateral restraint and diagonal bracing shall be installed according to the provisions of BCSI chapters B1, B2, B7 and/or B10 (Building Component Safety Information, by TPI and SBCA), or as specified by the Building Designer or other Registered Design Professional. The required locations for lateral restraint and/or bracing depicted on these drawings are only for the permanent lateral support of the truss members to reduce buckling lengths, and do not apply to and may not be relied upon for the temporary stability of the truss components during their installation.

Permanent Lateral Restraint and Bracing:
The required locations for lateral restraint or bracing depicted on these drawings are for the permanent lateral support of the truss members to reduce buckling lengths. Permanent lateral support shall be installed according to the provisions of BCSI chapters B3, B7 and/or B10, or as specified by the Building Designer or other Registered Design Professional. These drawings do not depict or specify installation/erection bracing, wind bracing, portal bracing or similar building stability bracing which are parts of the overall building design to be specified, designed and detailed by the Building Designer.

Connector Plate Information:
Alpine connector plates are made of ASTM A653 or ASTM A1063 galvanized steel with the following designations, gauges and grades: W=Wave, 20ga, grade 40; H=High Strength, 20ga, grade 60; S=Super Strength, 18ga, grade 60. Information on model code compliance is contained in the ICC Evaluation Service report ESR-1118, available on-line at www.icc-es.org.

General Notes (continued)

Key to Terms:
Information provided on drawings reflects a summary of the pertinent information required for the truss design. Detailed information on load cases, reactions, member lengths, forces and members requiring permanent lateral support may be found in calculation sheets available upon written request.

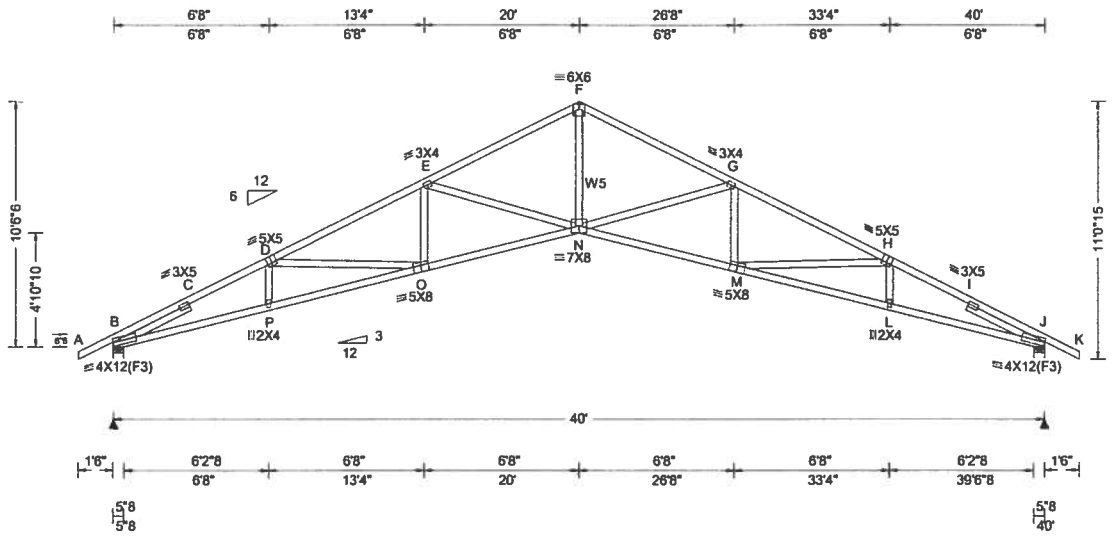
BCDL = Bottom Chord standard design Dead Load in pounds per square foot.
BCLL = Bottom Chord standard design Live Load in pounds per square foot.
Des Ld = total of TCLL, TCDL, BCLL and BCDL Design Load in pounds per square foot.
HORZ(LL) = maximum Horizontal panel point deflection due to Live Load, in inches.
HORZ(TL) = maximum Horizontal panel point long term deflection in inches, due to Total Load, including creep adjustment.
HPL = additional Horizontal Load added to a truss Piece in pounds per linear foot or pounds.
L/# = user specified divisor for limiting span/deflection ratio for evaluation of actual L/defl value.
L/defl = ratio of Length between bearings, in inches, divided by the immediate vertical Deflection, in inches, at the referenced panel point. Reported as 999 if greater than or equal to 999.
Loc = Location, starting location of left end of bearing or panel point (joint) location of deflection.
Max BC CSI = Maximum bending and axial Combined Stress Index for Bottom Chords for of all load cases.
Max TC CSI = Maximum bending and axial Combined Stress Index for Top Chords for of all load cases.
Max Web CSI= Maximum bending and axial Combined Stress Index for Webs for of all load cases.
NCBCLL = Non-Concurrent Bottom Chord design Live Load in pounds per square foot.
PL = additional Load applied at a user specified angle on a truss Piece in pounds per linear foot or pounds.
PLB = additional vertical load added to a Bottom chord Piece of a truss in pounds per linear foot or pounds
PLT = additional vertical load added to a Top chord Piece of a truss in pounds per linear foot or pounds.
PP = Panel Point.
R = maximum downward design Reaction, in pounds, from all specified gravity load cases, at the indicated location (Loc).
-R = maximum upward design Reaction, in pounds, from all specified gravity load cases, at the identified location (Loc).
Rh = maximum horizontal design Reaction in either direction, in pounds, from all specified gravity load cases, at the indicated location (Loc).
RL = maximum horizontal design Reaction in either direction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).
Rw = maximum downward design Reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the identified location (Loc).
TCDL = Top Chord standard design Dead Load in pounds per square foot.
TCLL = Top Chord standard design Live Load in pounds per square foot.
U = maximum Upward design reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).
VERT(CL) = maximum Vertical panel point deflection in inches due to Live Load and Creep Component of Dead Load in inches.
VERT(LL) = maximum Vertical panel point deflection in inches due to Live Load.
VERT(TL) = maximum Vertical panel point long term deflection in inches due to Total load, including creep adjustment.
W = Width of non-hanger bearing, in inches.

Refer to ASCE-7 for Wind and Seismic abbreviations.
Uppercase Acronyms not explained above are as defined in TPI 1.

References:

1. AF&PA: American Forest & Paper Association, 1111 19th Street, NW, Suite 800, Washington, DC 20036; www.afandpa.org.
2. ICC: International Code Council; www.iccsafe.org.
3. Alpine, a division of ITW Building Components Group Inc.: 13723 Riverport Drive, Suite 200, Maryland Heights, MO 63043; www.alpineitw.com.
4. TPI: Truss Plate Institute, 218 North Lee Street, Suite 312, Alexandria, VA 22314; www.tpinst.org.
5. SBCA: Wood Truss Council of America, 6300 Enterprise Lane, Madison, WI 53719; www.sbcindustry.co

SEQN: 650307 COMN FROM: CDM	Ply: 1 Qty: 10	**Job Number:** 19-3463 /MARK GANSKOP RES. /Contractor **Truss Label:** A01	Cust: R 215 JRef: 1WOd2150003 T27 DrwNo: 252.19.1440.13650 / YK 09/09/2019



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 21.16 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.00 ft
Loc. from endwall: not in 13.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.496	N	967	240
VERT(CL): 1.014	N	473	180
HORZ(LL): 0.338	L	-	-
HORZ(TL): 0.692	L	-	-

Creep Factor: 2.0
Max TC CSI: 0.943
Max BC CSI: 0.475
Max Web CSI: 0.894

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1759	/-	/-	/1039	/76	/312
J	1759	/-	/-	/1039	/76	/-

Wind reactions based on MWFRS
B Brg Width = 5.5 Min Req = 1.5
J Brg Width = 5.5 Min Req = 1.5
Bearings B & J are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	1196	-5361	F - G	802	-3608
C - D	1212	-5268	G - H	1057	-4653
D - E	1053	-4653	H - I	1202	-5268
E - F	825	-3608	I - J	1188	-5361

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - P	4798	-980	N - M	4205	-744
P - O	4825	-974	M - L	4825	-998
O - N	4205	-706	L - J	4798	-1003

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
D - O	246	-583	N - G	359	-963
O - E	419	-62	G - M	419	-63
E - N	361	-963	M - H	250	-583
F - N	2740	-528			

Lumber

Top chord 2x4 SP #2
Bot chord 2x4 SP 2400f-2.0E
Webs 2x4 SP #3 :W5 2x4 SP #2:
:Lt Slider 2x4 SP #3: BLOCK LENGTH = 3.655'
:Rt Slider 2x4 SP #3: BLOCK LENGTH = 3.655'

Wind

Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 10-6-6.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

#0-278
09/09/2019

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. **A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.**

For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

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