Columbia County Building Permit Application

867-0477

For Office Use Only Application # 0609-75 Date Received 9/26/06 By G Permit # 25086

Application Approved by - Zoning Official BLK Date 05.10.06 Plans Examiner OKTH Date 10-2-06

Flood Zone X Development Permit N/A Zoning A-3 Land Use Plan Map Category A-3

Comments

CK# 11948

Applicants Name Mike Todd Construction INC Phone 386 755 4387

Address 129 NE Colburn Avenue Lake City Florida 32055

Owners Name Ray & Patricia Brewer Phone

911 Address 4124 SW CR 18, Fort White, FL 32038

Contractors Name Mike Todd Construction Phone 386 755 4387

Address 129 NE Colburn Avenue Lake City FL 32055

Fee Simple Owner Name & Address —

Bonding Co. Name & Address —

Architect/Engineer Name & Address —

Mortgage Lenders Name & Address Bank of America 1201 Main St 11th Floor, Dallas TX 75202-0000

Circle the correct power company – FL Power & Light – Clay Elec. – Suwannee Valley Elec. – Progressive Energy

Property ID Number 36-6S-16-04076-120 ltx Estimated Cost of Construction 290,000

Subdivision Name Parker Woods Lot 20 or 21 Block — Unit — Phase —

Driving Directions Hwy 47 South to Fort White - Left ON 27 to Hwy 18 Turn Left - Go 2.3 miles ON Right is a metal out bldg W/ Green roof - Home Site is there

Type of Construction concrete block New SINGLE Family Number of Existing Dwellings on Property 1 Accessory Bld.

Total Acreage 10 Lot Size Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 245 ✓ Side 290 ✓ Side 224 ✓ Rear 380 ✓

Total Building Height 27'6" Number of Stories 1 Heated Floor Area ~~2972~~ 3196 Roof Pitch 7

TOTAL 4776

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

OWNERS AFFIDAVIT: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning.

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

Owner Builder or Agent (Including Contractor)

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me this 26 day of Sept 2006

Personally known or Produced Identification

Contractor Signature

Contractors License Number CGC062209

Competency Card Number

NOTARY STAMP/SEAL

TERESA N. PIERCE
MY COMMISSION # DD474390
EXPIRES: Sept. 21, 2009
(407) 398-0153 Florida Notary Service.com

Notary Signature

PREPARED BY:
Cecile Cary
Robertson & Anschutz, P.C.
10333 Richmond Avenue, Suite 550
Houston, TX 77042

AFTER RECORDED RETURN TO:

Bank of America, N.A.
9000 Southside Blvd., Ste. 700
Jacksonville, FL 32256

Inst:2006020904 Date:09/01/2006 Time:14:27
DC,P.DeWitt Cason,Columbia County B:1094 P:2094

NOTICE OF COMMENCEMENT

Permit No. _____ Tax Folio No. _____

State of Florida
County of Columbia

The undersigned hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

1. Legal description of property (include street address, if available)
4124 Southwest County Road 18
Fort White, FL 32038

See Exhibit "A" attached hereto and made a part hereof for all purposes

2. General description of improvement(s)

Construction of custom home

3. Owner information
Name: **Roy J. Brewer, Jr. and Patricia E. Brewer, husband and wife**
Address: **4124 Southwest County Road 18**
Fort White, FL 32038

4. Contractor information
Name: **Mike Todd Construction, Inc.**
Address: **129 Northeast Colburn Avenue**
Lake City FL 32055
Phone:

5. Surety
Name: _____
Address: _____
_____
Phone #: _____ Fax #: _____ Amt. of bond: _____

6. Lender
Name: **Bank of America, N.A.**
Address: **1201 Main Street, 11th Floor, Dallas, TX 75202-0000**
Phone #: **877-719-6142**

7. Persons 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
Name: ______
Address: ______
Phone #: ______
Fax #: ______

8. In addition to himself, Owner designates ______ of ______ to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes.
Phone #: ______
Fax #: ______

9. Expiration date of Notice of Commencement (the expiration date is 1 year from the date of recording unless a different date is specified).

Signature of Owner Patricia E. Brewer.

Sworn to and subscribed before me this 29th day of August, 2006.

My commission expires: 7/6/10

Notary Public

SUZETTE C. WOOLBEY
MY COMMISSION # DD 550842
EXPIRES: July 6, 2010
Bonded Thru Notary Public Underwriters

Inst:2006020904 Date:09/01/2006 Time:14:27
______DC,P.DeWitt Cason,Columbia County B:1094 P:2095

Loan No.: 6126982243

EXHIBIT "A"

Lots 20 and 21, Parker Woods, according to the map or plat thereof as recorded in Plat Book 6, Pages 81, 81-A & 81-B, Public Records of Columbia County, Florida

Inst:2006020904 Date:09/01/2006 Time:14:27
DC,P.DeWitt Cason,Columbia County B:1094 P:2096

(R&A) RA0131592 - exhibitA.ru - 12/30/2004

TOTAL P.04

Columbia County Property Appraiser

DB Last Updated: 8/1/2006

2006 Proposed Values

Parcel: 36-6S-16-04076-120 HX

Tax Record | Property Card | Interactive GIS Map | Print

<< Prev Search Result: 8 of 15 Next >>

Owner & Property Info

Owner's Name	BREWER ROY J JR & PATRICIA
Site Address	CR 18
Mailing Address	4124 SW COUNTY RD 18 FT WHITE, FL 32038
Description	LOTS 20 & 21 PARKER WOODS S/D. ORB 785-441, 946-2039 THRU 2040,

Use Desc. (code)	SINGLE FAM (000100)
Neighborhood	36616.02
Tax District	3
UD Codes	MKTA02
Market Area	02
Total Land Area	10.000 ACRES

Property & Assessment Values

Mkt Land Value	cnt: (1)	$60,000.00
Ag Land Value	cnt: (0)	$0.00
Building Value	cnt: (1)	$22,840.00
XFOB Value	cnt: (2)	$1,416.00
Total Appraised Value		$84,256.00

Just Value		$84,256.00
Class Value		$0.00
Assessed Value		$84,256.00
Exempt Value	(code: HX)	$25,000.00
Total Taxable Value		$59,256.00

Sales History

Sale Date	Book/Page	Inst. Type	Sale Vlmp	Sale Qual	Sale RCode	Sale Price
1/29/2002	946/2040	WD	I	Q		$55,000.00
1/29/2002	946/2039	WD	I	U	01	$31,000.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
2	SINGLE FAM (000100)	1997	WD or PLY (08)	576	608	$22,840.00

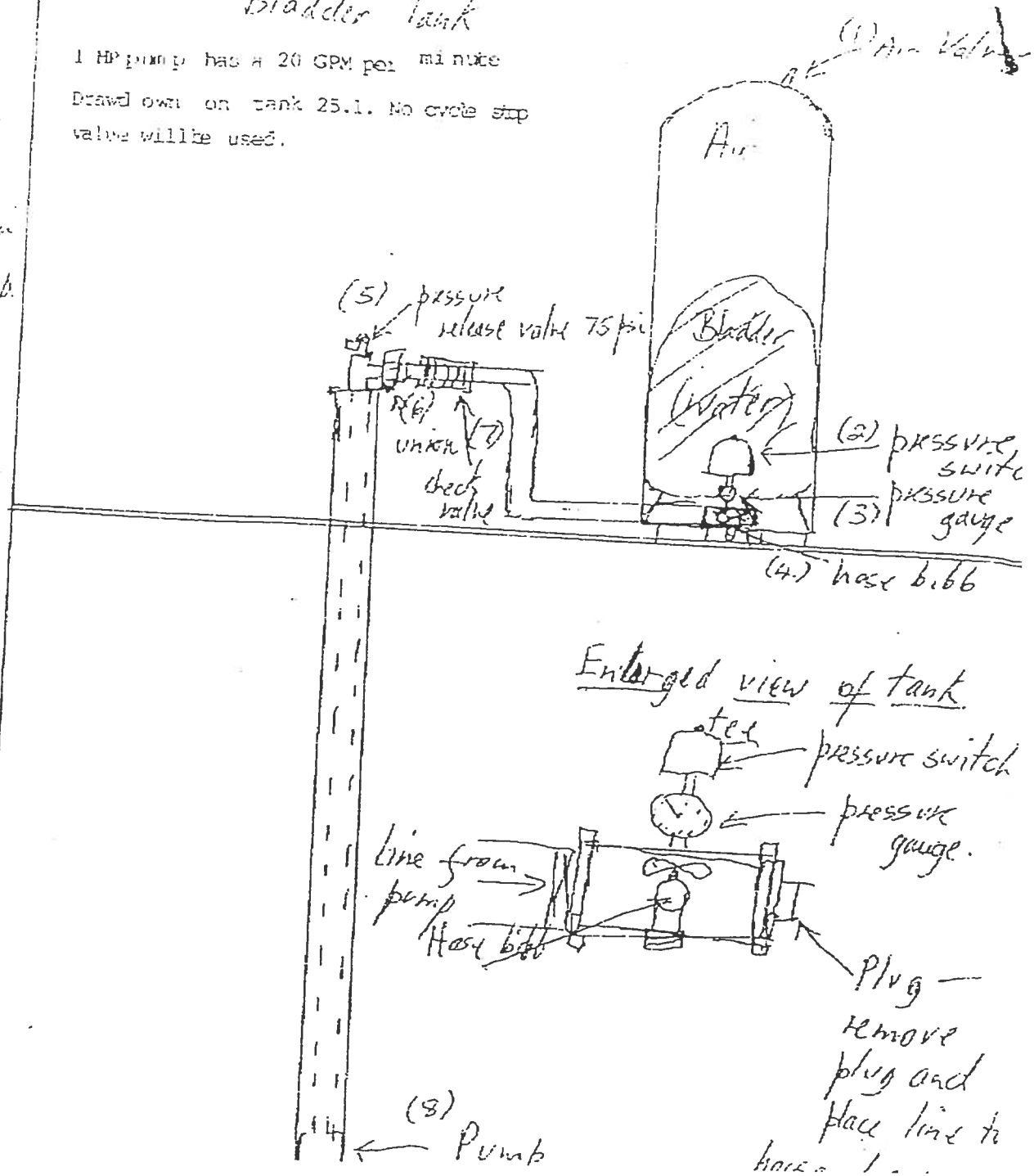

AMTROL INC.
WEL-FLO®
Pre-pressurized
Water System Tanks
• Proven Diaphragm Design
• Tough Gloss Finish
• Sizes from 14 to 119 Gallons
• Outstanding Value
Wel-Flo
Wel-Flo
Wel-Flo
Wel-Flo

1. Air Valve. Allows air to be put into tank. Must be at or 2 psi below cut-in pressure with tank empty.
2. Pressure switch. Sets cut-in and cut-off pressure for pump.
3. Pressure gauge. Shows actual pressure in tank
4. Hose bibb. May be used to drain tank or for watering purposes
5. Pressure release valve. Safety device to prevent explosion of tank.
6. Union. Used to separate tank from well
7. Check valve. Prevents water from running back down well.
8. Pump - Pushes water up from well into tank.

Bladder Tank

1 HP pump has a 20 GPM per minute

Drawed own on tank 25.1. No cycle stop valve willbe used.



Enlarged view of tank

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

PERMIT NO. _____
DATE PAID: _____
FEE PAID: _____
RECEIPT #: _____

CONSTRUCTION PERMIT FOR:

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

APPLICANT: Brewer, Roy & Patricia

PROPERTY ADDRESS: 4124 SW CR 18, Fort White, FL, 32038

LOT: 20/21 BLOCK: na SUBDIVISION: Parker Woods S/D
[SECTION, TOWNSHIP, RANGE, PARCEL NUMBER]

PROPERTY ID #: 36-6S-16-04076-120 [OR TAX ID NUMBER]

SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS AND STANDARDS OF SECTION 381.0065, F.S., AND CHAPTER 64E-6, F.A.C. DEPARTMENT APPROVAL OF SYSTEM DOES NOT GUARANTEE SATISFACTORY PERFORMANCE FOR ANY SPECIFIC PERIOD OF TIME. ANY CHANGE IN MATERIAL FACTS, WHICH SERVED AS A BASIS FOR ISSUANCE OF THIS PERMIT, REQUIRE THE APPLICANT TO MODIFY THE PERMIT APPLICATION. SUCH MODIFICATIONS MAY RESULT IN THIS PERMIT BEING MADE NULL AND VOID. ISSUANCE OF THIS PERMIT DOES NOT EXEMPT THE APPLICANT FROM COMPLIANCE WITH OTHER FEDERAL, STATE, OR LOCAL PERMITTING REQUIRED FOR DEVELOPMENT OF THIS PROPERTY.

SYSTEM DESIGN AND SPECIFICATIONS

T [1050] GALLONS / GPD SEPTIC TANK/AEROBIC UNIT CAPACITY MULTI-CHAMBERED/IN-SERIES [ ]
A [ ] GALLONS / GPD _____ CAPACITY MULTI-CHAMBERED/IN-SERIES [ ]
N [ ] GALLONS GREASE INTERCEPTOR CAPACITY [MAXIMUM CAPACITY SINGLE TANK: 1250 GALLONS]
K [ ] GALLONS DOSING TANK CAPACITY [ ] GALLONS @ [ ] DOSES PER 24 HRS # PUMPS [ ]

D [444] SQUARE FEET PRIMARY DRAINFIELD SYSTEM
R [ ] SQUARE FEET _____ SYSTEM
A TYPE SYSTEM: [ ] STANDARD [X] FILLED [ ] MOUND [ ] _____
I CONFIGURATION: [X] TRENCH [ ] BED [ ] _____
N
F LOCATION OF BENCHMARK: Live Oak
I ELEVATION OF PROPOSED SYSTEM SITE [12] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE [16] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [2] INCHES EXCAVATION REQUIRED: [NA] INCHES

O _____
T _____
H _____
E _____
R _____

SPECIFICATIONS BY: Rocky D Fry TITLE: MASTER CONTRACTOR

APPROVED BY: _____ TITLE: _____ _____ CHD

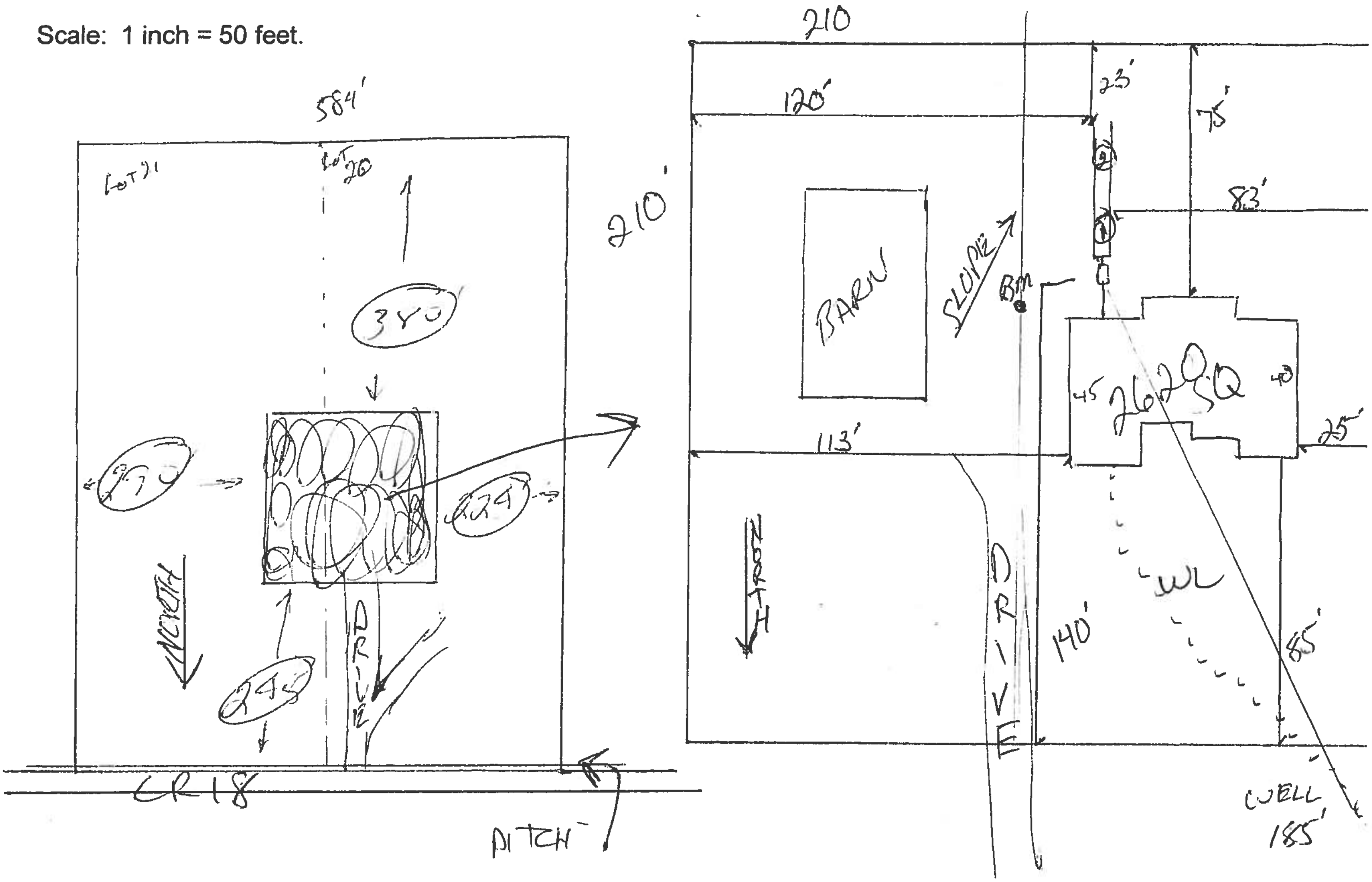
DATE ISSUED: _____ EXPIRATION DATE: _____

STATE OF FLORIDA
DEPARTMENT OF HEALTH
APPLICATION F0R ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number__________________

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

Scale: 1 inch = 50 feet.



Notes: 1 of 10 ACRES

Site Plan submitted by: [signature] MASTER CONTRACTOR

Plan Approved______ Not Approved_____ Date______________

By____ County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

ZONING & FLOOD PLAIN NOTIFICATION

TO: COLUMBIA COUNTY HEALTH DEPARTMENT

FROM: BREWER

RE: PERMIT # _____

As owner or authorized agent for the property described in the above referenced permit, I certify that I am fully aware of the following:

1. I am aware of the zoning requirements for the property, and I have determined from the County Planning & Zoning office that I can develop the property as described in my septic tank permit application.
2. I understand that it is my responsibility to determine if my property and proposed development lies within a flood prone area. (The County Planning & Zoning office can provide this information).
3. I understand that no portion of the fees paid for permits, site evaluations, or inspections of onsite sewage disposal systems are returnable once the service has been rendered.

Rock D

___ OWNER _X_ AUTHORIZED AGENT SIGNATURE

SEP 12 2006

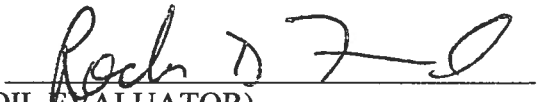
DATE

A & B CONSTRUCTION
PRIVATE SOIL EVALUATION ACKNOWLEDGEMENT

I HEREBY ACKNOWLEDGE THAT THE Columbia_ , COUNTY HEALTH DEPARTMENT HAD NO FIRST HAND KNOWLEDGE OF SOIL CHARACTORISTICS OR SEASONAL WATER TABLE LEVELS AT THIS PROPOSED ONSITE SEWAGE TREATMENT AND DISPOSAL SITE (PERMIT NUMBER _____). THEY ARE ACCEPTING THE WRITTEN EVALUATION OF THE APPROVED SOIL EVALUATOR HIRED BY MYSELF OR MY APPROVED AGENT(S). THE SYSTEM WILL BE PERMITTED IN ACCORDANCE WITH CHAPTER 64E-6 FAC AND FS381 USING THE PRIVATE EVALUATORS SOIL ANALYSIS AND THE INFORMATION WE HAVE PROVIDED CONCERNING FLOW RATES, TYPE OF FACILITY AND PROPOSED USAGE. ANY INCORRECT INFORMATION USED TO PERMIT THE SYSTEM WILL VOID THE PERMIT. I UNDERSTAND THAT A COMPLETE AND ACCURATE SITE PLAN IS NECESSARY TO SHOW THE EXACT LOCATION OF ALL PERTINANT FACILITIES AND FEATURES AND OTHER ITEMS THAT WOULD EFFECT THE LOCATION OF THE OSTDS. I ALSO ACKNOWLEDGE THAT ANY DEVIATION FROM THE EXACT SITE PLAN WOULD REQUIRE ANOTHER SITE EVALUATION BY THE PRIVATE SOIL EVALUATOR.

Columbia___ COUNTY HEALTH DEPARTMENT MAY REVIEW ANY WORK PREFORMED BY THE PRIVATE SOIL EVALUATOR AND IS NOT RESPONSIBLE FOR ANY SYSTEM FAILURE DUE TO INCORRECT SOIL EVALUATION, SITE PLAN OR APPLICATION INFORMATION.

SIGNATURE  DATE 9/12/2006
(HOMEOWNER / **AGENT**)

SIGNATURE  DATE 9/12/2006
(PRIVATE SOIL EVALUATOR)

DIRECTIONS TO BREWER RESIDENCE

HIGHWAY 47 TO FT. WHITE
LEFT ON 27 TO HWY. 18
TURN LEFT
2.3 MILES ON RIGHT
METAL BUILDING WITH GREEN ROOF

A & B CONSTRUCTION SITE PLAN ATTACHMENT

1. Is there any slope to the property?	(Yes)	No
2. Are there any public wells within 200' of the property lines?	Yes	(No)
3. Are there any private wells within 75' of the property lines?	Yes	(No)
4. Are there any lakes, streams, canals or standing bodies of water on or within 75' of your property lines?	Yes	(No)
5. Are there any drainage features (i.e. ditches, swales, retention areas, etc.) on or within 75' of the property lines?	(Yes)	No
6. Are there any septic systems on adjacent properties within 75' of the property lines?	Yes	(No)
7. Are there any recorded easements on the property?	Yes	(No)
8. Is there a swimming pool on the property?	Yes	(No)
9. Are there any non-potable water wells on or within 50' of the property lines?	Yes	(No)
10. Are there any other structures on the property?	(Yes)	No
11. Are there any paved or obstructed areas on the property?	Yes	(No)
12. Is the distance from the well and the building foundation equal to or greater than 25 feet?	(Yes)	No

IF YOU ANSWERED YES TO ANY OF THESE QUESTIONS, PLEASE SHOW LOCATION ON THE SITE PLAN

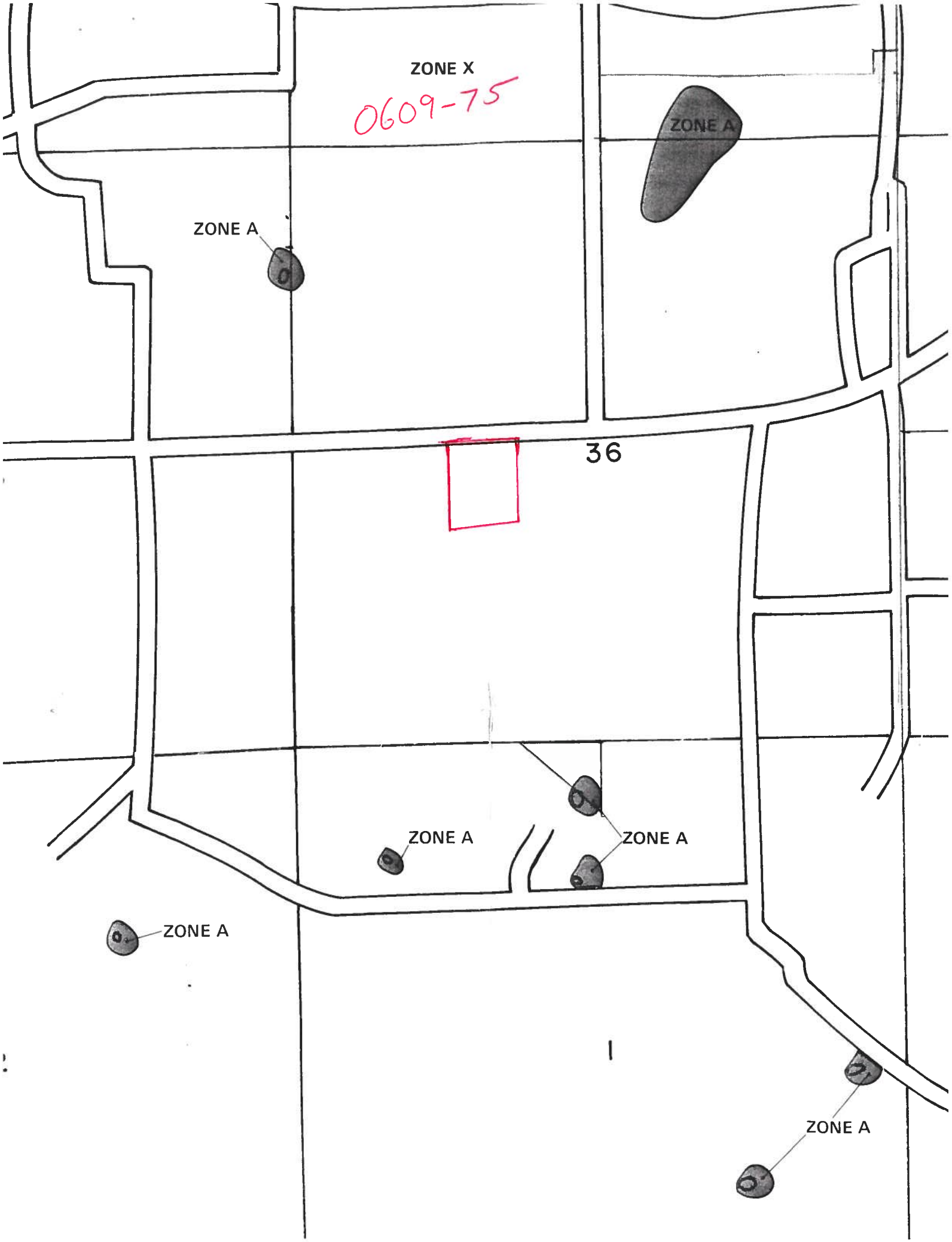
PLEASE USE THIS CHECKLIST WHILE COMPLETEING SITE PLAN TO BE SURE THAT ALL REQUIREMENTS AND DISTANCES ARE SHOWN

1. _____ Property dimensions.
2. _____ Distance from front, back and side property lines to the residence.
3. _____ Building dimensions.
4. _____ Location of proposed septic system and drain field.
5. _____ Distance from well to septic.
6. _____ Distance from septic to nearest property line.
7. _____ Water lines must be shown.
8. _____ Distance from residence to septic.
9. _____ Show driveway.
10. _____ Septic tank and drain field location staked and marked.

SEP 12 2006

Owner / Agent Signature / Date

Clerical Signature / Date

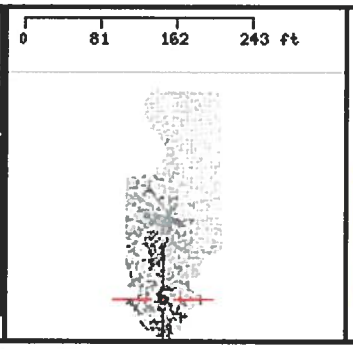

ZONE X
0609-75
ZONE A
ZONE A
36
ZONE A
ZONE A
ZONE A
ZONE A

Columbia County Property Appraiser

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

PARCEL: 36-6S-16-04076-120 HX - SINGLE FAM (000100)

Name:	BREWER ROY J JR & PATRICIA	LandVal	$60,000.00
Site:	CR 18	BldgVal	$22,840.00
Mail:	4124 SW COUNTY RD 18 FT WHITE, FL 32038	ApprVal	$84,256.00
		JustVal	$84,256.00
Sales	1/29/2002 $55,000.00 I / Q	Assd	$84,256.00
Info	1/29/2002 $31,000.00 I / U	Exmpt	$25,000.00
		Taxable	$59,256.00



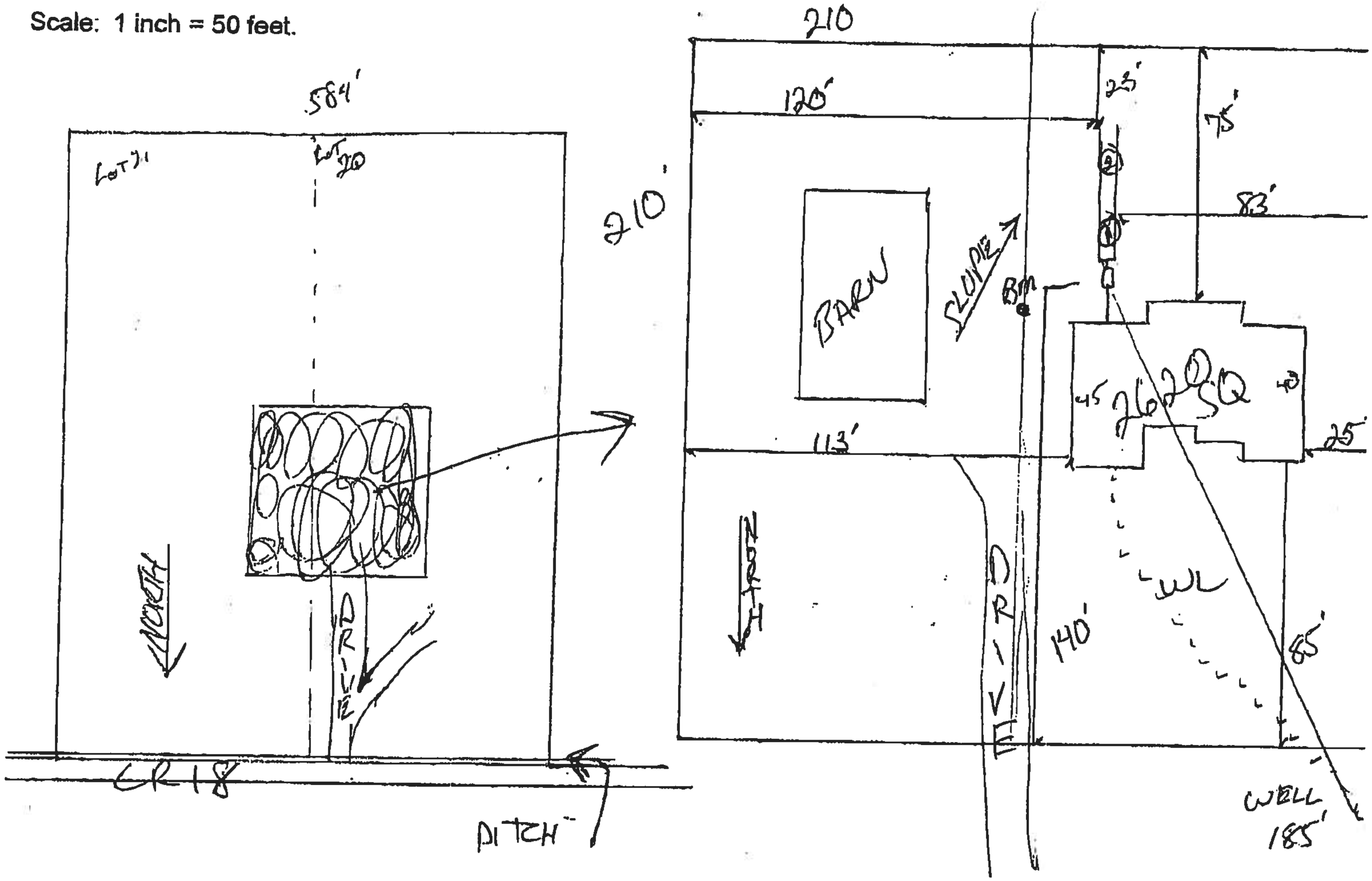
This information, GIS Map Updated: 9/1/2006, was derived from data which was compiled by the Columbia County Property Appraiser Office solely for the governmental purpose of property assessment. This information should not be relied upon by anyone as a determination of the ownership of property or market value. No warranties, expressed or implied, are provided for the accuracy of the data herein, it's use, or it's interpretation. Although it is periodically updated, this information may not reflect the data currently on file in the Property Appraiser's office. The assessed values are NOT certified values and therefore are subject to change before being finalized for ad valorem assessment purposes.

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

Permit Application Number 06-0899N

PART II - SITEPLAN

Scale: 1 inch = 50 feet.



Notes: 1 of 10 Acres

Site Plan submitted by: [signature] **MASTER CONTRACTOR**

Plan Approved______ Not Approved_____ Date______________

By____ County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

CERTIFICATE OF OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.

Parcel Number 36-6S-16-04076-120

Building permit No. 000025086

Use Classification SFD

Fire: 0.00

Permit Holder MIKE TODD

Waste:

Owner of Building ROY & PATRICIA BREWER

Total: 0.00

Location: 4124 SW CR 18, FT. WHITE, FL

Date: 04/24/2007

Harry Dicks

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

NICHOLAS
PAUL
GEISLER
ARCHITECT
N.C.A.R.B. Certified

Route 17, Box 1038
Lake City, FL 32055
386/755-9021

FLORIDA BUILDING CODE SECTION 1606

COMPLIANCE SUMMARY

OWNER: MIKE TODD CONSTRUCTION, Columbia County, FL
BREWER RESIDENCE

TYPE OF CONSTRUCTION

ROOF: Hip Construction, Wood Trusses @ 24" O.C.
WALLS: 8" CMU, w/ 1 #5 Rebar @ 48" O.C., Max.
FLOOR: 4" Thk. Conc. Slab, w/ 6x6 10/10 W.W.M., dbl. 3' from edge
FOUNDATION: Continuous Footer/Stemwall

ROOF DECKING

MATERIAL: 1/2" CDX Plywood or 7/16" OSB
SHEET SIZE: 48"x96" Sheets Placed Perpendicular to Roof Framing
FASTENERS: 8D Common Nails @ 4" O.C. Ends, 8" O.C. Interior

SHEAR WALLS

MATERIAL: 8" CMU, W/ 1 #5 vertical Rebar @ each end of segment hooked to footing and tie beam

HURRICANE UPLIFT CONNECTORS

TRUSS CLIPS: SIMPSON H3 @ Each Truss End, Typ. U.N.O.
Refer to Truss Engineering for uplift loads

FOOTINGS AND FOUNDATIONS

HOUSE FOOTINGS: 20"x10" Continuous w/ 2 - #5 Rebars
HOUSE STEMWALL: 8" CMU w/ #5 Rebar Dowels @ 48" O.C.

CONSTRUCTION DETAILS:

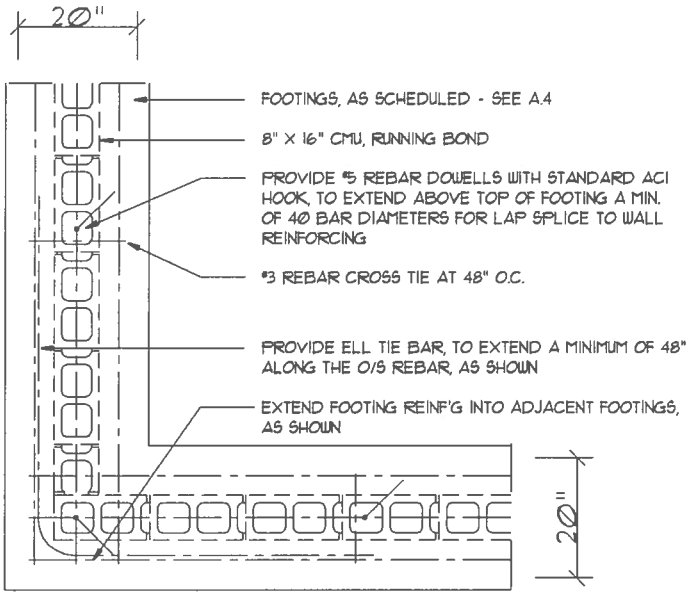
Refer to the Attached Details:
"A", "B", "C", "D", "E", "F", "W", "X", "Y" and "Z"
Details are general in nature and apply to walls up to 10'-0" height.

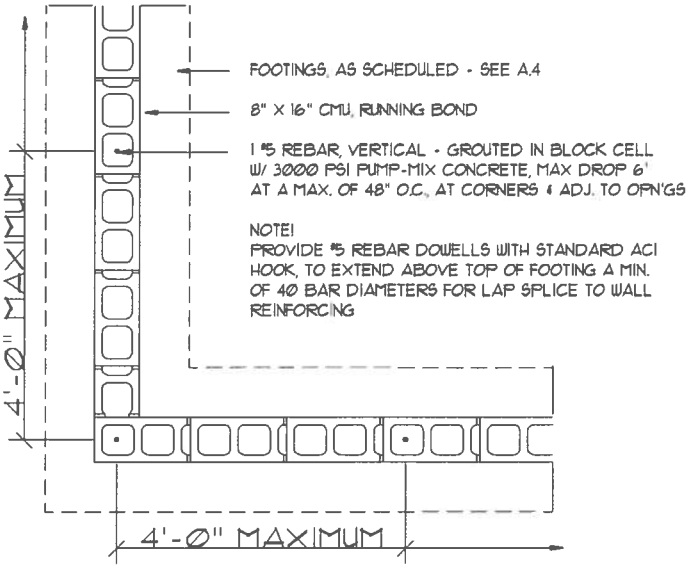
PREPARER'S CERTIFICATION

I hereby certify that the attached Wind Load Design and Analysis calculations are in compliance with the 2004 Florida Building Code, Section 1609, to the best of my knowledge and belief.

Date: 25 Sep 2006

Nicholas Paul Geisler, Architect AR0007005

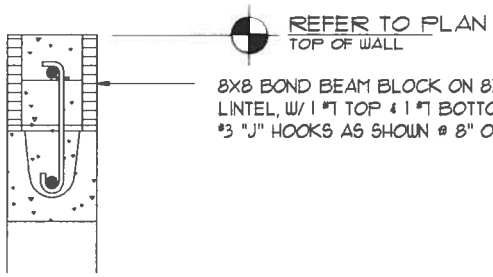




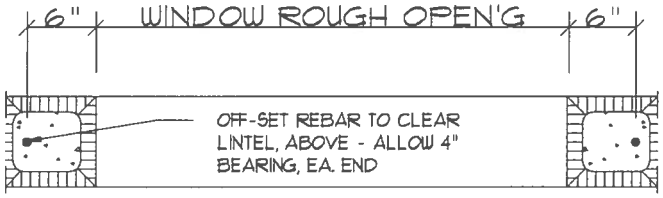
Wall/Foundation Reinf'g DETAIL

SCALE: 1/2" = 1'-0"

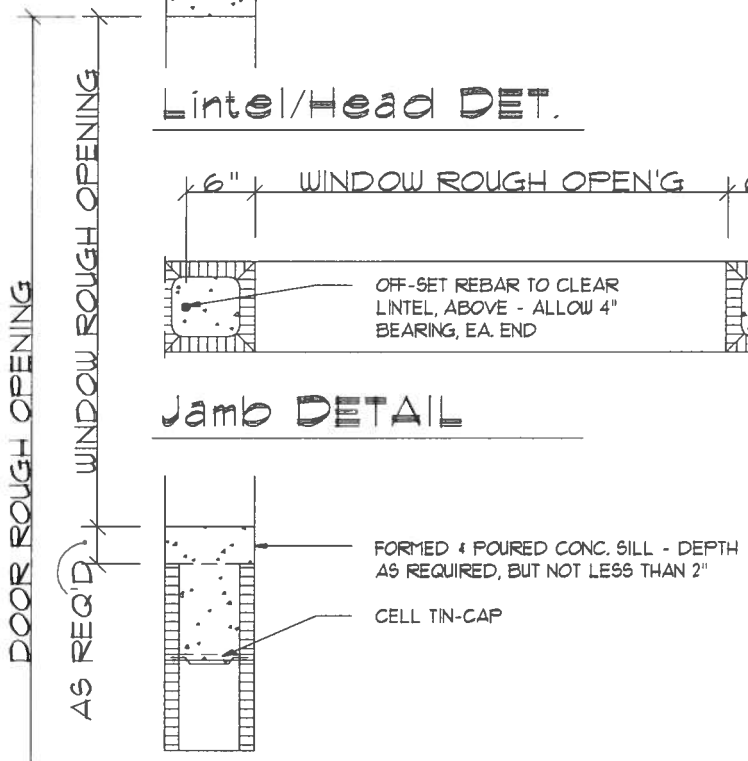
A



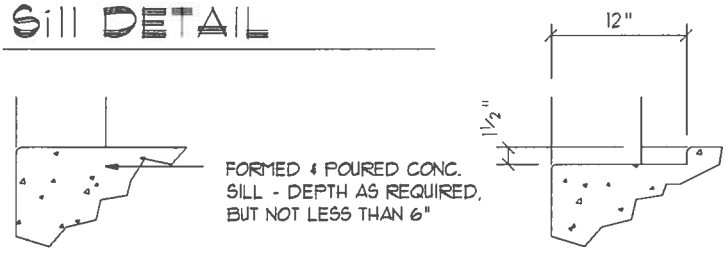
Lintel/Head DET.



Jamb DETAIL



Sill DETAIL



ENTRY DOOR

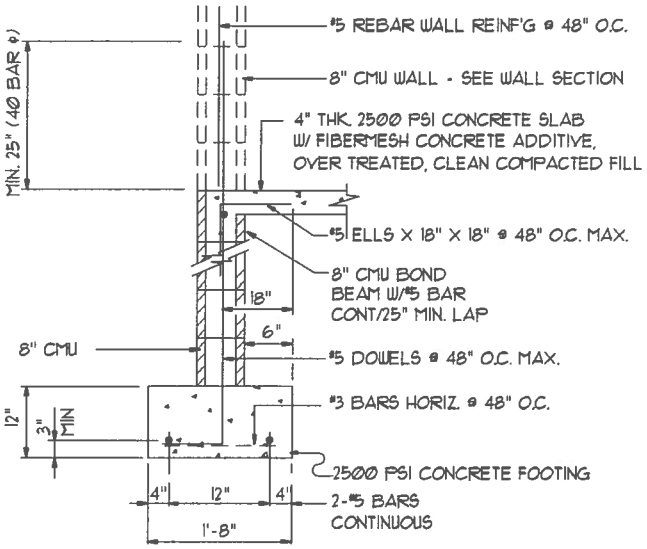
GARAGE DOOR

Sill DETAIL

Masonry Opn'g DET'S

B

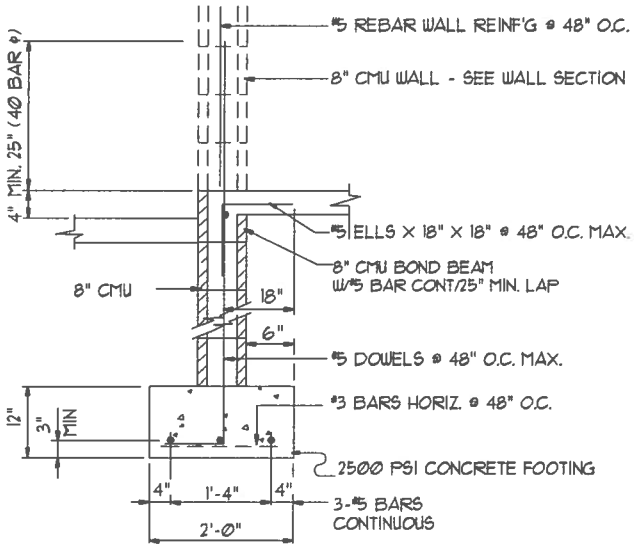
SCALE: 1" = 1'-0"



STEMWALL SECTION

SCALE: 1/2" = 1'-0

C

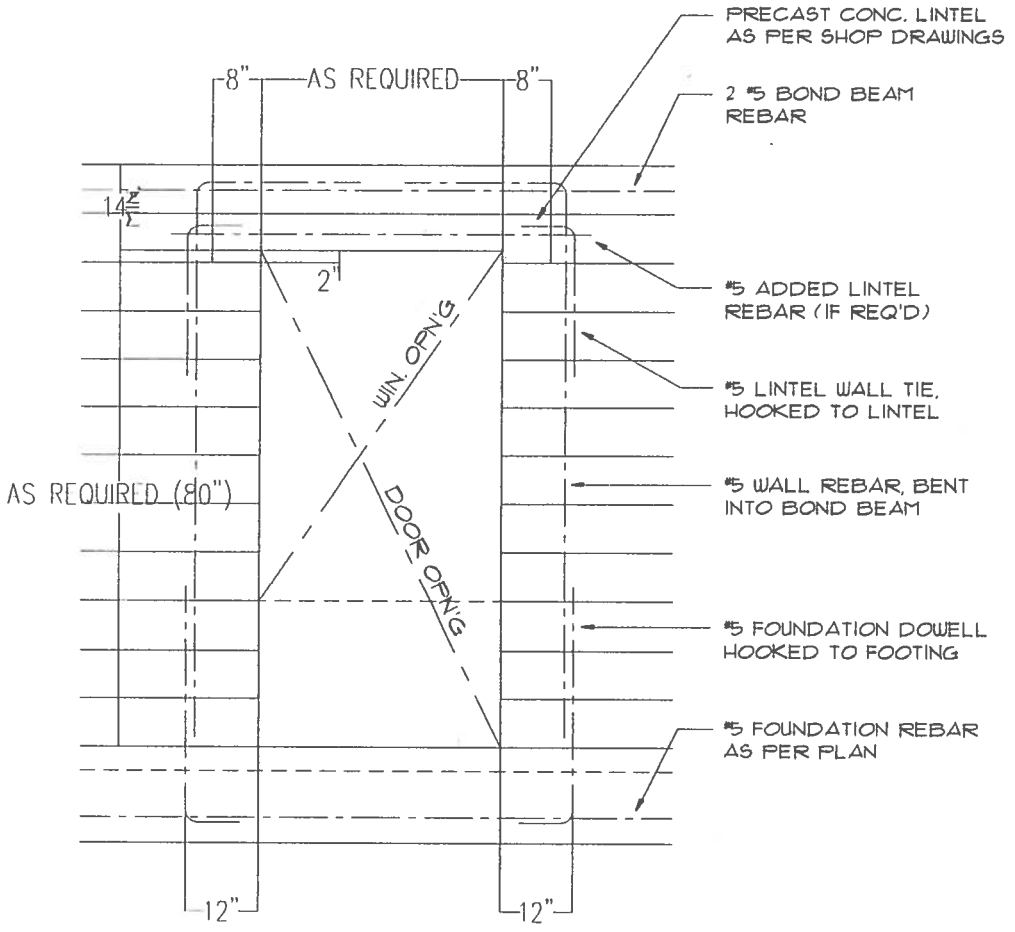


STEMWALL SECTION

SCALE: 1/2" = 1'-0

D

NOTE!
ALL BLOCK CELLS CONTAINING VERTICAL REINFORCING, SHALL BE SOLIDLY FILLED WITH CONCRETE - SEE GENERAL NOTES



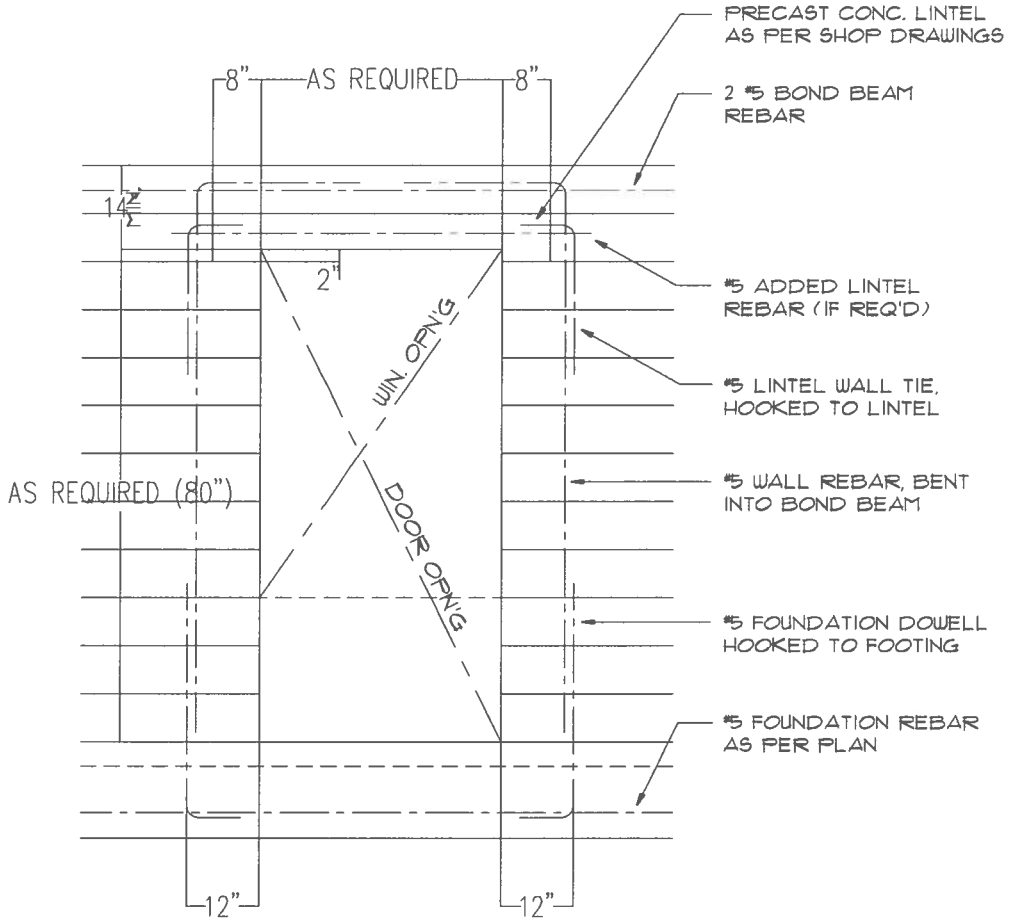
Typical Door/Window Opening Reinforcing DETAIL

E

SCALE: 1/2" = 1'-0"

NOTE!
REFER TO GENERAL NOTES FOR LAP SPLICE AND HOOK MINIMUM LENGTH/SIZE - ALL PER ACI 318-LATEST

NOTE!
ALL BLOCK CELLS CONTAINING VERTICAL REINFORCING, SHALL BE SOLIDLY FILLED WITH CONCRETE - SEE GENERAL NOTES

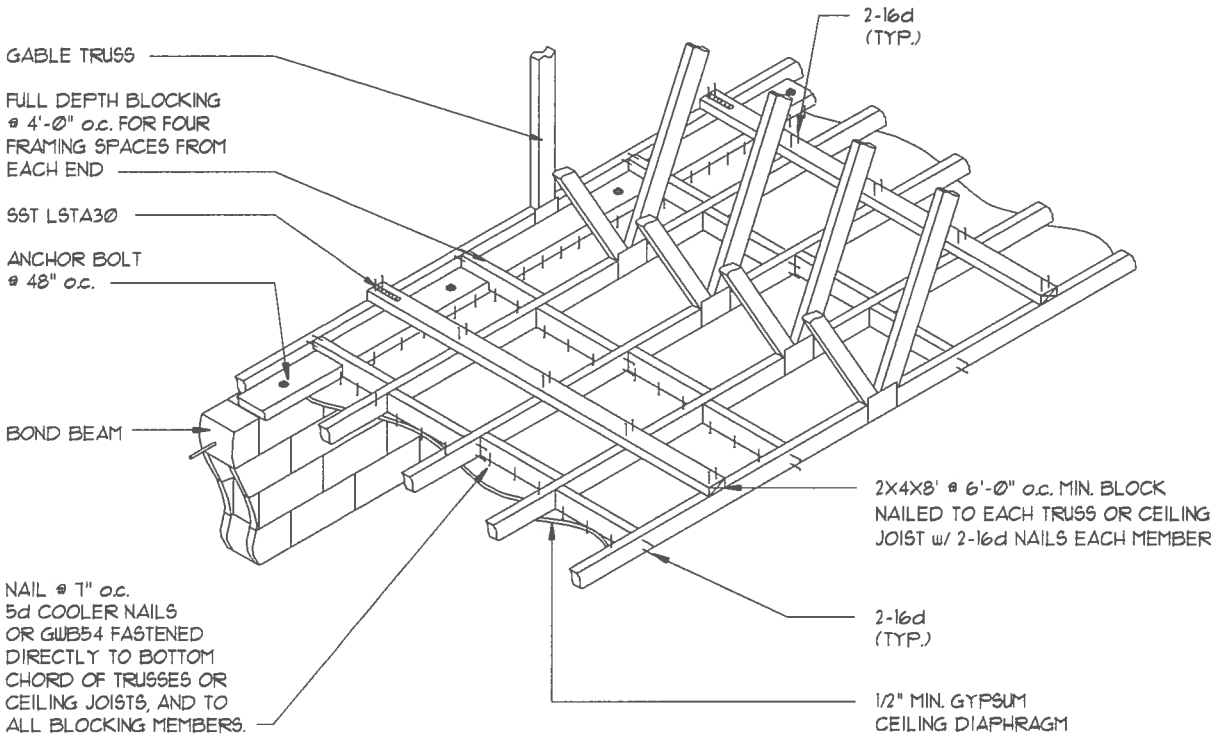


Typical Door/Window Opening Reinforcing DETAIL

E

SCALE: 1/2" = 1'-0"

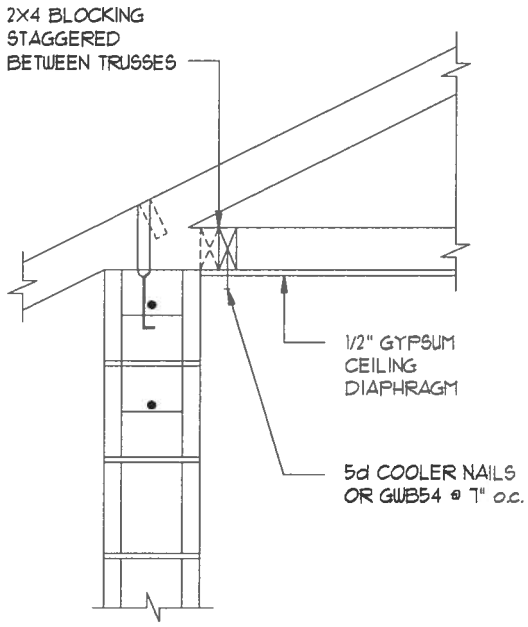
NOTE!
REFER TO GENERAL NOTES FOR LAP SPLICE AND HOOK MINIMUM LENGTH/SIZE - ALL PER ACI 318-LATEST



DIRECT TRUSS TO MASONRY CONNECTION ENDWALL FOR GYPSUM CEILING DIAPHRAGM

W

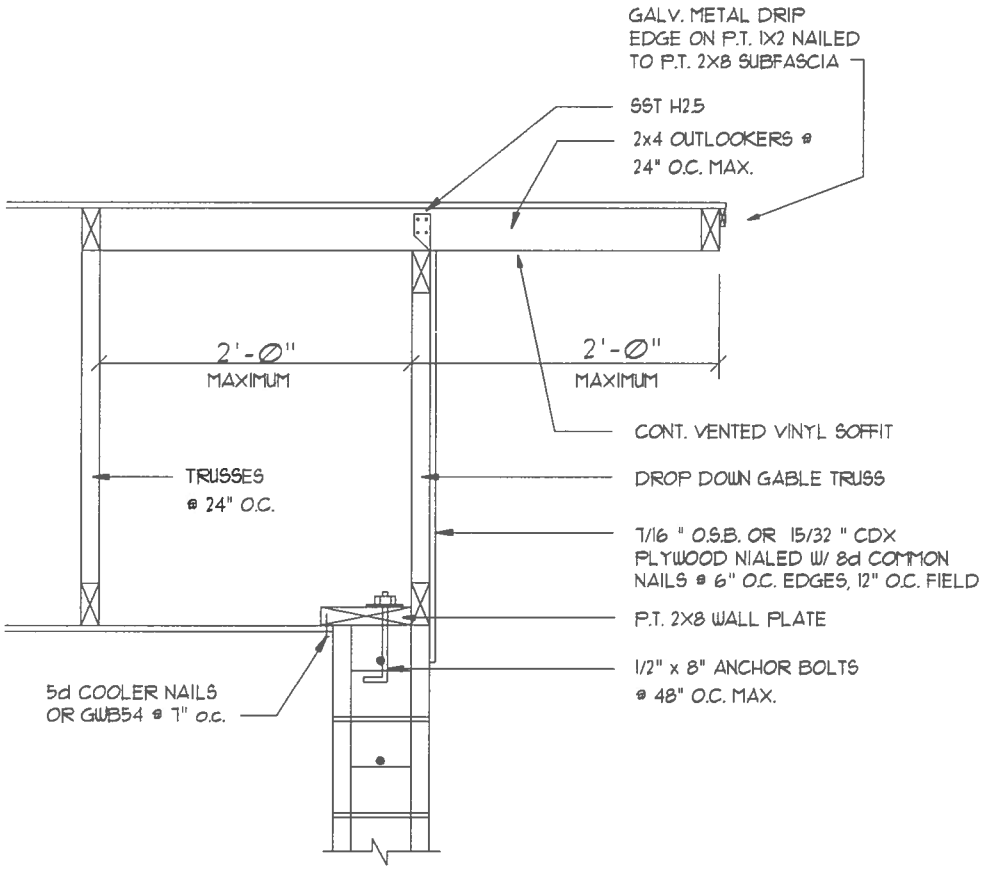
SCALE: NONE



GYPSUM CEILING DIAPHRAGM
TO SIDEWALL CONNECTION

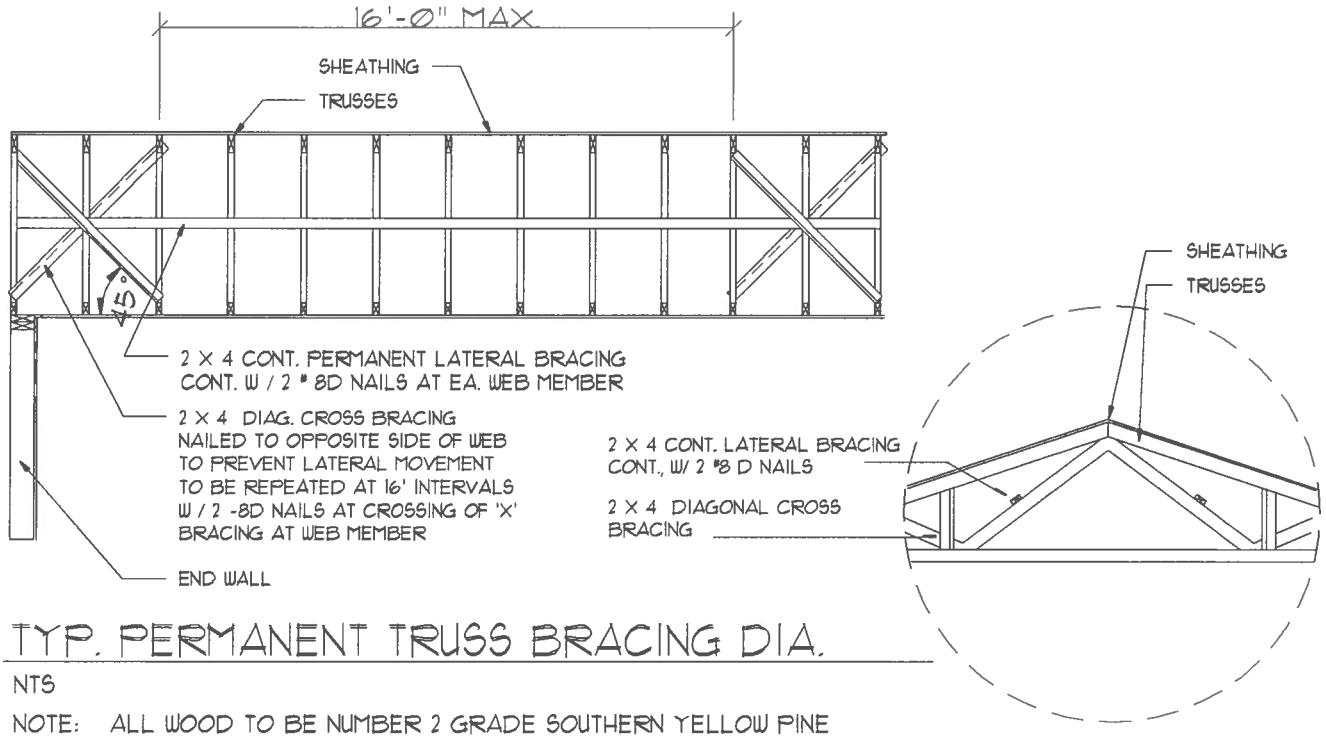
Roof Edge DETAIL

SCALE: NONE



Gable End DETAIL

SCALE: NONE



TYP. PERMANENT TRUSS BRACING DIA.

NTS

NOTE: ALL WOOD TO BE NUMBER 2 GRADE SOUTHERN YELLOW PINE

Truss Bracing DETAILS

Z

SCALE: AS NOTED

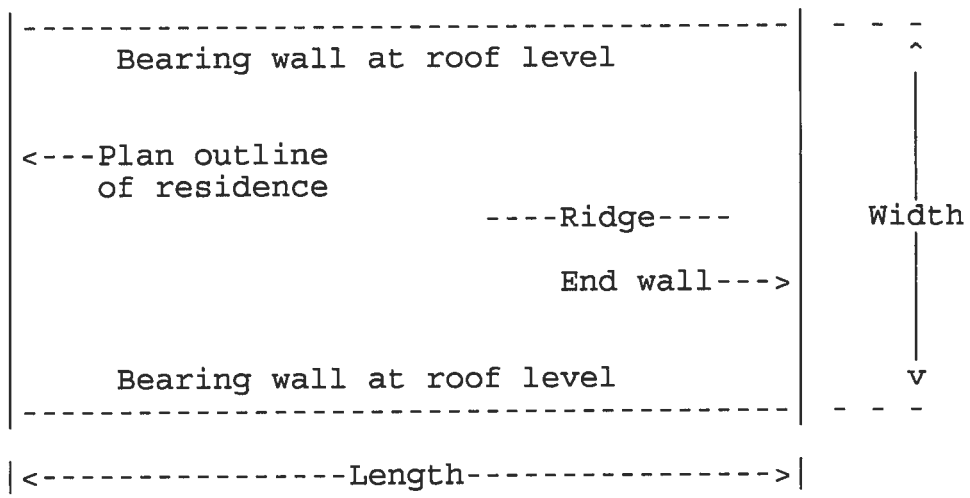
Data entry by: NPG Date: 09-25-06

Project name: BREWER RESIDENCE
Location : COLUMBIA COUNTY FL

W I N D D E S I G N
Version 1.0
Copyright 1988---EDA Software, Inc.
Based on ASCE 7-95 for wind loads

**** GENERAL INPUT DATA ****

Permanent construction
Simple rectangular building



Length along bearing walls out to out of studs (block) = 70 feet
Width along end walls out to out of studs (block) = 60 feet
Roof overhang in long dir. from outer face of stud (block) = 2 feet gen.
Roof overhang at short end wall from outer face of stud (block) = 2 feet
Height of exterior wall to top of plate (tie bm) on long side = 10 feet
Roof cross slope = 7 /12

Wind velocity = 110 mph

**** DEGREE OF ENCLOSURE ****

Assume that this building is an 'Enclosed building' per ASCE 7-95, section 6.2.

**** STRUCTURAL FRAMING INPUT DATA ****

*** Roof Structural Data ***

Member number 1
Common house-porch truss--supported by exterior walls and outside of porch
Span length out to out of supports = 60 feet
Roof cross slope = 7 /12
Truss spacing = 24 inches
House width from house wall to beam/column = 46 feet

Member number 2
Jack truss--hip-ended roof
Span length out to out of supports = 7 feet
Roof cross slope = 7 /12
Truss spacing = 24 inches
Overhang = 2 feet

*** Wall Structural Data ***

Spacing of tie columns = 48 inches
Depth of tie beam = 1.333333 feet
Tie column number 1 is 10 feet--fin. floor to top of tie beam

COEFFICIENTS AND PRESSURES FOR UPLIFT
Main Wind Force Resisting Systems
Actual wind pressure = Velocity pressure x Coefficient
Wind velocity is 110 mph
Mean roof height is 19.1359 feet
Velocity pressure is 23.46913 psf
Roof cross slope is 7 on 12, which equals 30.25644 degrees to horizontal
End zone width is 12 feet
Coefficients include exposure reduction and internal pressure component.
For illustration see ASCE 7-95, Figure 6-4 (page 22).

	Coefficient	Actual Pressure (psf)
End zone:		
Windward wall (1E)	.87	20.41
Windward roof (2E)	.45	10.56
Leeward roof (3E)	-.53	-12.44
Leeward wall (4E)	0	0
Interior zone:		
Windward wall (1)	0	0
Windward roof (2)	0	0
Leeward roof (3)	0	0
Leeward wall (4)	0	0

COEFFICIENTS AND PRESSURES FOR LATERAL FORCES
Main Wind Force Resisting Systems
Actual wind pressure = Velocity pressure x Coefficient
Wind velocity is 110 mph
Mean roof height is 19.1359 feet
Velocity pressure is 23.46913 psf
Roof cross slope is 7 on 12, which equals 30.25644 degrees to horizontal
End zone width is 12 feet
Coefficients include exposure reduction and internal pressure component.
For illustration see ASCE 7-95, Figure 6-4 (page 22).

	Coefficient	Actual Pressure (psf)
End zone:		
Windward wall (1E)	.87	20.41
Windward roof (2E)	.45	10.56
Leeward roof (3E)	-.53	-12.44
Leeward wall (4E)	0	0
Interior zone:		
Windward wall (1)	0	0
Windward roof (2)	0	0
Leeward roof (3)	0	0
Leeward wall (4)	0	0

TOTAL WIND FORCES ON ENTIRE BUILDING FOR UPLIFT
Main Wind Force Resisting Systems

Lateral forces (pounds):
Windward wall =-4516 outward
Leeward wall = 0 outward
Uplift forces (pounds) :
Windward roof =-7604 outward
Leeward roof = 8956 outward
Windward overhang = 2122 upward

TOTAL WIND FORCES ON ENTIRE BUILDING FOR LATERAL FORCES
Main Wind Force Resisting Systems

Forces transverse:
Lateral forces (pounds):
Windward wall = 4515 inward
Leeward wall = 0 outward
Windward roof = 4435 inward
Leeward roof = 5224 outward
Uplift forces (pounds) :
Windward roof = 7603 inward
Leeward roof = 8956 outward

Forces longitudinal:
Lateral forces (pounds):
Windward wall = 8620 inward
Leeward wall = 6828 outward

COEFFICIENTS AND PRESSURES
Roof Components

Actual wind pressure = Velocity pressure x Use factor x Coefficient
Velocity pressure =-.35 psf Use factor = 1.0
Edge strip width = 6 feet End zone width = 6 feet
Coefficients (GCp - GCpi) include reduction and internal pressure components.

Common-ext truss 1 --Span 60 ft., Spacing 24 in., Slope 7 /12, Overhang 46 ft.
Member located in interior zone: Tributary area = 1200 square feet
Interior area : Coefficient = -.98 Pressure = -23 psf
Eave and ridge areas: Coefficient = -1.181 Pressure = -27.718 psf
Overhang area : Coefficient = -1.98 Pressure = -46.469 psf
Wind uplift at bearing = 3630 pounds

Common-ext truss 2 --Span 60 ft., Spacing 24 in., Slope 7 /12, Overhang 46 ft.
Member located in end zone: Tributary area = 1200 square feet
Interior area : Coefficient = -1.181 Pressure = -27.718 psf
Eave and ridge areas: Coefficient = -1.181 Pressure = -27.718 psf
Overhang area : Coefficient = -1.98 Pressure = -46.469 psf
Wind uplift at bearing = 3800 pounds

Jack truss 3 --Span 7 ft., Spacing 24 in., Slope 7 /12, Overhang 2 ft.
Member located in interior zone: Tributary area = 16.33333 square feet
Interior area : Coefficient = -1.166 Pressure = -27.366 psf
Eave and ridge areas: Coefficient = -1.366 Pressure = -32.059 psf
Overhang area : Coefficient = -2.166 Pressure = -50.835 psf
Wind uplift at bearing = 480 pounds

Jack truss 4 --Span 7 ft., Spacing 24 in., Slope 7 /12, Overhang 2 ft.
Member located in end zone: Tributary area = 16.33333 square feet
Interior area : Coefficient = -1.166 Pressure = -27.366 psf
Eave and ridge areas: Coefficient = -1.366 Pressure = -32.059 psf
Overhang area : Coefficient = -2.166 Pressure = -50.835 psf
Wind uplift at bearing = 480 pounds

COEFFICIENTS AND PRESSURES
Wall Components

Actual wind pressure = Velocity pressure x Coefficient
Velocity pressure = 23.46913 psf
Edge strip width = 6 feet
Coefficients (GCp - GCpi) include reduction and internal pressure components.

Tie column number 1 --Column height 8.666667 feet, Spacing 48 inches
Column located in interior zone: Tributary area = 34.66667 square feet
Coefficient = -1.265 Pressure = -29.689 psf
Outward wind force on column = 1029 pounds

Tie column number 2 --Column height 8.666667 feet, Spacing 48 inches
Column located in end zone: Tributary area = 34.66667 square feet
Coefficient = -1.55 Pressure = -36.378 psf
Outward wind force on column = 1261 pounds

ROOF LOADING--Roof Number 1 (pounds per square foot)

Roof cross slope = 7 inches per foot

Fiberglass shingles 235 # per square and 1 layer of 15 # felt	= 2.5
No insulation	
7/16 in. roof sheathing, 1 layer	= 1.31
Total roof unit weight on slope	= 3.81
Cosine of roof cross slope	= .8637789
Roof unit weight on horizontal	= 4.410851
2 in. x 4 in. wood trusses at 24 in. spacing	= 2.240024
1 layer of 5/8 in. gypsum board ceiling--plain	= 2.5
Ceiling insulation R-30	= .5
Air-conditioning ductwork and potable water pipes	= 1.5
Full lighting	= .3
Miscellaneous	= 0
Total	= 11.45088

Roof Unit Dead Load = 12 psf
Roof dead load supported generally by wall = 355.0262 plf

ROOF LOADING--Roof Number 2 (pounds per square foot)

Roof cross slope = 7 inches per foot

Fiberglass shingles 235 # per square and 1 layer of 15 # felt	= 2.5
No insulation	
7/16 in. roof sheathing, 1 layer	= 1.31
Total roof unit weight on slope	= 3.81
Cosine of roof cross slope	= .8637789
Roof unit weight on horizontal	= 4.410851
2 in. x 4 in. wood trusses at 24 in. spacing	= 2.240024
1 layer of 5/8 in. gypsum board ceiling--plain	= 2.5
Ceiling insulation R-30	= .5
Air-conditioning ductwork and potable water pipes	= 1.5
Full lighting	= .3
Miscellaneous	= 0
Total	= 11.45088

Roof Unit Dead Load = 12 psf
Roof dead load supported generally by wall = 355.0262 plf

ROOF LOADING--Roof Number 3 (pounds per square foot)

Roof cross slope = 7 inches per foot

Fiberglass shingles 235 # per square and 1 layer of 15 # felt	= 2.5
No insulation	
7/16 in. roof sheathing, 1 layer	= 1.31
Total roof unit weight on slope	= 3.81
Cosine of roof cross slope	= .8637789
Roof unit weight on horizontal	= 4.410851
2 in. x 4 in. wood trusses at 24 in. spacing	= 2.240024
1 layer of 5/8 in. gypsum board ceiling--plain	= 2.5
Ceiling insulation R-30	= .5
Air-conditioning ductwork and potable water pipes	= 1.5
Full lighting	= .3
Miscellaneous	= 0
Total	= 11.45088

Roof Unit Dead Load = 12 psf
Roof dead load supported generally by wall = 355.0262 plf

ROOF LOADING--Roof Number 4 (pounds per square foot)

Roof cross slope = 7 inches per foot

Fiberglass shingles 235 # per square and 1 layer of 15 # felt	= 2.5
No insulation	
7/16 in. roof sheathing, 1 layer	= 1.31
Total roof unit weight on slope	= 3.81
Cosine of roof cross slope	= .8637789
Roof unit weight on horizontal	= 4.410851
2 in. x 4 in. wood trusses at 24 in. spacing	= 2.240024
1 layer of 5/8 in. gypsum board ceiling--plain	= 2.5
Ceiling insulation R-30	= .5
Air-conditioning ductwork and potable water pipes	= 1.5
Full lighting	= .3
Miscellaneous	= 0
Total	= 11.45088

Roof Unit Dead Load = 12 psf
Roof dead load supported generally by wall = 355.0262 plf

ROOF MEMBER DEAD LOAD REACTIONS AT BEARINGS (pounds)

Roof member number 1 --Span 60 feet, Slope 7 /12, interior zone---- 951
Roof member number 2 --Span 60 feet, Slope 7 /12, end zone--------- 951
Roof member number 3 --Span 7 feet, Slope 7 /12, interior zone---- 103
Roof member number 4 --Span 7 feet, Slope 7 /12, end zone--------- 103

EXTERIOR WALL LOADING (pounds per linear foot)

Concrete masonry wall-- 10 ft. from finished floor to top of tie beam

Concrete masonry 8 in. wide--stucco 1 faces	= 520.4545
Concrete tie beam 8 in. x 16 in.	= 122.8472
R-13 Insulation	= 2.5
No exterior finish	
1/2 in. Gypsum board--Total 1 layer---	= 20
Total	= 666

Exterior Wall Dead Load = 666 plf

S U M M A R Y O F H U R R I C A N E A N C H O R D E S I G N

Simpson Strong-Tie hurricane anchors

Member number 1 --Span 60 feet, located in interior zone:--Model XXXX

Member number 2 --Span 60 feet, located in end zone:-------Model XXXX

Member number 3 --Span 7 feet, located in interior zone:--Model H3

Member number 4 --Span 7 feet, located in end zone:-------Model H3

S U M M A R Y O F H U R R I C A N E A N C H O R A N A L Y S I S

All forces are in pounds. Resistances have been increased by 60 percent.
End zone width = 6 feet
Code: C = Compliance N = Non-compliance

Simpson Strong-Tie hurricane anchors

Member 1 --Common ext truss--Span 60 feet, at 24 in. oc--in interior zone:
Uplift = 3630 Dead = 951 Net = 2679 Model XXXX, Resistance = 9999 C
False anchor--required uplift exceeds all anchor values in computer databank

Member 2 --Common ext truss--Span 60 feet, at 24 in. oc--in end zone:
Uplift = 3800 Dead = 951 Net = 2849 Model XXXX, Resistance = 9999 C
False anchor--required uplift exceeds all anchor values in computer databank

Member 3 --Hip jack truss--Span 7 feet, at 24 in. oc--in interior zone:
Uplift = 480 Dead = 103 Net = 377 Model H3, Resistance = 455 C
Model H3--18 gauge anchor, 4--8d nails to truss, 4--8d nails to plate

Member 4 --Hip jack truss--Span 7 feet, at 24 in. oc--in end zone:
Uplift = 480 Dead = 103 Net = 377 Model H3, Resistance = 455 C
Model H3--18 gauge anchor, 4--8d nails to truss, 4--8d nails to plate

**** TRANSVERSE SHEARWALL DIMENSIONS ***

Transverse Shearwall Segment Analysis:

Segment ST1, , H = 120 in., L = 252 in., H/L = .476 < 3.5
Segment ST2, , H = 120 in., L = 240 in., H/L = .5 < 3.5

**** ANALYSIS OF ROOF SHEATHING FOR FASTENER WITHDRAWAL ****

Interior zone (area 1)
Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is 7/16 inch with no intermediate blocking
Size of sheathing is 48 inches by 96 inches
Fasteners along end trusses are 8d nails spaced 4 in.
Fasteners along int. trusses are 8d nails spaced 8 in.
Total outward wind force on sheathing = 744 pounds
Total withdrawal resistance of 47 common nails = 3569 pounds
Fastening of roof sheathing satisfies Code requirements.

Edge strip (area 2) width = 6 feet
Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is 7/16 inch with no intermediate blocking
Size of sheathing is 48 inches by 96 inches
Fasteners along end trusses are 8d nails spaced 4 in.
Fasteners along int. trusses are 8d nails spaced 8 in.
Total outward wind force on sheathing = 1495 pounds
Total withdrawal resistance of 47 common nails = 3569 pounds
Fastening of roof sheathing satisfies Code requirements.

End zone (areas 2 and 3) width = 6 feet
Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is 7/16 inch with no intermediate blocking
Size of sheathing is 48 inches by 96 inches
Fasteners along end truss are 8d nails spaced 4 in.
Fasteners along end wall are 8d nails spaced 4 in.
Fasteners along int. trusses are 8d nails spaced 8 in.
Total outward wind force on sheathing = 1495 pounds
Total withdrawal resistance of 47 common nails = 3569 pounds
Fastening of roof sheathing satisfies Code requirements.

**** DESIGN OF TIE COLUMN NUMBER 1 ****

Concrete masonry with heavy aggregate, 8 inches wide
Specified compressive strength of masonry F'm is 1500 psi
Net area compressive strength of block units is 1900 psi
Masonry mortar is Type S
Reinforcing steel is Grade 40. Bars are centered in grouted cells.
Tie column units are single cells with 1--# 5 bar each cell
Tie column units are spaced at 48 inches, in interior zone
Tie column height is 8.666667 ft., with 16 in. tie beam depth
Modular ratio--steel to masonry = 13.94231
Properties: Thick 7.625 in.-- Width 15.625 in.-- Gross Area 93.11128 sq. in.
Value of k= .3138972 Value of j = .8953676
Splice length is 25 in. minimum

Total outward force on tie column = 1029 pounds
Tie column actual bending moment = 1114 ft-lb.

Axial forces:

Uplift	=-18.66619 plf
Dead load	= 542.3874 plf
Difference (compression)	= 561.0536 plf
Tie column spacing	= 4 feet
Net compression on column	= 2244 pounds

Stresses in psi: (All allowable stresses are increased by 1/3 for wind):

Bending:			
Reinforcing steel	: Actual = 12773	Allowable = 26666	
Grouted masonry	: Actual = 419	Allowable = 666	
Shear in masonry	: Actual = 9	Allowable = 51	
Axial compression	: Actual = 25	Allowable = 337	
Combined compression	: Actual = 444	Allowable = 666	

Axial compressive loads (pounds): Actual = 2244 Allowable = 13373
Footing dowels to match tie column bars for size and spacing.

*** Summary of Design ***
Reinforced masonry tie column COMPLIES with Code requirements.

**** DESIGN OF TIE COLUMN NUMBER 2 ****

Concrete masonry with heavy aggregate, 8 inches wide
Specified compressive strength of masonry F'm is 1500 psi
Net area compressive strength of block units is 1900 psi
Masonry mortar is Type S
Reinforcing steel is Grade 40. Bars are centered in grouted cells.
Tie column units are single cells with 1--# 5 bar each cell
Tie column units are spaced at 48 inches, in end zone
Tie column height is 8.666667 ft., with 16 in. tie beam depth
Modular ratio--steel to masonry = 13.94231
Properties: Thick 7.625 in.-- Width 15.625 in.-- Gross Area 93.11128 sq. in.
Value of k= .3138972 Value of j = .8953676
Splice length is 25 in. minimum

Total outward force on tie column = 1261 pounds
Tie column actual bending moment = 1366 ft-lb.

Axial forces:

Uplift	=-18.66619 plf
Dead load	= 542.3874 plf
Difference (compression)	= 561.0536 plf
Tie column spacing	= 4 feet
Net compression on column	= 2244 pounds

Stresses in psi: (All allowable stresses are increased by 1/3 for wind):

Bending:		
Reinforcing steel	: Actual = 15652	Allowable = 26666
Grouted masonry	: Actual = 513	Allowable = 666
Shear in masonry	: Actual = 11	Allowable = 51
Axial compression	: Actual = 25	Allowable = 337
Combined compression	: Actual = 538	Allowable = 666

Axial compressive loads (pounds): Actual = 2244 Allowable = 13373
Footing dowels to match tie column bars for size and spacing.

*** Summary of Design ***
Reinforced masonry tie column COMPLIES with Code requirements.

**** ANALYSIS OF FOUNDATION ****

Stemwall is 8 inch concrete masonry, filled with grout, 16 inches high
Footing is 20 inches wide by 12 inches deep (including slab)
Earth cover over top of footing is 4 inches

Total uniform wind uplift on foundation =-19 pounds per linear foot
Uniform dead loads in pounds per linear foot:
Roof = 355.0262 plf
Wall = 665.8018 plf

Total = 1020.828 plf
Total uniform dead load times 2/3 = 680 pounds per linear foot
Net uplift force at top of foundation =-699 pounds per linear foot
Weight of stemwall footing earth x 2/3 = 287 pounds per linear foot
Net uplift at bottom of footing = 0 pounds per linear foot

*** Summary of Analysis ***
Foundation is stable.

**** ANALYSIS OF REINFORCING STEEL ****

Grade 40 reinforcing steel, Number 5 vert. bars at 48 inch centers

Total uniform wind uplift on foundation =-19 pounds per linear feet
Uniform dead loads in pounds per linear foot:
Roof = 355.0262 plf
Wall = 665.8018 plf

Total = 1020.828 plf
Total uniform dead load times 2/3 = 680 pounds per linear foot
Net uplift force on foundation =-699 pounds per linear foot
Weight of concrete block stemwall x 2/3 = 81 pounds per linear foot
Net uplift at top of footing = 0 pounds per linear foot

Total uplift force on each re-bar = 0 pounds
Safe tension value of each re-bar = 8181 pounds (increased by 1/3)

*** Summary of Analysis ***
Reinforcing steel satisfies all Code requirements.

**** SUMMARY OF REINFORCING DATA ****

Foundation wall data:
Wall is composed of 8 inch concrete masonry, fully grouted.
Wall reinforcing is Grade 40 steel, Number 5 at 48 inch centers
Minimum required lap splice for Number 5 bar is 25 inches.
Minimum required clearance for Number 5 bar is 1.5 inches.
For poured floor slabs--Number 5 bar extends to 1 inch below top of slab.
Wall reinf. in footing has a std. A.C.I. hook, 6 inches below top of footing.

Footing data:
Footing is continuous, 20 inches wide by 12 inches deep.
Footing concrete is 2500 psi
Footing reinforcing is Grade 40 steel, 2--# 5 longitudinal.
Minimum required splice length = 16 inches
Reinforcing steel shall have cover as follows:
    Top-------6 inches
    Sides-----3 inches
    Bottom----3 inches