

DATE 08/23/2006

Columbia County Building Permit

PERMIT  
000024908

This Permit Expires One Year From the Date of Issue

APPLICANT KEN LAKE PHONE 352.620.8889

ADDRESS POB 684 SPARR FL 32192

OWNER PAT MUHLEISEN PHONE 561.432.5942

ADDRESS 206 NE OWL RUN WAY LAKE CITY FL 32055

CONTRACTOR KEN LAKE PHONE 352.620.8889

LOCATION OF PROPERTY 441-N TO DREW GRADE RD,TR GO TO PAVEMENT END, PROCEED TO OWL  
RUN (RUNS INTO 90 DEGREE TURN) DRIVEWAY ON THE R SIDE OF IT.

TYPE DEVELOPMENT M/H/UTILITY ESTIMATED COST OF CONSTRUCTION 0.00

HEATED FLOOR AREA TOTAL AREA HEIGHT STORIES

FOUNDATION WALLS ROOF PITCH FLOOR

LAND USE & ZONING A-3 MAX. HEIGHT

Minimum Set Back Requirments: STREET-FRONT 30.00 REAR 25.00 SIDE 25.00

NO. EX.D.U. 0 FLOOD ZONE X DEVELOPMENT PERMIT NO.

PARCEL ID 01-2S-17-04659-043 SUBDIVISION

LOT BLOCK PHASE UNIT TOTAL ACRES 2.58

IH0000436 Ken Lake

Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor

PRIVATE. 06-0684MD BLK JTH N

Driveway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident

COMMENTS: REMOVE RV FROM SEPTIC SYSTEM FOR FINAL INSPECTION. 1 FOOT ABOVE ROAD.  
SECTION 2.3.1.

Check # or Cash 12374

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power date/app. by Foundation date/app. by Monolithic date/app. by

Under slab rough-in plumbing date/app. by Slab date/app. by Sheathing/Nailing date/app. by

Framing date/app. by Rough-in plumbing above slab and below wood floor date/app. by

Electrical rough-in date/app. by Heat & Air Duct date/app. by Peri. beam (Lintel) date/app. by

Permanent power date/app. by C.O. Final date/app. by Culvert date/app. by

M/H tie downs, blocking, electricity and plumbing date/app. by Pool date/app. by

Reconnection date/app. by Pump pole date/app. by Utility Pole date/app. by

M/H Pole date/app. by Travel Trailer date/app. by Re-roof date/app. by

BUILDING PERMIT FEE \$ 0.00 CERTIFICATION FEE \$ 0.00 SURCHARGE FEE \$ 0.00

MISC. FEES \$ 200.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ 11.84 WASTE FEE \$ 24.50

FLOOD DEVELOPMENT FEE \$ FLOOD ZONE FEE \$ 25.00 CULVERT FEE \$ TOTAL FEE 311.34

INSPECTORS OFFICE CLERKS OFFICE

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

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

This Permit Must Be Prominently Posted on Premises During Construction

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

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

CK# 12374

**PERMIT APPLICATION / MANUFACTURED HOME INSTALLATION APPLICATION**

**For Office Use Only** (Revised 6-23-05) Zoning Official af 8/8/06 Building Official OK JTH 8/14/06

AP# 068-17 Date Received 8/7 By JW Permit # 24908

Flood Zone X Development Permit N/A Zoning A-2 Land Use Plan Map Category A-2

Comments Panel 150  
Remove RV from septic system  
for final inspection  
Section 2.3.1

FEMA Map# \_\_\_\_\_ Elevation \_\_\_\_\_ Finished Floor \_\_\_\_\_ River \_\_\_\_\_ In Floodway \_\_\_\_\_

☒ Site Plan with Setbacks Shown ☒ EH Signed Site Plan ☒ EH Release ☒ Well letter ☒ Existing well

☒ Copy of Recorded Deed or Affidavit from land owner ☒ Letter of Authorization from Installer 6/22/05  
RV Permit # 23310

- Property ID # 01-25-17-04659-043 Must have a copy of the property deed
- New Mobile Home 32x76 Used Mobile Home \_\_\_\_\_ Year 2007
- Applicant KEN LAKE Phone # 352-620-8889 Cell 843-0566
- Address P.O. Box 684 SPARR, FL. 32192
- Name of Property Owner PATRICK MUEHLESEN Phone# 561-432-5942
- 911 Address 206 N.E OWL RUN WAY LAKE CITY
- Circle the correct power company - FL Power & Light - Clay Electric  
 (Circle One) - Suwannee Valley Electric - Progress Energy
- Name of Owner of Mobile Home PATRICK MUEHLESEN Phone # 561-432-5942
- Address 4147 2nd Ct. LANTANA, FL. 33462
- Relationship to Property Owner \_\_\_\_\_
- Current Number of Dwellings on Property 0
- Lot Size 267 X 472 Total Acreage 2 ACRES 2.58
- Do you : Have an Existing Drive or need a Culvert Permit or a Culvert Waiver (Circle one)
- Is this Mobile Home Replacing an Existing Mobile Home CAMPER AT (Owes)
- Driving Directions to the Property 441 N 7 miles past I-10 TO DREW Rd  
TR TO OWL RUN WAY TR, property is at end
- Name of Licensed Dealer/Installer KEN LAKE Phone # 352-620-8889
- Installers Address P.O. Box 684 SPARR, FL. 32192
- License Number TH0000 4316 Installation Decal # 258269

PERMIT NUMBER

Installer KEN LAKE License # TH00024310

Address of home being installed 206 N.E. Owl Run Way  
LAKE CITY

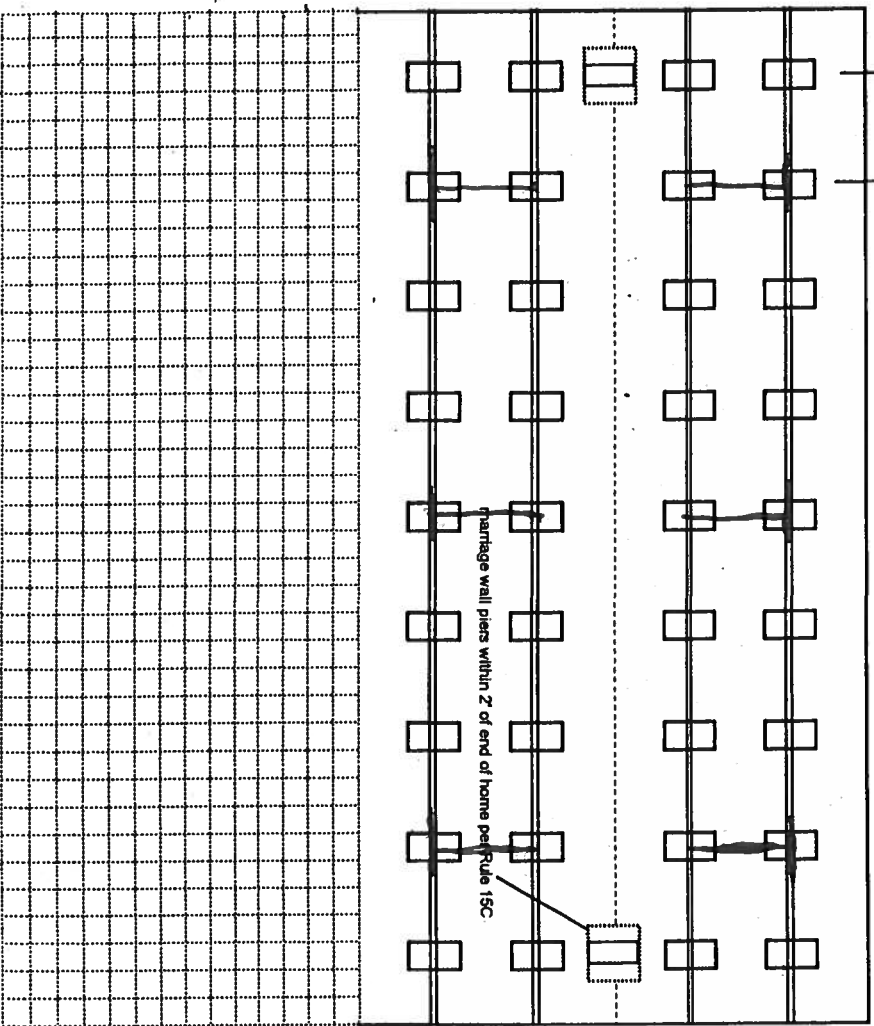
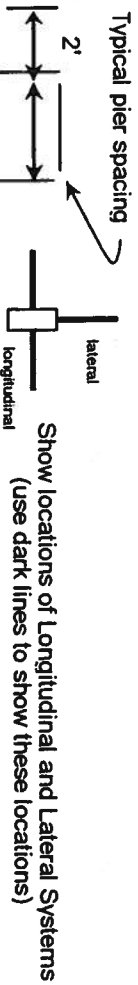
Manufacturer FLEETWOOD Length x width 76 X 32

NOTE: if home is a single wide fill out one half of the blocking plan  
if home is a triple or quad wide sketch in remainder of home

I understand Lateral Arm Systems cannot be used on any home (new or used)  
where the sidewall ties exceed 5 ft 4 in.

Installer's initials

KL



New Home ☒ Used Home ☐

Home installed to the Manufacturer's Installation Manual ☒

Home is installed in accordance with Rule 15-C ☐

Single wide ☐ Wind Zone II ☒ Wind Zone III ☐

Double wide ☒ Installation Decal # 258269

Triple/Quad ☐ Serial # THA

PIER SPACING TABLE FOR USED HOMES

| Load bearing capacity (sq in) | 16" x 16" (256) | 18 1/2" x 18 1/2" (342) | 20" x 20" (400) | 22" x 22" (484)* | 24" x 24" (576)* | 26" x 26" (676) |
|-------------------------------|-----------------|-------------------------|-----------------|------------------|------------------|-----------------|
| 1000 psf                      | 3'              | 4'                      | 5'              | 6'               | 7'               | 8'              |
| 1500 psf                      | 4' 6"           | 6'                      | 7'              | 8'               | 8'               | 8'              |
| 2000 psf                      | 6'              | 8'                      | 8'              | 8'               | 8'               | 8'              |
| 2500 psf                      | 7' 6"           | 8'                      | 8'              | 8'               | 8'               | 8'              |
| 3000 psf                      | 8'              | 8'                      | 8'              | 8'               | 8'               | 8'              |
| 3500 psf                      | 8'              | 8'                      | 8'              | 8'               | 8'               | 8'              |

\* interpolated from Rule 15C-1 pier spacing table.

PIER PAD SIZES

I-beam pier pad size 23.75 X 31.25

Perimeter pier pad size N/A

Other pier pad sizes (required by the mfg.) 20x20

Draw the approximate locations of marriage wall openings 4 foot or greater. Use this symbol to show the piers.

List all marriage wall openings greater than 4 foot and their pier pad sizes below.

Opening Pier pad size

18.5 X 18.5 20 X 20

TIEDOWN COMPONENTS

Longitudinal Stabilizing Device (LSD)  
Manufacturer 021452 1101 V  
Longitudinal Stabilizing Device w/ Lateral Arms  
Manufacturer

POPULAR PAD SIZES

| Pad Size          | Sq In |
|-------------------|-------|
| 16 x 16           | 256   |
| 16 x 18           | 288   |
| 18.5 x 18.5       | 342   |
| 16 x 22.5         | 360   |
| 17 x 22           | 374   |
| 13 1/4 x 26 1/4   | 348   |
| 20 x 20           | 400   |
| 17 3/16 x 25 3/16 | 441   |
| 17 1/2 x 25 1/2   | 446   |
| 24 x 24           | 576   |
| 26 x 26           | 676   |

ANCHORS

4 ft 5 ft

FRAME TIES

within 2' of end of home spaced at 5' 4" oc

OTHER TIES

Sidewall Longitudinal Marriage wall Shearwall  
Number 14  
14  
6  
Side

POCKET PENETROMETER TEST

The pocket penetrometer tests are rounded down to psf or check here to declare 1000 lb. soil ☒ without testing.

X \_\_\_\_\_ X \_\_\_\_\_ X \_\_\_\_\_

POCKET PENETROMETER TESTING METHOD

1. Test the perimeter of the home at 6 locations.
2. Take the reading at the depth of the footer.
3. Using 500 lb. increments, take the lowest reading and round down to that increment.

X \_\_\_\_\_ X \_\_\_\_\_ X \_\_\_\_\_

TORQUE PROBE TEST

The results of the torque probe test is 275 inch pounds or check here if you are declaring 5' anchors without testing. A test showing 275 inch pounds or less will require 4 foot anchors.

Note: A state approved lateral arm system is being used and 4 ft. anchors are allowed at the sidewall locations. I understand 5 ft anchors are required at all centerline tie points where the torque test reading is 275 or less and where the mobile home manufacturer may requires anchors with 4000 lb holding capacity.

\_\_\_\_\_  
Installer's initials

ALL TESTS MUST BE PERFORMED BY A LICENSED INSTALLER

Installer Name Lee Fale

Date Tested 8-8-06

Electrical

Connect electrical conductors between multi-wide units, but not to the main power source. This includes the bonding wire between multi-wide units. Pg. 57

Plumbing

Connect all sewer drains to an existing sewer tap or septic tank. Pg. 52

Connect all potable water supply piping to an existing water meter, water tap, or other independent water supply systems. Pg. 52

Site Preparation

Debris and organic material removed ☒ Pad ☐ Other

Fastening multi wide units

Floor: Type Fastener: 3/8 LAGS Length: 6" Spacing: 24"  
Walls: Type Fastener: 3/8 LAGS Length: 6" Spacing: 24"  
Roof: Type Fastener: 20 GA. 51000 Length: 1.5" x 1/8" Spacing: 24"  
For used homes a min. 30 gauge, 8" wide, galvanized metal strip will be centered over the peak of the roof and fastened with galv. roofing nails at 2" on center on both sides of the centerline.

Gasket (weatherproofing requirement)

I understand a properly installed gasket is a requirement of all new and used homes and that condensation, mold, mildew and buckled marriage walls are a result of a poorly installed or no gasket being installed. I understand a strip of tape will not serve as a gasket.

Installer's initials

Type gasket Form 5.11  
Pg. 40

Installed:  
Between Floors ☒  
Between Walls ☒  
Bottom of ridgebeam ☒

Weatherproofing

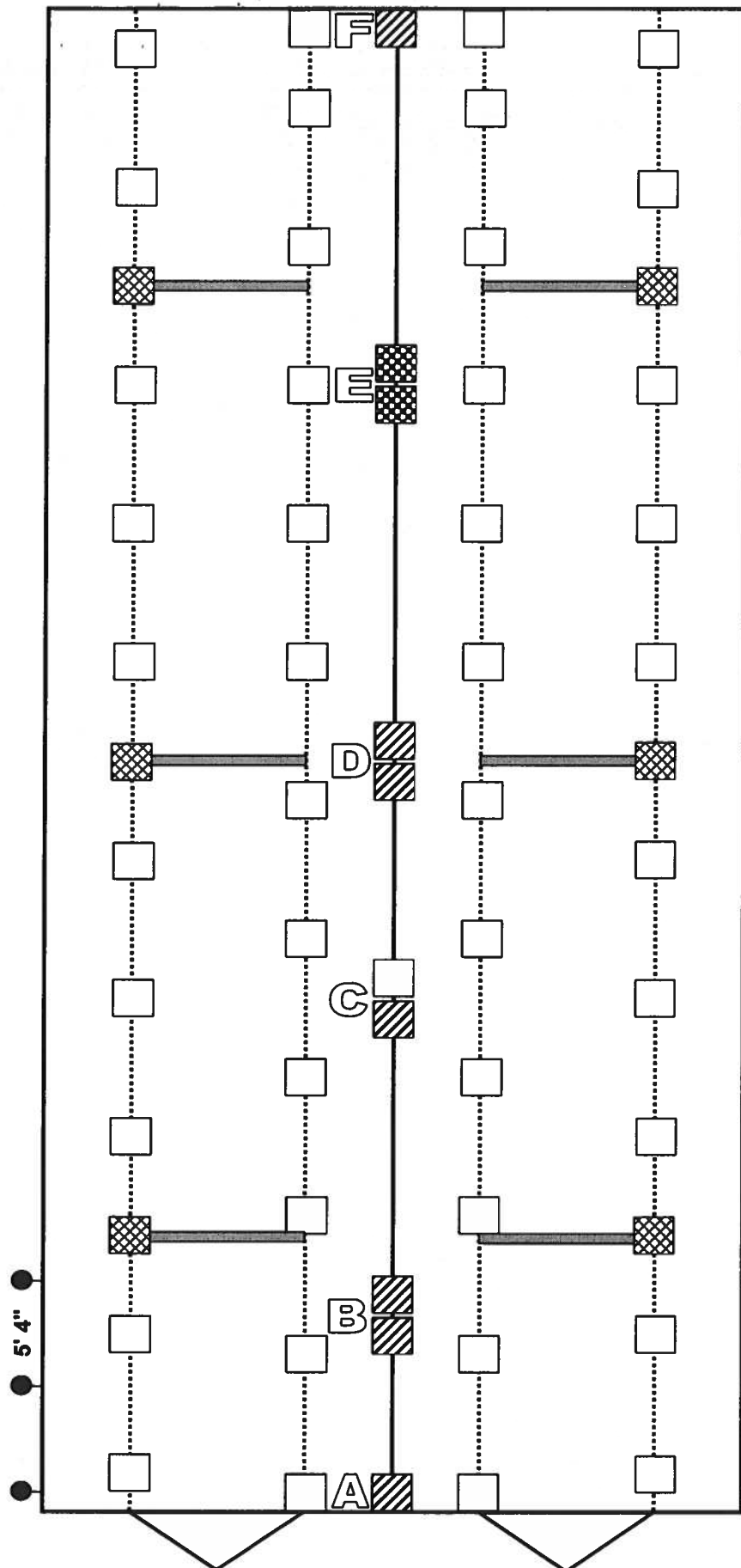
The bottomboard will be repaired and/or taped. ☒ Pg. 40  
Siding on units is installed to manufacturer's specifications. ☒  
Fireplace chimney installed so as not to allow intrusion of rain water. ☒

Miscellaneous

Skirting to be installed. ☒ No ☐  
Dryer vent installed outside of skirting. ☒ N/A  
Range downflow vent installed outside of skirting. Yes ☐  
Drain lines supported at 4 foot intervals. ☒ N/A  
Electrical crossovers protected. ☒  
Other: ☐

Installer verifies all information given with this permit worksheet is accurate and true based on the manufacturer's installation instructions and or Rule 15C-1 & 2

Installer Signature Lee Fale Date 8-8-06



**I-BEAM  
SPACING**  
**7'0"**

**PERIM.  
SPACING**  
**N/A**

**ANCHOR  
SPACING**  
**5'4"**

**BOX  
WIDTH**  
**32'**

**BOX  
LENGTH**  
**76'**

**I-BEAM  
HEIGHT**  
**12"**

| LEGEND |                             |
|--------|-----------------------------|
| ●      | SIDEWALL ANCHORS            |
| ■      | OLIVER 1101-V SYSTEM        |
| ■      | PADS -- 16 X 16 ABS         |
| ■      | PADS -- 18.5 X 18.5 ABS     |
| ■      | PADS -- 20 X 20 ABS         |
| ■      | PADS -- 21 X 29 ABS         |
| ■      | PADS -- 23.25 X 31.25" ABS  |
| ■      | PADS -- 26.25" X 26.25" ABS |

**SCALE**  
**Approx. 1/8" = 1'**

**NOTES**

- 1). PIER SPACING MAY CHANGE "LESS THAN 10%" DUE TO OBSTRUCTIONS
- 2). LONGITUDINAL ANCHORS & LATERAL STRAPS MAY BE SUBSTITUTED WITH THE OLIVER 1100 SYSTEM .....WITH THE EXCEPTION OF TWO DIAGONAL STRAPS AT EACH OLIVER 1100 SYS.
- 3). REFER TO FACTORY SUPPLIED HOME SCHEMATIC, INCLUDED IN INSPECTION PACKET, FOR CENTER-LINE PIER PLACEMENT AND WEIGHT.
- 4). PRELIMINARY TESTING REVEALED THE FOLLOWING RESULTS, PRIOR TO PERMIT PROCESS. A NEW TEST WILL BE PERFORMED AT THE TIME OF SET, NEW INFO. WILL BE SUBMITTED TO BLDG. DEPT.
- 5) DOOR PIERS AND SIDEWALL "G" ANCHORS ARE DESIGNED AND OBVIOUSLY MARKED ON THE HOME..... PER FLEETWOOD DOOR PIERS ARE NOT REQUIRED
- 6) PORCHES, FIREPLACES, SIDING GLASS DOORS AND MUD/TAPED SHEETROCK HOMES REQUIRE SPECIAL PERIMETER BLOCKING

**MANUFACTURED DATE**  
**T.B.A. 2006**

**TORQUE TEST RESULTS**  
**<275 IN. LBS.**

**PENTROMETER TEST RESULTS**  
**1000 P.S.F.**

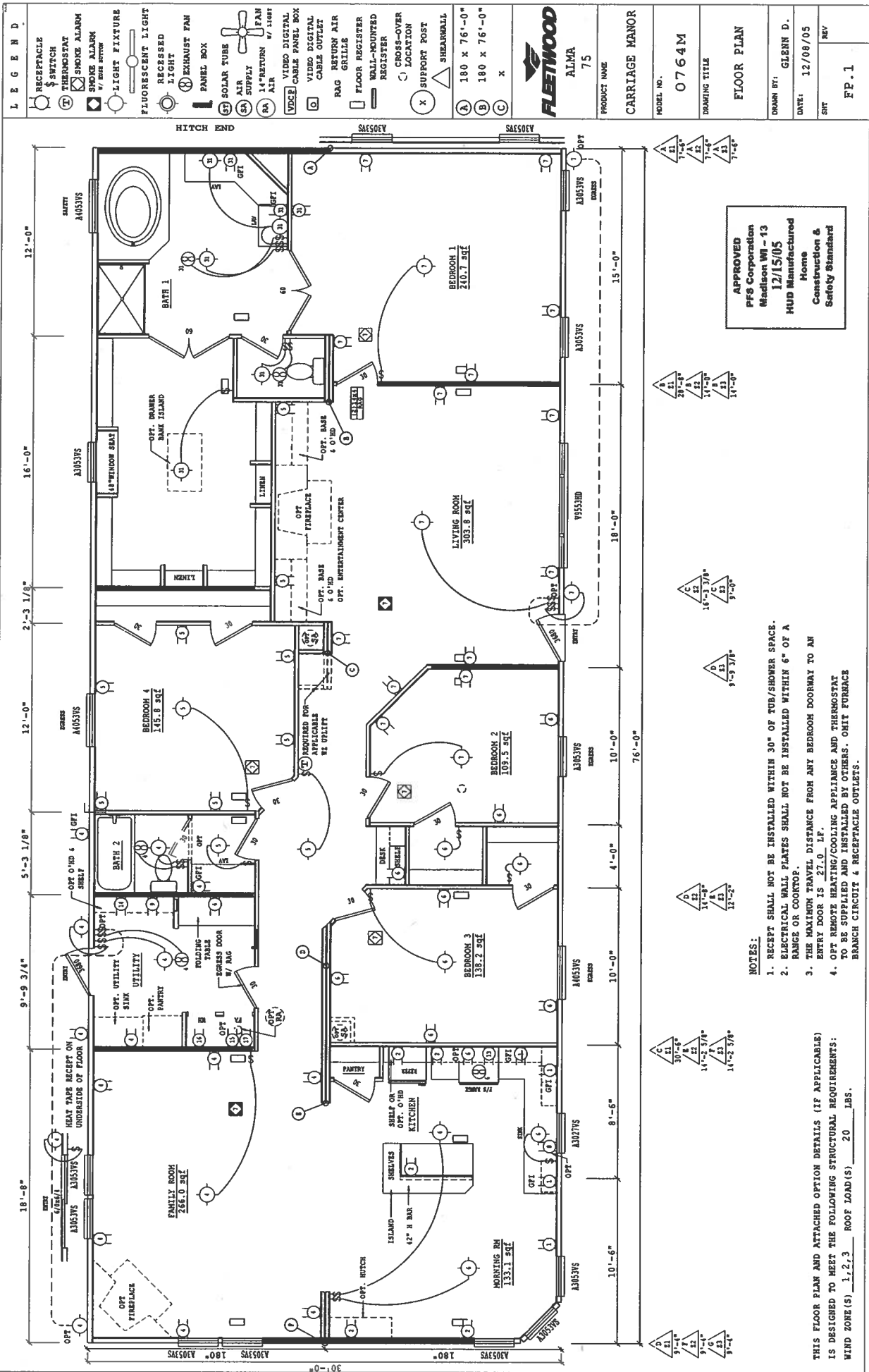
**MODEL NAME**  
**Carriage Manor**

**MODEL NUMBER**  
**0764M**

**CUSTOMER NAME**  
**Muhleisen**

**CENTERLINE PIER WEIGHT LOADS**

|                        |                        |                        |  |
|------------------------|------------------------|------------------------|--|
| <b>PIER A ~~~ 3300</b> | <b>PIER C ~~~ 8400</b> | <b>PIER E ~~~ 5600</b> |  |
| <b>PIER B ~~~ 7900</b> | <b>PIER D ~~~ 6700</b> | <b>PIER F ~~~ 3300</b> |  |



|                    |  |               |  |  |  |  |  |  |  |
|--------------------|--|---------------|--|--|--|--|--|--|--|
| CHASSIS INFO       |  |               |  |  |  |  |  |  |  |
| M.R. SPACING       |  | 95 1/2"       |  |  |  |  |  |  |  |
| I-BEAM SIZE        |  | 12"           |  |  |  |  |  |  |  |
| DRAWBAR LENGTH     |  | 39"           |  |  |  |  |  |  |  |
| DRAWBAR ANGLE      |  | 60            |  |  |  |  |  |  |  |
| FLOOR INFO         |  |               |  |  |  |  |  |  |  |
| JOIST SIZE         |  | 2x8           |  |  |  |  |  |  |  |
| JOIST MATERIAL     |  | SYP           |  |  |  |  |  |  |  |
| JOIST SPACING      |  | 19.2          |  |  |  |  |  |  |  |
| WALL INFO          |  |               |  |  |  |  |  |  |  |
| SIDEWALL HGT.      |  | 96"           |  |  |  |  |  |  |  |
| EXT WALL SIZE      |  | 2x4           |  |  |  |  |  |  |  |
| EXT SIDING MATL    |  | VINYL LAP     |  |  |  |  |  |  |  |
| CEILING/ROOF INFO  |  |               |  |  |  |  |  |  |  |
| RAFTER CODE (CATH) |  | F14S-180-2.6A |  |  |  |  |  |  |  |
| RAFTER CODE (FLAT) |  | 24"           |  |  |  |  |  |  |  |
| RAFTER SPACING     |  | 24"           |  |  |  |  |  |  |  |
| CEILING THICKNESS  |  | 5/16"         |  |  |  |  |  |  |  |
| CEILING MATERIAL   |  | GOLD BOND     |  |  |  |  |  |  |  |
| FRONT EAVE O'HANG  |  | 9"            |  |  |  |  |  |  |  |
| REAR EAVE O'HANG   |  | 9"            |  |  |  |  |  |  |  |
| FRONT GABLE O'HG   |  | 9"            |  |  |  |  |  |  |  |
| REAR GABLE O'HG    |  | 9"            |  |  |  |  |  |  |  |

|                 |  |            |  |  |  |  |  |  |  |
|-----------------|--|------------|--|--|--|--|--|--|--|
| STRAP DATA      |  |            |  |  |  |  |  |  |  |
| OVERLAPS (F/R): |  | 9 / 9      |  |  |  |  |  |  |  |
| WIND ZONE: 2    |  |            |  |  |  |  |  |  |  |
| LOCATION        |  | UNIT STRAP |  |  |  |  |  |  |  |
| 16'-0" A/B      |  | G-2        |  |  |  |  |  |  |  |
| 30'-4" A/B      |  | G-2        |  |  |  |  |  |  |  |
| 52'-0" A/B      |  | G-2        |  |  |  |  |  |  |  |
| 60'-0" A/B      |  | G-2        |  |  |  |  |  |  |  |
| 76'-0" A/B      |  | G-2        |  |  |  |  |  |  |  |
| WIND ZONE: 3    |  |            |  |  |  |  |  |  |  |
| LOCATION        |  | UNIT STRAP |  |  |  |  |  |  |  |
| 12'-1" A/B      |  | G-2        |  |  |  |  |  |  |  |
| 16'-0" A/B      |  | G-2        |  |  |  |  |  |  |  |
| 30'-4" A/B      |  | G-2        |  |  |  |  |  |  |  |
| 34'-1" A/B      |  | G-2        |  |  |  |  |  |  |  |
| 52'-0" A/B      |  | G-2        |  |  |  |  |  |  |  |
| 76'-0" A/B      |  | G-2        |  |  |  |  |  |  |  |

|                         |  |  |  |  |  |  |  |  |  |
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| POST DATA - TJI PRO 360 |  |  |  |  |  |  |  |  |  |
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## THERMAL CALCULATION RESULTS

| ITZ | CELL | FLOOR | U    | DESCRIPTION                           | DOCT TYPE | RESULT | MAX NOM | AVAIL. |
|-----|------|-------|------|---------------------------------------|-----------|--------|---------|--------|
| 1   | 14   | 11    | 1.10 | PHILLIPS AL                           | OVERHEAD  | PASS   | 226.66  | 14.71  |
| 1   | 14   | 11    | 1.10 | PHILLIPS AL                           | INSULATED | PASS   | 238.53  | 26.58  |
| 1   | 14   | 11    | 1.10 | PHILLIPS VINYL or PHILLIPS AL w/STORM | OVERHEAD  | PASS   | 520.47  | 309.52 |
| 1   | 14   | 11    | 1.10 | PHILLIPS VINYL or PHILLIPS AL w/STORM | INSULATED | PASS   | 547.75  | 335.80 |
| 1   | 14   | 11    | 1.10 | PHILLIPS VINYL LOW-E                  | OVERHEAD  | PASS   | 789.60  | 577.65 |
| 1   | 14   | 11    | 1.10 | PHILLIPS VINYL LOW-E                  | INSULATED | PASS   | 830.98  | 619.03 |
| 1   | 21   | 11    | 1.10 | PHILLIPS AL                           | OVERHEAD  | PASS   | 281.12  | 69.17  |
| 1   | 21   | 11    | 1.10 | PHILLIPS AL                           | INSULATED | PASS   | 297.44  | 85.49  |
| 1   | 21   | 11    | 1.10 | PHILLIPS VINYL or PHILLIPS AL w/STORM | OVERHEAD  | PASS   | 645.54  | 433.59 |
| 1   | 21   | 11    | 1.10 | PHILLIPS VINYL or PHILLIPS AL w/STORM | INSULATED | PASS   | 683.02  | 471.07 |
| 1   | 21   | 11    | 1.10 | PHILLIPS VINYL LOW-E                  | OVERHEAD  | PASS   | 979.33  | 767.38 |
| 1   | 21   | 11    | 1.10 | PHILLIPS VINYL LOW-E                  | INSULATED | PASS   | 1036.2  | 824.25 |
| 1   | 28   | 11    | 2.2  | PHILLIPS AL                           | OVERHEAD  | PASS   | 361.23  | 149.28 |
| 1   | 28   | 11    | 2.2  | PHILLIPS AL                           | INSULATED | PASS   | 381.25  | 169.30 |
| 1   | 28   | 11    | 2.2  | PHILLIPS VINYL or PHILLIPS AL w/STORM | OVERHEAD  | PASS   | 829.49  | 517.54 |
| 1   | 28   | 11    | 2.2  | PHILLIPS VINYL or PHILLIPS AL w/STORM | INSULATED | PASS   | 875.47  | 565.52 |
| 1   | 28   | 11    | 2.2  | PHILLIPS VINYL LOW-E                  | OVERHEAD  | PASS   | 1256.4  | 1046.5 |
| 1   | 28   | 11    | 2.2  | PHILLIPS VINYL LOW-E                  | INSULATED | PASS   | 1328.1  | 1116.1 |
| 2   | 14   | 11    | 1.10 | PHILLIPS AL                           | OVERHEAD  | N/A    | 102.76  | -109.2 |
| 2   | 14   | 11    | 1.10 | PHILLIPS AL                           | INSULATED | N/A    | 113.09  | -98.86 |
| 2   | 14   | 11    | 1.10 | PHILLIPS VINYL or PHILLIPS AL w/STORM | OVERHEAD  | PASS   | 235.98  | 24.03  |
| 2   | 14   | 11    | 1.10 | PHILLIPS VINYL or PHILLIPS AL w/STORM | INSULATED | PASS   | 259.68  | 47.73  |
| 2   | 14   | 11    | 1.10 | PHILLIPS VINYL LOW-E                  | OVERHEAD  | PASS   | 358.00  | 146.05 |
| 2   | 14   | 11    | 1.10 | PHILLIPS VINYL LOW-E                  | INSULATED | PASS   | 393.96  | 182.01 |
| 2   | 21   | 11    | 1.10 | PHILLIPS AL                           | OVERHEAD  | N/A    | 157.23  | -54.72 |
| 2   | 21   | 11    | 1.10 | PHILLIPS AL                           | INSULATED | N/A    | 172.00  | -35.95 |
| 2   | 21   | 11    | 1.10 | PHILLIPS VINYL or PHILLIPS AL w/STORM | OVERHEAD  | PASS   | 361.04  | 149.09 |
| 2   | 21   | 11    | 1.10 | PHILLIPS VINYL or PHILLIPS AL w/STORM | INSULATED | PASS   | 394.96  | 183.01 |
| 2   | 21   | 11    | 1.10 | PHILLIPS VINYL LOW-E                  | OVERHEAD  | PASS   | 547.73  | 335.78 |
| 2   | 21   | 11    | 1.10 | PHILLIPS VINYL LOW-E                  | INSULATED | PASS   | 599.18  | 387.23 |
| 2   | 28   | 11    | 2.2  | PHILLIPS AL                           | OVERHEAD  | PASS   | 237.34  | 25.39  |
| 2   | 28   | 11    | 2.2  | PHILLIPS AL                           | INSULATED | PASS   | 255.80  | 43.85  |
| 2   | 28   | 11    | 2.2  | PHILLIPS VINYL or PHILLIPS AL w/STORM | OVERHEAD  | PASS   | 545.00  | 333.05 |
| 2   | 28   | 11    | 2.2  | PHILLIPS VINYL or PHILLIPS AL w/STORM | INSULATED | PASS   | 587.40  | 375.45 |
| 2   | 28   | 11    | 2.2  | PHILLIPS VINYL LOW-E                  | OVERHEAD  | PASS   | 825.80  | 614.85 |
| 2   | 28   | 11    | 2.2  | PHILLIPS VINYL LOW-E                  | INSULATED | PASS   | 891.14  | 679.19 |
| 3   | 14   | 11    | 1.10 | PHILLIPS VINYL or PHILLIPS AL w/STORM | OVERHEAD  | N/A    | 2.89    | -209.1 |
| 3   | 14   | 11    | 1.10 | PHILLIPS VINYL or PHILLIPS AL w/STORM | INSULATED | N/A    | 4.38    | -186.5 |
| 3   | 14   | 11    | 1.10 | PHILLIPS VINYL LOW-E                  | OVERHEAD  | N/A    | 4.38    | -207.6 |
| 3   | 21   | 11    | 1.10 | PHILLIPS VINYL or PHILLIPS AL w/STORM | OVERHEAD  | N/A    | 127.30  | -84.65 |
| 3   | 21   | 11    | 1.10 | PHILLIPS VINYL or PHILLIPS AL w/STORM | INSULATED | N/A    | 158.02  | -53.93 |
| 3   | 21   | 11    | 1.10 | PHILLIPS VINYL LOW-E                  | OVERHEAD  | N/A    | 192.60  | -19.35 |
| 3   | 21   | 11    | 1.10 | PHILLIPS VINYL LOW-E                  | INSULATED | PASS   | 239.08  | 27.13  |
| 3   | 28   | 11    | 2.2  | PHILLIPS VINYL or PHILLIPS AL w/STORM | OVERHEAD  | PASS   | 310.29  | 98.34  |
| 3   | 28   | 11    | 2.2  | PHILLIPS VINYL or PHILLIPS AL w/STORM | INSULATED | PASS   | 349.45  | 137.50 |
| 3   | 28   | 11    | 2.2  | PHILLIPS VINYL LOW-E                  | OVERHEAD  | PASS   | 465.45  | 237.50 |
| 3   | 28   | 11    | 2.2  | PHILLIPS VINYL LOW-E                  | INSULATED | PASS   | 528.71  | 316.76 |

SUBTRACT 2 S.F. OF GLAZING FOR EACH S.F. OF SKYLIGHT AREA

| STANDARD OPENINGS                     | QTY | SIZE | DESCRIPTION       | TYPE   | AREA   | TOTAL  | U VALUE |
|---------------------------------------|-----|------|-------------------|--------|--------|--------|---------|
| 1                                     | 36  | x 80 | BLANK             | DOOR   | 20.00  | 20.00  | 0.380   |
| 1                                     | 36  | x 80 | BLANK-INSWING     | DOOR   | 20.00  | 20.00  | 0.280   |
| 1                                     | 30  | x 27 | V. SLIDER         | WINDOW | 5.82   | 5.82   | 5.82    |
| 1                                     | 30  | x 53 | V. SLIDER         | WINDOW | 11.38  | 125.22 |         |
| 3                                     | 40  | x 53 | V. SLIDER         | WINDOW | 15.12  | 45.35  |         |
| 1                                     | 95  | x 53 | H. DEL-END SLIDER | WINDOW | 35.55  | 35.55  |         |
| TOTAL WINDOW AREA :                   |     |      |                   |        | 211.95 |        |         |
| SEE THERMAL CHART FOR WINDOW U VALUES |     |      |                   |        |        |        |         |

| RECOMMENDED A/C SIZES | STATE | DESIGN | TEMP | TONS |
|-----------------------|-------|--------|------|------|
| AL                    | ALL   |        |      | 5.0  |
| FL                    | ALL   |        |      | 5.0  |
| GA                    | ALL   |        |      | 5.0  |
| LA                    | ALL   |        |      | 5.0  |
| MS                    | ALL   |        |      | 5.0  |
| NC                    | ALL   |        |      | 4.0  |
| SC                    | ALL   |        |      | 5.0  |
| TN                    | ALL   |        |      | 4.0  |

## OPTIONAL DOOR EQUIVALENT GLAZING AREA

| HALL | WINDOW                                | DOOR                      | AREA  |
|------|---------------------------------------|---------------------------|-------|
| 11   | PHILLIPS AL                           | 34 x 76 BLANK             | 4.44  |
| 11   | PHILLIPS AL                           | 34 x 76 BLANK-INSWING     | 1.15  |
| 11   | PHILLIPS AL                           | 34 x 76 COTTAGE           | 5.51  |
| 11   | PHILLIPS AL                           | 34 x 76 GUNSLT-INSWING    | 1.77  |
| 11   | PHILLIPS AL                           | 36 x 75 DL GUNSLT-INSWING | 7.81  |
| 11   | PHILLIPS AL                           | 36 x 75 DL GUNSLT-INSWING | 3.02  |
| 11   | PHILLIPS AL                           | 36 x 76 BLANK             | 4.70  |
| 11   | PHILLIPS AL                           | 36 x 76 BLANK-INSWING     | 1.50  |
| 11   | PHILLIPS AL                           | 36 x 80 BLANK             | 5.74  |
| 11   | PHILLIPS AL                           | 36 x 80 BLANK-INSWING     | 3.76  |
| 11   | PHILLIPS AL                           | 38 x 80 BLANK-INSWING     | 1.67  |
| 11   | PHILLIPS AL                           | 5/6 x 6/4 ATRIUM - SAFETY | 10.42 |
| 11   | PHILLIPS AL                           | 6/0 x 6/4 SGD - SAFETY    | 21.80 |
| 11   | PHILLIPS VINYL or PHILLIPS AL w/STORM | 34 x 76 BLANK             | 10.20 |
| 11   | PHILLIPS VINYL or PHILLIPS AL w/STORM | 34 x 76 COTTAGE           | 2.65  |
| 11   | PHILLIPS VINYL or PHILLIPS AL w/STORM | 34 x 76 GUNSLT-INSWING    | 12.64 |
| 11   | PHILLIPS VINYL or PHILLIPS AL w/STORM | 36 x 75 DL GUNSLT-INSWING | 4.08  |
| 11   | PHILLIPS VINYL or PHILLIPS AL w/STORM | 36 x 75 DL GUNSLT-INSWING | 17.93 |
| 11   | PHILLIPS VINYL or PHILLIPS AL w/STORM | 36 x 76 BLANK             | 6.95  |
| 11   | PHILLIPS VINYL or PHILLIPS AL w/STORM | 36 x 76 BLANK-INSWING     | 10.80 |
| 11   | PHILLIPS VINYL or PHILLIPS AL w/STORM | 36 x 76 BLANK-INSWING     | 3.45  |
| 11   | PHILLIPS VINYL or PHILLIPS AL w/STORM | 36 x 76 BLANK-INSWING     | 8.20  |
| 11   | PHILLIPS VINYL or PHILLIPS AL w/STORM | 36 x 80 BLANK             | 13.18 |
| 11   | PHILLIPS VINYL or PHILLIPS AL w/STORM | 36 x 80 BLANK-INSWING     | 8.64  |
| 11   | PHILLIPS VINYL or PHILLIPS AL w/STORM | 5/6 x 6/4 ATRIUM - SAFETY | 23.93 |
| 11   | PHILLIPS VINYL or PHILLIPS AL w/STORM | 6/0 x 6/4 SGD - SAFETY    | 50.07 |
| 11   | PHILLIPS VINYL LOW-E                  | 34 x 76 BLANK             | 15.47 |
| 11   | PHILLIPS VINYL LOW-E                  | 34 x 76 BLANK-INSWING     | 4.02  |
| 11   | PHILLIPS VINYL LOW-E                  | 34 x 76 COTTAGE           | 19.18 |
| 11   | PHILLIPS VINYL LOW-E                  | 36 x 75 DL GUNSLT-INSWING | 6.18  |
| 11   | PHILLIPS VINYL LOW-E                  | 36 x 75 DL GUNSLT-INSWING | 27.21 |
| 11   | PHILLIPS VINYL LOW-E                  | 36 x 75 GUNSLT-INSWING    | 10.54 |
| 11   | PHILLIPS VINYL LOW-E                  | 36 x 76 BLANK             | 16.38 |
| 11   | PHILLIPS VINYL LOW-E                  | 36 x 76 BLANK-INSWING     | 5.24  |
| 11   | PHILLIPS VINYL LOW-E                  | 36 x 80 BLANK             | 12.45 |
| 11   | PHILLIPS VINYL LOW-E                  | 36 x 80 BLANK-INSWING     | 20.00 |
| 11   | PHILLIPS VINYL LOW-E                  | 38 x 80 BLANK-INSWING     | 13.10 |
| 11   | PHILLIPS VINYL LOW-E                  | 5/6 x 6/4 ATRIUM - SAFETY | 5.82  |
| 11   | PHILLIPS VINYL LOW-E                  | 6/0 x 6/4 SGD - SAFETY    | 36.31 |
| 11   | PHILLIPS VINYL LOW-E                  | 6/0 x 6/4 SGD - SAFETY    | 75.96 |

## DESIGN CERTIFICATION &amp; ECONOMY TEMPERATURES

| STATE | TYPE | TEMPERATURE                                | DT | CT  | ET |
|-------|------|--------------------------------------------|----|-----|----|
| AL    | ELEC | 20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 16 | -6  | 17 |
| AL    | GAS  | 77K BTUH 80% ANTE AUTO GAS FURN            | 16 | 0   | 21 |
| FL    | ELEC | 15 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 29 | 12  | 32 |
| FL    | ELEC | 17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 29 | 7   | 27 |
| FL    | GAS  | 70K BTUH 80% ANTE AUTO GAS FURN            | 29 | 0   | 21 |
| FL    | GAS  | 77K BTUH 80% ANTE AUTO GAS FURN            | 29 | 0   | 21 |
| GA    | ELEC | 17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 21 | -7  | 27 |
| GA    | ELEC | 20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 21 | -6  | 17 |
| GA    | GAS  | 70K BTUH 80% ANTE AUTO GAS FURN            | 21 | 0   | 21 |
| LA    | ELEC | 17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 25 | -7  | 27 |
| LA    | ELEC | 20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 25 | -6  | 17 |
| LA    | GAS  | 70K BTUH 80% ANTE AUTO GAS FURN            | 25 | 7   | 27 |
| LA    | GAS  | 77K BTUH 80% ANTE AUTO GAS FURN            | 25 | 0   | 21 |
| MS    | ELEC | 20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 19 | -6  | 17 |
| MS    | GAS  | 77K BTUH 80% ANTE AUTO GAS FURN            | 19 | 0   | 21 |
| NC    | ELEC | 17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 14 | -4  | 18 |
| NC    | ELEC | 20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 14 | -18 | 8  |
| NC    | GAS  | 70K BTUH 80% ANTE AUTO GAS FURN            | 14 | -4  | 18 |
| NC    | GAS  | 77K BTUH 80% ANTE AUTO GAS FURN            | 14 | -12 | 13 |
| SC    | ELEC | 17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 22 | -7  | 27 |
| SC    | ELEC | 20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 22 | -6  | 17 |
| SC    | GAS  | 70K BTUH 80% ANTE AUTO GAS FURN            | 22 | 7   | 27 |
| SC    | GAS  | 77K BTUH 80% ANTE AUTO GAS FURN            | 22 | 0   | 21 |
| TN    | ELEC | 17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 12 | -4  | 18 |
| TN    | ELEC | 20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS | 12 | -18 | 8  |
| TN    | GAS  | 70K BTUH 80% ANTE AUTO GAS FURN            | 12 | -4  | 18 |
| TN    | GAS  | 77K BTUH 80% ANTE AUTO GAS FURN            | 12 | -12 | 13 |

APPROVED  
PFS Corporation  
Madison WI - 13  
12/15/05  
HUD Manufactured  
Home  
Construction &  
Safety Standard

**FLEETWOOD**  
ALMA  
75

PRODUCT NAME  
CARRIAGE MANOR

MODEL NO.  
0764M

DRAWING TITLE  
THERMAL SPECS

DRAWN BY: GLENN D.

DATE: 12/08/05

SHT REV

TS.1

752CD0764N

| QTY                 | SIZE    | DESCRIPTION             | TYPE   | AREA | TOTAL U VALUE |
|---------------------|---------|-------------------------|--------|------|---------------|
| 1                   | 36 x 80 | BLANK                   | DOOR   | 20.0 | 20.0 0.380    |
| 1                   | 36 x 80 | BLANK-INSULING          | DOOR   | 20.0 | 20.0 0.280    |
| 1                   | 30 x 27 | SGL HUNG WINDOW         | WINDOW | 5.8  | 5.8           |
| 11                  | 30 x 53 | SGL HUNG WINDOW         | WINDOW | 11.4 | 125.2         |
| 3                   | 40 x 53 | SGL HUNG WINDOW         | WINDOW | 15.1 | 45.4          |
| 1                   | 95 x 53 | H.DBL-END SLIDER WINDOW | WINDOW | 35.6 | 35.6          |
| TOTAL WINDOW AREA : |         |                         |        |      | 211.95        |

SEE ENERGY STAR CHART FOR WINDOW U VALUES

| ENERGY STAR THERMAL RESULTS |       |      |          |          |      |      |       |        |      |
|-----------------------------|-------|------|----------|----------|------|------|-------|--------|------|
| CR                          | UO    | WALL | HEAT     | DUCT     | TYPE | CEIL | FLOOR | WINDOW | SHGC |
| 3                           | 0.087 | 2x4  | GAS      | INSUL    | 14   | 11   | 11    | 0.38   | 0.40 |
| 3                           | 0.088 | 2x4  | GAS      | OVERHEAD | 14   | 11   | 11    | 0.38   | 0.40 |
| 3                           | 0.078 | 2x4  | GAS      | INSUL    | 21   | 11   | 11    | 0.38   | 0.40 |
| 3                           | 0.079 | 2x4  | GAS      | OVERHEAD | 21   | 11   | 11    | 0.38   | 0.40 |
| 3                           | 0.066 | 2x4  | GAS      | INSUL    | 28   | 11   | 22    | 0.38   | 0.40 |
| 3                           | 0.067 | 2x4  | GAS      | OVERHEAD | 28   | 11   | 22    | 0.38   | 0.40 |
| 3                           | 0.092 | 2x4  | ELECTRIC | INSUL    | 14   | 11   | 11    | 0.53   | 0.76 |
| 3                           | 0.093 | 2x4  | ELECTRIC | OVERHEAD | 14   | 11   | 11    | 0.53   | 0.76 |
| 3                           | 0.084 | 2x4  | ELECTRIC | INSUL    | 21   | 11   | 11    | 0.53   | 0.76 |
| 3                           | 0.085 | 2x4  | ELECTRIC | OVERHEAD | 21   | 11   | 11    | 0.53   | 0.76 |
| 3                           | 0.071 | 2x4  | ELECTRIC | INSUL    | 28   | 11   | 22    | 0.53   | 0.76 |
| 3                           | 0.072 | 2x4  | ELECTRIC | OVERHEAD | 28   | 11   | 22    | 0.53   | 0.76 |
| 3                           | 0.088 | 2x4  | ELECTRIC | INSUL    | 14   | 11   | 11    | 0.38   | 0.40 |
| 3                           | 0.089 | 2x4  | ELECTRIC | OVERHEAD | 14   | 11   | 11    | 0.38   | 0.40 |
| 3                           | 0.078 | 2x4  | ELECTRIC | INSUL    | 21   | 11   | 11    | 0.38   | 0.40 |
| 3                           | 0.079 | 2x4  | ELECTRIC | OVERHEAD | 21   | 11   | 11    | 0.38   | 0.40 |
| 3                           | 0.066 | 2x4  | ELECTRIC | INSUL    | 28   | 11   | 22    | 0.38   | 0.40 |
| 3                           | 0.067 | 2x4  | ELECTRIC | OVERHEAD | 28   | 11   | 22    | 0.38   | 0.40 |
| 4                           | 0.088 | 2x4  | GAS      | INSUL    | 14   | 11   | 11    | 0.38   | 0.40 |
| 4                           | 0.089 | 2x4  | GAS      | OVERHEAD | 14   | 11   | 11    | 0.38   | 0.40 |
| 4                           | 0.078 | 2x4  | GAS      | INSUL    | 21   | 11   | 11    | 0.38   | 0.40 |
| 4                           | 0.079 | 2x4  | GAS      | OVERHEAD | 21   | 11   | 11    | 0.38   | 0.40 |
| 4                           | 0.066 | 2x4  | GAS      | INSUL    | 28   | 11   | 22    | 0.38   | 0.40 |
| 4                           | 0.067 | 2x4  | GAS      | OVERHEAD | 28   | 11   | 22    | 0.38   | 0.40 |
| 4                           | 0.087 | 2x4  | ELECTRIC | INSUL    | 14   | 11   | 11    | 0.53   | 0.76 |
| 4                           | 0.088 | 2x4  | ELECTRIC | OVERHEAD | 14   | 11   | 11    | 0.53   | 0.76 |
| 4                           | 0.078 | 2x4  | ELECTRIC | INSUL    | 21   | 11   | 11    | 0.53   | 0.76 |
| 4                           | 0.079 | 2x4  | ELECTRIC | OVERHEAD | 21   | 11   | 11    | 0.53   | 0.76 |
| 4                           | 0.066 | 2x4  | ELECTRIC | INSUL    | 28   | 11   | 22    | 0.53   | 0.76 |
| 4                           | 0.067 | 2x4  | ELECTRIC | OVERHEAD | 28   | 11   | 22    | 0.53   | 0.76 |

OPT ENERGY STAR  
SEE TS.1 FOR OPT DOORS



PRODUCT NAME

CARRIAGE MANOR

MODEL NO.

0764M

DRAWING TITLE

THERMAL SPECS

DRAWN BY: GLENN D.

DATE: 12/08/05

SHT

TS.2

752CD0764M

APPROVED  
PFS Corporation  
Madison WI -13  
12/15/05  
HUD Manufactured  
Home  
Construction &  
Safety Standard

# DIRECT MOBILE CONNECTIONS, Inc.

PAGE 2 CUSTOMER PATRICK MUEHLEISEN DATE 7-25-06

## STANDARD PACKAGE CONSISTING OF FOLLOWING ITEMS:

4" DIAMETER, BLACK STEEL CASED WELL DRILLED UP TO 100'  
¾ HP. 16 GPM SUBMERSIBLE PUMP WITH 42 GAL. EQUIVALENT PRE-CHARGED TANK WITH CONTROL VALVE.  
960 GALLON CONCRETE SEPTIC TANK - BELOW GRADE SYSTEM  
STANDARD DRAINFIELD FOR MOBILE HOME SIZE BEDROOMS BASED ON 1:20 SOIL TEST **EXISTING**  
200 AMP 8 CIRCUIT SERVICE WITH MAIN ☒ Overhead ☐ Underground (wood - concrete) **EXISTING**  
4 WIRE CIRCUIT TO MOBILE HOME UP TO 75 FEET  
20 AMP 230 VOLT CIRCUIT TO PUMP UP TO 100 FEET  
SEWER DRAIN TO SEPTIC SYSTEM WITHIN 15 FEET OF MOBILE HOME  
¾ INCH PVC PR-160 WATER LINE UP TO 100 FEET WITH ¾" GATE VALVE AND ONE HOSE BIB  
PERMITS FOR PLACEMENT, PLUMBING, ELECTRICAL, SEPTIC AND WELL

PRICE FOR ABOVE PACKAGE \$ 5800.00

## UPGRADES AND ADDITIONAL WORK

### UPGRADES

|                                                                |                   |
|----------------------------------------------------------------|-------------------|
| UPGRADE PUMP AND TANK TO _____ HP WITH _____ TANK.....         | \$ _____          |
| UPGRADE SEPTIC SYSTEM TO _____ WITH STANDARD DRAINFIELD.....   | \$ _____          |
| UPGRADE WATERLINE TO _____" SCH.....                           | \$ _____          |
| UPGRADE PUMP CIRCUIT TO # _____ AWG WIRE FOR VOLTAGE DROP..... | \$ _____          |
| OTHER <u>ADD 145' DRAINFIELD</u> .....                         | \$ <u>7</u>       |
| <u>CLEAR LAND</u> .....                                        | \$ <u>500.00</u>  |
| <u>BUILD PAD FOR HOME 18'</u> .....                            | \$ <u>4340.00</u> |

PRICE FOR PACKAGE, UPGRADES AND ADDITIONAL WORK (LESS EXTRA'S).....\$ \_\_\_\_\_

### NOTES\*

- \* EXTRA WELL DEPTH WILL BE BILLED AT \$ 14.00 PER FOOT
- \* EXTRA DRAINFIELD WILL BE BILLED AT \$ \_\_\_\_\_ PER SQUARE FOOT
- \* EXTRA M/H CIRCUIT OVER 75' WILL BE BILLED AT \$ \_\_\_\_\_ PER FOOT.
- \* EXTRA PUMP CIRCUIT OVER 100' WILL BE BILLED AT \$ \_\_\_\_\_ PER FOOT.
- \* EXTRA WATER LINE OVER 100' WILL BE BILLED AT \$ \_\_\_\_\_ PER FOOT.
- \* MOUND TYPE SYSTEM WILL BE PRICED UPON OBTAINING SPECIFICATIONS FROM THE HEALTH DEPARTMENT

### SPECIAL INSTRUCTIONS

## PAYMENTS

WE PROPOSE TO FURNISH MATERIAL AND LABOR AS STATED ABOVE FOR THE SUM OF \$ 10,140.00  
PLUS COUNTY IMPACT FEE OF \$ \_\_\_\_\_ WITH PAYMENTS AS FOLLOWS:  
DEPOSIT TO BE PAID BY OWNER \$ \_\_\_\_\_ BALANCE DUE ON COMPLETION \$ 10,140.00

## TERMS AND CONDITIONS

Site plan is based on information supplied by customer, therefore customer assumes sole responsibility for location of mobile home, set backs, site improvements and zoning requirements. Location of all improvements on site plan are general locations and subject to change at the time of installation due to unusual or unanticipated conditions. Customer understands and agrees to have their electrical service location verified by their power company or will assume responsibility for their chosen location. Additional requirements for flood-prone, environmental sensitive or delineated areas are not included in this package. Direct Mobile Connections, Inc. (DMC) can not guarantee the quantity or quality of any water obtained nor the depth of the well. Customer agrees to hold DMC harmless for damage to driveways, walks, trees, plants, land (including ruts and sinkholes) and buildings caused by moving and using heavy equipment on job site. Customer will be responsible for re-inspection fees caused by rejected items not included in this proposal and failure to have home unlocked for inspector. Charges for additional or extra work are due and payable when they occur. Utility companies deposits, hookup fees and primary service lateral (if needed) are not included and must be paid separately. Contract balance due on completion of the items indicated on this proposal, after 10 days, unpaid balance will be assessed 1.5% per month carrying charge. If it becomes necessary to enforce this contract, customer agrees to pay all cost for collection including a reasonable attorney's fee whether or not suit is filed. In any legal proceeding arising out of this contract, customer agrees that venue shall lie in Marion County, Florida. Customer understands he or she is contracting directly with DMC and is responsible for any unpaid balance until paid in full. All work includes one (1) year parts and labor warranty. All agreements and understandings are contained herein and there are no verbal agreement or representation not herein contained. By signing below, the customer accepts the above prices, specifications and conditions

Customer \_\_\_\_\_

Date \_\_\_\_\_

Salesman \_\_\_\_\_

Date \_\_\_\_\_



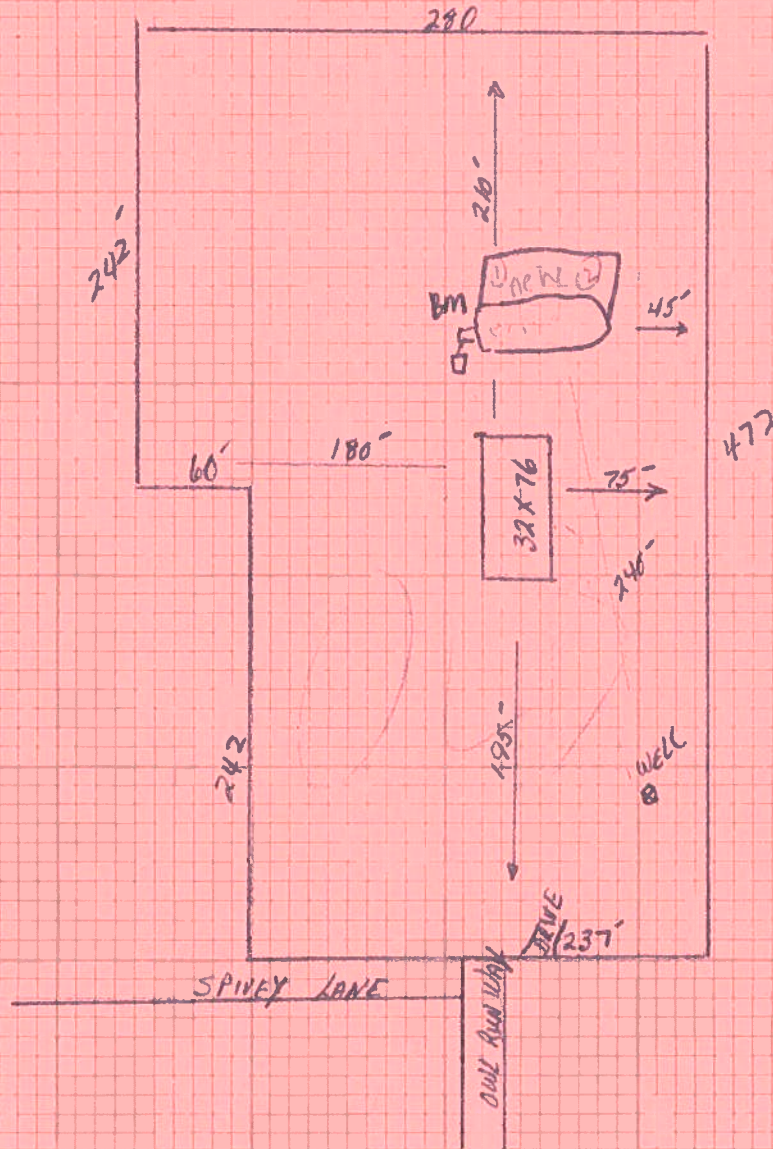
STATE OF FLORIDA  
DEPARTMENT OF HEALTH

APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 06-0184MID

PART II - SITE PLAN

Scale: Each block represents 5 feet and 1 inch = 50 feet.



Notes: 1" = 100'

Site Plan submitted by:

Ken Lalo

Signature

Agent

Title

Plan Approved X

Not Approved

8.3.06

Date

7/28/06

By

Salhi Maddy ESII

County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

Prepared by and return to:  
Mickle Salter

Home Town Title of North Florida  
2744 US Highway 90 West  
Lake City, FL 32055  
386-754-7175  
File Number: 2005-853  
Will Call No.:

Inst: 2005006808 Date: 03/23/2005 Time: 11:28  
Doc Stamp-Deed : 112.00  
DC, P. DeWitt Casson, Columbia County B: 1041 P: 1145

[Space Above This Line For Recording Data]

## Warranty Deed

This Warranty Deed made this 18th day of March, 2005 between Linda Ross, a single person whose post office address is 881 N.E. Cheshire Lane, Lake City, FL 32055, grantor, and Patrick Muhleisen and Donna Muhleisen, husband and wife whose post office address is 4147 2nd Court, Lake Worth, FL 33462, grantee:

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

Witnesseth, that said grantor, for and in consideration of the sum of TEN 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 SW CORNER OF THE NW 1/4 OF THE NE 1/4 OF SECTION 1, TOWNSHIP 2 SOUTH, RANGE 17 EAST, COLUMBIA COUNTY, FLORIDA AND RUN S 0°12' WEST, A DISTANCE OF 39.27 FEET, TO THE POINT OF BEGINNING; THENCE N 88°46'10" EAST, A DISTANCE OF 267 FEET; THENCE S 0°12' WEST, A DISTANCE OF 60.21 FEET; THENCE N 88°46'10" EAST 25.0 FEET; THENCE N 0°12' EAST, A DISTANCE OF 271.56 FEET; THENCE N 82°39'10" WEST, A DISTANCE OF 293.41 FEET; THENCE S 0°12' WEST, A DISTANCE OF 238.03 FEET TO THE POINT OF BEGINNING; SUBJECT TO A 5' EASEMENT FOR DRAINAGE PURPOSES OVER THE EAST AND NORTH SIDE OF THE ABOVE DESCRIBED LAND.

COMMENCE AT THE SW CORNER OF THE NW 1/4 OF THE NE 1/4 OF SECTION 1, TOWNSHIP 2 SOUTH, RANGE 17 EAST, COLUMBIA COUNTY, FLORIDA AND RUN N 0°12' EAST, ALONG THE WEST LINE OF SAID NE 1/4, A DISTANCE OF 190.32 FEET TO THE POINT OF BEGINNING; THENCE S 82°39'10" EAST, A DISTANCE OF 233.79 FEET; THENCE N 1°09'40" EAST, A DISTANCE OF 242.0 FEET; THENCE N 82°39'10" WEST, A DISTANCE OF 237.88 FEET; THENCE S 0°12' WEST, A DISTANCE OF 242.48 FEET, TO THE POINT OF BEGINNING; SUBJECT TO AN EASEMENT FOR ROAD RIGHT-OF-WAY AND UTILITY PURPOSES OVER THE NORTH 25 FEET THEREOF, AND SUBJECT TO A 5' EASEMENT FOR DRAINAGE PURPOSES OVER THE EAST SIDE OF THE ABOVE DESCRIBED LAND.

Parcel Identification Number: R04659-043

DoubleTime

Jun. 04 2006 12:38PM P4

No. 5628 P. 6/8

FRX NO. : 56196591491

SOUTH PINE MH SALES 352-671-9217

FROM: R04 FRASER

Jun. 16. 2006 5:32PM

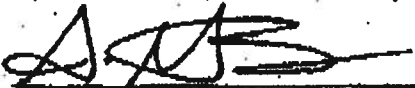
Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

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

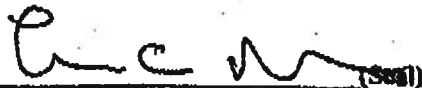
And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 2004.

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: **A. MICHELLE SALTER**

 (Seal)

Linda Rosa

  
Witness Name: **Paul Frey**

State of Florida  
County of Columbia

The foregoing instrument was acknowledged before me this 8th day of March, 2005 by Linda Rosa, who ☐ is personally known or ☒ has produced a driver's license as identification.

[Notary Seal]



**A. MICHELLE SALTER**  
Notary Public, State of Florida  
My comm. expires July 15, 2006  
Comm. No. DD 129450

  
Notary Public

**A. MICHELLE SALTER**

Printed Name: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

SCALE: 1" = 100'



—●— CHAM & RIK FERN  
—B— CHUBEN FERN

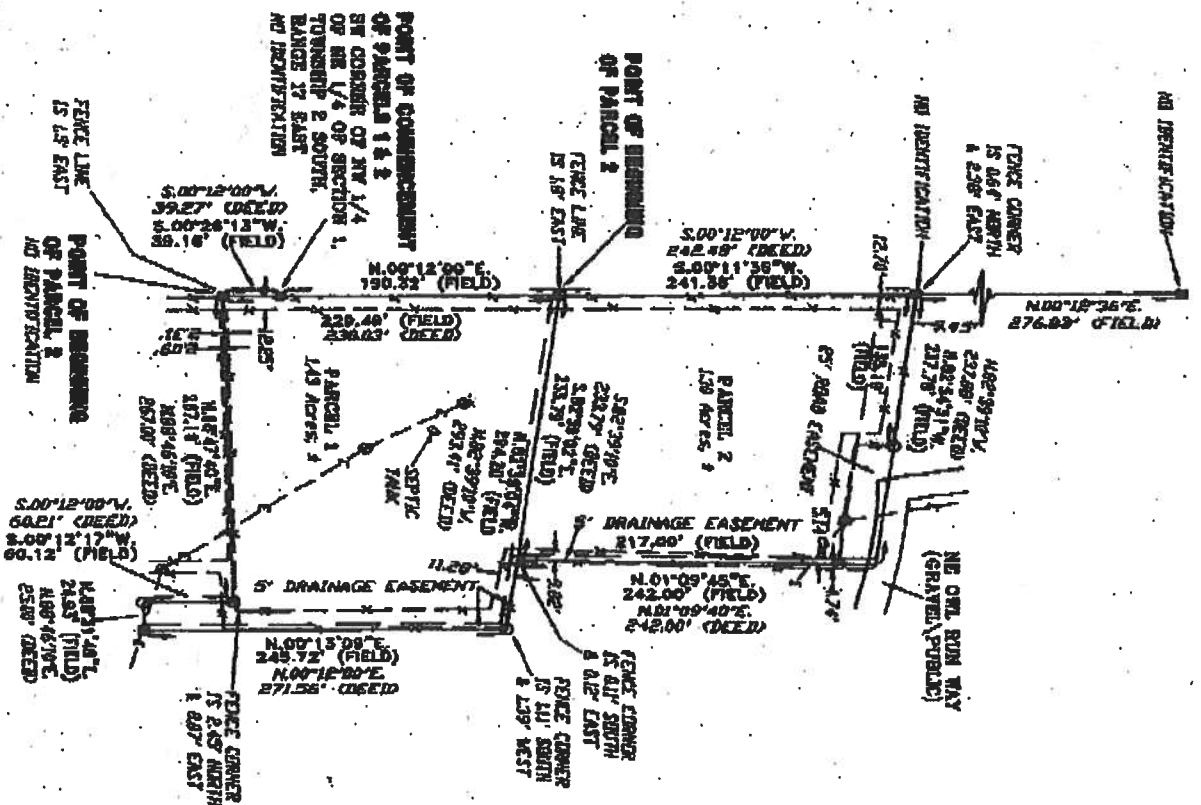
SYMBOL LEGEND

- 474 CONCRETE JOISTMENT CLAWS
- 474 CONCRETE JOISTMENT SET
- IRON PIPE FOUND
- RIVER PLY AND CAP SET
- POWER POLE
- ▲ HANDED NETTER
- ▲ BENDERLAME
- ▲ WELL
- SATELLITE BUSH
- TELEPHONE BOX
- ELECTRIC LINES
- ▲ VINE FENCE
- ▲ CHAIN LINK FENCE
- WOODEN FENCE

SECTION 17, TOWNSHIP 10 NORTH, RANGE 12 EAST, COUNTY OF FLORIDA AND RAIL SOUTHEASTERN, A DISTANCE OF 318.27 FEET, TO THE POINT OF BEGINNING, THENCE N68°40'00"E, A DISTANCE OF 263.00 FEET, THENCE S67°10'00"E, A DISTANCE OF 64.21 FEET, THENCE N42°30'00"E, 23.00 FEET, THENCE W47°00'00"E, A DISTANCE OF 21.56 FEET, THENCE N62°45'00"E, A DISTANCE 29.24 FEET, THENCE S87°00'00"E, A DISTANCE OF 22.65 FEET, TO THE POINT OF BEGINNING, ADJACENT TO A S EASTERLY RAIL ADJACENT TO THE EAST AND NORTH SIDE OF THE ABOVE DESCRIBED LAND. PARCELS OVER THE EAST AND NORTH SIDE OF THE ABOVE DESCRIBED LAND.

ALSO PARCEL 2  
CORNER AT THE SW CORNER OF THE NW 1/4 OF THE NE 1/4 OF SECTION 1, TOWNSHIP  
2 SOUTH RANGE 12 EAST, COLUMBIA COUNTY, FLORIDA AND RUN ALONG THE  
WEST LINE OF SAID NE 1/4, A DISTANCE OF 190.29 FEET TO THE POINT OF BEGINNING,  
THENCE S 87° 00' 00" W, A DISTANCE OF 224.79 FEET, THENCE ALONG A CURVE, A DISTANCE OF  
246.00 FEET, THENCE ALONG A CURVE, A DISTANCE OF 233.89 FEET, THENCE S 10° 00' 00" W,  
A DISTANCE OF 246.00 FEET TO THE POINT OF BEGINNING, SUBJECT TO AN EASEMENT FOR  
ROAD RIGHT-OF-WAY AND UTILITY PURPOSES OVER THE NE 1/4 23 FEET WIDE, AND  
SUBJECT TO A 5' EASEMENT FOR FURNACE PURPOSES OVER THE EAST SIDE OF THE  
ABOVE DESCRIBED LAND.

1. SURVEYOR'S NOTES
2. MONUMENT BASED OR INSTRUMENTATION FLOOD.
3. DEPARTURE AND BASED ON A DEED OR RECORD AS ISSUED THIS OFFICE.
4. SOME PORTIONS OF THIS PARCEL ARE IN ZONE "A" AND MAY BE SUBJECT TO FLOODING.
5. HOWEVER, NO BASE FLOOD ELEVATION HAS BEEN DETERMINED FOR ZONE "A".
6. AS PER FLOOD INSURANCE RATE MAP, DATED 6 JAN 1958 COMMUNITY PANEL NO 100070
7. 0000 & HOWEVER, THE FLOOD INSURANCE RATE MAPS ARE SUBJECT TO CHANGE.
8. THE DEPARTMENTS, IF ANY, INDICATED ON THIS SURVEY DRAWING ARE AS LOCATED ON
9. DATE OF FIELD SURVEY AS SHOWN HEREON.
10. IF THEY EXIST, NO UNDERGROUND ENCROACHMENTS AND/OR UTILITIES WERE LOCATED FOR
11. THIS SURVEY EXCEPT AS SHOWN HEREON.
12. THIS SURVEY WAS COMPLETED WITHOUT THE BENEFIT OF A TITLE COMMITMENT OR A TITLE
13. FILED.



**CERTIFIED TO**

**HARRIS & KENNA MORTGAGE  
SERVIST MORTGAGE  
UNITED TITLE INSURANCE SERVICES, INC.**

FILED 1000 288  
PAGE 1000

**PLANNING FOR THE FUTURE**

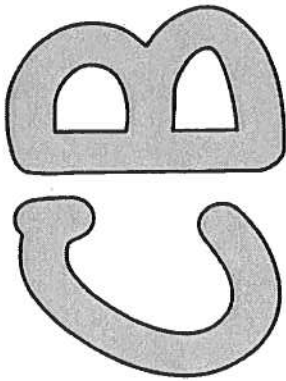
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# BRITT SURVEYING

## LAND SURVEYORS AND HAPPINESS

021 206 1161 Fax 021 206 573

WORK ORDER # 1-17358



Circle B of Ocala, Inc.

# LAP TO GROUND SKIRTING - VINYL

THE FIRST ROW OF THE VINYL LAP SKIRTING WILL BE LED OFF THE BOTTOM ROW OF THE HOME LOCKING INTO THE INTEGRATED LOCKING SNAP RAIL AT THE TOP OF EACH PIECE OF SIDING

THERE WILL BE ONE ACCESS PANEL IN THE JOB SITE ( 16" X 24" ) LOCATED AT CLOSE PROXIMITY TO THE MAIN WATER INTAKE UNDER THE HOME... AND WILL BE VERY VISIBLE ... DUE TO CONSTRUCTION

THE DEALER WILL HAVE VENTING PUNCHED INTO EVERY PIECE OF THE LAP SIDING SKIRTING (( EQUIVALENT TO 4.368 SQUARE INCHES PER LINER FOOT OF PANEL ))

THE SIDING SUPPORT POSTS WILL BE MADE FROM 25 GAUGE METAL DRYWALL HAT RAILS AND WILL BE SPACED NO MORE THAN 16" ON CENTER, IN THE ABSENCE OF STRUCTURAL BACKING

THE SIDING SUPPORT POST WILL BE BURIED INTO THE GROUND NO MORE THAN 16" BUT NO LESS THAN 8" TO HELP MAINTAIN STRUCTURAL INTEGRITY

VINYL SIDING PANELS ARE SECURED BY 1 1/4" HEX HEAD SCREWS EVERY 16" AT THE TOP AND ARE SECURED BY THE LOCKING CHANNEL OF THE NEXT PIECE AT THE BOTTOM

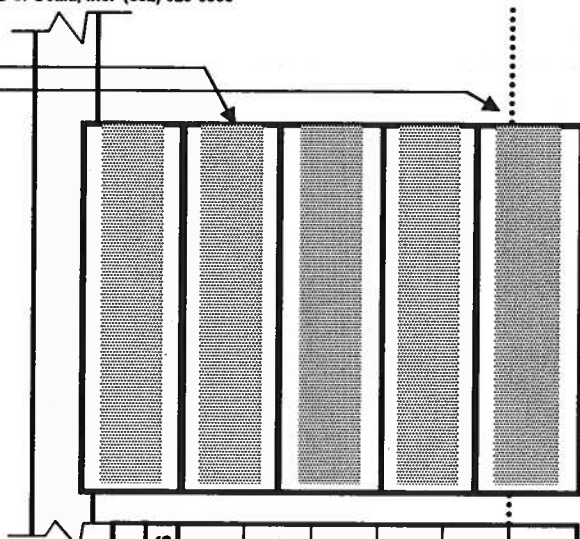
THE BOTTOM PIECE OF VINYL LAP SIDING SHALL BE BURIED A MINIMUM 4.5", BUT NOT TO EXCEED 50% OF THE PANELS WIDTH

VINYL SIDING SUPPORT POSTS ARE SECURED BY 1 1/4" HEX HEAD SCREWS EVERY 16" AT THE TOP AND ARE SECURED BY BEING BURIED INTO THE GROUND AT THE BOTTOM

AVERAGE HEIGHT OF SKIRTING FROM GROUND TO HOME IS 36"

GRADE OF THE LAND

## WALL SECTION



| VITAL STATISTICS |      |            |        |
|------------------|------|------------|--------|
|                  | FEET |            | INCHES |
| WIDTH A-HALF     | 16   | LAP WIDTH  | 9      |
| WIDTH B-HALF     | 16   | LAP LENGTH | 132    |
| LENGTH A-HALF    | 76   | HEIGHT     | 36     |
| LENGTH B-HALF    | 76   |            |        |
|                  |      |            |        |
|                  |      |            |        |

| VENTING CALCULATIONS                  |           |  |
|---------------------------------------|-----------|--|
| BOX SIZE OF HOME                      | 32' x 76' |  |
| VENT AREA REQUIRED                    | 16.21     |  |
| PERIMETER IN INCHES                   | 2592.00   |  |
| NO. OF 09" X 144" VENTED PANELS       | 39.27     |  |
| NO. OF SQUARES OF LAP NEEDED          | 3.27      |  |
| VENT AREA SUPPLIED                    | 15.65     |  |
| METAL STAKE CALCULATIONS              |           |  |
| BOX SIZE OF HOME                      | 32' x 76' |  |
| PERIMETER IN INCHES                   | 2592.00   |  |
| TOTAL AMOUNT OF 48" STAKES (16" O.C.) | 108.00    |  |
| TOTAL AMOUNT OF 12' STAKES            | 36.00     |  |

|               |           |
|---------------|-----------|
| CUSTOMER NAME | Muhleisen |
|---------------|-----------|

## ELEVATION

# Columbia County Property Appraiser

DB Last Updated: 8/1/2006

Parcel: 01-2S-17-04659-043

## 2006 Proposed Values

Tax Record

Property Card

Interactive GIS Map

Print

### Owner & Property Info

Search Result: 1 of 1

|                        |                                                                                                                                                                                                                                                                                                                                                      |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Owner's Name</b>    | MUHLEISEN PATRICK &                                                                                                                                                                                                                                                                                                                                  |
| <b>Site Address</b>    | ADDRESS NOTE                                                                                                                                                                                                                                                                                                                                         |
| <b>Mailing Address</b> | DONNA MUHLEISEN<br>4147 2ND CT<br>LAKE WORTH, FL 33462                                                                                                                                                                                                                                                                                               |
| <b>Description</b>     | COMM SW COR OF NE1/4, RUN N 746 FT FOR POB, CONT N 1012.51 FT, SE 237.88 FT, S 242 FT, SE 59.62 FT, S 271.56 FT, W 25 FT S 479.79 FT, W 267 FT TO POB, EX 2.20 AC (LOTS 28 & 29) DESC ORB 997-1587 & EX 1.10 AC DESC IN ORB 1026-1094 (LOT 27) (LOTS REMAINING ARE LOTS 30 & 33 FRANK THOMAS S/D UNREC) ORB 725-549 THRU 550, 805-1943 WD 1041-1145. |

|                         |                  |
|-------------------------|------------------|
| <b>Use Desc. (code)</b> | AC/XFOB (009901) |
| <b>Neighborhood</b>     | 1217.01          |
| <b>Tax District</b>     | 3                |
| <b>UD Codes</b>         | MKTA05           |
| <b>Market Area</b>      | 05               |
| <b>Total Land Area</b>  | 2.580 ACRES      |

### Property & Assessment Values

|                              |          |             |
|------------------------------|----------|-------------|
| <b>Mkt Land Value</b>        | cnt: (2) | \$16,190.00 |
| <b>Ag Land Value</b>         | cnt: (0) | \$0.00      |
| <b>Building Value</b>        | cnt: (0) | \$0.00      |
| <b>XFOB Value</b>            | cnt: (0) | \$0.00      |
| <b>Total Appraised Value</b> |          | \$16,190.00 |

|                            |             |
|----------------------------|-------------|
| <b>Just Value</b>          | \$16,190.00 |
| <b>Class Value</b>         | \$0.00      |
| <b>Assessed Value</b>      | \$16,190.00 |
| <b>Exempt Value</b>        | \$0.00      |
| <b>Total Taxable Value</b> | \$16,190.00 |

### Sales History

| Sale Date | Book/Page | Inst. Type | Sale VImp | Sale Qual | Sale RCode | Sale Price  |
|-----------|-----------|------------|-----------|-----------|------------|-------------|
| 3/18/2005 | 1041/1145 | WD         | I         | Q         |            | \$16,000.00 |
| 5/18/1995 | 805/1943  | WD         | I         | U         | 12         | \$10,000.00 |
| 6/28/1990 | 725/549   | AG         | I         | U         | 13         | \$10,000.00 |

### Building Characteristics

| Bldg Item | Bldg Desc | Year Blt | Ext. Walls | Heated S.F. | Actual S.F. | Bldg Value |
|-----------|-----------|----------|------------|-------------|-------------|------------|
| NONE      |           |          |            |             |             |            |

### Extra Features & Out Buildings

| Code | Desc | Year Blt | Value | Units | Dims | Condition (% Good) |
|------|------|----------|-------|-------|------|--------------------|
| NONE |      |          |       |       |      |                    |

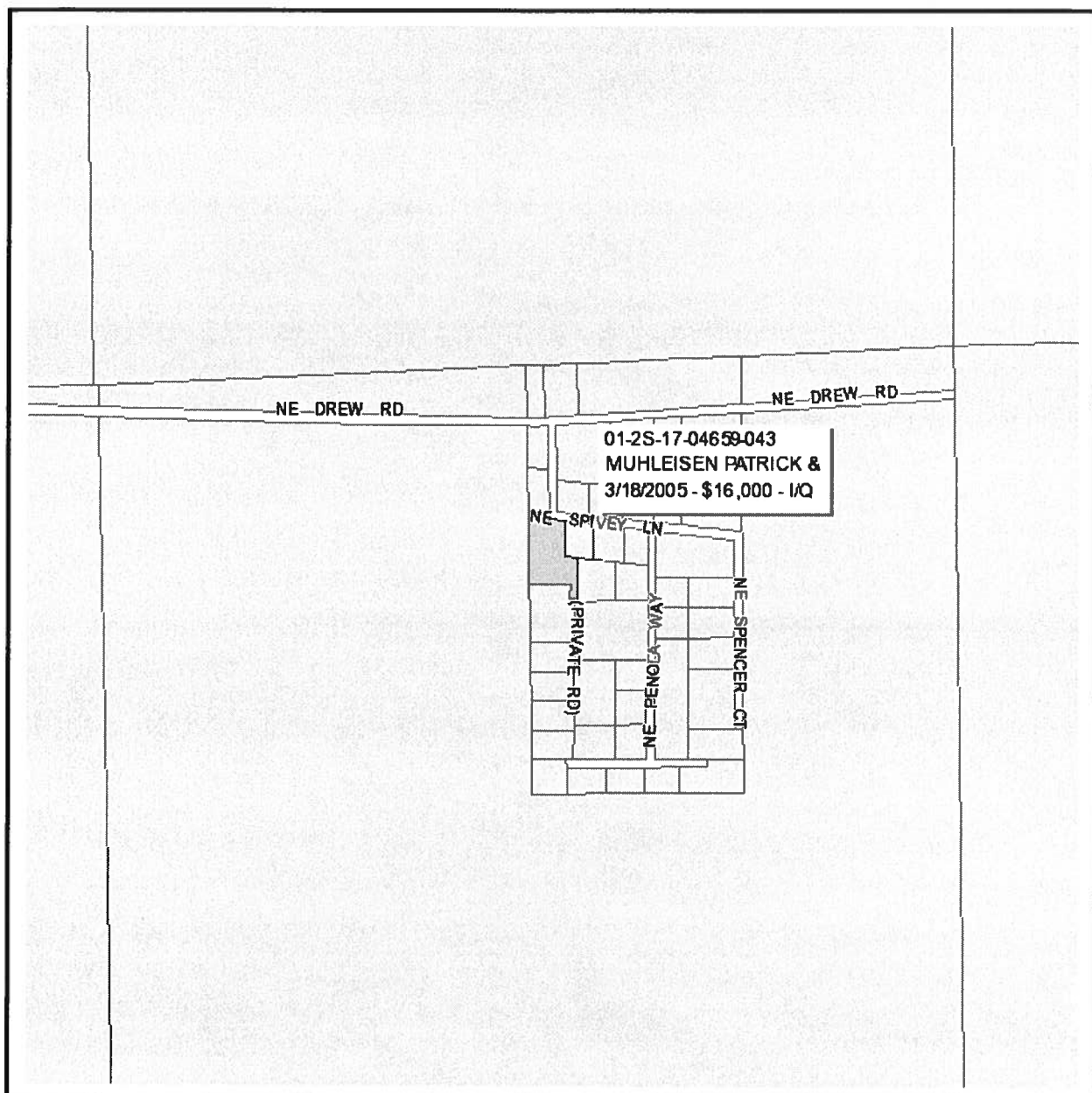
### Land Breakdown

| Lnd Code | Desc            | Units               | Adjustments         | Eff Rate   | Lnd Value   |
|----------|-----------------|---------------------|---------------------|------------|-------------|
| 009901   | AC/XFOB (MKT)   | 2.580 AC            | 1.00/1.00/1.00/1.00 | \$5,500.00 | \$14,190.00 |
| 009945   | WELL/SEPT (MKT) | 1.000 UT - (.000AC) | 1.00/1.00/1.00/1.00 | \$2,000.00 | \$2,000.00  |

Columbia County Property Appraiser

DB Last Updated: 8/1/2006

1 of 1



### Columbia County Property Appraiser

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

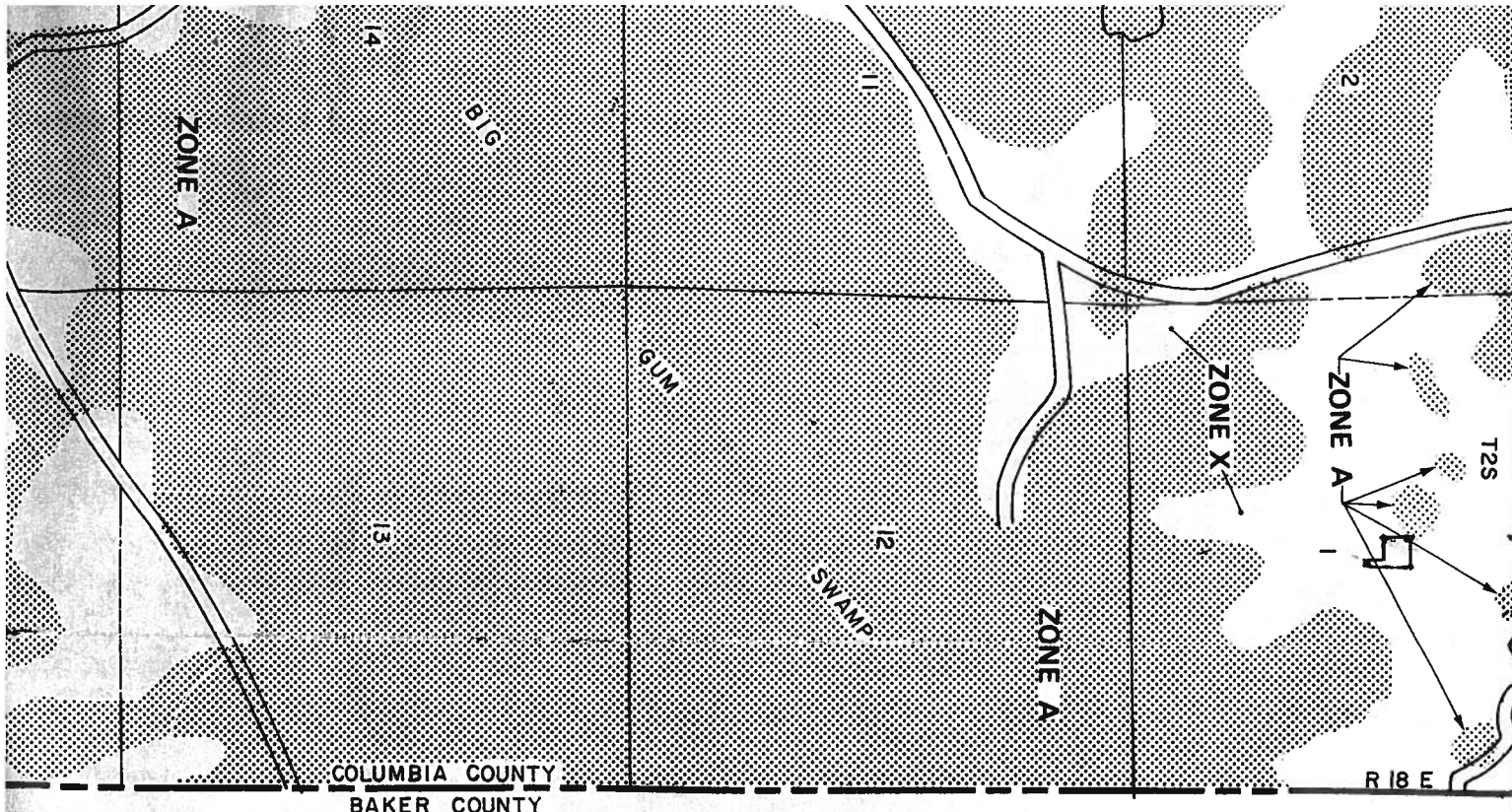
**PARCEL: 01-2S-17-04659-043** - AC/XFOB (009901)

|       |                             |         |             |
|-------|-----------------------------|---------|-------------|
| Name: | MUHLEISEN PATRICK &         | LandVal | \$16,190.00 |
| Site: | ADDRESS NOTE                | BldgVal | \$0.00      |
|       | DONNA MUHLEISEN             | ApprVal | \$16,190.00 |
| Mail: | 4147 2ND CT                 | JustVal | \$16,190.00 |
|       | LAKE WORTH, FL 33462        | Assd    | \$16,190.00 |
| Sales | 3/18/2005 \$16,000.00 I / Q | Exmpt   | \$0.00      |
| Info  | 5/18/1995 \$10,000.00 I / U | Taxable | \$16,190.00 |
|       | 6/28/1990 \$10,000.00 I / U |         |             |

0 0.07 0.14 0.21 mi



This information, GIS Map Updated: 8/1/2006, 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.



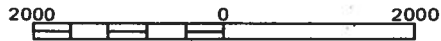
J

H

J



APPROXIMATE SCALE IN FEET



**NATIONAL FLOOD INSURANCE PROGRAM**

**FIRM**  
**FLOOD INSURANCE RATE MAP**

**COLUMBIA  
COUNTY,  
FLORIDA**  
(UNINCORPORATED AREAS)

**PANEL 150 OF 290**

PANEL LOCATION



**COMMUNITY-PANEL NUMBER**

**120070 0150 B**

**EFFECTIVE DATE:**

**JANUARY 6, 1988**



**Federal Emergency Management Agency**

# COLUMBIA COUNTY OFFICE OF M/H 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.*

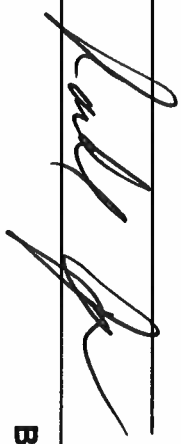
Parcel Number 01-2S-17-04659-043 Building permit No. 000024908

Permit Holder KEN LAKE

Owner of Building PAT MUHLEISEN

Location: 206 NE OWL RUN WAY, LAKE CITY, FL 32055

Date: 12/15/2006



Building Inspector



POST IN A CONSPICUOUS PLACE  
(Business Places Only)

September 29, 1999

Rick Bolling (via fax 352-629-7017)

Circle B of Ocala  
1031 N. Pine Ave.  
Ocala, FL 34475

Subject: ABS Pads by TieDown Engineering - part 2

Dear Rick:

As a follow-up to my recent letter concerning spacing charts for ABS pads I have an alternate solution. Fleetwood has already issued supplemental information for the installation of another brand of ABS pads in the form of 72-72-0081. In some cases using these charts would more closely match the pad capacities of the ABS pads by TieDown Engineering. My solution is as follows:

- For TieDown's 16"x18", use the spacing for "Configuration 2" on 72-72-0081.
- For TieDown's 16"x22-1/2", use the spacing for "Configuration 3"
- For TieDown's 17-1/8"x25-1/8", use the spacing for "Configuration 4"
- For TieDown's triple 16"x22-1/2" (two on the ground and one above) use the spacing for "Configuration 5"

If I can be of further assistance please let me know.

Sincerely,

FLEETWOOD ENTERPRISES, INC.

*Bill Farish*

Bill Farish, P.E.  
Director of Product Engineering  
Housing Group

cc - Bob Henry, Jerry Moriarty, Georgia Celebar  
Boons Smith - TieDown Engineering

3001 Myers Street  
P.O. Box 7639  
Riverside, CA 92513-7639  
909-351-3600

10-8-99

*Page 22*



BF9-145



State of Florida  
DEPARTMENT OF  
HIGHWAY SAFETY AND MOTOR VEHICLES

TALLAHASSEE, FLORIDA 32399-0000

FRID O. DICKENSON, III  
Executive Director

June 17, 2002

Mr. Lon Larson, General Manager  
Manufactured Housing Foundation Systems, Inc.  
A Division of Oliver Technologies  
Post Office Box 9  
Hobartville, Tennessee 38462

Dear Mr. Larson:

We wish to acknowledge receipt of your specifications and test results certifying that your 1055 20 Firm Free ABS Plastic Pad lined below complies with the specifications and regulations set by the Department of Highway Safety and Motor Vehicles, Rules 15C-1.0105, 15C-1.0107 and 15C-1.0108, Florida Administrative Code.

Based on the information submitted to this bureau, the following products are listed for sale and use in Florida when the installation instructions showing the way the pads were tested, are provided.

| MODEL # | IDENTIFICATION            | DESCRIPTION     | AREA          |
|---------|---------------------------|-----------------|---------------|
| 1055-20 | Firm Free ABS Plastic Pad | 23.25" x 31.25" | 4.698 sq. ft. |

MAXIMUM PER LOADS IN POUNDS BASED ON SOIL VALUES

| PAD CONFIGURATION | PAD AREA      | LOAD                                           |
|-------------------|---------------|------------------------------------------------|
| Pad 1             | 4.698 sq. ft. | 1800 lb. soil - 4,698<br>2000 lb. soil - 9,396 |

NOTES: 1) INSTALLER IS RESPONSIBLE FOR DETERMINING SOIL BEARING CAPACITY.  
2) THIS PAD WAS TESTED FOR SINGLE AND DOUBLE BLOCK CONFIGURATION.  
3) 2,000 LB. LOAD AND ABOVE REQUIRES DOUBLE BLOCK CONFIGURATION.

If you have any questions, please advise at (407) 623-1340.

Sincerely,

*Phil Bergin*  
Phil Bergin, Program Manager  
Bureau of Motor Home and  
Recreational Vehicle Construction  
Division of Motor Vehicles

FBB:zrb

DIVISIONS / FLORIDA HIGHWAY SAFETY CONTROL • DRIVER LICENSES • MOTOR VEHICLES • ADMINISTRATIVE SERVICES  
Phil Bergin Building, Tallahassee, Florida 32399-0000

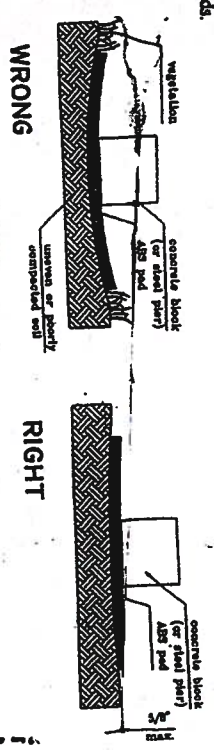
*page 3-3*

MANUFACTURED HOUSING FOUNDATION SYSTEMS  
A Division of Oliver Technology, Inc.  
1-800-284-7437  
HOME OF THE ORIGINAL ABS PIER PAD

(IMPORTANT)  
IF PAD DEFLECTS MORE THAN 5/8" WHEN  
INSTALLED, PIER SPACING IS INCORRECT  
FOR SOIL CONDITIONS, OR A DOUBLE FIRST  
BLOCK CONFIGURATION SHOULD BE USED

Installation Instructions for ABS Pads

The purpose of this addendum is to emphasize that the ground under the ABS pads must be leveled, evenly compacted, and cleared of all vegetation and debris before the placement of the pads.



The maximum deflection in a single pad is 5/8" measured from the highest point to the lowest point of the top.

| PAD SIZE  | PAD AREA    | 1000 LB. SOIL | 2000 LB. SOIL | 3000 LB. SOIL |
|-----------|-------------|---------------|---------------|---------------|
| 16" x 16" | 256 SQ. IN. | 1780 LBS.     | 3560 LBS.     | 5333 LBS.     |
| 16" x 18" | 288 SQ. IN. | 2000 LBS.     | 4000 LBS.     | 6000 LBS.     |
| 16" x 26" | 338 SQ. IN. | 2375 LBS.     | 4750 LBS.     | 7125 LBS.     |
| 18" x 18" | 324 SQ. IN. | 2175 LBS.     | 4350 LBS.     | 6525 LBS.     |
| 18" x 26" | 468 SQ. IN. | 3225 LBS.     | 6450 LBS.     | 9675 LBS.     |
| 20" x 26" | 520 SQ. IN. | 3500 LBS.     | 7000 LBS.     | 10500 LBS.    |
| 24" x 24" | 576 SQ. IN. | 4000 LBS.     | 8000 LBS.     | 12000 LBS.    |

\*Concrete blocks are only rated at 8000 LBS. 8000 LBS. + must be double blocked.

General Notes:

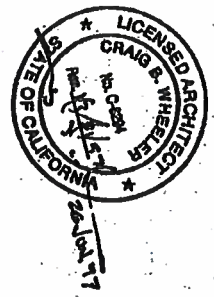
- Any configuration above may be used to replace a home manufacturer's recommended concrete or wood base pad.
- The maximum load at any intermediate soil value may be determined as the average of the next lower and next higher soil values given in the above table.
- Pad sizes shown are nominal dimensions and may vary up to 1/8".
- Pad loads are the same when using single stack or double stack blocks.

Pho 5

ABS pads as manufactured by MANUFACTURED HOUSING FOUNDATION SYSTEMS, INC. may be used to replace most of the concrete and wood pads used with concrete block piers which are shown on Page 13 of the Home Installation Manual. Use the table of equivalent pad sizes to determine the proper ABS pad configuration to use for Licensed Permittee Piers, piers of Licensed G-2 Single Wall Steel Joist Houses (not shown on Page 17 of the Home Installation Manual) and for piers used for Permittee Footings (as shown on Pages 20, 22, 24, 26, 28, and 30 of the Home Installation Manual).

To select the appropriate ABS pad configuration, find the required arrangement of single, double, or triple concrete or wood pads required for the appropriate soil bearing capacity from the tables in the Home Installation Manual. Using the table of equivalent ABS pads below, find the appropriate ABS pad subbottom.

| TABLE OF FOOTING PAD EQUIVALENTS |                        |                                  |                       |                                  |
|----------------------------------|------------------------|----------------------------------|-----------------------|----------------------------------|
| Soil Capacity                    | 16" x 16" Concrete Pad | Equivalent ABS Pad Configuration | 8" x 16" Concrete Pad | Equivalent ABS Pad Configuration |
| 1000                             | SINGLE                 | 2                                | DOUBLE                | 2                                |
| 1000                             | DOUBLE                 | 5                                | TRIPLE                | 4                                |
| 1500                             | SINGLE                 | 2                                | DOUBLE                | 2                                |
| 1500                             | DOUBLE                 | N/A                              | TRIPLE                | 4                                |
| 2000 TO 4000                     | SINGLE                 | 2                                | DOUBLE                | 2                                |
| 2000 TO 4000                     | DOUBLE                 | 5                                | TRIPLE                | 4                                |



|             |  |                            |              |
|-------------|--|----------------------------|--------------|
| APPROVAL    |  | FLEETWOOD ENTERPRISES INC. |              |
| RADCO       |  | CALCULATION NUMBERS        |              |
| AUG 27 1997 |  | 0022158                    | 0022162      |
| 8           |  | 0022140                    | 0022163      |
| APPROVED    |  | 0022158                    |              |
|             |  | 0022159                    |              |
|             |  | 0022161                    |              |
|             |  | DATE                       | 6-20-97      |
|             |  | BY                         | Frank        |
|             |  | NO.                        | 72-72-0081.5 |
|             |  | REV.                       |              |

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Addendum to page 10 of the Fleetwood Home Installation Manual -

SOIL BEARING VALUES

Many local building jurisdictions have soil bearing values available in pounds per square foot (psf). It is important that this information be obtained in order to determine that the home footing sizes and piers are adequate to support the home. However, if (1) Soil investigation and analysis of the site, (2) Compliance with the local building code and (3) Competent opinion by a local registered professional engineer or building official are unavailable, use the procedure shown below to determine the soil bearing capacity.

- A. If all of the following requirements are met for all of the pads under the home, the soil bearing capacity may be assumed to be 2000 psf minimum:
  - 1) All organic material must be removed from under all of the footing pads, and
  - 2) the top three inches of natural soil must be removed from under all of the pads, and
  - 3) the soils under all of the pads must be reasonably level.
- B. If any of these requirements are not met for any of the pads, the soil bearing capacity shall be assumed to be 1000 psf or as determined by other methods outlined in the Fleetwood Home Installation Manual.



|                                                                                                          |  |                                                                                                                                                                           |  |
|----------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>FLEETWOOD ENTERPRISES, INC.</b><br>HOUSING CONSTRUCTION<br>& SAFETY STANDARDS<br>MAY 07 1996<br>8 RFT |  | <b>APPROVAL</b>                                                                                                                                                           |  |
| TITLE: ADDENDUM TO PAGE 10 OF THE INSTALLATION MANUAL                                                    |  | PROPRIETARY AND CONFIDENTIAL<br>These drawings and specifications are original property of Fleetwood Enterprises, Inc.<br>Copyright © 1996 by Fleetwood Enterprises, Inc. |  |
| By: Jack W. NO. 72-72-0100                                                                               |  | REV. A                                                                                                                                                                    |  |
| DATE: 5-5-96                                                                                             |  | 72-72-0100                                                                                                                                                                |  |

2-1-7

October 4, 2000

BFO-113

Don McTaggart (via fax: 352-732-1459)  
 Bureau of Mobile Home & RV Construction  
 318 SE 25<sup>th</sup> Ave.  
 Ocala, FL 34471

Subject: Lag Screws at Marriageline of Endwall

Dear Don:

Thank you for your fax today concerning this subject. I had already given verbal approval for this procedure to Circle B but let me confirm this in writing to you.

As I understand it the installer is using 3/8" x 4" or 5" lag screws for the close-up of the endwall at the marriageline of our multi-wide homes. Page 44 of the Fleetwood Home Installation Manual (W22 & 3) shows that #8 x 4" wood screws should be used for this application. The installer claims that the wood screws often break off in this application while the lag screws do not.

I see no reason why the lag screws will not perform adequately for this situation. I appreciate your concern for splitting of the lumber, but our manual already recommends using 3/8" lags for roof close-up and this has resulting in very little splitting in the past according to information I have received.

Sincerely,

FLEETWOOD ENTERPRISES, INC.

*Bill Farish*

Bill Farish, P.E.  
 Director of Product Engineering  
 Housing Group

cc - Sean Gerard - Circle B, Ocala (via fax: 352-629-7017)

3001 Myer Street  
 P.O. Box 7638  
 Riverside, CA 92513-7638  
 909-351-3500

Page 13

# SUPPLEMENT TO THE INSTALLATION MANUAL

## GROUND ANCHORS

The support system must also resist the lifting, sliding and overturning forces resulting from side winds. A method used is to install ground anchors and tie-down straps in addition to the piers. Tie-downs as described are the minimum necessary if the home is to withstand its design wind load without dislocation. On multi-section homes, sections must be fastened together and level before tie-down straps are installed.

### WARNING

INSTALLING A SUPPORT SYSTEM WITHOUT TIEDOWNS DOES NOT MEET THE FEDERAL INSTALLATION GUIDELINES.

BEFORE GROUND ANCHOR INSTALLATION, DETERMINE THAT THE ANCHOR LOCATIONS AROUND THE HOME WILL NOT BE CLOSE TO ANY UNDERGROUND ELECTRICAL CABLES, WATER LINES OR SEWER PIPING. FAILURE TO DETERMINE THE LOCATION OF UNDERGROUND ELECTRICAL CABLES MAY RESULT IN SERIOUS PERSONAL INJURY AND EVEN DEATH.

### NOTE

The type of ground anchors shown are typical. Other types of anchors may be used provided the manufacturer's installation instructions meet the specifications as outlined on page 8.

### GROUND ANCHOR INSTALLATION

- Should be installed below the frost line.
- Should be at least 12 inches above the water table.
- Should be installed to their full depth.
- Stabilizer plates should be installed to provide added resistance to overturning or sliding forces. See Method 3.
- Refer to the manufacturer's instructions for the type soil in which the anchor is to be installed.

#### METHOD 1

The anchor and anchor head location should be in line with the diagonal strap that will be installed around the main beam. This location may require anchors to be installed at the site location prior to moving the home section(s) into its final position.

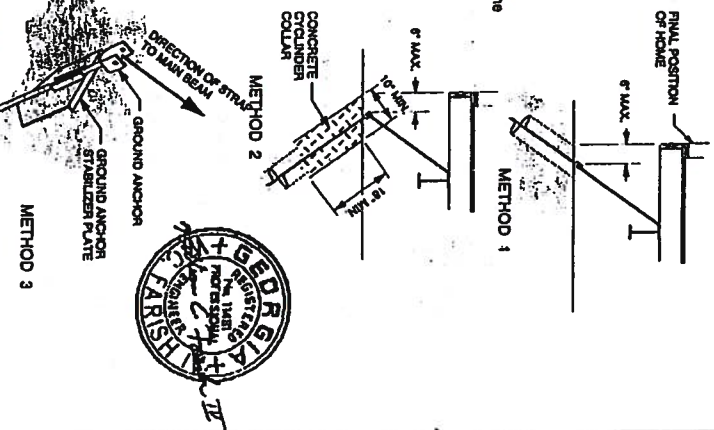
If this method is not appropriate, methods 2 and 3 are acceptable alternatives after the section(s) is in position, level and fastened together.

#### METHOD 2

Anchor may be at a vertical or angle position. Pour a concrete cylinder collar around the anchor shaft approx. 10" in diameter and a minimum of 18" deep.

#### METHOD 3

- Anchor may be at a vertical or angle position.
- Drive anchor into ground approx 18".
- Place stabilizer plate between anchor and metal frame of home. Locate the stabilizer channel over the anchor bar as a guide.
- Drive stabilizer into the ground, using oversize hammer, until top of stabilizer is ground level or below.
- Continue to drive anchor until anchor head is in full contact with the top of the stabilizer plate.

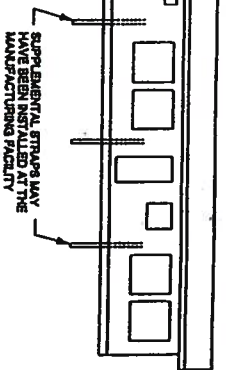


|             |  |                                         |  |                     |  |
|-------------|--|-----------------------------------------|--|---------------------|--|
| APPROVAL    |  | FLEETWOOD ENTERPRISES INC.              |  | Calculation Numbers |  |
| RADCO       |  | HOUSING CONSTRUCTION & SAFETY STANDARDS |  | TITLE               |  |
| JUL 28 1997 |  | APPROVED                                |  | GROUND ANCHORS      |  |
| 8           |  | REV. B                                  |  | NO. 72-72-0103      |  |
| By: Jack W. |  | Date: 7-25-87                           |  | REV. B              |  |

# SUPPLEMENT TO THE INSTALLATION MANUAL

## SUPPLEMENTAL TIEDOWN STRAPS LOCATED ALONG EXTERIOR SIDEWALL (IF PROVIDED) WIND ZONE I ONLY

Supplemental straps may be fastened to same ground anchor as the main beam tie-down straps if anchor is approved by the manufacturer for such installation.

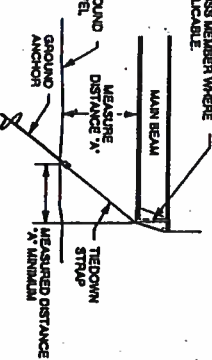


### CAUTION

SUPPLEMENTAL TIEDOWN STRAPS ARE NOT A REPLACEMENT FOR DIAGONAL MAIN BEAM TIEDOWN STRAPS. THE DIAGONAL TIEDOWN STRAPS ARE THE MINIMUM ANCHORING SYSTEM FOR THE HOME TO MEET WIND ZONE I REQUIREMENTS.

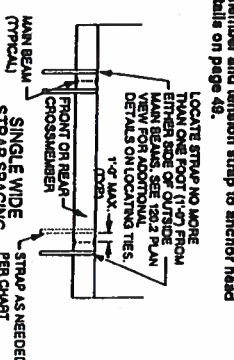
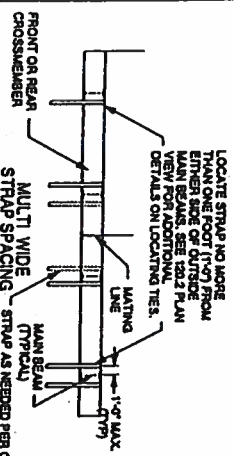
### LONGITUDINAL TIEDOWN STRAPS AT FRONT AND REAR OF THE HOME

FRONT OR REAR CROSSMEMBER, MAY BE OTHER CONFIGURATION FOR NON-FRAME DETAIL. CROSS MEMBER WHERE APPLICABLE.

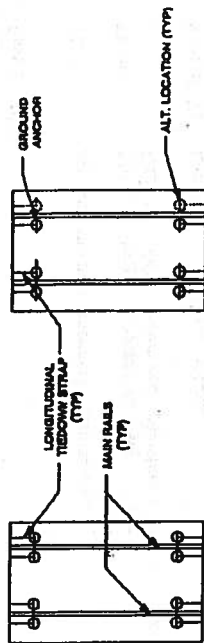


NOTE: 1. Thread strap through buckle, around front and rear crossmember and tension strap to anchor head per details on page 49.

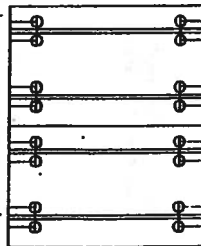
| NUMBER OF STRAPS REQUIRED |                    |                   |     |
|---------------------------|--------------------|-------------------|-----|
| SECTION                   | NUMBER OF SECTIONS | MAX SECTION WIDTH |     |
| I                         | SINGLE             | 14"               | 15" |
| II                        | DOUBLE             | 6"                | 8"  |
| III                       | TRIPLE             | 8"                | 10" |
| IV                        | SINGLE             | 3"                | 4"  |
| V                         | DOUBLE             | 6"                | 8"  |
| VI                        | TRIPLE             | 10"               | 12" |



|             |  |                                         |  |                                 |  |
|-------------|--|-----------------------------------------|--|---------------------------------|--|
| APPROVAL    |  | FLEETWOOD ENTERPRISES INC.              |  | Calculation Numbers             |  |
| RADCO       |  | HOUSING CONSTRUCTION & SAFETY STANDARDS |  | TITLE                           |  |
| DEC 23 1998 |  | APPROVED                                |  | LONGITUDINAL STRAP REQUIREMENTS |  |
| 4           |  | REV. A                                  |  | NO. 72-72-0120.1                |  |
| By: TMM     |  | Date: 11-10-98                          |  | REV. A                          |  |



4 - TIE (PER END) SYSTEM  
SINGLE SECTION HOME



8 - TIE (PER END) SYSTEM



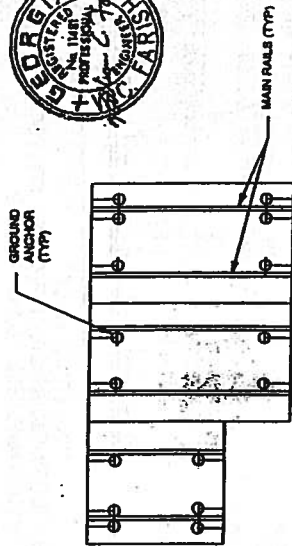
6 - TIE (PER END) SYSTEM

TWO SECTION HOME

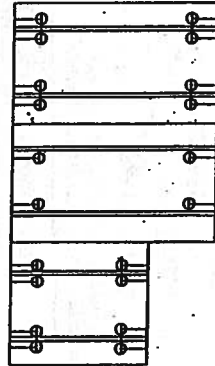
Note:  
1. Two section details may also be used in combination for "Quadr" home configurations.

|                                                                                                                      |  |                                                                                                                                                                                                                          |  |
|----------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>APPROVAL</b><br>RADC<br>DEC 23 1998<br>4                                                                          |  | <b>APPROVED</b><br>HOUSING CONSTRUCTION<br>& SAFETY STANDARDS<br>TITLE<br>LONGITUDINAL STRAP<br>REQUIREMENTS<br>WZ-1, WZ-2 & WZ-3<br>(REPLACES #48 IN MANUAL)<br>BY: TIMMI<br>DATE: 11-10-98<br>NO. 72-72-0120.2<br>REV. |  |
| FLEETWOOD ENTERPRISES INC.<br>FEDERAL MANUFACTURED<br>HOUSING CONSTRUCTION<br>& SAFETY STANDARDS<br>DEC 23 1998<br>4 |  | PROPRIETARY AND CONFIDENTIAL<br>These drawings and specifications are the property of Fleetwood Enterprises Inc.<br>Copyright © 1988 by Fleetwood Enterprises Inc.                                                       |  |

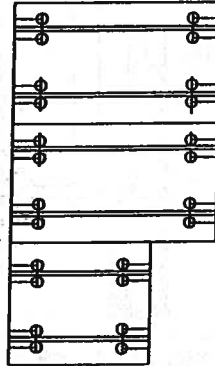
2. 1. 71.



8 - TIE (PER END) SYSTEM



10 - TIE (PER END) SYSTEM



12 - TIE (PER END) SYSTEM

Note:  
1. Offset varies and may be at both front and rear.

|                                                                                                                      |  |                                                                                                                                                                                                                          |  |
|----------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>APPROVAL</b><br>RADC<br>DEC 23 1998<br>4                                                                          |  | <b>APPROVED</b><br>HOUSING CONSTRUCTION<br>& SAFETY STANDARDS<br>TITLE<br>LONGITUDINAL STRAP<br>REQUIREMENTS<br>WZ-1, WZ-2 & WZ-3<br>(REPLACES #48 IN MANUAL)<br>BY: TIMMI<br>DATE: 11-10-98<br>NO. 72-72-0120.3<br>REV. |  |
| FLEETWOOD ENTERPRISES INC.<br>FEDERAL MANUFACTURED<br>HOUSING CONSTRUCTION<br>& SAFETY STANDARDS<br>DEC 23 1998<br>4 |  | PROPRIETARY AND CONFIDENTIAL<br>These drawings and specifications are the property of Fleetwood Enterprises Inc.<br>Copyright © 1988 by Fleetwood Enterprises Inc.                                                       |  |

# SUPPLEMENT TO THE INSTALLATION MANUAL SUPPLEMENTAL TEDOWN STRAPS LOCATED ALONG EXTERIOR SIDEWALL (IF PROVIDED) WIND ZONE I ONLY



## State of Florida DEPARTMENT OF HIGHWAY SAFETY AND MOTOR VEHICLES TALLAHASSEE, FLORIDA 32399-0500

FRED O. DICKINSON, III  
Executive Director

### MEMORANDUM

June 14, 2002

TO: All Anchor and Component Manufacturers  
FROM: Philip R. Bergelt, Program Manager  
Bureau of Mobile Home and Recreational Vehicle Construction  
SUBJECT: Lateral Arm Stabilizer Systems

To ensure consumer protection and to ensure that minimum standards are met in the installation of Lateral Arm Stabilizing Systems, it is necessary for us to create uniform installation standards for these systems. A secondary benefit of uniform standards will be the clarification of installation procedures for installers and for county and city inspectors performing field oversight.

Effective immediately all Florida lateral arm stabilizing instructions will include the following prescriptive number of systems:

Four (4) systems up to 52 feet  
Six (6) systems from 52 to 80 feet

Five (5) 12 pitch roofs will require a minimum of the following number of lateral arm stabilizing systems, unless a greater number is specified by your engineering:

Six (6) systems up to 52 feet  
Eight (8) systems from 52 to 80 feet

Your instructions should contain the following three (3) notes:

Note: 1) The use of this system requires sidewall vertical ties at no greater than 54" on center and allows for the use of 4' anchors.

Note: 2) Centerline anchors to be sized according to soil torque condition. Any manufacturer's specifications for sidewall anchor loads in excess of 4,000 lbs. require a 5' anchor.

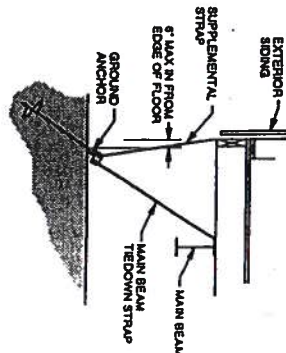
Note: 3) Each system is required to have a frame tie and stabilizer attached at each lateral arm stabilizing location.

DIVISIONS/FLORIDA HIGHWAY PATROL • DRIVER LICENSES • MOTOR VEHICLES • ADMINISTRATIVE SERVICES  
Neil Korman Building, Tallahassee, Florida 32399-0500

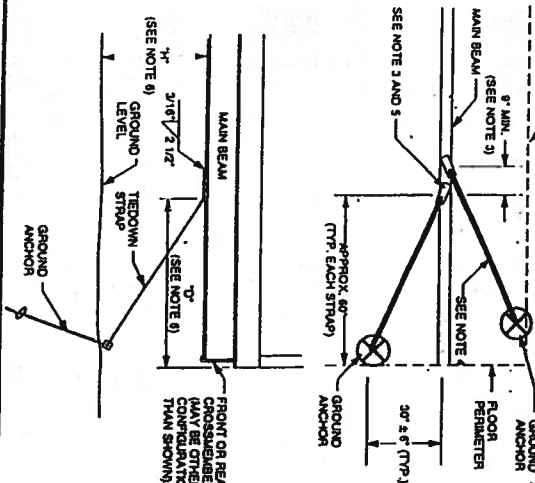
Supplemental straps may be fastened to same ground anchor as the main beam tiedown straps if anchor is approved by the manufacturer for such installation.

#### CAUTION

SUPPLEMENTAL TEDOWN STRAPS ARE NOT A REPLACEMENT FOR DIAGONAL MAIN BEAM TEDOWN STRAPS. THE DIAGONAL MAIN BEAM STRAPS ARE THE MINIMUM ANCHORING SYSTEM FOR THE HOME TO MEET WIND ZONE I REQUIREMENTS.



### LONGITUDINAL TEDOWN STRAPS AT FRONT AND REAR OF THE HOME

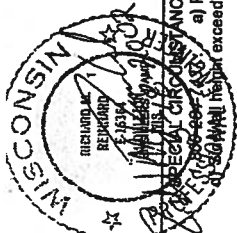


| STRAP<br>SECTION | NUMBER OF<br>STRAPS REQUIRED<br>AT EACH END OF HOME | MAX. SECTION WIDTH |
|------------------|-----------------------------------------------------|--------------------|
| 1. ALL           | NA                                                  | NA                 |
| 2. SINGLE        | 1                                                   | 3                  |
| 2. DOUBLE        | 2                                                   | 6                  |
| 2. TRIPLE        | 3                                                   | 10                 |
| 3. SINGLE        | 4                                                   | 4                  |
| 3. DOUBLE        | 6                                                   | 6                  |
| 3. TRIPLE        | 10                                                  | 12                 |

#### Notes:

1. "Quad" houses shall be treated as two separate double section homes.
2. Offsets on multi-section homes do not affect the number of straps required.
3. Connectors are to be placed at front and rear of each floor. Ground anchor shall be a min. of 48" from any mating line anchor and a min. 24" from any sidewall anchor. Connectors may be located along main beam far enough back to allow clearance.
4. Anchorage strap and accessories shall be rated for min. 4725 lbs. capacity at a 45° angle to the ground.
5. Attach strap to slot of min. 3150 lb. rated capacity connector (min. 1.5 factor of safety) welded to the bottom flange of the main beam with min. of 2 1/2" of 3/16" fillet weld.
6. Distance (D) from anchor head to connector slot shall be greater than height (H) of main beam to ground level.

|                            |  |                                 |  |
|----------------------------|--|---------------------------------|--|
| FLEETWOOD ENTERPRISES INC. |  | Calculation Numbers             |  |
| 0022167                    |  |                                 |  |
| TITLE                      |  | LONGITUDINAL STRAP REQUIREMENTS |  |
| WZ-1, WZ-2 & WZ-3          |  | (REPLACES PAGE 748 IN MANUAL)   |  |
| DATE: 11-10-98             |  | REV.                            |  |
| APPROVAL                   |  | APPROVED                        |  |
| RADCO                      |  | 4                               |  |
| DEC 23 1998                |  |                                 |  |



OLIVER TECHNOLOGIES, INC.  
FLORIDA INSTALLATION INSTRUCTIONS FOR THE  
MODEL 1101 "V" SERIES ALL-STEEL FOUNDATION SYSTEM  
MODEL 1101 "V" (STEPS 1-14)  
MODEL 1101-L "V" LONGITUDINAL ONLY  
FOLLOW INSTRUCTIONS 1-10

*Handwritten signature: Richard M. Reinhardt*  
*Handwritten date: 5/15/14*  
ENGINEER'S STAMP

**CRITICAL CLEARANCES:** If the following conditions occur - STOP! Contact Oliver Technologies at 1-800-284-7437.  
a) Pier height exceeds 48" b) Length of home exceeds 76' c) Roof eaves exceed 16' d) Pier height exceeds 96" e) Roof Pitch greater than 4.37/12 (20 degrees) f) Location is within 1506 feet of coast  
of seawall height exceed 96"

**INSTALLATION OF GROUND PAN**

2. Remove weeds and debris in an approximate two foot square to expose firm soil for each ground pan (C).
  3. Place ground pan (C) directly below chassis I-beam. Press or drive pan firmly into soil until flush with or below soil.
- SPECIAL NOTE:** The longitudinal "V" brace system serves as a pier under the home and should be loaded as any other pier. It is recommended that after leveling piers, and one-half inch (1/2") before home is lowered completely on to piers, complete items 4 through 8 below.

**INSTALLATION OF LONGITUDINAL "V" BRACE SYSTEM**

**NOTE:** IF INSTALLING THE MODEL 1101-L "V" LONGITUDINAL ONLY, A MINIMUM OF 2 SYSTEMS PER FLOOR SECTION IS REQUIRED. FOUR FOOT (4') GROUND ANCHOR MAY BE USED EXCEPT WHERE MANUFACTURER'S SPECIFY A DIFFERENCE. USE GROUND ANCHORS WITH DIAGONAL TIES AND STABILIZER PLATES EVERY 6'4". VERTICAL TIES ARE ALSO REQUIRED ON HOMES SUPPLIED WITH VERTICAL TIE CONNECTION POINTS (PER FLORIDA REG.).

4. Select the correct square tube brace (E) length for set-up (pier) height at support location. (The 18" tube is always used as the bottom part of the longitudinal arm). Note: Either tube can be used by itself, cut and drilled to length as long as a 40 to 45 degree angle is maintained.

| PIER HEIGHT<br>(Approx. 45 degrees Max.) | 1.25' ADJUSTABLE<br>Tube Length | 1.50' ADJUSTABLE<br>Tube Length |
|------------------------------------------|---------------------------------|---------------------------------|
| 7 3/4" to 25"                            | 22"                             | 18"                             |
| 24 3/4" to 32 1/4"                       | 32"                             | 18"                             |
| 33 1/2" to 41"                           | 44"                             | 18"                             |
| 40" to 48"                               | 54"                             | 18"                             |

5. Install 2 of the 1.50" square tubes (E (18" tube) ) into the "J" bracket (J), insert carriage bolt and leave nut loose for final adjustment.
6. Place I-beam connector (F) loosely on the bottom flange of the I-beam.
7. Slide the selected 1.25" tube (E) into a 1.50" tube (E) and attach to I-beam connectors (F) and fasten loosely with bolt and nut.
8. Repeat steps 6 through 7 to create the "V" pattern of the square tubes loosely in place. NOTE: The angle is not to exceed 45 degree and not below 40 degrees.
9. After all bolts are tightened, secure 1.25" and 1.50" tubes using four (4) 1/4"-14 x 3/4" self-tapping screws in pre-drilled holes.
10. Install remaining vertical tie-down straps and 4" ground anchors per home manufacturer's instructions. All loads in excess of 3,150 pounds at shear walls, columns, and centerline, must have five foot (5') anchors installed regardless of soil conditions, per the state of Florida.

**INSTALLATION OF LATERAL TELESCOPING TRANSVERSE ARM SYSTEM**

**NOTE: THE MODEL 1101 "V" (LONGITUDINAL & LATERAL PROTECTION) ELIMINATES THE NEED FOR ALL STABILIZER PLATES & FRAME TIES.**

12. Select the correct square tube brace (H) length for set-up lateral transverse at support location. The lengths come in either 60" or 72" lengths. (With the 1.50" tube as the bottom tube, and the 1.25" tube as the inserted tube.)
13. Install the 1.50 transverse brace (H) to the ground pan connector (D) with bolt and nut.
14. Slide 1.25" transverse brace into the 1.50" brace and attach to adjacent I-beam connector (I) with bolt and nut.
15. Secure 1.50" transverse arm to 1.25" transverse arm using four (4) 1/4" - 14 x 3/4" self-tapping screws in pre-drilled holes.

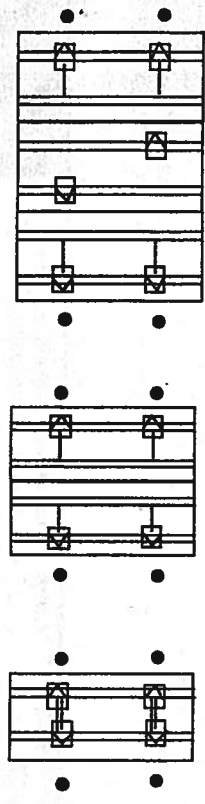


MANUFACTURED HOUSING FOUNDATION SYSTEMS  
A DIVISION OF OLIVER TECHNOLOGIES, INC.  
1-800-284-7437

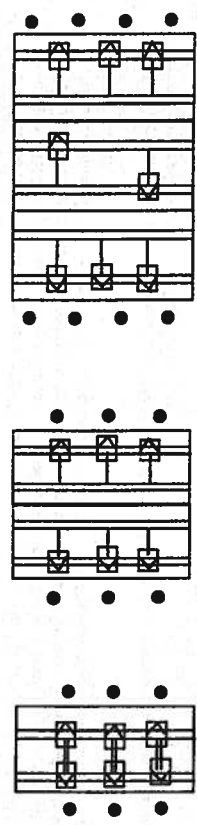
Telephone: 831-798-4555  
Fax: 931-798-5811  
www.olivertechnologies.com

REQUIRED NUMBER AND LOCATION OF MODEL 1101 "V" BRACES FOR UP TO 4/12 ROOF PITCH

ALL WIDTHS; AND LENGTHS UP TO 52'

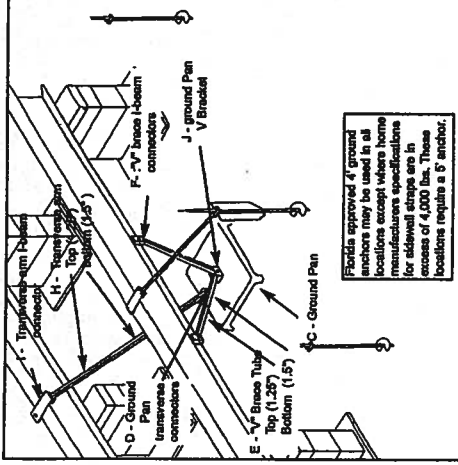


ALL WIDTHS; AND LENGTHS OVER 52' TO 80'



**HOMES WITH 5/12 ROOF PITCH REQUIRE: PER FLORIDA REGULATIONS**

6 systems for home lengths up to 52' and 8 systems for homes over 52' and up 80'. One stabilizer plate and frame tie required at each lateral bracing system.



**NOTES:**

1. LENGTH OF HOUSE IS THE ACTUAL BOX SIZE
2. \* = STABILIZER PLATE AND FRAME TIE LOCATION.
3. \* = LOCATION OF ASF MODEL 1101 "V" (LATERAL & LONGITUDINAL BRACING).
4. \* = LOCATION OF MODEL 1101-L "V" (LONGITUDINAL BRACING ONLY).

- C = GROUND PAN
- D = GROUND PAN CONNECTOR
- E = TELESCOPING V BRACE
- F = BRACE I-BEAM CONNECTOR ASSEMBLY
- G = TELESCOPING TRANSVERSE ARM ASSEMBLY
- H = TRANSVERSE ARM I-BEAM CONNECTOR
- J = V PAN BRACKET

PATENT PENDING

REVISED INSTRUCTIONS 6/20/02



MANUFACTURED HOUSING FOUNDATION SYSTEMS  
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0  
1  
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Toll Free: 1-800-284-7437

November 7, 2000

To Whom It May Concern:

SUBJECT: BOLT HEAD CONFIGURATION ON CROSSRACE I-BEAM CONNECTOR

In reference to the bolts used to secure the Crossrace Connectors to the I-Beams on Our Model 1100 or Model 1100-L Systems, Grade 8 bolts may be used regardless of the head configuration. Carriage Head bolts are noted in our instructions based on ease of installation. However, Flat Head bolts work with the same effectiveness when tightened to the required 110 foot pounds torque called for in the instructions.

In addition, please also be advised that Flat Head bolts may be used as a substitute for any other bolts used in the Model 1100 and 1100-L Systems.

While our instructions picture the bolt as inserted from the top of the bracket, it will also be equally effective if inserted from the bottom and properly tightened as noted above.

This information has been verified through the Professional Engineer, certified in the State Of Florida who certified our Systems.

Sincerely,

*Bob Burns*

Bob Burns  
Plant Manager  
Oliver Technologies

Page 23

MANUFACTURED HOUSING FOUNDATIONS SYSTEMS  
a division of Oliver Technologies, Inc.



Date: 9/10/96

To: Henry Valle, Mary Johnson, Lewis Pope, Chuck Strack

CC: Mike Kern, Tom Scholberg, Tom Kern

From: Bryan Kern

RE: Eagle Center Vent Ventilation Standards

This memo is to update the information regarding the ventilation provided by each of our existing ventilation panel programs.

|                                    |                                             |
|------------------------------------|---------------------------------------------|
| Premium Pull Vent                  | 15.5 lit Vent per lineal ft of vented panel |
| Eagle Pull Vent                    | 9.0 lit Vent per lineal ft of vented panel  |
| New Eagle Center Vent Panel        | 4.0 lit Vent per lineal ft of vented panel  |
| Proposed Premium Center Vent Panel | 6.7 lit Vent per lineal ft of vented panel  |

All vented panels will have a 0.050" depth run condition with a +/- 0.005" tolerance. Operational tolerances will allow the depth to have a low end tolerance of 0.040" while any problems are being corrected. Therefore the center vented ventilation figures noted above are based on vent at the 0.040" depth of the header weave. The full vent ventilation figures given above are based on current marketing information that is being used.

If there are questions, please contact me.

Bryan

Page 20



**CONFIGURATION - 1**

**CONFIGURATION - 2**

**CONFIGURATION - 3**

**CONFIGURATION - 4**

**CONFIGURATION - 5**

**NOTES:**

- ABS peds to be manufactured by Manufactured Housing Foundation Systems, Inc.
- ABS peds to be installed, assembled, pinned and glued per manufacturer's installation instructions.
- Pier spacing to be per applicable loads.
- For values greater than 1000 psf soil bearing capacity, use a pocket penetrometer or other approved testing equipment to determine actual soil capacity.
- Pad installation and configuration to meet applicable local codes.
- For soil values greater than 3,000 psf, use the tables for 3,000 psf soil.
- WARNING: If ABS pads deflect more than 5/8\"/>

**APPROVAL**

**RADCO**

**AUG 27 1997**

**8**

**HOUSING CONSTRUCTION & SAFETY SYSTEMS**

**Calculation Numbers**

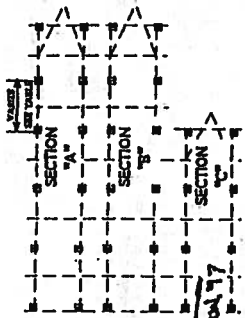
|         |         |
|---------|---------|
| 0022156 | 0022162 |
| 0022140 | 0022163 |
| 0022158 |         |
| 0022159 |         |
| 0022161 |         |

**ABS FOOTING PAD CONFIGURATIONS**

By: Jack W. INC. 72-72-0081.1

Date: 6-20-97

REV. A



**12 & 14 WIDE - SINGLE, DOUBLE, OR TRIPLE SECTIONS**

These tables determine the footing pad spacing and bearing capacity along the main beams of the sections.

Refer to page 72-72-0081.1 for footing pad configuration details.

Review the tables that indicate the footing type you are going to use for main beams.

Refer to page 18 of the Installation Manual for the procedure on using the tables.

Refer to Floorwood House Installation Manual for foundation spacing requirements.

| 12 WIDE - ABS FOOTINGS              |                         |                      |                      |                      |                      |                      |                      |                      |                      |
|-------------------------------------|-------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| MAXIMUM BEAM FOOTING SPACING (FEET) |                         |                      |                      |                      |                      |                      |                      |                      |                      |
| Soil Capacity (PSF)                 | Footing Live Load (PSF) | Configuration 1      |                      | Configuration 2      |                      | Configuration 3      |                      | Configuration 4      |                      |
|                                     |                         | Main Beam Size (ft.) | Main Beam Size (ft.) | Main Beam Size (ft.) | Main Beam Size (ft.) | Main Beam Size (ft.) | Main Beam Size (ft.) | Main Beam Size (ft.) | Main Beam Size (ft.) |
| 1000                                | 20                      | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                |
|                                     | 30                      | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                |
|                                     | 40                      | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                |
|                                     | 50                      | 3'-0"                | 3'-0"                | 3'-0"                | 3'-0"                | 3'-0"                | 3'-0"                | 3'-0"                | 3'-0"                |
| 1500                                | 20                      | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                |
|                                     | 30                      | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                |
|                                     | 40                      | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                |
|                                     | 50                      | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                |
| 2000                                | 20                      | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                |
|                                     | 30                      | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                |
|                                     | 40                      | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                |
|                                     | 50                      | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                |
| 2500                                | 20                      | 10'-0"               | 10'-0"               | 10'-0"               | 10'-0"               | 10'-0"               | 10'-0"               | 10'-0"               | 10'-0"               |
|                                     | 30                      | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                |
|                                     | 40                      | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                |
|                                     | 50                      | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                |
| 3000                                | 20                      | 11'-0"               | 11'-0"               | 11'-0"               | 11'-0"               | 11'-0"               | 11'-0"               | 11'-0"               | 11'-0"               |
|                                     | 30                      | 10'-0"               | 10'-0"               | 10'-0"               | 10'-0"               | 10'-0"               | 10'-0"               | 10'-0"               | 10'-0"               |
|                                     | 40                      | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                |
|                                     | 50                      | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                |
| 14 WIDE - ABS FOOTINGS              |                         |                      |                      |                      |                      |                      |                      |                      |                      |
| MAXIMUM BEAM FOOTING SPACING (FEET) |                         |                      |                      |                      |                      |                      |                      |                      |                      |
| Soil Capacity (PSF)                 | Footing Live Load (PSF) | Configuration 1      |                      | Configuration 2      |                      | Configuration 3      |                      | Configuration 4      |                      |
|                                     |                         | Main Beam Size (ft.) | Main Beam Size (ft.) | Main Beam Size (ft.) | Main Beam Size (ft.) | Main Beam Size (ft.) | Main Beam Size (ft.) | Main Beam Size (ft.) | Main Beam Size (ft.) |
| 1000                                | 20                      | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                |
|                                     | 30                      | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                |
|                                     | 40                      | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                |
|                                     | 50                      | 3'-0"                | 3'-0"                | 3'-0"                | 3'-0"                | 3'-0"                | 3'-0"                | 3'-0"                | 3'-0"                |
| 1500                                | 20                      | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                |
|                                     | 30                      | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                |
|                                     | 40                      | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                |
|                                     | 50                      | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                | 3'-6"                |
| 2000                                | 20                      | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                |
|                                     | 30                      | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                |
|                                     | 40                      | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                |
|                                     | 50                      | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                | 4'-0"                |
| 2500                                | 20                      | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                |
|                                     | 30                      | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                |
|                                     | 40                      | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                |
|                                     | 50                      | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                | 5'-0"                |
| 3000                                | 20                      | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                | 9'-0"                |
|                                     | 30                      | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                | 8'-0"                |
|                                     | 40                      | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                | 7'-0"                |
|                                     | 50                      | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                | 6'-0"                |

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**8**

**HOUSING CONSTRUCTION & SAFETY SYSTEMS**

**Calculation Numbers**

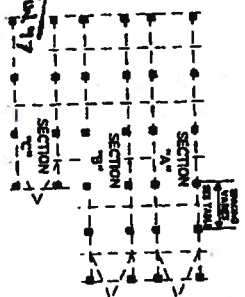
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**MAIN BEAM ABS FOOTING CONFIGURATION AND SPACING 12 & 14 WIDE 20, 30, & 40 PSF ROOF LL**

By: Anna Z. INC. 72-72-0081.2

Date: 6/20/97

REV. A



**16 & 18 WIDE - SINGLE, DOUBLE, OR TRIPLE SECTIONS 20, 30, & 40 PSF**

These tables determine the footing and footing configuration along the main beams of the section.

Refer to page 72-72-0081.1 for footing and configuration details.

Refer to page 16 of the Installation Manual for the procedure on using the tables.

Refer to Appendix Home Installation Manual for footing spacing requirements.

**16 WIDE - ABS FOOTINGS**

**MAXIMUM BEAM FOOTING SPACING (FEET)**

| Soil Capacity (PSF) | Footing Width (in) | Configuration 1 |     |     |     |     | Configuration 2 |     |     |     |     | Configuration 3 |     |     |     |     | Configuration 4 |     |     |     |     | Configuration 5 |     |     |     |     |
|---------------------|--------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|
|                     |                    | 1               | 2   | 3   | 4   | 5   | 1               | 2   | 3   | 4   | 5   | 1               | 2   | 3   | 4   | 5   | 1               | 2   | 3   | 4   | 5   | 1               | 2   | 3   | 4   | 5   |
| 1000                | 20                 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 |
| 1500                | 20                 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 |
| 2000                | 20                 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 |
| 2500                | 20                 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 |
| 3000                | 20                 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 |

**18 WIDE - ABS FOOTINGS**

**MAXIMUM BEAM FOOTING SPACING (FEET)**

| Soil Capacity (PSF) | Footing Width (in) | Configuration 1 |     |     |     |     | Configuration 2 |     |     |     |     | Configuration 3 |     |     |     |     | Configuration 4 |     |     |     |     | Configuration 5 |     |     |     |     |
|---------------------|--------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|
|                     |                    | 1               | 2   | 3   | 4   | 5   | 1               | 2   | 3   | 4   | 5   | 1               | 2   | 3   | 4   | 5   | 1               | 2   | 3   | 4   | 5   | 1               | 2   | 3   | 4   | 5   |
| 1000                | 20                 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 |
| 1500                | 20                 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 |
| 2000                | 20                 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 |
| 2500                | 20                 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 |
| 3000                | 20                 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 | 3-0             | 3-0 | 3-0 | 3-0 | 3-0 |

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