

DATE 01/24/2011

## Columbia County Building Permit

PERMIT

This Permit Must Be Prominently Posted on Premises During Construction

000029139

APPLICANT MIKE CANTO PHONE 352.318.9625  
ADDRESS 3601 NW 97TH BLVD. GAINSVILLE FL 32606  
OWNER DARIN & JEANETTE RYDER PHONE 386.758.3925  
ADDRESS 114 NW HERIAGE DRIVE LAKE CITY FL 32055  
CONTRACTOR MIKE CANTO PHONE 352.332.7665  
LOCATION OF PROPERTY 90-W TO BROWN,TR TO EM. LAES S.D. ENTRANCE @ WINDING WAY,TL  
TO STOP SIGN,TL(CORNER OF EM. LAKES DR & HERITAGE ON R)  
TYPE DEVELOPMENT SWIMMING POOL ESTIMATED COST OF CONSTRUCTION 40000.00  
HEATED FLOOR AREA TOTAL AREA HEIGHT STORIES  
FOUNDATION WALLS ROOF PITCH FLOOR  
LAND USE & ZONING MAX. HEIGHT  
Minimum Set Back Requirments: STREET-FRONT REAR SIDE  
NO. EX.D.U. 1 FLOOD ZONE DEVELOPMENT PERMIT NO.

PARCEL ID 28-3S-16-02372-523 SUBDIVISION EMERALD LAKES  
LOT 23 BLOCK PHASE UNIT TOTAL ACRES 0.53

CPC1457306

Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor  
EXISTING BLK TC N  
Driveway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident

COMMENTS: ACCSSORY USE. NOC ON FILE.

Check # or Cash 42040

## FOR BUILDING &amp; ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power Foundation Monolithic  
date/app. by date/app. by date/app. by  
Under slab rough-in plumbing Slab Sheathing/Nailing  
date/app. by date/app. by date/app. by  
Framing Insulation  
date/app. by date/app. by  
Rough-in plumbing above slab and below wood floor Electrical rough-in  
date/app. by date/app. by  
Heat & Air Duct Peri. beam (Lintel) Pool  
date/app. by date/app. by date/app. by  
Permanent power C.O. Final Culvert  
date/app. by date/app. by date/app. by  
Pump pole Utility Pole M/H tie downs, blocking, electricity and plumbing  
date/app. by date/app. by date/app. by  
Reconnection RV Re-roof  
date/app. by date/app. by date/app. by

BUILDING PERMIT FEE \$ 200.00 CERTIFICATION FEE \$ 0.00 SURCHARGE FEE \$ 0.00  
MISC. FEES \$ 0.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ 0.00 WASTE FEE \$  
FLOOD DEVELOPMENT FEE \$ FLOOD ZONE FEE \$ CULVERT FEE \$ TOTAL FEE 250.00  
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."

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

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

# Columbia County Building Permit Application

For Office Use Only Application # 1101-20 Date Received 1/19 By JW Permit # 29139  
 Zoning Official BLK Date 24.01.11 Flood Zone N/A Land Use RES. 2-0 Zoning RSF-2  
 FEMA Map # N/A Elevation N/A MFE N/A River N/A Plans Examiner J.C. Date 1-21-11  
 Comments \_\_\_\_\_  
☒ NOC ☒ EH ☒ Deed or PA ☒ Site Plan ☐ State Road Info ☐ Parent Parcel # \_\_\_\_\_  
☐ Dev Permit # \_\_\_\_\_ ☐ In Floodway ☒ Letter of Auth. from Contractor ☐ F W Comp. letter \_\_\_\_\_  
 IMPACT FEES: EMS \_\_\_\_\_ Fire \_\_\_\_\_ Corr ON FILE Road/Code \_\_\_\_\_  
 School \_\_\_\_\_ = TOTAL 0 SUSPENDED ACCESSORY USE

Septic Permit No. \_\_\_\_\_ Fax 352-332-0266  
 Name Authorized Person Signing Permit MIKE CANTO OR Barry Blanton Phone 352-332-7665  
 Address 3801 NW 97TH Blvd Gainesville FL 32606  
 Owners Name Darin / Jeanette Ryder Phone 386-758-3925  
 911 Address 114 NW Heritage Drive Lake City FL 32055  
 Contractors Name Fun State Pools - Michael Canto Phone 352-332-7665  
 Address 3801 NW 97TH Blvd. Gainesville FL 32606  
 Fee Simple Owner Name & Address \_\_\_\_\_  
 Bonding Co. Name & Address \_\_\_\_\_  
 Architect/Engineer Name & Address Fun State Pools Inc / Driscoll Engineering Inc  
 Mortgage Lenders Name & Address \_\_\_\_\_

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progress Energy

Property ID Number 28-35-16-02372-523 Estimated Cost of Construction \$ 40,000  
 Subdivision Name Emerald Lakes Lot 23 Block \_\_\_\_\_ Unit \_\_\_\_\_ Phase \_\_\_\_\_  
 Driving Directions 90-W to Brown Rd on Right - .6 miles to Emerald Lakes Subdivision on left - winding road to stop sign - left to CORNER OF emerald Lakes Dr. Heritage Road ON R.  
 Number of Existing Dwellings on Property 1  
 Construction of In ground concrete pool Total Acreage 53 Lot Size \_\_\_\_\_  
 Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height \_\_\_\_\_  
 Actual Distance of Structure from Property Lines - Front \_\_\_\_\_ Side \_\_\_\_\_ Side \_\_\_\_\_ Rear \_\_\_\_\_  
 Number of Stories \_\_\_\_\_ Heated Floor Area \_\_\_\_\_ Total Floor Area \_\_\_\_\_ Roof Pitch \_\_\_\_\_

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

42040

**Columbia County Building Permit Application**

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

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

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

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

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

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

**NOTICE TO OWNER:** There are some properties that may have deed restrictions recorded upon them. These restrictions may limit or prohibit the work applied for in your building permit. It may be to your advantage to check and see if your property is encumbered by any restrictions.

(Owners Must Sign All Applications Before Permit Issuance.)

  
\_\_\_\_\_  
Owners Signature

**\*\*OWNER BUILDERS MUST PERSONALLY APPEAR AND SIGN THE BUILDING PERMIT.**

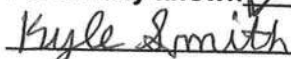
**CONTRACTORS AFFIDAVIT:** By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit including all application and permit time limitations.

  
\_\_\_\_\_  
Contractor's Signature (Permitee)

Contractor's License Number CPC1457306  
Columbia County  
Competency Card Number 23803

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 18 day of Jan 2011.

Personally known ☒ or Produced Identification \_\_\_\_\_

  
\_\_\_\_\_  
State of Florida Notary Signature (For the Contractor)

SEAL:



## NOTICE OF COMMENCEMENT

This Instrument Prepared By:

Name: Fun State Pools, Inc. Barry Blanton

Address: 3601 NW 97 Blvd Gville FL 32606

Permit No. \_\_\_\_\_

Tax Folio No: 28-35-16-02372-523

STATE OF Florida

COUNTY OF: Columbia

Inst. 201112000867 Date: 1/19/2011 Time: 10:13 AM

DC, P. DeWitt Cason, Columbia County Page 1 of 1 B:1208 P:1030

THE UNDERSIGNED HEREBY gives notice that improvement(s) will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

1. DESCRIPTION OF PROPERTY: Street Address: 114 NW Heritage Drive Lake City FL  
Legal Description: 28-35-16-02372-523

2. GENERAL DESCRIPTION OF IMPROVEMENT(S): in ground concrete pool

3. OWNER INFORMATION: a.) Name: Darin / Jeannette Ryder Address: 114 NW Heritage Drive Lake City FL  
b.) Interest in Property: Fee Simple  
c.) Fee Simple Titleholder (if other than owner) Name: \_\_\_\_\_ Address: \_\_\_\_\_

4. CONTRACTOR: a.) Name: Fun State Pools, Inc Address: 3601 NW 97 Blvd Gville 32606 b.) Phone: 352-332-7665

5. SURETY: a.) Name: N/A Address: N/A  
b.) Amount of bond \$: N/A c.) Phone: N/A

6. LENDER: a.) Name: N/A Address: N/A b.) Phone: N/A

7. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a) 7., Florida Statutes:

a.) Name: N/A Address: N/A b.) Phone: N/A

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

a.) Name: N/A Address: N/A b.) Phone: N/A

9. Expiration date of notice of commencement (the expiration date is one (1) year from the date of recording unless a different date is specified.) N/A

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

[Signature]  
Signature of Owner or Owner's Authorized Officer/Director  
Partner/Manager

Signatory's Title/Office \_\_\_\_\_

The foregoing instrument was acknowledged before me this 18 day of Jan 2011 (year)  
by Darin Ryder (name of person) as \_\_\_\_\_ (type of authority, e.g. officer,  
trustee, attorney in fact) for \_\_\_\_\_ (name of party on behalf of whom instrument was executed).



Kyle Smith  
Signature of Notary Public - State of Florida  
Print, Type, or Stamp Commissioned Name of Notary Public  
Commission Number: EE 038053  
Personally Known \_\_\_\_\_ or Produced Identification FLDL

Verification Pursuant to Section 92.525, Florida Statutes

Under penalties of perjury, I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief.

[Signature]  
Signature of Natural Person Signing Above

Darin / Jeanette Ryder

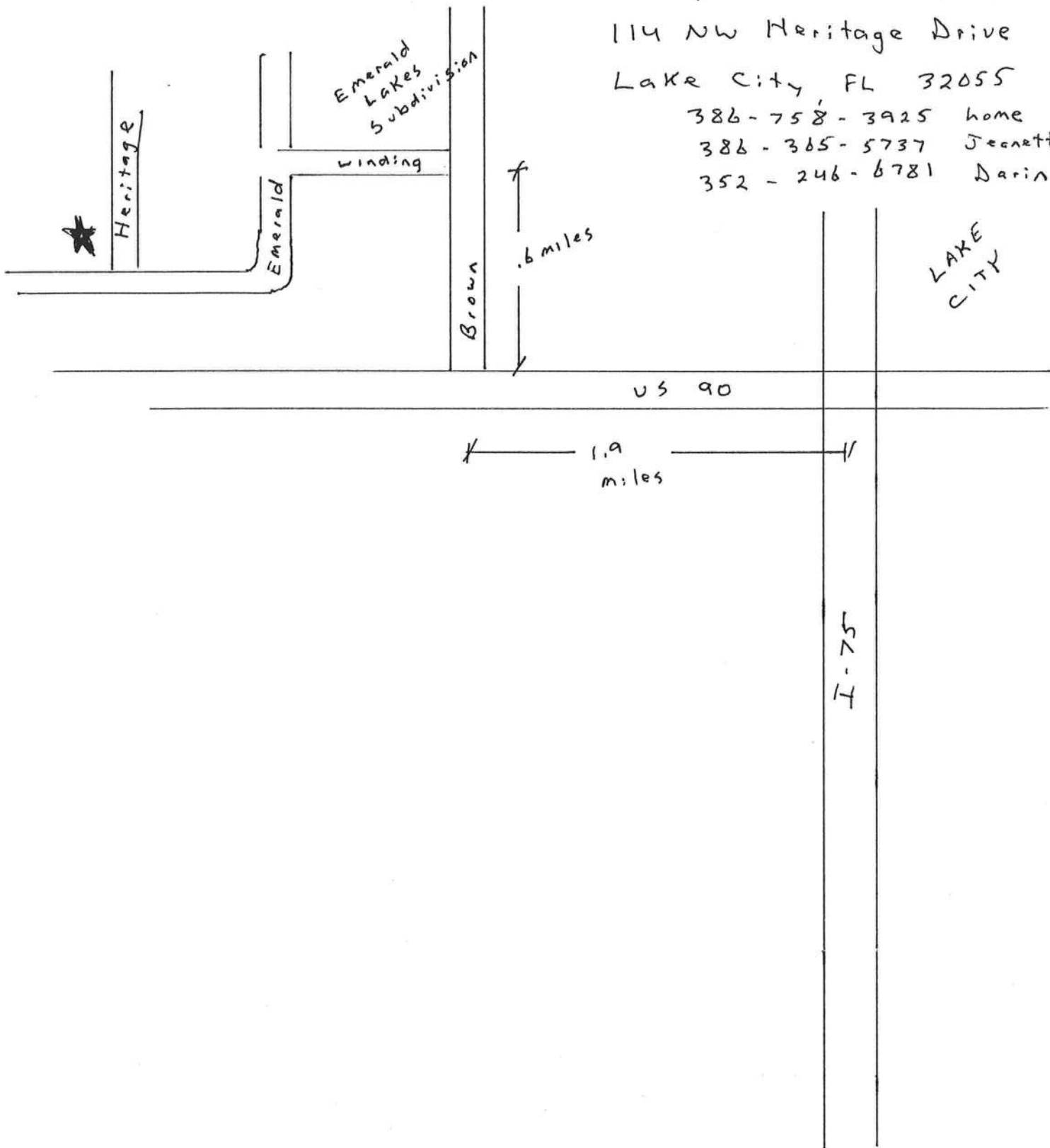
114 NW Heritage Drive

Lake City, FL 32055

386-758-3925 home

386-385-5737 Jeanette

352-246-6781 Darin



THIS INSTRUMENT WAS PREPARED BY:

Rec. 10.50

TERRY McDAVID  
POST OFFICE BOX 1328  
LAKE CITY, FL 32056-1328

Doc. \_\_\_\_\_

RETURN TO:

Inst:20020619 Date:02 25/2002 Time:10:32:05

02-156

Doc State-Deed : 136.50

--- 6D --- DC.P. Dewitt Mason, Columbia County B:749 P:1507

TERRY McDAVID  
POST OFFICE BOX 1328  
LAKE CITY, FL 32056-1328

Grantee #1 S.S. No.

Grantee #2 S.S. No.

Property Appraiser's  
Parcel Identification No.: R02372-523

### WARRANTY DEED

THIS INDENTURE, made this 22nd day of March, 2002, between D D P CORPORATION, a corporation existing under the laws of the State of Florida, whose post office address is 5012 U.S. Highway 90 West, Lake City, FL 32055 and having its principal place of business in the County of Columbia, State of Florida, party of the first part, and DARIN J. RYDER and JEANETTE L. RYDER, Husband and Wife whose post office address is Route 30, Box 2060, Lake City, FL 32055, of the State of Florida, parties of the second part,

WITNESSETH: that the said party of the first part, for and in consideration of the sum of Ten Dollars (\$10.00), to it in hand paid, the receipt whereof is hereby acknowledged, has granted, bargained, sold, aliened, remised, released, conveyed and confirmed, and by these presents doth grant, bargain, sell, alien, remise, release, convey and confirm unto the said party of the second part, and its heirs and assigns forever, all that certain parcel of land lying and being in the County of Columbia and State of Florida, more particularly described as follows:

Lot 23, ARBOR GREENE AT EMERALD LAKES, a subdivision according to the plat thereof as recorded in Plat Book 7, Pages 82 and 83 of the public records of Columbia County, Florida.

SUBJECT TO: Restrictions, easements and outstanding mineral rights of record, if any, and taxes for the current year.

TOGETHER with all the tenements, hereditaments and appurtenances, with every privilege, right, title, interest and estate, reversion, remainder and easement thereto belong or in anywise appertaining:

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

And the said party of the first part doth covenant with said party of the second part that it is lawfully seized of said premises; that they are free of all encumbrances, and that it has good right and lawful authority to sell the same; and the said party of the first part does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, the party of the first part has caused these presents to be signed in its name by its President, the day and year above written.

Signed, sealed and delivered  
in our presence:

D D P CORPORATION, A Florida  
Corporation


Witness: Terry McDavid

Witness: Crystal L. Brunner

By:   
O.P. DAUGHTRY, III, President

STATE OF FLORIDA  
COUNTY OF COLUMBIA

The foregoing instrument was acknowledged before me this 22nd day of March, 2002, by O.P. DAUGHTRY, III, as President of D D P CORPORATION, a State of Florida corporation, on behalf of the corporation. He is personally known to me and did not take an oath.

  
Notary Public  
My Commission Expires: \_\_\_\_\_



&gt;&gt; Print as PDF &lt;&lt;

LOT 23 ARBOR GREENE AT EMERALD LAKES S/D. ORB 949-1537.				RYDER DARIN J & JEANETTE L 114 NW HERITAGE DR LAKE CITY, FL 32055				28-3S-16-02372-523				Columbia County 2011 R CARD 001 of 001 BY JEFF			
								PRINTED 1/06/2011 11:22 APPR 7/10/2008 DF							
BUSE	000100	SINGLE	FAM	AE? Y	1663	HTD AREA	115.632	INDEX	28316.05	EMRLD	LAKE	PUSE	000100	SINGLE	FAMILY
MOD	1	SFR	BATH	2.00		2007 EFF AREA	53.191	E-RATE	100.000	INDX	STR 28- 3S- 16				
EXW	19	COMMON BRK	FIXT			106754 RCN			2002	AYB	MKT AREA 06			98,213	BLDG
%	0000000000	BDRM		3		92.00 %GOOD	98,213	B BLDG VAL	2002	EYB	(PUD1			4,932	XFOB
RSTR	08	IRREGULAR	RMS								AC	.530		23,040	LAND
RCVR	03	COMP SHNGL	UNTS			*FIELD CK:		HX AppYr 2003			NTCD			0	CLAS
%	N/A	C-W%				*LOC: 114 HERTIAGE DR NW LAKE CITY					APPR CD			0	MKTUSE
INTW	05	DRYWALL	HGHT								CNDO			126,185	JUST
%	N/A	PMTR									SUBD			0	APPR
FLOR	14	CARPET	STYS	1.0		+++10-+	1	1	I		BLK				
10%	08	SHT VINYL	ECON			+-----20-----+BAS2002	1	1	I		LOT			0	SOHD
HTTP	04	AIR DUCTED	FUNC			* IFGR2002	I		+---12-+	I	MAP# 44			0	ASSD
A/C	03	CENTRAL	SPCD			* I	I		FSP2002	I	HX			0	EXPT
QUAL	05	05	DEPR	52		* 2	2			3	TXDT	002		0	COTXBL
FNDN	N/A	UD-1	N/A			* 3	3			9					
SIZE	04	IRREGULAR	UD-2	N/A		* I	I			I					
CEIL	N/A	UD-3	N/A			* +-----20-----+				I					
ARCH	N/A	UD-4	N/A							I					
FRME	02	WOOD FRAME	UD-5	N/A						I					
KTCH	01	01	UD-6	N/A						I					
WNDO	N/A	UD-7	N/A							I					
CLAS	N/A	UD-8	N/A							I					
OCC	N/A	UD-9	N/A							I					
COND	03	03	%	N/A						I					
SUB	A-AREA	%	E-AREA	SUB VALUE											
BAS02	1663	100	1663	81379											
FSP02	132	55	73	3572											
FGR02	460	55	253	12381											
FOP02	60	30	18	881											
TOTAL	2315		2007	98213											
-----EXTRA FEATURES-----															
AE BN	CODE	DESC	LEN	WID	HGHT	QTY	QL	YR	ADJ	UNITS	UT	PRICE	ADJ	UT	PR
Y	0166	CONC,PAVMT				1		2002	1.00	1251.000	SF	2.000		2.000	100.00
Y	0169	FENCE/WOOD				1		2007	1.00	180.000	LF	13.500		13.500	100.00
-----															
LAND	DESC	ZONE	ROAD	{UD1	{UD3	FRONT	DEPTH	FIELD CK:				UNITS	UT	PRICE	ADJ
AE	CODE	TOPO	UTIL	{UD2	{UD4	BACK	DT	ADJUSTMENTS							LAND
Y	000100	SFR	RSF-2	0007				1.00	1.00	1.00	1.00	1.000	LT	23040.000	23040.00
			0002	0003											23,040

## SUBCONTRACTOR VERIFICATION FORM

APPLICATION NUMBER

1101-20

CONTRACTOR

FUN STATE PAPER INC.

PHONE 352-332-7669

THIS FORM MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A PERMIT

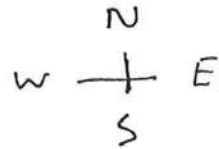
In Columbia County one permit will cover all trades doing work at the permitted site. It is **REQUIRED** that we have records of the subcontractors who actually did the trade specific work under the permit. Per Florida Statute 440 and Ordinance 89-6, a contractor shall require all subcontractors to provide evidence of workers' compensation or exemption, general liability insurance and a valid Certificate of Competency license in Columbia County.

Any changes, the permitted contractor is responsible for the corrected form being submitted to this office prior to the start of that subcontractor beginning any work. Violations will result in stop work orders and/or fines.

* ELECTRICAL 583 ✓	Print Name <u>Kurt Swindel</u> License #: <u>EC-0002384</u>	Signature <u>Kurt Swindel</u> Phone #: <u>352-262-0792</u>
MECHANICAL/ A/C	Print Name _____ License #: _____	Signature _____ Phone #: _____
PLUMBING/ GAS	Print Name _____ License #: _____	Signature _____ Phone #: _____
ROOFING	Print Name _____ License #: _____	Signature _____ Phone #: _____
SHEET METAL	Print Name _____ License #: _____	Signature _____ Phone #: _____
FIRE SYSTEM/ SPRINKLER	Print Name _____ License #: _____	Signature _____ Phone #: _____
SOLAR	Print Name _____ License #: _____	Signature _____ Phone #: _____

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
MASON			
CONCRETE FINISHER			
FRAMING			
INSULATION			
STUCCO			
DRYWALL			
PLASTER			
CABINET INSTALLER			
PAINTING			
ACOUSTICAL CEILING			
GLASS			
CERAMIC TILE			
FLOOR COVERING			
ALUM/VINYL SIDING			
GARAGE DOOR			
METAL BLDG ERECTOR			

F. S. 440.103 Building permits; Identification of minimum premium policy.--Every employer shall, as a condition to applying for and receiving a building permit, show proof and certify to the permit issuer that it has secured compensation for its employees under this chapter as provided in ss. 440.10 and 440.38, and shall be presented each time the employer applies for a building permit.



65' +/-

Darin / Jeanette Ryder

114 NW Heritage Drive

lot #123 Arbor Greene at Emerald Lakes

28-35-16-02372-523

30' +/-

20' +/-

65' +/-



Heritage Drive

NW Emerald Lakes Drive



## COLUMBIA COUNTY BUILDING DEPARTMENT

135 NE Hernando Ave., Suite B-21

Lake City, FL 32055

Office: 386-758-1008 Fax: 386-758-2160

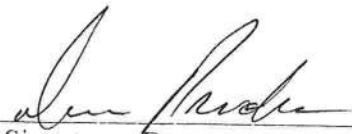
Application Number \_\_\_\_\_

### NOTICE TO SWIMMING POOL OWNERS


I Darin/Jeannette Ryder have been informed and I understand that prior to the final inspection approval and use of my pool, I will need all the inspections approved and the required fencing installed in accordance with applicable regulations. The Florida Building Code Chapter 4 Section 24 requires private residential swimming pools, hot tubs, or non-portable spas containing water over 24 inches deep to meet the following pool barrier safety feature requirements:

- The pool access must be isolated by a barrier at least 4 feet high and installed around the perimeter of the pool. Unless the pool is equipped with a safety cover complying with the specifications of American Society for Testing and Materials standard F-1346-91.
- The barrier shall not have any gaps or openings which would allow a child to crawl under, squeeze through or climb over and must be placed no less than 20 inches from the water's edge.
- Gates located in the pool barrier must open outward away from the pool and be both self-closing and self latching, with a release mechanism not less than 54" above the standing surface at the gate.
- The barrier must be separate from any other fence, wall, or other enclosure surrounding the yard unless the fence, wall or other enclosure or portion thereof is situated on the perimeter of the pool and meets the pool barrier requirements.
- Where a wall of a dwelling serves as part of the barrier **one** of the following shall apply:
  - 1) All doors and first floor windows with a sill height of less than 48 inches providing direct access from the home to the pool must be equipped with an alarm that has a minimum sound pressure rating of 85 decibels at 10 feet. The alarm shall sound immediately upon opening the window or door unless the temporary bypass mechanism is activated.
  - 2) **Or;** all doors providing direct access from the home to the pool must be equipped with a self-closing, self-latching device with a release mechanism located at least 54 inches above the floor.

According to Florida statutes, failure to comply with these requirements is a misdemeanor of the second degree, punishable by imprisonment for up to 60 days or a fine of up to \$500, except that no penalty shall be imposed if within 45 days after arrest or issuance of a summons or notice to appear, the pool is equipped with the aforementioned safety features and the responsible person attends a drowning prevention education program developed by the Florida Department of Health. I also understand that there are several inspections required in addition to a final inspection for my swimming pool.

  
Owner Signature Date

Address: 114 NW Heritage Drive Lake City FL 32055

 1-13-11  
Contractor Signature Date

CPC1457306  
License Number



ANSI/APSP-7 2006 Specifies three methods for determining the maximum system flow rate. The following simplified TDH calculation is one of the methods specified.

## Simplified Total Dynamic Head (TDH) Calculation Worksheet

### Determine Maximum System Flow Rate:

Minimum Flow Rate Required: 35 gpm Per Skimmer (Required: 1 skimmer per 800 sf of surf. area)

1. Calculate Pool Volume:  $546 \times 5.25 \times 7.48 \text{ (gal./cubic foot)} = 21,441$

2. Determine preferred Turnover Time in hours:  $8 \times 60 \text{ (min. / hr.)} = 480$

3. Determine Max Flow Rate:  $21,441 / 480 = 44.67$

4. Spa Jets:  $\frac{\text{(No. of Jets)} \times \text{(Jet Flow)}}{\text{(Turnover Mins)}} = \text{flow rate.}$

(For single pump pool/spa combo, use the higher of No. 3 or No. 4 in the following calculations for the pool & spa)

### Determine Pipe Sizes:

Branch Piping to be 2" inch to keep velocity @ 6 fps max. at 82 gpm Maximum System Flow Rate.  
Trunk Piping to be 2" inch to keep velocity @ 8 fps max. at 82 gpm Maximum System Flow Rate.  
Return Piping to be 2" inch to keep velocity @ 10 fps max. at 103 gpm Maximum System Flow Rate.

### Determine Simplified TDH:

- Distance from pool to pump in feet: 10'
- Friction loss (in suction pipe) in 2" inch pipe per 1 ft. @ 82 gpm = .10 (from pipe flow/friction loss chart)
- Friction loss (in return pipe) in 2" inch pipe per 1 ft. @ 103 gpm = .16 (from pipe flow/friction loss chart)
- $\frac{10}{10} \times .10 = 1.0$   
(Length of Suct. Pipe) (ft of head/1 ft of Pipe) (TDH Suct. Pipe)
- $\frac{10}{10} \times .16 = 1.60$   
(Length of Return Pipe) (ft of head/1 ft of Pipe) (TDH Return Pipe)

TDH in Piping: 2.60

Filter loss in TDH (from filter data sheet): 7

Header loss in TDH (from header data sheet): 7.80

Total all other loss: 21.06

Total Dynamic Head (TDH): 38.46

### Selected Pump and Main Drain Cover:

Pump selection V5+SVAS / 54Arite  
(Pump model and size in Horsepower)

using pump curve for TDH & System Flow Rate

### Main Drain Cover

44A Star  
32 CDFL XXX  
(Make and Model)

(System Flow Rate must not exceed approved cover flow rates)

Notes: Minimum system flow based on min. flow per skimmer of 35 gpm.

Determine the Number and Type of Required In-Floor Suction Outlets:

Check all that apply.

- ☐ 3'-0" ☐ suction outlets @ ☐ gpm max. flow (see note 2).  
☐ ☐ suction outlets @ ☐ gpm max. flow (see note 3).  
☐ 32" 44A Star channel drain @ 170 gpm w/ 2/2" ports (see note

### TDH Calculation Options

For each pump

- ☐ Check one.  
☐ Simplified Total Dynamic Head (STDH)  
Complete STDH Worksheet - Fill in all blanks.  
☐ Total Dynamic Head (TDH)  
Complete Program or other calcs. Fill in required blanks on worksheet & attach calculations.  
☐ Maximum Flow Capacity  
of the new or replacement pump.

### Notes

- If a variable speed pump is used, use the max. pump flow in calculations.
- For side wall drains, use appropriate side wall drain flow as published by manufacturer.
- Insert manufacturer's name and approved maximum flow
- See installation instructions for number of ports to be used.
- In-Floor suction outlet cover/grate must conform to most recent edition of ASME/ANSI A112.19.8 and be embossed with that edition approval.
- Pump, Filter & Heater make and model cannot be changed, and equipment location cannot be moved closer to pool without submitting a revised plan and TDH calculation worksheet for approval.

### Flow and Friction Loss Per Foot

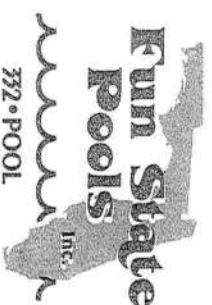
Schedule 40 PVC Pipe

Pipe Size	6 fpm	8 fpm	10 fpm
1"	16 gpm	21 gpm	26 gpm
1.5"	37 gpm	50 gpm	62 gpm
2"	62 gpm	82 gpm	103 gpm
2.5"	88 gpm	117 gpm	146 gpm
3"	136 gpm	181 gpm	227 gpm
4"	234 gpm	313 gpm	392 gpm
5"	534 gpm	712 gpm	892 gpm

### Total Head In Feet Conversion Chart

Inches Mercury (Vacuum Gauge)																		
0	2	4	6	8	10	12	14	16	18	0	2	4	6	8	10	12	14	16
0.0	2.3	4.5	6.8	9.0	11.3	13.6	15.8	18.1	20.3	0.0	2.3	4.5	6.8	9.0	11.3	13.6	15.8	18.1
1	2.3	4.6	6.8	9.1	11.4	13.6	15.9	18.1	20.4	1	2.3	4.6	6.8	9.1	11.4	13.6	15.9	18.1
2	4.6	6.9	9.1	11.4	13.7	15.9	18.2	20.4	22.7	2	4.6	6.9	9.1	11.4	13.7	15.9	18.2	20.4
3	6.9	9.2	11.5	13.7	16.0	18.2	20.5	22.8	25.0	3	6.9	9.2	11.5	13.7	16.0	18.2	20.5	22.8
4	9.2	11.5	13.8	16.0	18.3	20.5	22.8	25.1	27.3	4	9.2	11.5	13.8	16.0	18.3	20.5	22.8	25.1
5	11.5	13.8	16.1	18.3	20.6	22.8	25.1	27.4	29.6	5	11.5	13.8	16.1	18.3	20.6	22.8	25.1	27.4
6	13.8	16.1	18.4	20.6	22.9	25.2	27.4	29.7	31.9	6	13.8	16.1	18.4	20.6	22.9	25.2	27.4	29.7
7	16.2	18.4	20.7	23.0	25.2	27.5	29.7	32.0	34.3	7	16.2	18.4	20.7	23.0	25.2	27.5	29.7	32.0
8	18.5	20.7	23.0	25.3	27.5	29.8	32.1	34.3	36.6	8	18.5	20.7	23.0	25.3	27.5	29.8	32.1	34.3
9	20.8	23.1	25.3	27.6	29.8	32.1	34.3	36.6	38.9	9	20.8	23.1	25.3	27.6	29.8	32.1	34.3	36.6
10	23.1	25.4	27.6	29.9	32.1	34.4	36.7	38.9	41.2	10	23.1	25.4	27.6	29.9	32.1	34.4	36.7	38.9
11	25.4	27.7	29.9	32.2	34.5	36.8	39.0	41.3	43.6	11	25.4	27.7	29.9	32.2	34.5	36.8	39.0	41.3
12	27.7	30.0	32.2	34.5	36.8	39.1	41.4	43.6	45.9	12	27.7	30.0	32.2	34.5	36.8	39.1	41.4	43.6
13	30.0	32.3	34.6	36.9	39.1	41.4	43.6	45.9	48.1	13	30.0	32.3	34.6	36.9	39.1	41.4	43.6	45.9
14	32.3	34.6	36.9	39.2	41.4	43.7	45.9	48.2	50.4	14	32.3	34.6	36.9	39.2	41.4	43.7	45.9	48.2
15	34.6	36.9	39.2	41.5	43.7	46.0	48.3	50.5	52.7	15	34.6	36.9	39.2	41.5	43.7	46.0	48.3	50.5
16	37.0	39.2	41.5	43.8	46.1	48.3	50.6	52.8	55.0	16	37.0	39.2	41.5	43.8	46.1	48.3	50.6	52.8
17	39.3	41.5	43.8	46.1	48.3	50.6	52.8	55.1	57.4	17	39.3	41.5	43.8	46.1	48.3	50.6	52.8	55.1
18	41.6	43.8	46.1	48.4	50.6	52.9	55.2	57.4	59.7	18	41.6	43.8	46.1	48.4	50.6	52.9	55.2	57.4
19	43.9	46.2	48.4	50.7	52.9	55.2	57.4	59.7	62.0	19	43.9	46.2	48.4	50.7	52.9	55.2	57.4	59.7
20	46.2	48.5	50.7	53.0	55.2	57.5	59.8	62.0	64.3	20	46.2	48.5	50.7	53.0	55.2	57.5	59.8	62.0
21	48.5	50.8	53.0	55.3	57.6	59.9	62.1	64.4	66.6	21	48.5	50.8	53.0	55.3	57.6	59.9	62.1	64.4
22	50.8	53.1	55.3	57.6	59.9	62.1	64.4	66.6	68.9	22	50.8	53.1	55.3	57.6	59.9	62.1	64.4	66.6
23	53.1	55.4	57.7	59.9	62.2	64.4	66.7	69.0	71.2	23	53.1	55.4	57.7	59.9	62.2	64.4	66.7	69.0
24	55.4	57.7	60.0	62.3	64.5	66.7	69.0	71.3	73.5	24	55.4	57.7	60.0	62.3	64.5	66.7	69.0	71.3
25	57.8	60.0	62.3	64.5	66.8	69.1	71.3	73.6	75.8	25	57.8	60.0	62.3	64.5	66.8	69.1	71.3	73.6
26	60.1	62.3	64.6	66.8	69.1	71.4	73.6	75.9	78.1	26	60.1	62.3	64.6	66.8	69.1	71.4	73.6	75.9
27	62.4	64.6	66.9	69.2	71.5	73.7	76.0	78.2	80.5	27	62.4	64.6	66.9	69.2	71.5	73.7	76.0	78.2
28	64.7	66.9	69.2	71.5	73.8	76.0	78.3	80.5	82.8	28	64.7	66.9	69.2	71.5	73.8	76.0	78.3	80.5
29	67.0	69.3	71.5	73.8	76.0	78.3	80.5	82.8	85.1	29	67.0	69.3	71.5	73.8	76.0	78.3	80.5	82.8
30	69.3	71.6	73.8	76.1	78.3	80.6	82.9	85.1	87.4	30	69.3	71.6	73.8	76.1	78.3	80.6	82.9	85.1
31	71.6	73.9	76.1	78.4	80.7	82.9	85.2	87.4	89.7	31	71.6	73.9	76.1	78.4	80.7	82.9	85.2	87.4
32	73.9	76.2	78.4	80.7	83.0	85.2	87.5	89.7	92.0	32	73.9	76.2	78.4	80.7	83.0	85.2	87.5	89.7
33	76.2	78.5	80.7	83.0	85.3	87.5	89.8	92.0	94.3	33	76.2	78.5	80.7	83.0	85.3	87.5	89.8	92.0
34	78.5	80.8	83.1	85.3	87.6	89.8	92.1	94.4	96.6	34	78.5	80.8	83.1	85.3	87.6	89.8	92.1	94.4
35	80.9	83.1	85.4	87.6	89.9	92.2	94.4	96.7	98.9	35	80.9	83.1	85.4	87.6	89.9	92.2	94.4	96.7

NOTE: FIELD TDH MUST BE EQUAL TO OR HIGHER THAN THE CALCULATED TDH.



Voice (352) 332-7665  
Fax (352) 332-0266  
mike@funstatepoolsinc.com

www.funstatepoolsinc.com  
3601 N.W. 97th Blvd. • Gainesville, Florida 32606

Swimming Pool Specification For:

Darin and Jeanette Ryder

114 NW Heritage Drive

Lake City, FL 32055

Sealer Name

This form is the property of funstatepoolsinc. and may only be used in conjunction with my Residential Swimming Pool Specification Drawings or by others with my written permission.

Date: 1/18/11

Contractor Signature: Michael Canto  
Contractor Printed Name: Michael Canto  
Contractor License No.: CPC 1457306  
Contractor Phone No.: 352-332-7665

RECEIVED  
COLUMBIA COUNTY BUILDING DEPARTMENT  
FILE COPY  
for Code Compliance  
PLANS EXAMINER

POOL SHAPE Random JOB NO. \_\_\_\_\_

SIZE 18'x34'8" DEPTH 3'6" TO 7' PERM 96 AREA 546

DECK 1000 DECK SURFACE Pavers DECK-O-DRAIN yes

COPING Paver CANTILEVER no

TILE 6"x6" COLOR over

STEP COLOR no COLOR no

TURNOVER yes FILTER TYPE PLN SIZE 150 PUMP V515VRS

SKIMMER yes INLETS 5 MAIN DRAIN yes

GRAB RAILS no HAND RAIL no LADDER no

POOL LIGHT yes (LED) VOLTS 120 WATTS 300

DIVING BOARD no SIZE no

AUTOMATIC CHLORINATOR SALT TIMER yes FILL LINE no

CLEANING EQUIPMENT manual SWIMMOUT yes SIZE 1/2"x5" JETS no

ROPE & FLOATS no ROPE ANCHORS no

AUTOMATIC CLEANING SYSTEM Legend POOL HEATER 333,000

GAS LINE BY: owner SLIDE no SIZE no

SPA SPECIFICATIONS

SIZE 7' DEPTH 3' JETS 6-wall

BLOWER no SKIMMER no LIGHT yes

SPILLWAY tile HEATER 333,000 MAIN DRAIN yes

SCREEN ENCLOSURE owner ROOF owner DOORS owner

ALUM. ROOF owner GUTTER owner

REMOVE FENCE owner REPLACE FENCE owner TEMP. FENCE owner

TREE REMOVAL owner STUMP REMOVAL owner

SHRUBS owner SAVE owner HAULAWAY owner

SEPTIC TANK owner SEWER LINE owner

POWER LINE owner RELOCATE owner

GAS LINE owner WATER LINE owner

SPRINKLERS owner REROUTE owner CAP owner

PHONE LINE owner ACCESS PERMISSION owner

RETAINING WALL owner

Part 2 of contract dated \_\_\_\_\_ for pool at:

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_ SUB \_\_\_\_\_

BOOK \_\_\_\_\_ PAGE \_\_\_\_\_

ALSO DESCRIBED AS \_\_\_\_\_

CUSTOMER'S SIGNATURE \_\_\_\_\_

DWN. BY Berry DATE 1/18/11 CHK. BY \_\_\_\_\_

Custom Design...FUN-STATE POOLS

NAME Darin and Jeannette Ryder

ADDRESS 114 NW Heritage Drive

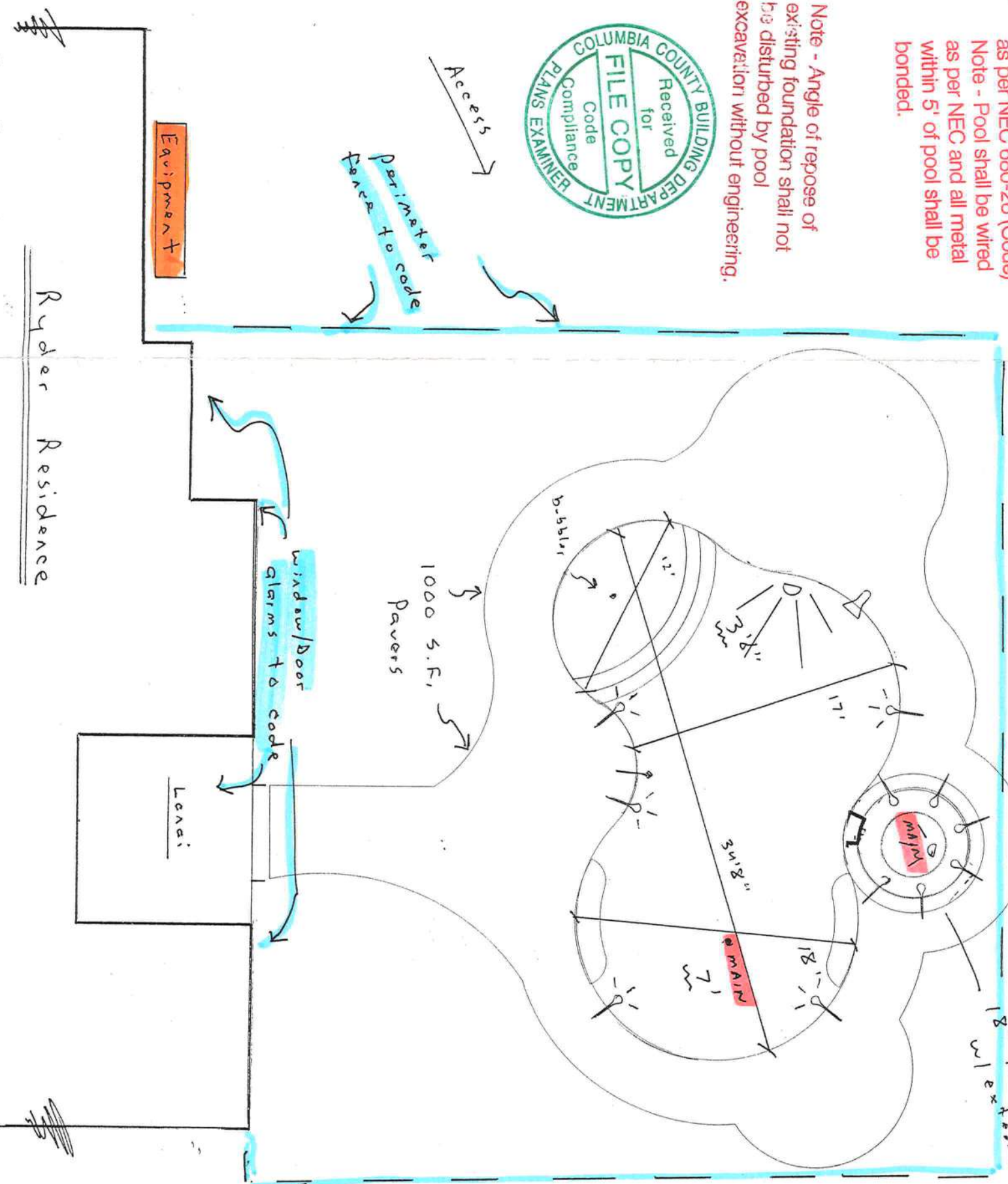
CITY Lake City PHONE: 386-758-3925

PLOT PLAN  
SCALE: 1/8" = 1'0"

Equipotential Bonding Grid as per NEC 680-26 (Code)  
Note - Pool shall be wired as per NEC and all metal within 5' of pool shall be bonded.  
Note - Angle of repose of existing foundation shall not be disturbed by pool excavation without engineering.



- ① 18'x34'8" pool / 7' spa \$ 39,000
- ② no screen
- ③ perimeter fence and alarms
- ④ 333,000 BTU gas heater



*Jeannette Ryder*

Note: All plan dimensions are subject to field verification and modification.

GENERAL NOTES

Design Criteria

1. Structure to meet wind load requirements of FBC 2007 SEC. 1609 for a design wind speed of 110 mph.
2. Wood framing and fasteners to meet NDS 2005 requirements.
3. Fastener requirements: (1) All nails are Common galvanized, (2) all bolts are to be galvanized steel and include nuts and washers, and (3) all other hardware (Shims, etc.) is to be installed according to manufacturer's specifications and recommendations. Nailing (size and number) shall satisfy Tables 2306.3.1, 2306.3.2 and 2306.4.1 FBC unless otherwise indicated. Note: Fasteners exposed to the weather are to be treated for weather resistance and compatible with the type of pressure treated wood used (connectors, nails, bolts, nuts and washers). Fasteners shall be driven flush with surface of sheathing.
- 4.

Concrete Construction Notes

1. Concrete work shall conform to "Building Code Requirements for Reinforced Concrete" (ACI 318) and "Specifications for Structural Concrete" (ACI 301), Latest Edition.
2. Concrete Mix "A" shall be used for foundation walls, footings and interior slabs on grade. Concrete mix "B" shall be used for exterior slabs, curbs and all other exterior concrete. All concrete mixes shall contain a water-reducing admixture conforming to ASTM C-494. Air-entraining admixture shall conform to ASTM C-260.

	Mix A	Mix B
Ultimate Compressive Strength @ 28 days	3000 psi	3000 psi
Shrinkage	4"±.1"	3"±.1"
Maximum Aggregate Size	1"	1"
Extreme Air	None	5-7%
Dry Weight per Cubic Foot	150#	150#

3. All concrete shall be cured for a minimum of 28 days. If forms for vertical surfaces are removed prior to the end of the curing period, spray surfaces with liquid membrane curing compound.
4. Reinforcing steel shall conform to ASTM A615, Grade 40 (Fy=40 ksi). Lap continuous bars for tension lap splice per ACI 318, unless otherwise noted. Provide corner bars of same size and spacing as horizontal wall reinforcement. Cover for concrete reinforcing steel shall be in accordance with ACI 318, Paragraph 7.7.
5. Welded wire fabric (WVF) shall conform to ASTM A185. Lap sheets two mesh spaces and wire tie adjacent sheets together securely. Cut alternate reinforcement at control joints.
6. All slabs on grade shall have construction or control joints not to exceed 15' - 0" spacing, unless otherwise noted. Electrical conduit and other pipes to be embedded in structural concrete floor slabs or walls shall be placed in accordance with the requirements of ACI 318, Paragraph 6.3.
- 7.

Masonry Construction Notes

1. Concrete masonry work shall conform to "Building Code Requirements for Masonry Structures" (ACI 530.02/ASCE 5-02) and "Specifications for Masonry Structures" (ACI 530.1-02/ASCE 5-02).
2. Concrete masonry units shall be Type 1 and comply with "Standard Specifications for Hollow Load-Bearing Concrete Masonry Units" (ASTM C90-90).
3. The minimum net area compressive strength of masonry (f<sub>m</sub>), as determined by the unit strength method, shall be 1500 psi.
4. Mortar shall conform to ASTM C270. Type M Mortar shall be used unless otherwise noted. Type S Mortar shall be used with masonry in contact with earth.
5. Masonry column reinforcement shall have #2 ties in the bed joints at 8" oc, unless otherwise noted.
6. Grout for filling block cores and bond beams shall have a minimum compressive strength (f<sub>c</sub>) of 3000 psi at the age of 28 days.



DRISCOLL ENGINEERING, INC.  
CONSULTING ENGINEERS  
PO BOX 357577  
GAINESVILLE, FL 32606  
CA 8690  
PH (352) 331-1513

PREPARED FOR  
Darin and Jeannette Ryder  
114 NW Horitage Drive  
Lake City FL 32055

CONTRACTOR:  
FUNSTATE POOLS  
3601 N.W. 97th BLVD  
GAINESVILLE, FL  
352-332-7665

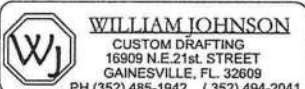
ALL POOL CONSTRUCTION TO COMPLY WITH  
ANSI/ APSP-7 & FBC 2007 & 2009 AMENDMENTS.  
AND V.G.B.2008 COMPLIANCE

INDEX

- SHEET:1 PROFESSIONAL SERVICES,  
GENERAL INFORMATION  
SHEET:2 GENERAL NOTES & CHARTS  
SHEET:3 DETAIL DRAWINGS  
SHEET:4 DETAIL DRAWINGS  
SHEET:5 DETAIL DRAWINGS

THESE DETAILS HAVE BEEN PREPARED IN COMPLIANCE  
WITH REQUIREMENTS OF THE 2007 FLORIDA BUILDING CODE  
AND THE 2009 AMENDMENTS TO THE BEST OF MY KNOWLEDGE

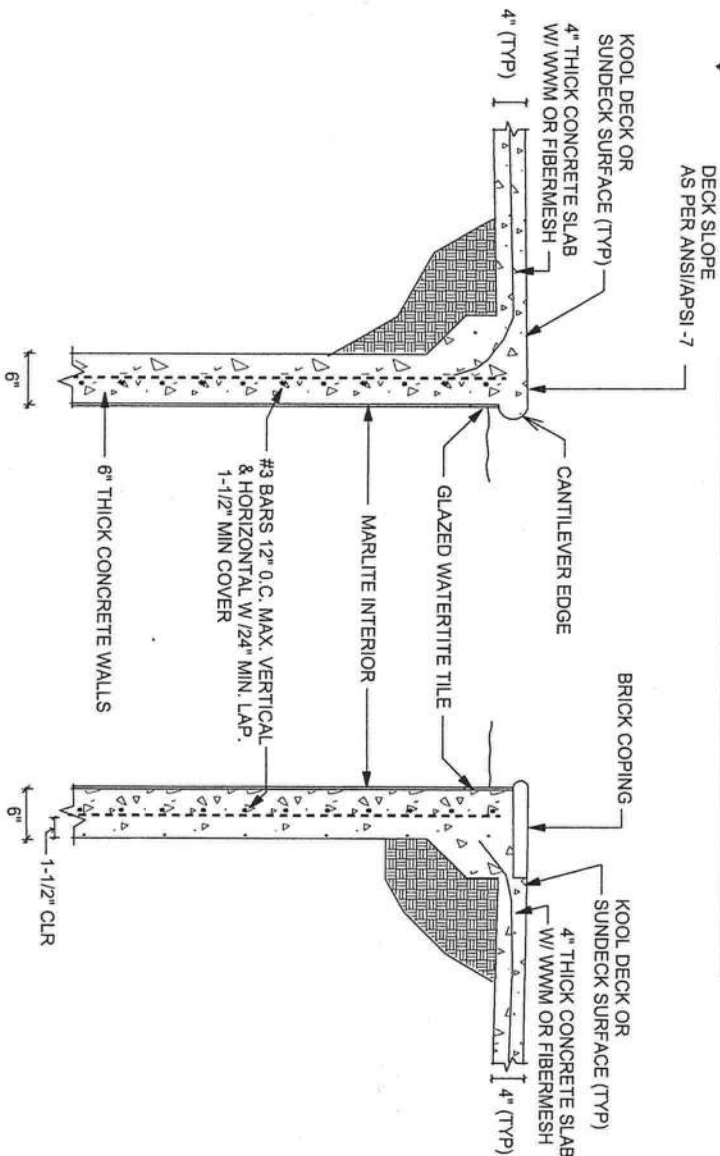
REVISED 9-1-09  
MICHAEL DRISCOLL, P.E.  
FL REG. #43922



RESIDENTIAL SWIMMING POOL & SPA DESIGN  
FOR FUN STATE POOLS USE ONLY

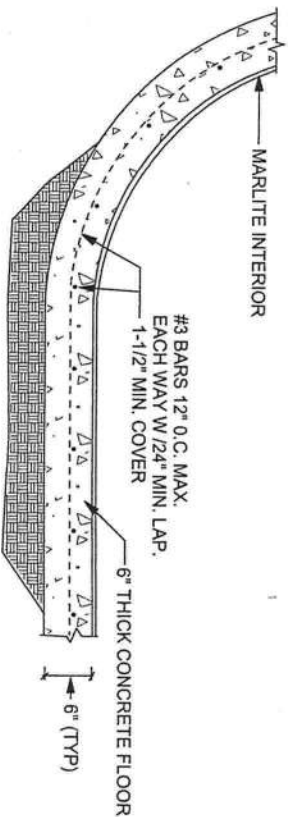


ALL POOL CONSTRUCTION TO COMPLY WITH  
ANSI/ APSP-7 & FBC 2007 WITH 2009 AMENDMENTS.  
& COMPLY WITH V.G.B. 2008 REQUIREMENTS



### TYP WALL SECTIONS

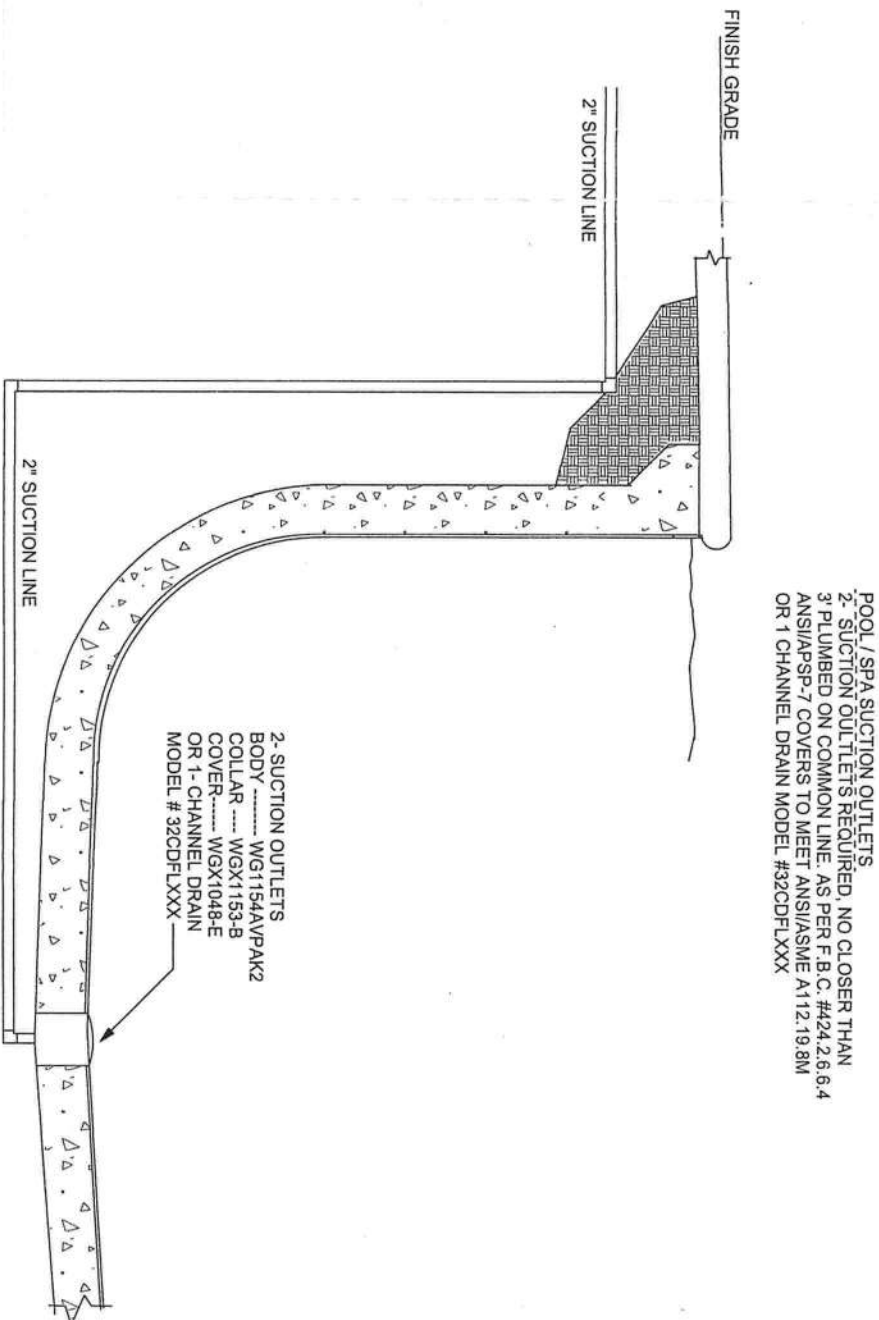
NTS



### FLOOR SECTION (TYP)

NTS

ALL POOL CONSTRUCTION TO COMPLY WITH  
ANSI/ APSP-7 & FBC 2007 WITH 2009 AMENDMENTS.  
& COMPLY WITH V.G.B. 2008 REQUIREMENTS



### DUAL SUCTION OUTLETS OR SINGLE CHANNEL SUCTION OUTLET

NTS

FOOTINGS FOR SCREEN OR OTHER ACCESSORY STRUCTURES BY OTHERS  
POOL WALL & FLOOR CONCRETE TO BE 3000 PSI, MIN.  
POOL DECK CONCRETE TO BE 2500 PSI, MIN  
ALL PIPING SHALL BE SCH 40 PVC PIPE  
ALL SUCTION DEVICES SUCTION OUTLETS, ETC. SHALL BE 2" DIA. SCH 40 PVC PIPE.  
MAX SUCTION PIPE VELOCITY SIX FEET PER SECOND.

REVISED 9-1-09  
MICHAEL E. DRISCOLL P.E.  
FL REG. #43922

SUCTION OUTLETS SHALL MEET  
FBC 2007 # 424.2.6.6.4 & ANSI/APSP-7  
& COMPLY WITH V.G.B. 2008 REQUIREMENTS  
SUCTION OUTLET COVERS SHALL MEET  
ASME A112.19.8.M 2007  
& COMPLY WITH V.G.B. 2008 REQUIREMENTS



ALL ELECTRICAL DESIGN BY OTHERS  
ANY ELECTRICAL COMPONENTS SHOWN  
ON DRAWINGS ARE FOR DIAGRAMMATICAL  
PURPOSE ONLY.

4

SHEET



**WILLIAM JOHNSON**  
CUSTOM DRAFTING  
16909 N.E. 21st. STREET  
GAINESVILLE, FL. 32609  
H (352) 485-1942 (352) 494-2041

RESIDENTIAL SWIMMING POOL & SPA DESIGN  
FOR FUN STATE POOLS USE ONLY

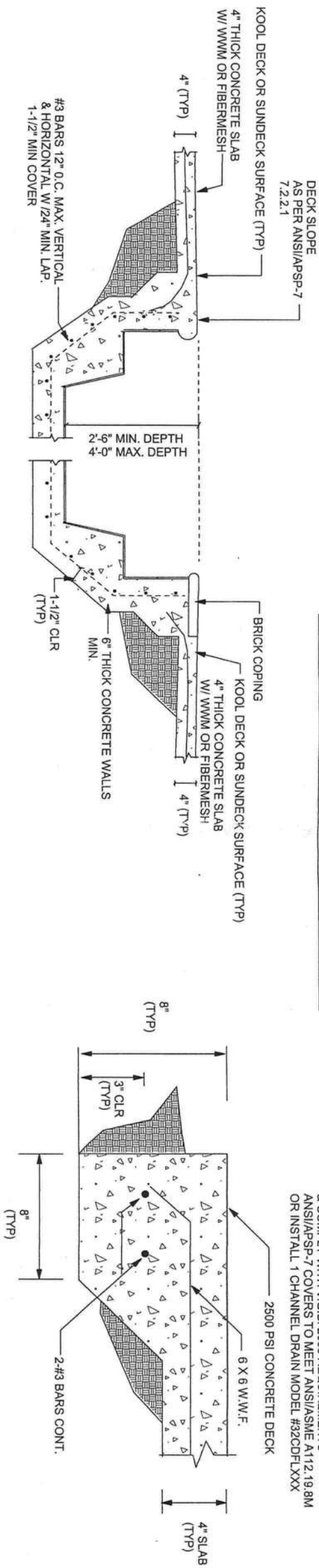


**DRISCOLL ENGINEERING, INC.**  
**CONSULTING ENGINEERS**  
PO BOX 357577 PH (352) 331-1513 EB 0600  
INESVILLE, FL 32606 FX (352) 525-3368

ALL POOL CONSTRUCTION TO COMPLY WITH  
ANSI/ APSP-7 & FBC 2007 AND 2009 AMENDMENTS.  
& COMPLY WITH V.G.B. 2008 REQUIREMENTS

NOTES:

POOL / SPA SUCTION OUTLETS  
2- SUCTION OUTLETS REQUIRED, NO CLOSER THAN  
3'-0" O.C. PLUMBED ON COMMON LINE AS PER F.B.C. #424.2.6.6.4  
& COMPLY WITH V.G.B. 2008 REQUIREMENTS  
ANSI/APSP-7 COVERS TO MEET ANSI/ASME A112.19.8M  
OR INSTALL 1 CHANNEL DRAIN MODEL #32CDFLXXX

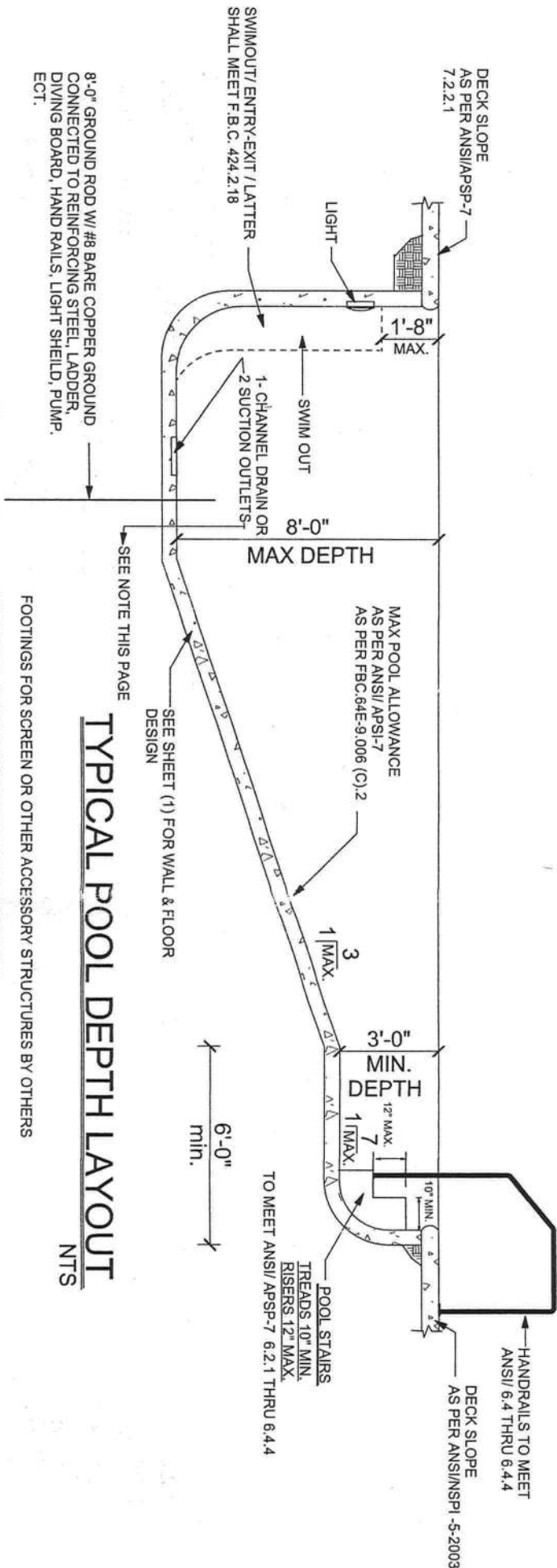


SPA DEPTH LAYOUT

NTS

THICKENED EDGE

8" X 8" W/ 2 #3 BAR CONT.  
NTS



NTS

FOOTINGS FOR SCREEN OR OTHER ACCESSORY STRUCTURES BY OTHERS  
POOL WALL & FLOOR CONCRETE TO BE 3000 PSI, MIN.  
POOL DECK CONCRETE TO BE 2500 PSI, MIN.  
ALL PIPING SHALL BE SCH 40 PVC PIPE  
ALL SUCTION DEVICES, SUCTION OUTLETS, ETC. SHALL BE 2" DIA. SCH 40 PVC PIPE.  
MAX SUCTION PIPE VELOCITY SIX FEET PER SECOND.

REVISED 9-1-09  
MICHAEL E. DRISCOLL P.E.  
FL REG. #43922

GENERAL NOTES FOR RESIDENTIAL SWIMMING POOLS

- Design, construction and workmanship shall be in conformity with the requirements of the 2007 Florida Building Code with 2009 supplement, Chapter 41, ANSI/NSPI 3; ANSI/NSPI 4; ANSI/NSPI 5; and ANSI/NSPI 6; ANSI/APSP-7.
- Every swimming pool shall be equipped complete with approved mechanical equipment consisting of filter, pump, piping valves and component parts.
- Pool piping shall be designed so the water velocity will not exceed 10 feet per second (3048 mm/s) for pressure piping and 8 feet per second (2438 mm/s) for suction piping, except that the water velocity shall not exceed 8 feet per second (2438 mm/s) in copper tubing.
- All pool and spa suction inlets shall be provided with a cover that has been tested and accepted by a recognized testing facility and comply with ANSI/ASME A112.19.8M, Suction Fittings for Use in Swimming Pools, Spas, Hot Tubs, and Whirlpool Bathtub Appliances.  
☐ Exceptions:  
☐ 1. Surface Skimmers.  
☐ 2. Grate or grates having a minimum area of 144 square inches (.09 mm<sup>2</sup>) or greater.
- A minimum of one channel drain or two suction outlets shall be provided for each pump in the suction outlet system, separated by a minimum of 3 feet (914 mm) or located on two different planes; i.e., one on the bottom and one on the vertical wall, or one each on two separate vertical walls. These suction outlets shall be plumbed such that water is drawn through them simultaneously through a common line to the pump. When a skimmer is used in conjunction with a single main outlet to meet the requirements of this section, the common suction line must be in compliance with Section R4101.6.6.3 such that a vacuum cannot be drawn on any single main outlet or skimmer.
- Pumps shall be installed in accordance with manufacturer's recommendations.
- Pump impellers, shafts, wear rings and other working parts shall be of corrosion-resistant materials.
- All pool piping shall be tested and proved tight to the satisfaction of the administrative authority, under a static water or air pressure test of not less than 36 pounds per square inch (psi) (241 kPa) for 15 minutes.  
☐ Exception: Circulating pumps need not be tested as required in this section.
- All pools whether public or private shall be provided with a ladder or steps in the shallow end where water depth exceeds 24 inches (610 mm). In private pools where water depth exceeds 5 feet (1524 mm), there shall be ladders, stairs or underwater benches/swim-outs in the deep end.  
Where manufactured diving equipment is to be used, benches or swim-outs shall be recessed or located in a corner.  
☐ Exception: In private pools having more than one shallow end, only one set of steps is required. A bench, swim-out or ladder may be used at all additional shallow ends in lieu of an additional set of steps.
- The entire design of matched components shall have sufficient capacity to provide a complete turnover of pool water in 12 hours or less.
- Approved surface skimmers are required and shall be installed in strict accordance with the manufacturer's installation instructions. Skimmers shall be installed on the basis of one per 800 square feet (74 m<sup>2</sup>) of surface area or fraction thereof, and shall be designed for a flow rate of at least 25 gallons per minute (gpm) (1.6 L/s) per skimmer.
- Approved manufactured inlet fittings for the return of re-circulated pool water shall be provided on the basis of at least one per 300 square feet (28 m<sup>2</sup>) of surface area. Such inlet fittings shall be designed and constructed to insure an adequate seal to the pool structure and shall incorporate a convenient means of sealing for pressure testing of the pool circulation piping. Where more than one inlet is required, the shortest distance between any two required inlets shall be at least 10 feet (3048 mm).
- Filters shall be equipped with a pressure gauge and an air release system.
- Piping shall be schedule 40 PVC, NSFpw minimum.
- Contractor shall install piping so as to not exceed the limits imposed by the tables shown.
- All electrical design is by others.
- Minimum soil bearing capacity shall be a min. 2000 psi.
- Contractor shall submit completed total or simplified total Dynamic head calculation worksheet with each permit application to the building dept.

Flow and Friction Loss Per Foot						
Schedule 40 PVC Pipe		Velocity-Feet Per Second				
Pipe Size	6 fps	8 fps		10 fps		
1"	16 gpm	0.25'	21 gpm	0.66'	28 gpm	0.94'
1.5"	37 gpm	0.16'	50 gpm	0.28'	62 gpm	0.48'
2"	62 gpm	0.15'	82 gpm	0.25'	103 gpm	0.40'
2.5"	86 gpm	0.09'	117 gpm	0.15'	146 gpm	0.23'
3"	138 gpm	0.09'	181 gpm	0.14'	227 gpm	0.23'
4"	234 gpm	0.06'	313 gpm	0.10'	392 gpm	0.15'
6"	534 gpm	0.04'	712 gpm	0.04'	890 gpm	0.10'

Total Head In Feet Conversion Chart																
Inches Mercury (Vacuum Gauge)																
0	0.0	2.3	4.5	6.8	9.0	11.3	13.6	15.8	18.1	20.3	22.7	25.0	27.3	29.6	31.9	34.2
1	2.3	4.6	6.8	9.1	11.4	13.7	15.9	18.2	20.4	22.7	25.0	27.3	29.6	31.9	34.2	36.5
2	4.6	6.9	9.1	11.4	13.7	15.9	18.2	20.4	22.7	25.0	27.3	29.6	31.9	34.2	36.5	38.8
3	6.9	9.2	11.5	13.8	16.0	18.3	20.6	22.8	25.1	27.4	29.7	31.9	34.2	36.5	38.8	41.1
4	9.2	11.5	13.8	16.0	18.3	20.6	22.8	25.1	27.4	29.7	31.9	34.2	36.5	38.8	41.1	43.4
5	11.5	13.8	16.1	18.3	20.6	22.8	25.1	27.4	29.7	31.9	34.2	36.5	38.8	41.1	43.4	45.8
6	13.9	16.1	18.4	20.6	22.9	25.2	27.4	29.7	31.9	34.2	36.5	38.8	41.1	43.4	45.8	48.1
7	16.2	18.4	20.7	23.0	25.2	27.5	29.7	32.0	34.3	36.6	38.9	41.2	43.5	45.8	48.1	50.4
8	18.5	20.7	23.0	25.3	27.5	29.8	32.0	34.3	36.6	38.9	41.2	43.5	45.8	48.1	50.4	52.7
9	20.8	23.1	25.3	27.6	29.8	32.1	34.3	36.6	38.9	41.2	43.5	45.8	48.1	50.4	52.7	55.0
10	23.1	25.4	27.6	29.9	32.1	34.4	36.7	38.9	41.2	43.5	45.8	48.1	50.4	52.7	55.0	57.3
11	25.4	27.7	29.9	32.2	34.5	36.7	39.0	41.2	43.5	45.8	48.1	50.4	52.7	55.0	57.3	59.6
12	27.7	30.0	32.2	34.5	36.8	39.0	41.3	43.5	45.8	48.1	50.4	52.7	55.0	57.3	59.6	61.9
13	30.0	32.3	34.6	36.8	39.1	41.3	43.6	45.9	48.2	50.4	52.7	55.0	57.3	59.6	61.9	64.2
14	32.3	34.6	36.9	39.1	41.4	43.6	45.9	48.2	50.4	52.7	55.0	57.3	59.6	61.9	64.2	66.5
15	34.6	36.9	39.2	41.4	43.7	45.9	48.2	50.5	52.7	55.0	57.3	59.6	61.9	64.2	66.5	68.9
16	37.0	39.2	41.5	43.7	46.0	48.3	50.6	52.8	55.1	57.4	59.7	61.9	64.2	66.5	68.9	71.2
17	39.3	41.5	43.8	46.1	48.3	50.6	52.8	55.1	57.4	59.7	61.9	64.2	66.5	68.9	71.2	73.5
18	41.6	43.8	46.1	48.4	50.6	52.9	55.1	57.4	59.7	61.9	64.2	66.5	68.9	71.2	73.5	75.8
19	43.9	46.2	48.4	50.7	52.9	55.2	57.4	59.7	61.9	64.2	66.5	68.9	71.2	73.5	75.8	78.1
20	46.2	48.5	50.7	53.0	55.2	57.5	59.8	62.0	64.3	66.5	68.9	71.2	73.5	75.8	78.1	80.4
21	48.5	50.8	53.0	55.3	57.6	59.8	62.1	64.3	66.6	68.9	71.2	73.5	75.8	78.1	80.4	82.7
22	50.8	53.1	55.3	57.6	59.9	62.1	64.4	66.6	68.9	71.2	73.5	75.8	78.1	80.4	82.7	85.0
23	53.1	55.4	57.7	59.9	62.2	64.4	66.7	69.0	71.2	73.5	75.8	78.1	80.4	82.7	85.0	87.3
24	55.4	57.7	60.0	62.2	64.5	66.7	69.0	71.3	73.6	75.8	78.1	80.4	82.7	85.0	87.3	89.6
25	57.8	60.0	62.3	64.5	66.8	69.1	71.3	73.6	75.9	78.1	80.4	82.7	85.0	87.3	89.6	91.9
26	60.1	62.3	64.6	66.8	69.1	71.4	73.6	75.9	78.1	80.4	82.7	85.0	87.3	89.6	91.9	94.2
27	62.4	64.6	66.9	69.2	71.4	73.7	75.9	78.2	80.5	82.8	85.0	87.3	89.6	91.9	94.2	96.5
28	64.7	66.9	69.2	71.5	73.7	76.0	78.2	80.5	82.8	85.0	87.3	89.6	91.9	94.2	96.5	98.8
29	67.0	69.3	71.5	73.8	76.0	78.3	80.5	82.8	85.1	87.3	89.6	91.9	94.2	96.5	98.8	101.2
30	69.3	71.6	73.8	76.1	78.3	80.6	82.9	85.1	87.4	89.6	91.9	94.2	96.5	98.8	101.2	103.5
31	71.6	73.9	76.1	78.4	80.7	82.9	85.2	87.4	89.7	92.0	94.3	96.6	98.9	101.2	103.5	105.8
32	73.9	76.2	78.4	80.7	83.0	85.2	87.5	89.7	92.0	94.3	96.6	98.9	101.2	103.5	105.8	108.1
33	76.2	78.5	80.7	83.0	85.3	87.5	89.8	92.0	94.3	96.6	98.9	101.2	103.5	105.8	108.1	110.4
34	78.5	80.8	83.1	85.3	87.5	89.8	92.1	94.4	96.6	98.9	101.2	103.5	105.8	108.1	110.4	112.7
35	80.9	83.1	85.4	87.6	89.9	92.2	94.4	96.7	98.9	101.2	103.5	105.8	108.1	110.4	112.7	115.0

- Notes:
- If a variable speed pump is used, use the max. pump flow in calculations.
  - For side wall drains, use appropriate side wall drain flow as published by manufacturer.
  - Insert manufacturer's name and approved maximum flow.
  - See installation instructions for number of ports to be used.
  - In-floor suction outlet coverage must conform to most recent edition of ASME/ANSI A112.19.8 and be embossed with that edition approval. & V.G.B. 2008 compliance
  - Pump & filter make, model and location can not change without obtaining a revised plan and TDD worksheet.

TDD Calculation Options  
For each pump

☒ Check one.  
Simplified Total Dynamic Head (STDH)  
Complete STDH Worksheet-Fill in all blanks.

☐ Total Dynamic Head (TDH)  
Complete Program or other calc. Fill in required blanks on worksheet & attach calculations.

PROFESSIONAL SERVICES  
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PLANS AND SPECIFICATIONS

The plans and specifications presented herein are only for the anticipated construction at the locations shown. If construction plans change, the Design Professional should be notified so the plans and specifications can be re-evaluated. The Design Professional should be given the opportunity to review final plans and specifications to see if the intent of the plans and specifications has been followed and/or if supplement details and recommendations are needed. The Design Professional warrants that the plans and specifications contained herein, have been prepared in accordance with generally accepted professional engineering practice. No other warranties are implied or expressed.

CORPORATE PROTECTION

It is understood and agreed that the Design Professional's Basic Services under this agreement do not include project observation or review of the Contractor's performance or any other construction phase services will be provided by the client. The client assumes all responsibility for interpretation of the contractor's documents and for construction observation and supervision and waives any claims against the Design Professional that may in any way connected thereto.

In addition, The client agrees, to the fullest extent permitted by law, to indemnify and hold the Design Professional harmless from any loss, claim or cost including reasonable attorney's fees and cost of defense, arising or resulting from such services by other person or entities and from any and all claims arising from modifications, clarifications, interpretations, adjustments or changes made to contract documents to reflect changed field or other conditions, except for claims arising from the sole negligence or willful misconduct thereof.

OWNERSHIP OF INSTRUMENTS OF SERVICE

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by the Design Professional as instruments of service shall remain property of the Design Professional. The Design Professional shall retain all common law, statutory and other reserved rights, including the copyright thereto.

DEFECTS IN SERVICE

The client shall promptly report to the Design Professional any defects or suspected defects in the Design Professional's work or services of which the client becomes aware, so that the Design Professional may take measures to minimize the consequences of such defect. The client warrants that he or she will impose similar notification requirement on all contractors in his or her client/contractor contract and shall require all subcontractors at any level to contain a like requirement. Failure by the client's contractors or subcontractors to notify the Design Professional of the cost of remedying the defects above the sum such remedy would have cost had prompt notification been given.

VERIFICATION OF EXISTING CONDITIONS

Inasmuch as the remodeling and/or rehabilitation of an existing building requires certain assumptions be made regarding existing conditions, and because some of these assumptions may not be verifiable without expending additional sums of money or destroying otherwise adequate serviceable portions of the building, The client agrees, to the fullest extent permitted by law, to indemnify and hold the Design Professional harmless in any claim, liability or cost (including attorney's fees and cost of defense) for injury or economic loss arising out of professional services provided under this agreement, except only those damages, liability, or cost attributable to the sole negligence or willful misconduct of the Design Professional.

RESIDENTIAL SWIMMING POOL & SPA DESIGN  
FOR FUN STATE POOLS USE ONLY