



BUILDING JOB SITE CARD

City of Belle Isle

BUILDING PERMIT 2017-08-032

PERMIT MUST BE POSTED ON SITE

Permit Number: 2017-08-032

Site Address: 4214 Belle Grove Ct, 32812

Subdivision:

Description of Work: Swimming pool and spa per attached plans

Issue Date: 08.15.2017

Parcel Number: 20-23-30-1661-01-100

Class: Residential

Issued To: All Seasons Pool Service Inc

Name: Watts, John

Payment Date & Method: 8-22-17 check 61474 \$455.59

Business Phone: 407 321 5404

Contractor License #: CPC023576

Schedule Inspections via Email at: BDscheduling@universalengineering.com

SCHEDULE INSPECTIONS BY 4PM CUT OFF TIME

Inspection Results Will Be Sent Out the Following Morning

"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."

BUILDING	INSPECTOR	DATE	COMMENTS
Demo Final			
Footing			
Stem Wall			
Slab			
Lintel/Tie Beam			
Down Pour			
Tilt Panel			
Window In-progress			
Sheathing (wall)			
Sheathing (roof)			
Framing			
Fire Rated Assembly			
Above-Ceiling			
Insulation			
Lathe			
Pool Steel & Ground			
Pool Safety			
Final			

GAS	INSPECTOR	DATE	COMMENTS
Rough Gas			
Final Gas			

ELECTRICAL	INSPECTOR	DATE	COMMENTS
Temp Pole			
TUG			
Underground			
Rough			
Footer Steel Bonding			
Pool Light			
PrePower			
Meter ReSet			
Final			

MECHANICAL	INSPECTOR	DATE	COMMENTS
Above Ceiling			
Rough			
Hood Vent			
Final			

PLUMBING	INSPECTOR	DATE	COMMENTS
Sewer			
Underground			
Rough			
Above Ceiling			
Irrigation			
Final			

ROOF	INSPECTOR	DATE	COMMENTS
In-progress			
Final			

Schedule Inspections via Email at: BDscheduling@universalengineering.com
 SCHEDULE INSPECTIONS BY 4PM CUT OFF TIME
 Inspection Results will be sent out the following business day

Please call Michele when ready 407-883-2150
 mpermits plus.com

RECEIVED
 AUG 02 2017
 BY:



City of Belle Isle

Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
 Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

Building Permit (Land Use) Application

DATE: 7-31-17

PERMIT # 2017-08-032

PROJECT ADDRESS 4214 Belle Grove Ct.

Belle Isle, FL 32809 32812

PROPERTY OWNER RHett Landram

PHONE 352-727-8114

VALUE OF WORK (labor & material) \$ 41653

PLEASE LIST THE NATURE OF YOUR PROPOSED IMPROVEMENTS

Inground pool + spa w/ deck

Please provide information, if applicable.

- **SINGLE FAMILY RESIDENCE:** 8.5"x11" Plat Survey, Plot Plan of Home and Floor Plans of New Construction/Revision Required
- **BOAT DOCK:** DEP Clearance Required with Application (Call 407-897-4100); please provide a copy of their report
- **SEPTIC SYSTEM (RESIDENTIAL):** - Provide verification of OC Health Dept approval for on-site septic tank system, per FAC Chap. 64E-6
- Homeowners will be required to have a contractor on record for homes that are rented and/or not homestead

Please Complete for the City of Belle Isle Zoning Review: Parcel Id Number: 20-23-30-1661-01100

To obtain this information, please visit <http://www.ocpafi.org/Searches/ParcelSearch.aspx>

SPECIAL CONDITIONS: STRUCTURES MAY NOT ENCR OACH INTO ANY EASEMENT OR REQUIRED SETBACK. Survey specific foundation plan required to show compliance with zoning setbacks. Note: this Zoning Approval MAY or MAY NOT be in conflict with your Deed Restrictions. For New Single Family Residence, a Traffic Impact Fee and School Impact will be assessed.

Wind Exposure Category: B C D

PLANNING & ZONING APPROVAL: 8-11-17 See April's stamp following page
 DATE

PLEASE COMPLETE for Building Review (min. of 2 sets of signed/sealed plans required)
 CONSTRUCTION TYPE _____
 OCCUPANCY GROUP Comm Res: Single Fam Multi Fam
 #BLDG. _____ #UNITS _____ #STORIES _____ TOTAL SQ.FT. _____
 MAX. FLOOR LOAD _____ MAX. OCCUPANCY _____
 MIN. FLOOR ELEV. _____ LOW FLOOR ELEV. _____
 WATER SERVICE WELL SEPTIC

SPRINKLERS REQ'D	Y	N	
If Required - SUBMIT COPY OF PLANS FOR FIRE REVIEW Date: Sent _____ RCD _____			
ZONING	<input checked="" type="radio"/>	<input type="radio"/>	\$ <u>165.00</u>
CERT OF OCC	<input type="radio"/>	<input type="radio"/>	\$ _____
TRAFFIC	<input type="radio"/>	<input type="radio"/>	\$ _____
SCHOOL	<input type="radio"/>	<input type="radio"/>	\$ _____
FIRE	<input type="radio"/>	<input type="radio"/>	\$ _____
SWIMMING POOL	<input checked="" type="radio"/>	<input type="radio"/>	\$ <u>283.50</u>
SCREEN ENCLOSURE	<input type="radio"/>	<input type="radio"/>	\$ _____
ROOFING	<input type="radio"/>	<input type="radio"/>	\$ _____
BOAT DOCK	<input type="radio"/>	<input type="radio"/>	\$ _____
BUILDING	<input type="radio"/>	<input type="radio"/>	\$ _____
WINDOW(S)	<input type="radio"/>	<input type="radio"/>	\$ _____
DOOR(S)	<input type="radio"/>	<input type="radio"/>	\$ _____
FENCE	<input type="radio"/>	<input type="radio"/>	\$ _____
SHED	<input type="radio"/>	<input type="radio"/>	\$ _____
DRIVEWAY	<input type="radio"/>	<input type="radio"/>	\$ _____
OTHER	<input type="radio"/>	<input type="radio"/>	\$ _____

BUILDING REVIEWER [Signature] DATE 8-15-17

VERIFIED CONTRACTOR'S LICENSE & INSURANCE ARE ON FILE ca DATE 8-7-17
NOC ✓

Per FSS 105.3.3:
 An enforcing authority may not issue a building permit for any building construction, erection, alteration, modification, repair or addition unless the permit either includes on its face or there is attached to the permit the following statement: "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."
check 61474 8-20-17

Republic Services is by legal contract the sole authorized provider of garbage, recycling, yard waste, and commercial garbage and construction debris collection and disposal services with the city limits of the City. Contractors, homeowners and commercial businesses may contact Republic Services at 407-293-8000 to setup accounts for Commercial, Construction Roll Off, or other services needed. Rates are fixed by contract and are available at City Hall or from Republic Services. The City enforces the contract through its code enforcement office. Failure to comply will result in a stop work order.

SEPARATE PERMITS ARE REQUIRED FOR ROOFING, ELECTRICAL, PLUMBING, GAS, MECHANICAL, SIGNS, POOLS, ENCLOSURES, ETC. 15T 16

1.9% = 2.584
1.59% = 4.25
2.09

41x4

25
16.4
1.89 x 2
3.78
283.50

25
 3% FL SURCHARGE 7.09
 TOTAL 455.59

By Owner Form Y NA
 Notice of Commencement Y NA
 Power of Attorney Y NA
 Contractor Packet Included? Y N

OTHER PERMITS REQUIRED:
 ELECTRICAL Y NA
 PREPOWER Y NA
 MECHANICAL Y NA
 PLUMBING Y NA
 ROOFING Y NA
 GAS Y NA



City of Belle Isle
 Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
 Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

RECEIVED
 AUG 02 2017
 BY: _____

Building Permit (Land Use) Application

To be completed as required by State Statute Section 713 and other applicable sections.

Owner's Name Rhett Landrum
 Owner's Address 4214 Bell Grove Ct

PERMIT # 2017-08-032

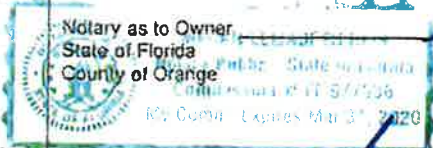
Contractor Name	JOHN N. WATTS	Company Name	ALL SEASONS POOL SERVICE INC
License #	CPC023576	Company Address	185 E AIRPORT BLVD
Contact Phone/Cell	407-871-2020	City, State, ZIP	SANFORD FL 32773
Contact Email	reception@allseasonspools.com	Contact Fax	407-321-5404

WARNING TO OWNER: Your failure to record a Notice of Commencement may result in your paying twice for improvements to your property. A notice of commencement must be recorded if job is \$2500(+) or if A/C Replacement \$7500(+) and posted on the job site before the first inspection. If you intend to obtain financing, consult with your lender or an attorney before recording your Notice of Commencement.

I hereby make Application for Permit as outlined above, and if same is granted I agree to conform to all Division of Building Safety Regulations (www.floridabuilding.org) and City Ordinances (www.municode.com) regulating same and in accordance with plans submitted. The issuance of this permit does not grant permission to violate any applicable City and/or State of Florida codes and/or ordinances. Application is hereby made to obtain a permit to do the 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 will be performed to meet the standards of all laws regulating construction in this jurisdiction. I understand that a separate permit must be secured for all other construction including ROOFING, ELECTRICAL, MECHANICAL, PLUMBING, GAS, SIGNS, POOLS, SCREEN ENCLOSURES, ETC.

OWNER'S AFFIDAVIT: 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.

Owner Signature [Signature]
 The foregoing instrument was acknowledged before me this 7/28/17
 by [Signature] who is personally known to me
 and who produced [Signature]
 as identification and who did not take an oath.



Contractor Signature [Signature]
 COMPANY NAME ALL SEASONS POOL SERVICE INC
 The foregoing instrument was acknowledged before me this 7/28/17
 by JOHN N WATTS who is personally known to me
 and who produced _____
 as identification and who did not take an oath.



Impervious Surface Ratio Worksheet
 Development Zoned A-1, A-2, R-1-AAA, R-1-AA, R-1-A, R-1 per City Code, Section 50-74: Impervious Surface Ratio

- Total Lot Area (sqft) X 0.35 = Allowable Impervious Area (BASE).
 Total Lot Area 14,800 X 0.35 =
 Allowable Impervious Area (BASE) 5,180
- Calculate the "proposed" impervious area on the lot. This includes the sum of all areas that do not allow direct percolation of rainwater. Examples include house, pool, deck, driveway, accessory building, etc.
 - House 2808
 - Driveway 695
 - Walkway 91
 - Accessory Buildings -
 - Pool & Spa 302
 - Deck & Patio 913
 - Other -
 Actual Impervious Area (AIA) 4809
- If AIA is less than BASE, subtract AIA from BASE to determine the amount of impervious area that may be added without providing onsite retention.
- If AIA is greater than BASE, then onsite retention **must be provided**.

Assuming 7.5 inches of rainfall based on a 24hr 10 year Rain Event (TP40), the formula is: (7.5 inches rainfall/12 Inches p/foot) X (result from line 4) = cubic feet of storage volume needed

Please call Michelle when ready 407-803-2150
 mpermits plus@live.com



City of Belle Isle

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PROPERTY OWNER RHett Landrum

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PLANNING & ZONING APPROVAL:

ZONING APPROVED
 8/11/17 By: [Signature]

CITY OF BELLE ISLE

PLEASE COMPLETE for Building Review (min. of 2 sets of signed/sealed plans required)

CONSTRUCTION TYPE _____
 OCCUPANCY GROUP: Comm _____ Res: _____ Single Fam _____ Multi Fam _____
 #BLDG. _____ #UNITS _____ #STORIES _____ TOTAL SQ.FT. _____
 MAX. FLOOR LOAD _____ MAX OCCUPANCY _____
 MIN. FLOOD ELEV. _____ LOW FLOOR ELEV _____
 WATER SERVICE _____ WELL _____ SEPTIC _____

BUILDING REVIEWER [Signature] DATE 8-15-17

VERIFIED CONTRACTOR'S LICENSE & INSURANCE ARE ON FILE _____ DATE _____

Per FSS 105.33:

An enforcing authority may not issue a building permit for any building construction, erection, alteration, modification, repair or addition unless the permit either includes on its face or there is attached to the permit the following statement: "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."

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SEPARATE PERMITS ARE REQUIRED FOR ROOFING, ELECTRICAL, PLUMBING, GAS, MECHANICAL, SIGNS, POOLS, ENCLOSURES, ETC

Wind Exposure Category:	B	C	D
SPRINKLERS REQ'D	Y	N	_____
If Required - SUBMIT COPY OF PLANS FOR FIRE REVIEW	Date: Sent _____	RCD _____	
ZONING	<input checked="" type="checkbox"/>	N	\$ <u>1650</u>
CERT OF DCC	Y	N	\$ _____
TRAFFIC	Y	N	\$ _____
SCHOOL	Y	N	\$ _____
FIRE	Y	N	\$ _____
SWIMMING POOL	<input checked="" type="checkbox"/>	N	\$ _____
SCREEN ENCLOSURE	Y	N	\$ _____
ROOFING	Y	N	\$ _____
BOAT DOCK	Y	N	\$ _____
BUILDING	Y	N	\$ _____
WINDOW(S)	Y	N	\$ _____
DOOR(S)	Y	N	\$ _____
FENCE	Y	N	\$ _____
SHED	Y	N	\$ _____
DRIVEWAY	Y	N	\$ _____
OTHER	Y	N	\$ _____
3% FLSURCHARGE			_____
TOTAL			_____
By Owner Form	Y	NA	
Notice of Commencement	Y	NA	
Power of Attorney	Y	NA	
Contractor Packet included?	Y	N	
OTHER PERMITS REQUIRED:			
ELECTRICAL	Y	NA	
PREPOWER	Y	NA	
MECHANICAL	Y	NA	
PLUMBING	Y	NA	
ROOFING	Y	NA	
GAS	Y	NA	



CITY OF BELLE ISLE, FLORIDA
 Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
 Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

RESIDENTIAL SWIMMING POOL
SAFETY AFFIRMATION

Date: 8/16/17

Address: 4214 Belle Grove Ct

I, John N. Waltz License # CPC 023576
(print contractor's name)

hereby affirm that the pool will be isolated from access from within the dwelling AND from adjacent properties by a barrier that meets the pool barrier requirements of Florida Statute 515.29 and the 2014 Florida Building Code Section 454.2.

Check the applicable barrier requirements from the following options and show on the site plan:

The pool will be equipped with an approved safety pool cover that complies with ASTM F1346 (Standard Performance Specifications for Safety Covers for Swimming Pools, Spas and Hot Tubs) per FBC 454.2.17, Exception.

The pool will be isolated from access by a mesh safety barrier that meets the requirements of FBC 454.17.1.15.

The pool will be isolated from access by a screen enclosure that meets the requirements of FBC 454.2.17.1.11.

The pool will be isolated from access by a fence and pedestrian gates that meet the requirements of FBC 454.2.17.1.1 through 454.2.17.1.8.

Does any part of the barrier consist of dwelling walls which contain doors or windows?

Yes No If yes, then check which of the two options below are applicable:

All doors and windows providing direct access from the dwelling to the pool will be equipped with an exit alarm that meets the requirements of FBC 454.2.17.1.9(1) unless Exceptions a, b or c apply.

All doors providing direct access from the dwelling to the pool will be equipped with self-closing, self-latching devices installed 54" above the threshold that meet the requirements of FBC 454.2.17.1.9, exception 2.

I understand that the final electrical and barrier code inspection shall be completed prior to filling the pool with water unless it's a vinyl liner or fiberglass FBC 454.2.19.

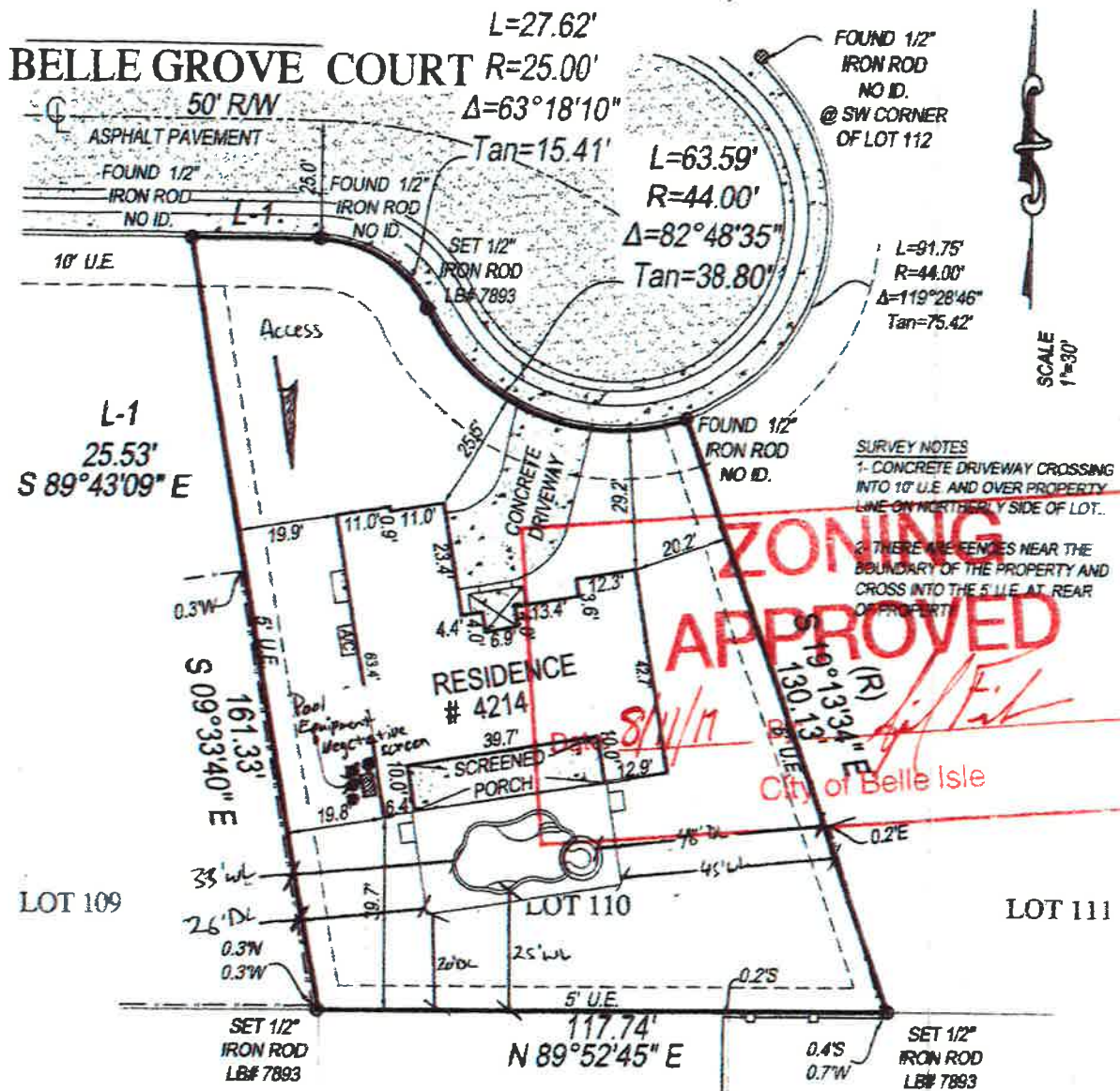
J. N. Waltz
(contractor's signature)

[Signature]
(property owner's signature)



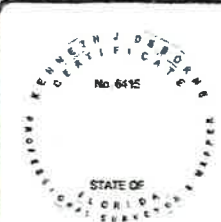
Reviewed for Code Compliance
Universal Engineering Sciences

BOUNDARY SURVEY



SURVEY NOTES
 1- CONCRETE DRIVEWAY CROSSING INTO 10' U.E. AND OVER PROPERTY LINE ON NORTHERLY SIDE OF LOT.
 2- THERE ARE FENCES NEAR THE BOUNDARY OF THE PROPERTY AND CROSS INTO THE 5' U.E. AT REAR OF PROPERTY.

ZONING APPROVED
 (R)
 City of Belle Isle



SURVEYORS CERTIFICATE

I HEREBY CERTIFY THAT THIS BOUNDARY SURVEY IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY PREPARED UNDER MY DIRECTION. NOT VALID WITHOUT AN AUTHENTICATED ELECTRONIC SIGNATURE AND AUTHENTICATED ELECTRONIC SEAL OR A RAISED EMBOSSED SEAL AND SIGNATURE.

Kenneth Osborne
 Digitally signed by Kenneth Osborne
 Date: 2017.06.22 23:03:49 -04'00'

(SIGNED) **Kenneth J. Osborne**
 PROFESSIONAL SURVEYOR AND MAPPER #6415



TARGET SURVEYING, LLC
 LB #7893

SERVING FLORIDA
 6250 N. MILITARY TRAIL, SUITE 102
 WEST PALM BEACH, FL 33407
 PHONE (561) 946-4800
 STATEWIDE PHONE: (800) 226-4807
 STATEWIDE FACSIMILE (800) 741-0576
 WEBSITE: <http://targetsurveying.net>

NOTICE OF COMMENCEMENT

FS 713.13

THIS DOCUMENT MUST BE COMPLETED WHEN CONSTRUCTION VALUE EXCEEDS \$2500.00

This Instrument Prepared by: ALL SEASONS POOL SERVICE INC
185 E AIRPORT BLVD
SANFORD FL 32773

PERMIT #: _____
STATE: FLORIDA

TAX FOLIO #: 20-23-30-1661-01-100
CITY OF: BELLE ISLE

The undersigned hereby gives notice that improvement will be made to certain real property, and in accordance with chapter 713, florida statutes, the following information is provided in this notice of commencement.

1. Legal Description of property: Conway Groves Unit 2 40/4 Lot 110
4214 Bell Grove Ct.

2. General description of improvement(s): CONSTRUCT SWIMMING POOL / SCREEN ENCLOSURE

3. Owner information Name: Lindsay + Rhett Landram
Address: 4214 Bell Grove Ct
Phone: Or landry Fax:

a. Interest in property: FEE SIMPLE
b. Name and address of fee simple titleholder (if other than owner) Phone:

4. Contractor:

Name: ALL SEASONS POOL SERVICE INC ALL SEASONS POOL SCREEN ENCLOSURES INC
Address: 185 E AIRPORT BLVD SANFORD FL 32773 650 HICKMAN CIRCLE SANFORD FL 32771
Phone Number: 407-871-2020 407-703-2500
Fax Number: 407-321-5404 407-703-2501

5. Surety: Name and address:
Phone: Fax:

DOC# 20170428211
08/02/2017 10:39:27 AM Page 1 of 1
Rec Fee: \$10.00
Phil Diamond, Comptroller
Orange County, FL
MB - Ret To: ALL SEASONS POOL SERVICE

6. Lender: Name and address:
Phone: Fax:



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:

8. In addition to himself, Owner designates the following person(s) to receive a copy of the Lienor's Notice as provided in Section 713/13 (1) (b), Florida Statutes: (Name, Address, Phone number and fax number)

9. Expiration date of notice of commencement (the expiration date is 1 year from the date of recording unless a different date is specified)
7-28-19

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 1, 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.

Verification pursuant to Section 92.525, Florida Statutes. Under Penalties of perjury, I declare that I have read the foregoing and that facts in it are true to the best of my knowledge and belief.

[Signature of Owner]
(Signature of Owner) Note: per Section 713.13(1)g, Florida Statutes
Signature of Owner, or Owner's Authorized Officer, Director, Partner, Manager

Lindsey Landram
(Print Owner's Name)

(Signature of Owner) Note: per Section 713.13(1)g, Florida Statutes
Signature of Owner, or Owner's Authorized Officer, Director, Partner, Manager

(Print Owner's Name)

State of Florida, County of Orange
The foregoing instrument was acknowledged before me this 28 day of July, 2017, by

Lindsay Landram Who is personally known to me or who has produced FL Driver License as identification and 7 did take an oath did not take an oath.

[Signature]
Notary Signature
(seal)

[Signature]
Print Name: Megan Elizabeth Reis



Job # 8606

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD



LICENSE NUMBER	CPC023576
----------------	-----------

The COMMERCIAL POOL/SPA CONTRACTOR
Named below IS CERTIFIED
Under the provisions of Chapter 489 FS.
Expiration date: AUG 31, 2018

WATTS, JOHN NICHOLAS
ALL SEASONS POOL SERVICE INC
185 E AIRPORT BLVD
SANFORD FL 32773

ISSUED: 08/03/2016

DISPLAY AS REQUIRED BY LAW

SEQ.# L1608030001960



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
11/30/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).


PRODUCER Insurance By Ken Brown, Inc. PO Box 948117 Maitland, FL 32794-8117 Kenneth M Brown	CONTACT NAME: Kenneth M Brown PHONE (A/C, No, Ext): 321-397-3870 FAX (A/C, No): 321-397-3888 E-MAIL ADDRESS:													
	<table border="1"> <thead> <tr> <th>INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> </thead> <tbody> <tr> <td>INSURER A : Amerisure Ins Company</td> <td>19488</td> </tr> <tr> <td>INSURER B : Amerisure Mutual Ins. Co</td> <td>23396</td> </tr> <tr> <td>INSURER C :</td> <td></td> </tr> <tr> <td>INSURER D :</td> <td></td> </tr> <tr> <td>INSURER E :</td> <td></td> </tr> <tr> <td>INSURER F :</td> <td></td> </tr> </tbody> </table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A : Amerisure Ins Company	19488	INSURER B : Amerisure Mutual Ins. Co	23396	INSURER C :		INSURER D :		INSURER E :		INSURER F :
INSURER(S) AFFORDING COVERAGE	NAIC #													
INSURER A : Amerisure Ins Company	19488													
INSURER B : Amerisure Mutual Ins. Co	23396													
INSURER C :														
INSURER D :														
INSURER E :														
INSURER F :														
INSURED All Seasons Pool All Seasons Pool Srv Inc DBA 185 E Airport Blvd Sanford, FL 32773														

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:			CPP20266931201	01/16/2017	01/16/2018	EACH OCCURRENCE	\$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 500,000
							MED EXP (Any one person)	\$ 5,000
							PERSONAL & ADV INJURY	\$ 1,000,000
							GENERAL AGGREGATE	\$ 2,000,000
							PRODUCTS - COMP/OP AGG	\$ 2,000,000
								\$
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			CA20786140601	01/16/2017	01/16/2018	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
							BODILY INJURY (Per person)	\$
							BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
								\$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTIONS 0			CU20812270501	01/16/2017	01/16/2018	EACH OCCURRENCE	\$ 5,000,000
							AGGREGATE	\$ 5,000,000
								\$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		Y/N	WC131559819	01/16/2017	01/16/2018	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER	
			N/A				E.L. EACH ACCIDENT	\$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	\$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER BELLEIS City of Belle Isle 1600 Nela Avenue Belle Isle, FL 32809	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
--	--

Property Record - 20-23-30-1661-01-100

Orange County Property Appraiser • <http://www.ocpafl.org>

Property Summary

Property Name

4214 Belle Grove Ct

Names

Isaac Anita

Municipality

BI - Belle Isle

Property Use

0103 - Single Fam Class III

Mailing Address

25939 147Th Dr
Rosedale, NY 11422-2925

Physical Address

4214 Belle Grove Ct
Orlando, FL 32812



QR Code For Mobile Phone



302320166101100 09/28/2006



Value and Taxes

2016 Taxable Value and Certified Taxes

Taxing Authority	Assd Value	Exemption	Tax Value	Millage Rate	Taxes	%
Public Schools: By State Law (Rle)	\$259,893	\$25,000	\$234,893	4.5630 (-8.19%)	\$1,071.82	27 %
Public Schools: By Local Board	\$259,893	\$25,000	\$234,893	3.2480 (0.00%)	\$762.93	19 %
Orange County (General)	\$259,893	\$50,000	\$209,893	4.4347 (0.00%)	\$930.81	24 %
City Of Belle Isle	\$259,893	\$50,000	\$209,893	4.4018 (0.00%)	\$923.91	24 %
Library - Operating Budget	\$259,893	\$50,000	\$209,893	0.3748 (0.00%)	\$78.67	2 %
St Johns Water Management District	\$259,893	\$50,000	\$209,893	0.2885 (-4.57%)	\$60.55	2 %
Lake Conway Mstu	\$259,893	\$50,000	\$209,893	0.4107 (0.00%)	\$86.20	2 %
				17.7215	\$3,914.89	

Property Features

Property Description

CONWAY GROVES UNIT 2 40/4 LOT 110

Total Land Area

14,800 sqft (+/-)

| 0.34 acres (+/-)

GIS Calculated

Land

Land Use Code	Zoning	Land Units	Unit Price	Land Value	Class Unit Price	Class Value
0100 - Single Family	R-1-AA	1 LOT(S)	working...	working...	working...	working...

THIS INSTRUMENT PREPARED BY AND RETURN TO:

C. Mellow

Edgewater Title Company

2518 Edgewater Drive

Orlando, Florida 32804

Our File No.: 368

Property Appraisers Parcel Identification (Folio) Number: 20-23-30-1661-01100

Florida Documentary Stamps in the amount of \$2,415.00 have been paid hereon.

SPACE ABOVE THIS LINE FOR RECORDING DATA

WARRANTY DEED

THIS WARRANTY DEED, made the 20 day of June, 2017 by ANITA ISAAC, a single woman, surviving spouse of WILNER ISAAC, whose post office address is 4214 Belle Grove Court, Belle Isle, FL 32812 herein called the Grantor, to RHETT LANDRAM and LINDSEY LANDRAM, husband and wife whose post office address is 4214 Belle Grove Court, Belle Isle, FL 32812, hereinafter called the Grantees:

(Wherever 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)

WITNESSETH: That the Grantor, for and in consideration of the sum of TEN AND 00/100'S (\$10.00) Dollars and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the Grantee all that certain land situate in ORANGE County, State of Florida, viz.:

Lot 110, CONWAY GROVES UNIT 2, according to the Plat thereof, as recorded in Plat Book 40, Page 4, of the Public Records of Orange County, Florida

Grantor herein covenants and agrees that she was continuously married to WILNER ISAAC, without interruption from the date they first acquired title up until the date of his death of June 12, 2015.

Subject to easements, restrictions and reservations of record and taxes for the year 2017 and thereafter.

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 Grantees that the Grantor is lawfully seized of said land in fee simple; that the Grantor has good right and lawful authority to sell and convey said land, and hereby 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, 2016.

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

Signed, sealed and delivered in the presence of:

Judy Miller
Witness #1 Signature

Anita Isaac
ANITA ISAAC

Jordan Maxwell
Witness #1 Printed Name

[Signature]
Witness #2 Signature

MEGAN BAUS
Witness #2 Printed Name

STATE OF FLORIDA
COUNTY OF ORANGE

The foregoing instrument was acknowledged before me this 28 day of June, 2017, by ANITA ISAAC who is personally known to me or has produced FLTA as identification.

SEAL

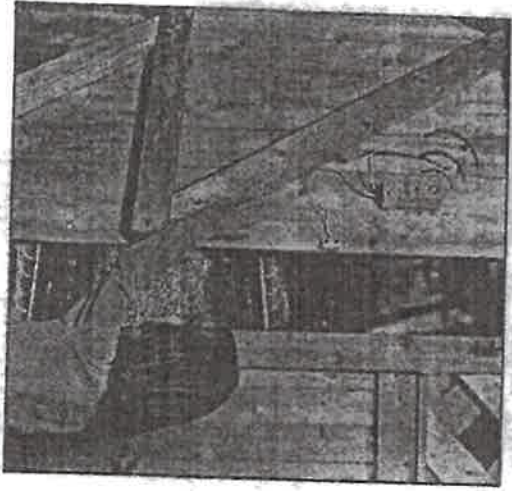


[Signature]
Notary Public

Printed Notary Name

My Commission Expires:

YARDGUARD



ALARM 5

Welcome

Congratulation on purchasing this YARDGUARD safety alarm. The YARDGUARD can be used to monitor potential dangerous areas, and provides a high volume alarm/alert when children enter these areas. It can be used indoors or outdoors, mounted on a wooden fence or metal gates. It can be mounted on any doorways or openings that lead to potentially dangerous areas.

Caution

The alarm siren is very loud. Never place the unit close to your ear. Prolonged exposure to the loud siren can affect your hearing.

Install the unit at minimum height 54", high enough to be out of reach of children.

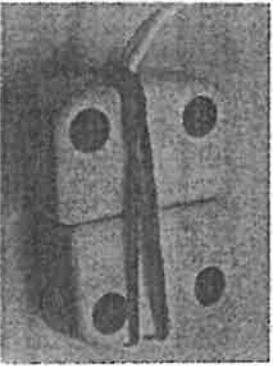
This YARDGUARD is an entry monitor device. Whether expressed or implied, it cannot replace any safety device. All safety precautions should be maintained, including parental supervision.

Neither SmartPool Inc. nor anyone else who has been involved in the creation, reproduction or delivery shall be liable for any direct, indirect, consequential or incidental damages arising out of the use or liability to use the YARDGUARD.

Install Battery	3
Auto Battery Check	4
Mount On Wooden Fence	5
Mount On Metal Gate	6
Mount On Wall And Glass Doors	7
Additional PASS/RESET Switch	8
Operation	9
Automatic Reset Under All Conditions	10
Auto Siren OFF	11
Automatic Continuous Monitoring	11
IMPORTANT	12

Install Battery

Before installing the battery, use a rubber band to hold the magnet sensors together temporarily, with dot matched to dot, thereby preventing the alarm from sounding after the battery is installed when mounting the unit.



To install battery, remove the four screws at the back, then open the battery door.

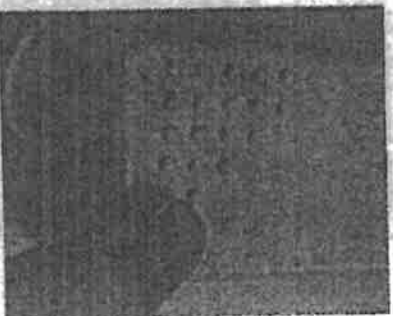
Install a fresh 9V battery (not included) into the battery compartment. Check the polarity.

Close the battery door and tighten up the four screws.



3

Now the unit is ON and in working mode. To check if battery is installed properly, press the battery check button located at the lower right corner. The unit will beep when you press this button. If no beep sound is heard, check the battery installation again, or replace with a new battery.



Auto Battery Check

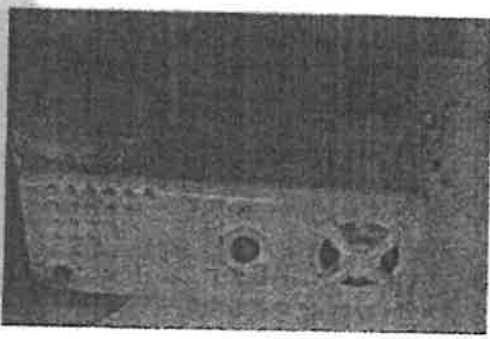
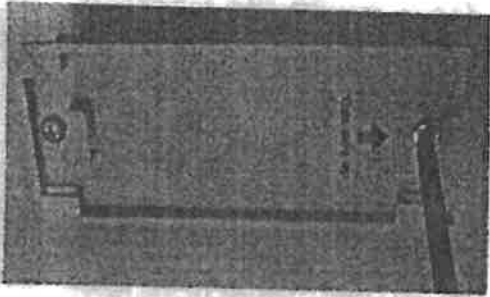
The unit will keep monitoring the battery level. When it detects that the battery is low, you will hear a loud and short beep every minute. Change battery when you hear this beep.

**Check battery periodically.
Change battery a minimum of
once a year.**

4

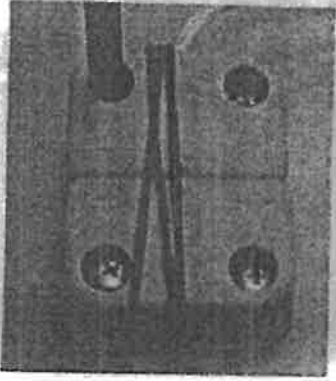
Mount On Wooden Fence

Install the mounting bracket onto fence post using the two bigger screws. Slide the alarm unit onto this



mounting bracket. You will feel a click when the unit is properly installed.

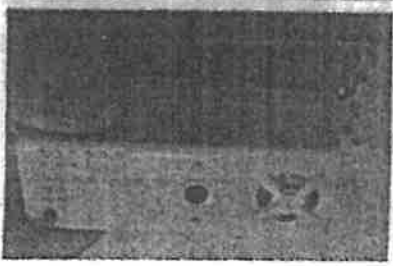
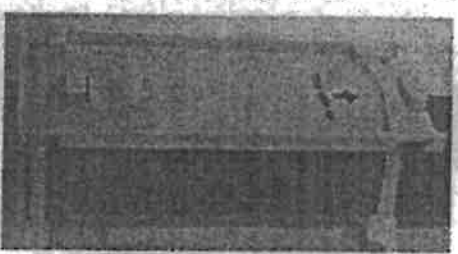
Mount the two magnet sensors onto fence post, one on each side, using the four smaller screws.



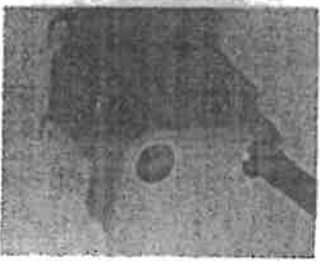
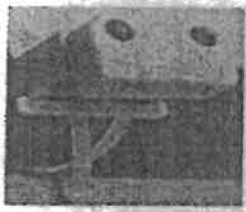
5

Mount On Metal Gate

Install the mounting bracket onto gate post using two nylon straps. Slide the alarm unit onto this mounting bracket. You will feel a click when the unit is properly installed.



Mount the two magnet sensors onto the t w o spacer stands using the f o u r smaller screws and then mount this sensor assembly onto gate post using the nylon straps.



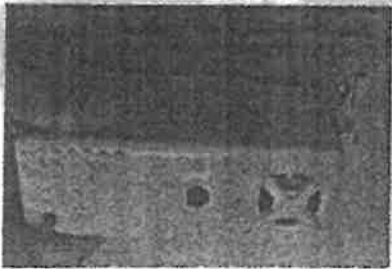
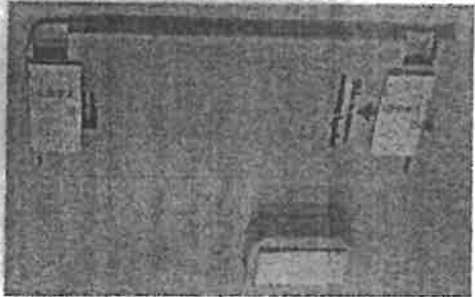
6

Mount On Wall And Glass Doors

Install the mounting bracket using two pieces of double sided foam tape. Slide the alarm unit onto this mounting bracket. You will feel a click when the unit is properly installed.

Apply the double sided foam tape onto the bottom recessed area of magnet sensor pair. Mount the magnet sensors, one on the door and the other on the door frame.

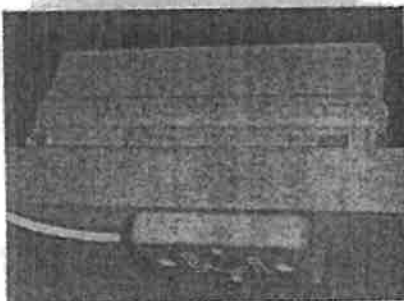
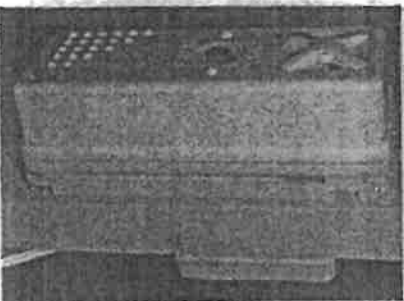
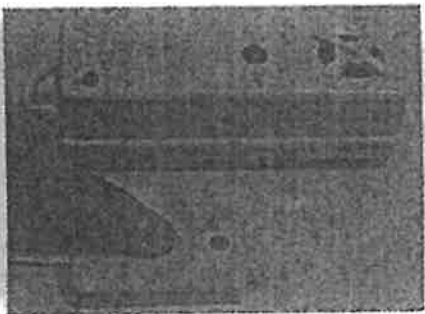
Mount the magnet sensor with the wire onto the stationary surface such as door frame.



Additional PASS/RESET Switch

This unit provides an additional PASS/RESET switch, which can be mounted on the other side of the door for convenient access from both sides.

This additional switch can be mounted by the 2 smaller screws or double sided foam

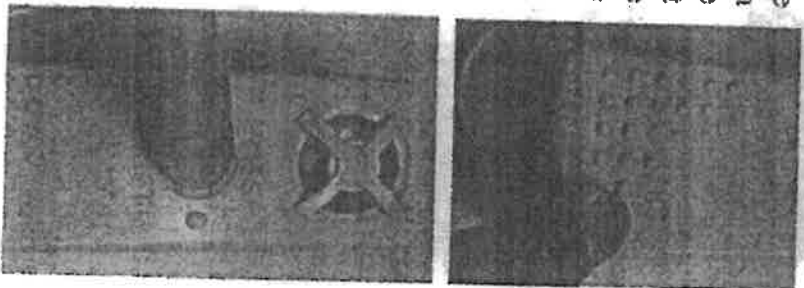


Operation

This **YARDGUARD** is designed to monitor the opening of gate or door, to alert an adult if a child has opened a gate or door to a potential dangerous area.

Check the battery. Press the **CHECK** button should give a loud beep, otherwise replace with a new battery. The unit will give a loud siren if gate or door is opened by more than one inch.

For adult entry, press the **PASS** button. The unit will allow the door be opened up to 7 seconds without triggering alarm. However, if the gate or door is opened for over 7 seconds, the alarm will trigger.



9

To reset the alarm, first close the door and then press the **PASS/RESET** button. The alarm is now back to stand by mode.

To exit the protected area, press the **PASS/RESET** button and exit the area within 30 seconds.



Automatic Reset Under All Conditions

The unit will be reset automatically in 30 seconds after the last key activation. If the **PASS/RESET** button is pressed but the adult entry 7 seconds allowance is not utilized, this adult entry allowance will be canceled in 30 seconds, and reset to stand by mode automatically.

10

Auto Siren OFF

Siren can be turned OFF manually as describe on previous section, or the unit will reset in 4 minutes automatically if the gate is closed.

Automatic Continuous Monitoring

If alarm is triggered and reset by itself in 4 minutes, the unit will check the condition of magnet contact sensor to decide if the door remains open or not. If the door is left open, the alarm sounds again for 4 minutes, check the door condition again and continue the cycle until the door is closed.

IMPORTANT

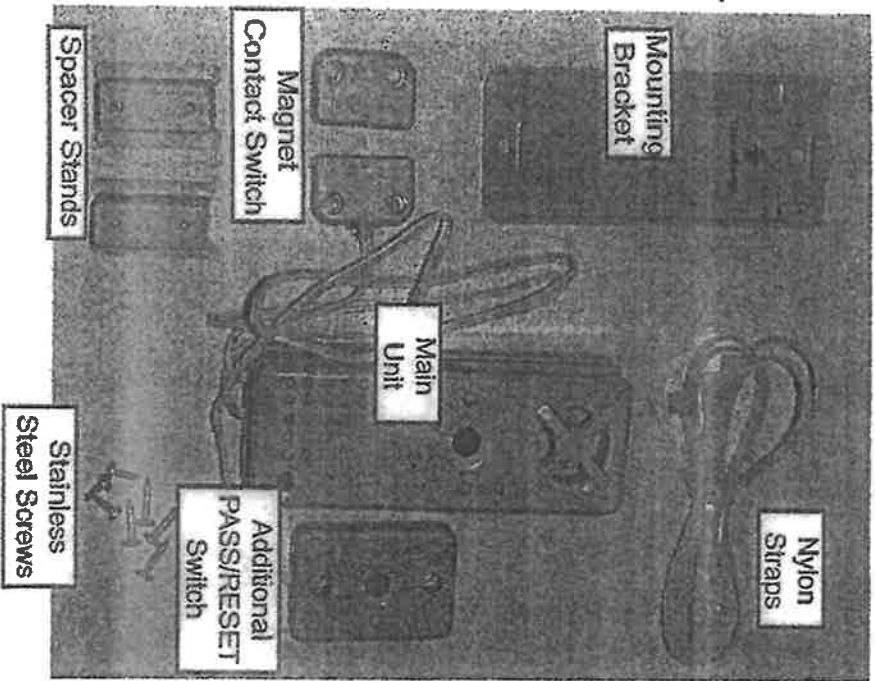
Install the unit at minimum height 54", high enough to be out of reach of children

Keep the distance between the two pieces magnet sensor contacts to a maximum of 3/4"

Test the unit by opening the door.

The alarm should go off immediately. Otherwise contact SmartPool Inc. at 877-799-7665.

Do not rely on the alarm until the test results are satisfactory.



13

SMARTPOOL

COMPLIES WITH UL 2071!
 Conforme aux lois de sécurité CSA 22.2 No. 205

GATE, DOOR, WINDOW

POUR PORTE, PORTILLON ET PENÉTRE

INCLUDES ALL HARDWARE FOR Mounting on Wooden and Metal Gates, Sliding Glass Doors & Windows!


Comprend tout le matériel pour le montage sur porte de bois ou de métal, les portes et les fenêtres coulissantes en verre

120 dB Siren!
 Sirene de 120 dB

Meets or Exceeds All State Barrier Alarm Codes!
 Respecte ou dépasse toutes les normes d'alarme de barrière

Low Battery Warning!
 Avertissement de batterie faible

Automatic Reset!
 Réinitialisation automatique

Plans

JXi HEATER
POOL & SPA HEATER



Jandy
Pro/Series

JXi™
POOL & SPA HEATER

Ultra-Compact
Lightweight Design
Easy to Install



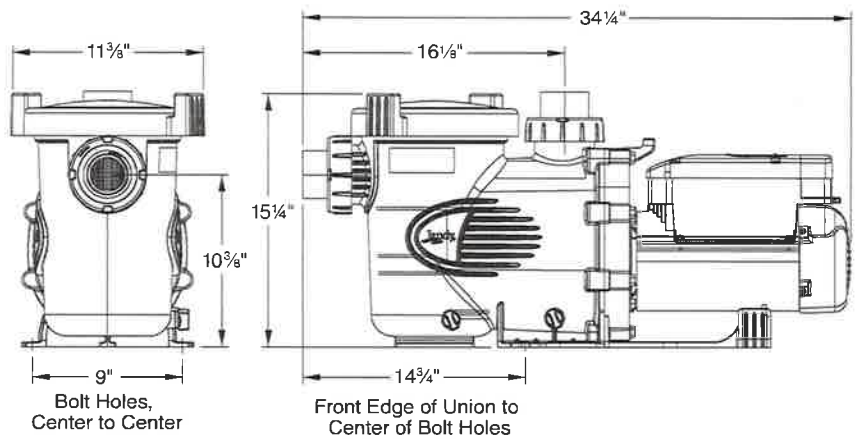
NEW

Reviewed for Code Compliance
Universal Engineering Sciences



Technical Specifications

ePump™ Variable Speed Pumps



Part No.	Description	HP
JEP1.5	ePump Variable Speed Pump	1.5 HP
JEP2.0	ePump Variable Speed Pump	2.0 HP

Replacement Motor Guide	
Pump Model	A.O. Smith/Century
JEP2.0	M48A40D58
JEP1.5	M48A42D58

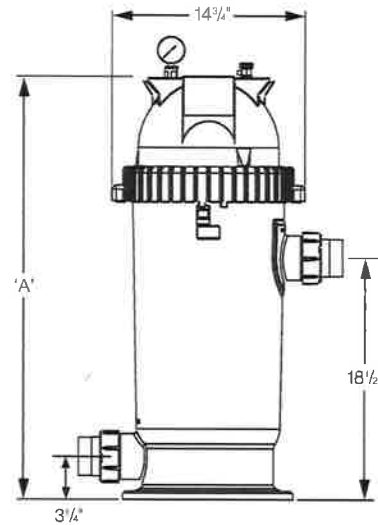
ePump Specifications

Full Rated Pumps						
Model No.	HP	Voltage	Watts	Pipe Size	Carton Weight	Overall Length
JEP1.5	0.25–2.2	208–230VAC	2,100 W	2½–3"	71.5 lbs.	34¼"
JEP2.0	0.25–2.7	208–230VAC	2,300 W	2½–3"	71.5 lbs.	34¼"

When installing the pump, leave a minimum of 2 ft. of clearance above the pump for removal of strainer basket.

Recommended Minimum Wire Size For ePump Series Pumps*					
Distance from Sub-panel		0–50 Feet	50–100 Feet	100–150 Feet	150–200 Feet
Model	Branch Fuse AMPS Class: CC, G, H, J, K, RK, or T	Voltage	Voltage	Voltage	Voltage
	230 VAC	208–230 VAC	208–230 VAC	208–230 VAC	208–230 VAC
JEP2.0	20A	12	10	8	6
JEP1.5	20A	12	10	8	6

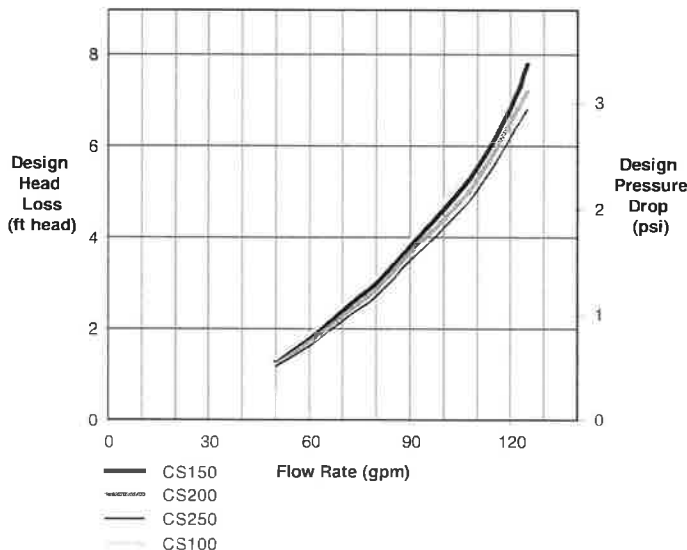
*Assumes three (3) copper conductors in a buried conduit and 3% maximum voltage loss in branch circuit. All National Electrical Code (NEC) and local codes must be followed. Table shows minimum wire size and branch fuse recommendations for typical installation per NEC.



Part No.	Description	Size
CS100	CS Cartridge Filter	100 Sq. Ft.
CS150	CS Cartridge Filter	150 Sq. Ft.
CS200	CS Cartridge Filter	200 Sq. Ft.
CS250	CS Cartridge Filter	250 Sq. Ft.

Specifications and Dimensions, CS Series Filters				
Model No.	CS100	CS150	CS200	CS250
Filter Area	100 ft ²	150 ft ²	200 ft ²	250 ft ²
Design Flow Rate	1 gpm/ft ²	.85 gpm/ft ²	.625 gpm/ft ²	.5 gpm/ft ²
Maximum Flow	100 gpm	125 gpm	125 gpm	125 gpm
Six (6) Hour Capacity	36,000 gallons	45,000 gallons	45,000 gallons	45,000 gallons
Eight (8) Hour Capacity	48,000 gallons	60,000 gallons	60,000 gallons	60,000 gallons
Normal Start Up Pressure	6-15 psi	6-15 psi	6-15 psi	6-15 psi
Max. Working Pressure	50 psi	50 psi	50 psi	50 psi
Cartridges Required	1	1	1	1
Shipping Weight	28 lbs.	28 lbs.	34 lbs.	36 lbs.
Height ('A')	32 3/8"	32 3/8"	42 1/2"	42 1/2"

CS Filter Head Loss Curves



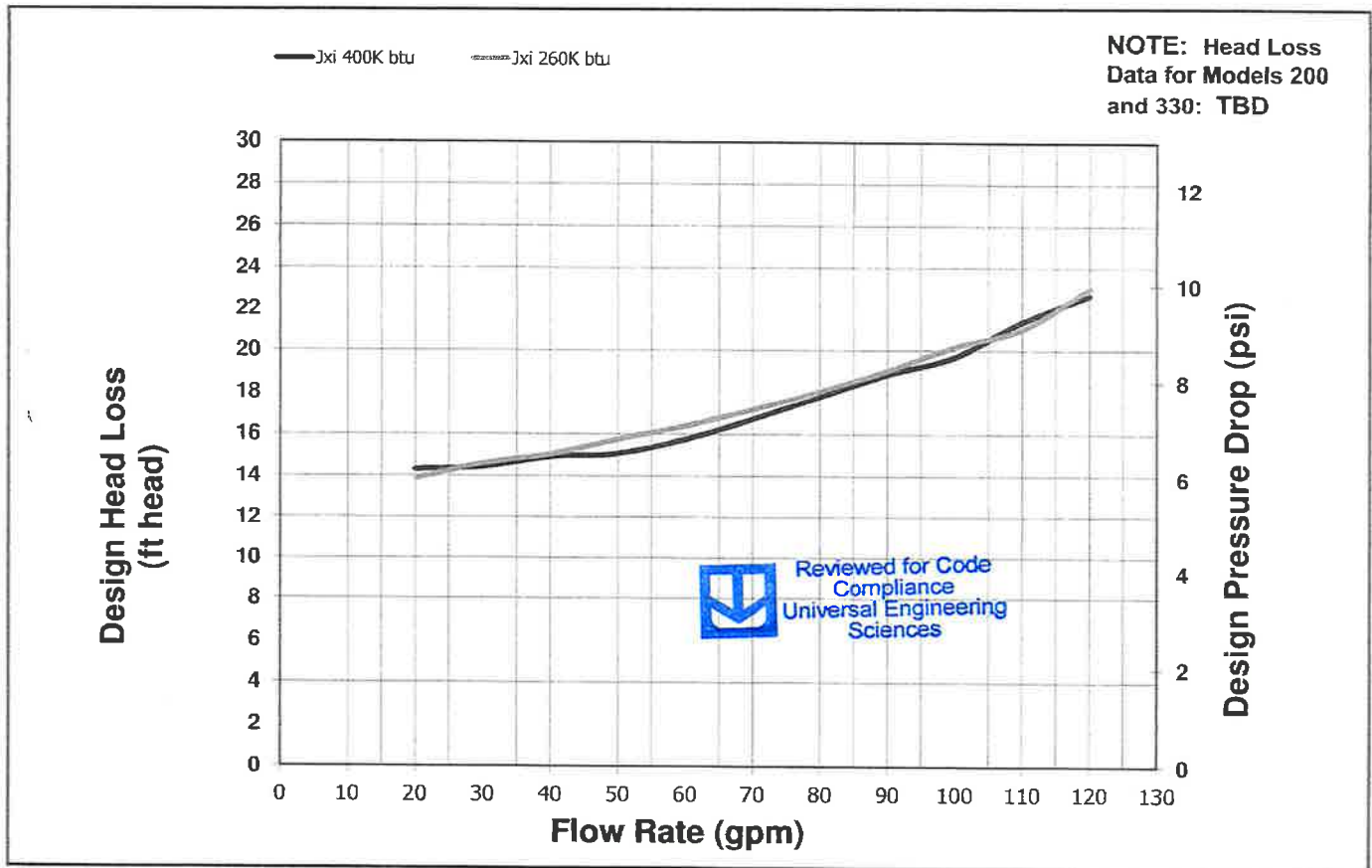


Figure 14. Head Loss Chart

5.3 Plumbing Connections

The heater has a standard 2 inch water header and coupling design. With this feature, only nominal two inch PVC or CPVC may be connected to the heater. However, by installing the appropriate pipe adapters and two (2) short pieces of two-inch plastic pipe (supplied by the installer), any size existing pipe may be fitted to the heater.

Optional Water Inlet Piping

The water inlet can be piped in one of two possible configurations. The heater comes with a Zodiac® Sweep Elbow for increased hydraulic performance and efficiency. The sweep elbow also provides the advantage of its exclusive interface with the Zodiac AquaLink® RS temperature sensor. The sweep elbow may be installed in the top inlet connection, and the cap and plug with O-ring installed to close off the unused side port (see Figure 15). This configuration may be preferred for Versa Plumb® piping to mating components

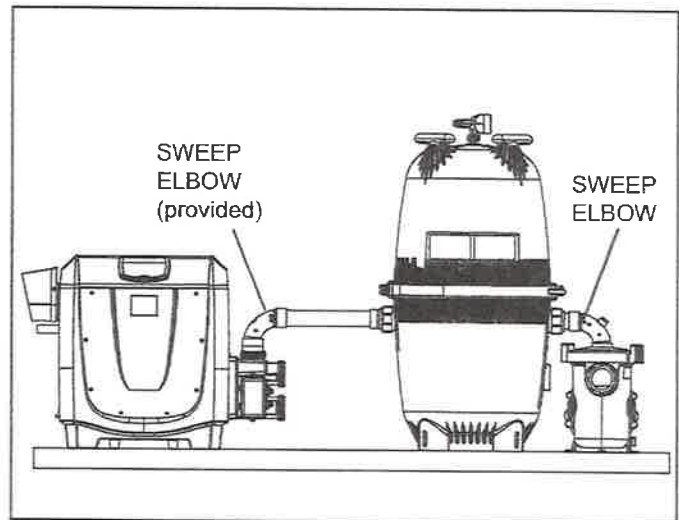


Figure 15. Top Inlet Piping Using the Versa Plumb Sweep Elbow

VGB UNBLOCKABLE CHANNEL PEBBLE TOP DRAIN COVER

Only One Drain Cover Needed

Patent #'s 6,209,586 / 6,340,035 / 6,557,588

FEATURES

This new Unblockable Channel Pebble Top Drain Cover is designed with our Pebble Top Technology that adheres the same plaster, aggregate, or tile being applied to the pool, directly to the top of the drain cover to virtually disappear into your pool floor.

Channel Pebble Top Drain Cover

- Fits with A&A AVSC Channel Drain (sold separately)
- Safety Engineered: VGB, ANSI/APSP 16-2001 and NSF/ANSI 50-2009a Compliant
- Flow Rates: Single inlet 200 GPM; Dual inlet 208 GPM
- Manufactured from superior UV-Resistant ABS
- Available in 7 designer colors
- Proudly made in the USA

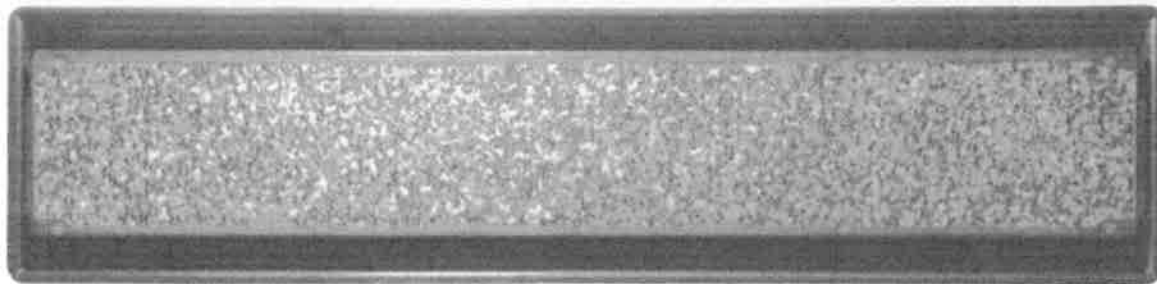
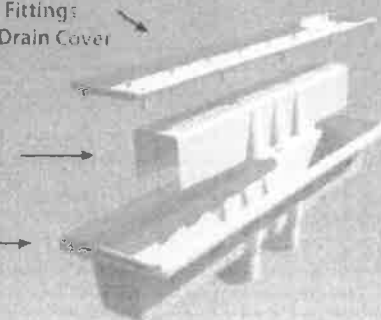
A&A AVSC Channel Drain (sold separately)

- Unblockable design
- Large Opening for debris removal
- Available in Single and Dual Inlet
- Save money: with dual inlet design you can use one AVSC Drain for two pumps
- Perfect for pools, spas, negative/vanishing edges, fountains, and water features
- Optional Hydrostatic Valve connection

Color Match Pool Fittings:
Channel Pebble Top Drain Cover

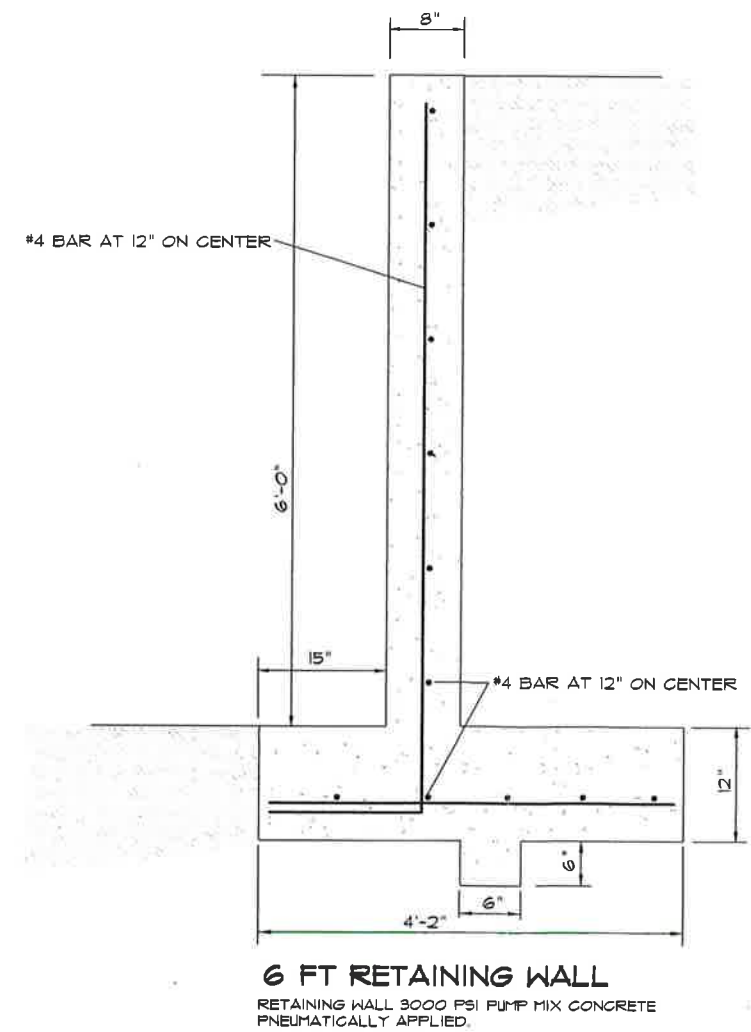
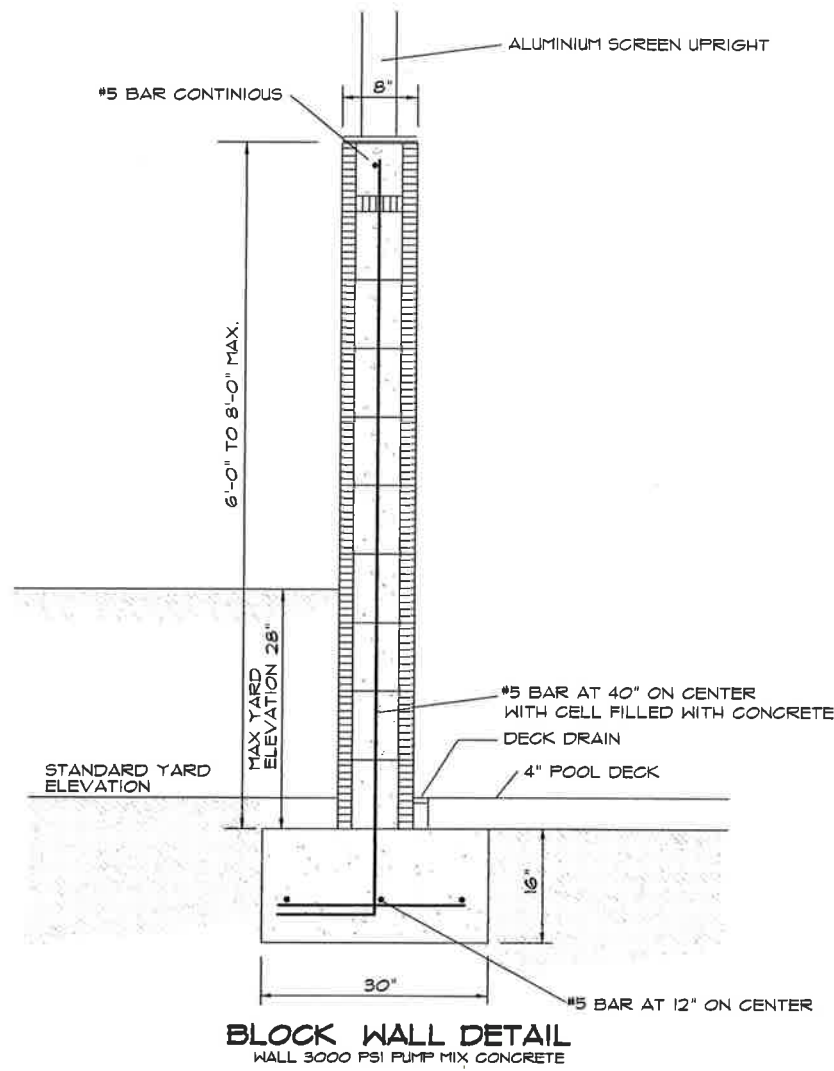
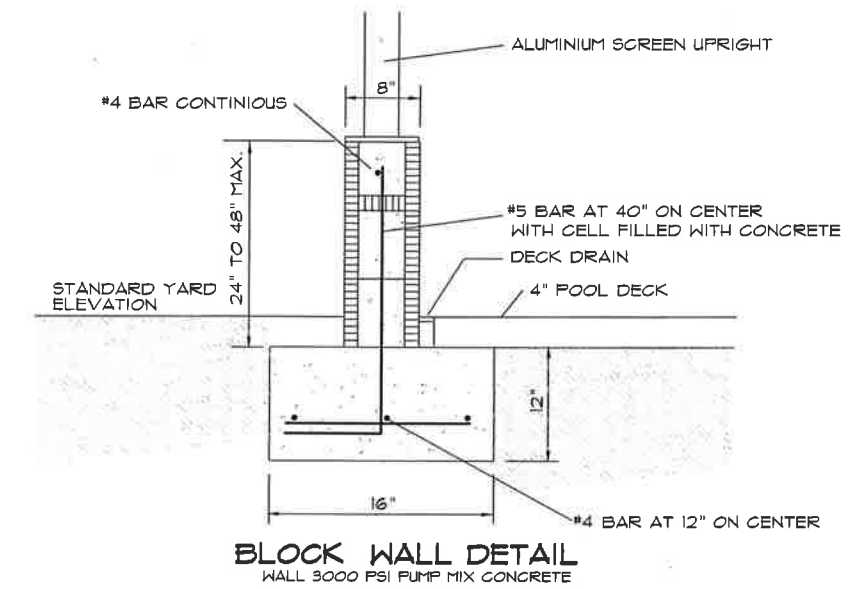
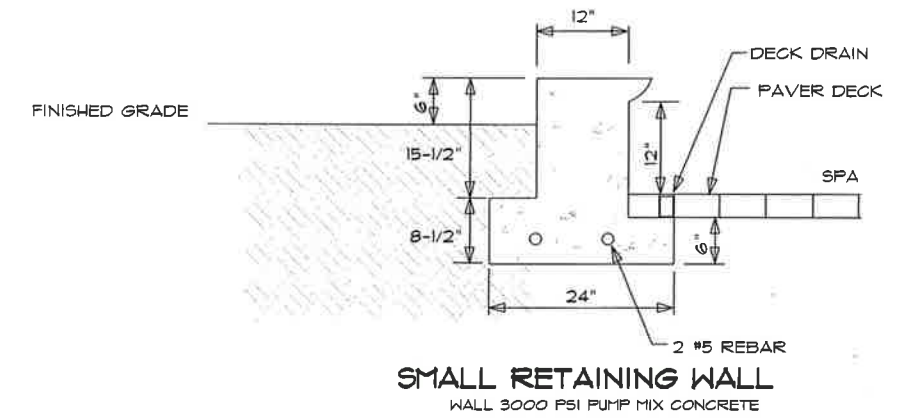
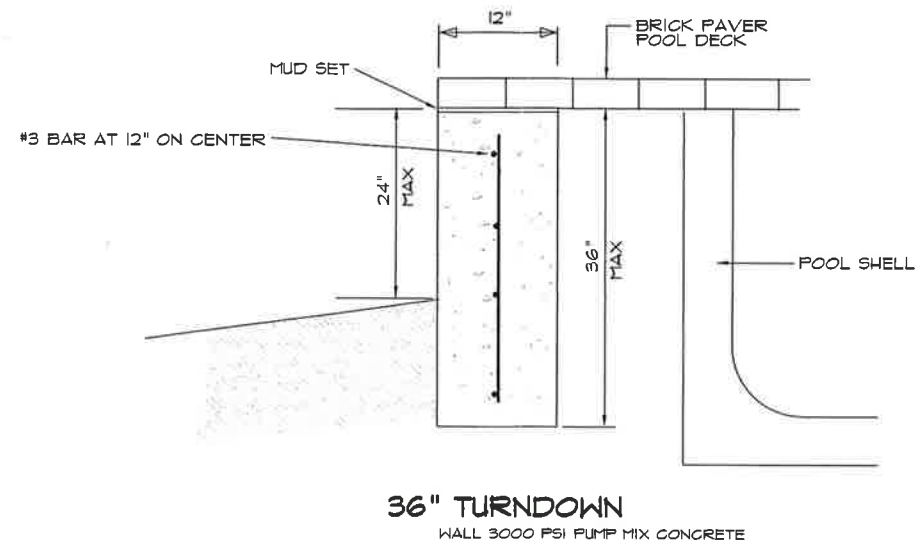
A&A
AVSC Channel
Drain Baffle

A&A
AVSC Channel
Drain Sump



Color Options





Reviewed for Code Compliance
Universal Engineering Sciences



PARKER MYNCHENBERG & ASSOC. INC.
PROFESSIONAL ENGINEERS LANDSCAPE ARCHITECTS
1729 RIDGEWOOD AVENUE HOLLY HILL FLORIDA 32118
(386) 677-6891 FAX (386) 677-2114

TYPICAL RESIDENTIAL SW/POOL DESIGN FOR ALL SEASONS POOLS & SERVICE
185 EAST AIRPORT BLVD.
SANFORD, FLORIDA
407-871-2020

THIS SIGNED AND SEALED SHEET IS TO BE USED AS A MASTER FILE COPY. IT WILL BE USED FOR A MAXIMUM PERIOD OF ONE YEAR EXPIRING ON 12/31/17. IF THE FLORIDA BUILDING CODE IS ALTERED OR MODIFIED BEFORE THAT DATE, THIS DRAWING MAY BE RENDERED VOID.

PARKER MYNCHENBERG, F.E. #32645

Job Name: Landram # 8606

Swimming Pool Efficiency Compliance Information

NOTE: These Requirements Apply ONLY to the Filtration Pump

ANSI/APSP/ICC-15-2011

Flow Calculation:

Pool water volume 7,189 ÷ 360 = 36 gpm - this is the calculated flow rate.

Note: for pools under 13,000 gals. the calculated flow rate or 36 gpm whichever is greater = the filtration flow rate.

Is there an Auxillary load on the filtration pump? YES NO

If so, what in the calculated flow rate 75 gpm.

Flow Rate (low speed) 68 gpm @ 1725 rpm.

Minimum suction side pipe size @ 6 fps 2.0 in. Minimum suction side branch pipe size @ 6fps 2.0 in.

Minimum return side pipe size @ 8 fps 2.0 in. Minimum suction side branch pipe size @ 6fps 2.0 in.

Determine Filter Size:

Filter Factors (GPM/SF): Cartridge (0.375) DE (2.0) Sand (15)

Filter Size: 75 / .375 = 200 **CS 250**
(Flow Rate) (Filter Fact) (Flow Rate) (Filter Make & Model)

Pump Controls

Filtration pump has no auxillary load - standard time clock _____

Filtration pump with auxillary load - Control model for low speed default within 24 hr. 2ND TIMER

Heater Model: JXI 400 LP

Gas Heater efficiency rating 95 (No Pilot Light)

Heat Pump efficiency C.O.P. _____

ANSI 5 & ANSI 7 Compliance Work Sheet

Determine Simplified TDH:

- Distance from pool to pump in feet: 28
- Friction Loss (in suction pipe) in 3 Inch pipe per 1 ft. @ 181 gpm = .07 (from pipe flow friction loss chart)
- Friction Loss (in return pipe) in 2.5 Inch pipe per 1 ft. @ 146 gpm = .13 (from pipe flow friction loss chart)

Determine Simplified TDH:

4. $\frac{28}{(\text{Length of suct pipe})} \times \frac{.07}{(\text{ft of head / 1 ft of Pipe})} = \frac{1.96}{(\text{TDH Suct Pipe})}$

5. $\frac{28}{(\text{Length of Return pipe})} \times \frac{.13}{(\text{ft of head / 1 ft of Pipe})} = \frac{3.64}{(\text{TDH Return Pipe})}$

TDH in Piping: 5.6
Filter / Heater loss in TDH: 4.0
All Other losses: _____
Total Dynamic Head (TDH): 9.6

Determine Simplified TDH:

- Branch Piping to be 4 Inch to keep velocity @ 6 fps max at 234 gpm System Flow Rate.
- Trunk Skimmer & Suction Piping to be 3 Inch to keep velocity @ 8 fps max at 181 gpm System Flow Rate.
- Return Piping to be 2.5 Inch to keep velocity @ 10 fps max at 146 gpm System Flow Rate.

Pump Selection as Listed on Curve A or C (circle one)

Filtration Pump: JEP VS 1.5 HP Maximum Flow Rate 145 gpm

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

Main Drain Cover: VGB CHANNEL

Check all that apply.

 2 suction outlets @ _____ gpm max. flow

 3 suction outlets @ _____ gpm max. flow

 **FLOOR** suction outlets @ 200 gpm w/ 1 Ports

Reviewed for Code Compliance Universal Engineering Sciences

Total Head in Conversion Chart
Inches Mercury (Vacuum Gauge)

	0	2	4	6	8	10	12	14	16	18
0	0.0	2.3	4.5	6.8	9.0	11.3	13.6	15.8	18.1	20.3
1	2.3	4.5	6.8	9.1	11.3	13.6	15.9	18.1	20.4	22.7
2	4.6	6.8	9.1	11.4	13.7	15.9	18.2	20.4	22.7	25.0
3	6.9	9.2	11.5	13.7	16.0	18.2	20.5	22.8	25.0	27.3
4	9.2	11.5	13.8	16.0	18.3	20.5	22.8	25.1	27.3	29.6
5	11.5	13.8	16.1	18.3	20.6	22.8	25.1	27.4	29.6	31.9
6	13.8	16.1	18.4	20.6	22.9	25.2	27.4	29.7	31.9	34.2
7	16.2	18.4	20.7	23.0	25.2	27.5	29.7	32.0	34.3	36.5
8	18.5	20.7	23.0	25.3	27.5	29.8	32.0	34.3	36.6	38.8
9	20.8	23.1	25.3	27.6	29.8	32.1	34.3	36.6	38.9	41.1
10	23.1	25.4	27.6	29.9	32.1	34.4	36.7	38.9	41.2	43.4
11	25.4	27.7	29.9	32.2	34.5	36.7	39.0	41.2	43.5	45.8
12	27.7	29.9	32.2	34.5	36.8	39.0	41.3	43.5	45.8	48.1
13	30.0	32.3	34.5	36.8	39.1	41.3	43.6	45.9	48.1	50.4
14	32.3	34.6	36.9	39.1	41.4	43.6	45.9	48.2	50.4	52.7
15	34.6	36.9	39.2	41.4	43.7	45.9	48.2	50.5	52.7	55.0
16	37.0	39.2	41.5	43.7	45.9	48.3	50.5	52.8	55.0	57.2
17	39.3	41.5	43.8	46.1	48.3	50.6	52.8	55.1	57.4	59.6
18	41.6	43.8	46.1	48.4	50.6	52.9	55.1	57.4	59.7	61.9
19	43.9	46.2	48.4	50.7	52.9	55.2	57.4	59.7	62.0	64.2
20	46.2	48.5	50.7	53.0	55.2	57.5	59.7	62.0	64.3	66.5
21	48.5	50.8	53.0	55.3	57.5	59.8	62.1	64.3	66.6	68.8
22	50.8	53.1	55.3	57.5	59.8	62.1	64.4	66.6	68.9	71.1
23	53.1	55.4	57.7	59.9	62.2	64.4	66.7	69.0	71.2	73.5
24	55.4	57.7	60.0	62.2	64.5	66.7	69.0	71.3	73.6	75.8
25	57.8	60.0	62.3	64.5	66.8	69.1	71.3	73.6	75.9	78.1
26	60.1	62.3	64.6	66.8	69.1	71.4	73.6	75.9	78.1	80.4
27	62.4	64.6	66.9	69.1	71.4	73.7	75.9	78.2	80.5	82.7
28	64.7	66.9	69.2	71.5	73.7	76.0	78.2	80.5	82.8	85.0
29	67.0	69.3	71.5	73.8	76.0	78.3	80.5	82.8	85.1	87.3
30	69.3	71.6	73.8	76.1	78.3	80.6	82.9	85.1	87.4	89.6
31	71.6	73.9	76.1	78.4	80.7	82.9	85.2	87.4	89.7	92.0
32	73.9	76.2	78.4	80.7	83.0	85.2	87.5	89.7	92.0	94.3
33	76.2	78.5	80.7	83.0	85.3	87.5	89.8	92.0	94.3	96.6
34	78.5	80.8	83.1	85.3	87.6	89.8	92.1	94.4	96.6	98.9
35	80.8	83.1	85.4	87.6	89.9	92.2	94.4	96.7	98.9	101.2

NOTE: Field TDH Must be Equal to or Higher Than the Calculation TDH

Flow and Friction Loss Per Foot
Schedule 40 PVC Pipe

Pipe Size	Velocity - Feet Per Second		
	6 fps	8 fps	10 fps
1"	16 gpm 0.14'	21 gpm 0.23'	28 gpm 0.32'
1.5"	37 gpm 0.08'	50 gpm 0.14'	62 gpm 0.10'
2"	62 gpm 0.08'	82 gpm 0.10'	103 gpm 0.07'
2.5"	88 gpm 0.05'	117 gpm 0.09'	146 gpm 0.07'
3"	136 gpm 0.04'	181 gpm 0.07'	227 gpm 0.05'
4"	234 gpm 0.03'	313 gpm 0.05'	392 gpm 0.03'
6"	534 gpm 0.02'	712 gpm 0.03'	

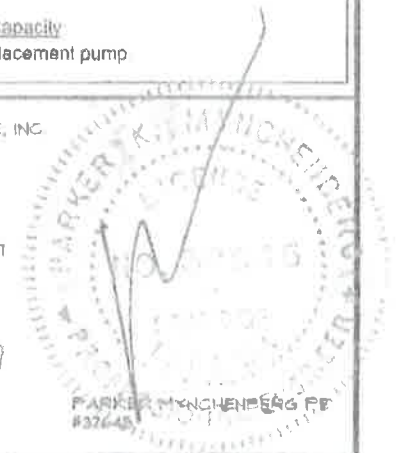
TDH Calculation Options

- For each pump
- 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.

ALL SEASONS POOL SERVICE, INC.
185 EAST AIRPORT BLVD
SANFORD, FLORIDA

EXPIRES DECEMBER 31, 2017

JAN 04 2017



Plumbing Sizes

ORIGINAL: 07/27/17

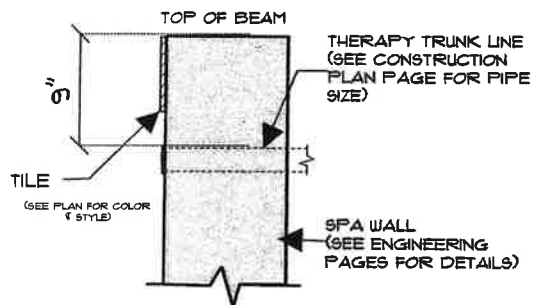
- Pool & Spa Main Branch Lines 4" Pipe
- Pool Main Drain & Spa Main Drain Trunk Lines Are 3" Pipe
- Pool Return & Spa Therapy Trunk Lines Are 2.5" Pipe

Project Notes:

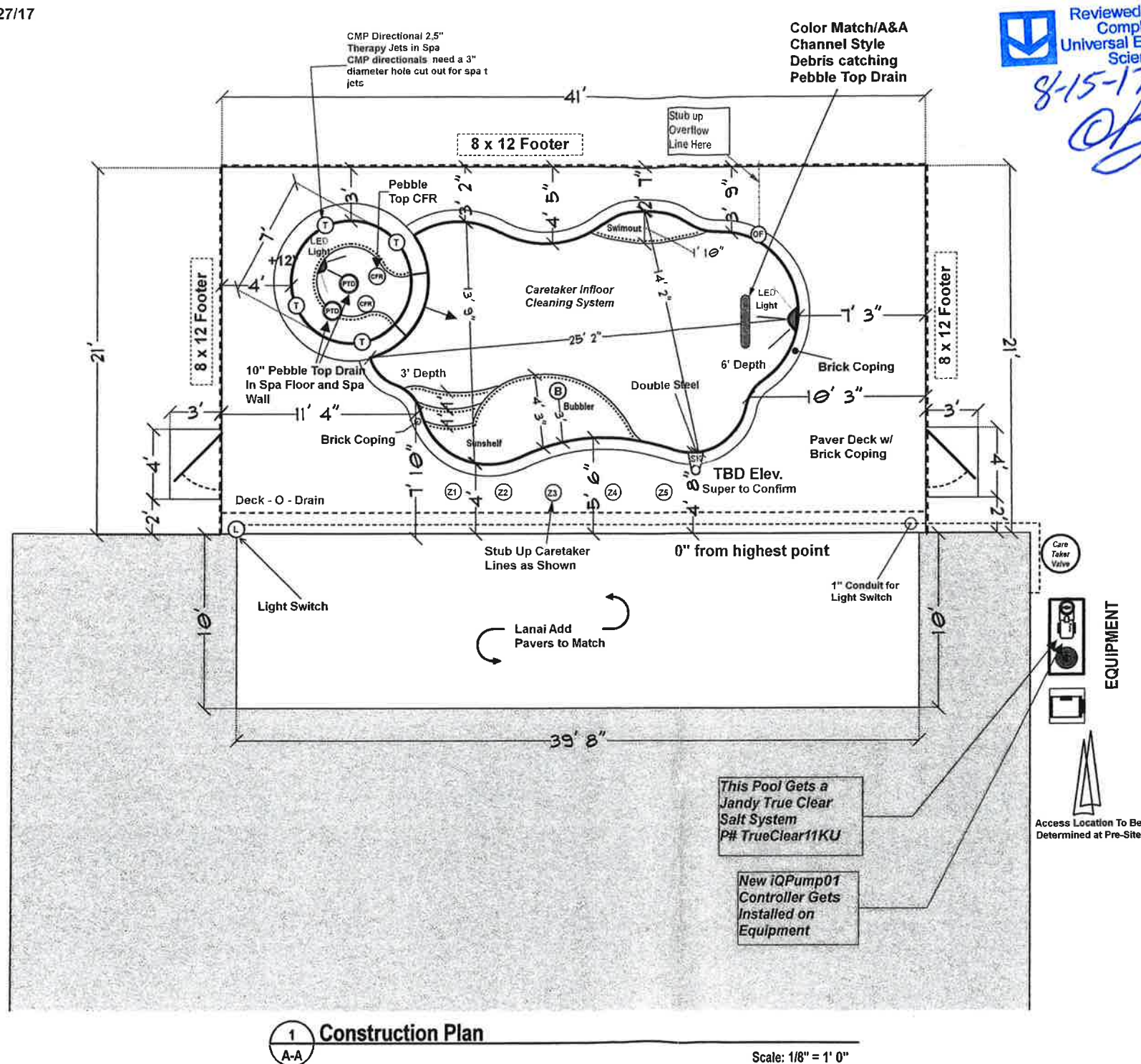
- Pool Deck Will be Screen Enclosed
- Pool Will Have Caretaker System
- Home Will Have 6 door and window alarms
- 30" PVC at Return Valve for Salt Cell

CMP DIRECTIONALS NEED A 3" DIAMETER HOLE CUT OUT FOR SPA T JETS

NOTE: THERAPY TRUNK LINES ARE 9" FROM TOP OF BEAM TO TOP OF TRUNK LINE



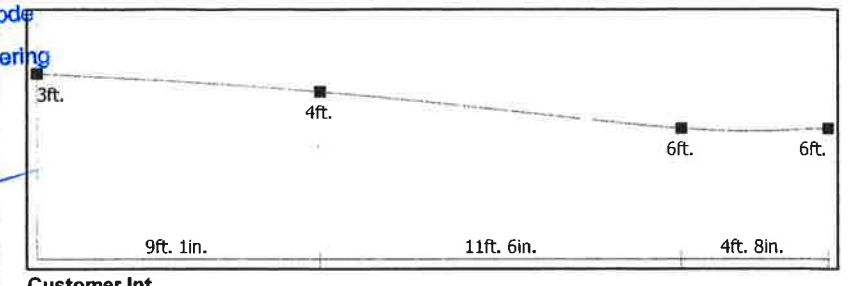
1 SPA THERAPY JET TRUNK HEIGHT SECTION Not to Scale



1 Construction Plan Scale: 1/8" = 1' 0"

Reviewed for Code Compliance Universal Engineering Sciences
8-15-17
of

Finish Pool Depth Profile



Customer Int. _____

Pool Specifications

STYLE: Freeform
PERIMETER: 68' AREA: 264 sqft
WIDTH: 13' 6" LENGTH: 25' 1"
DEPTH: 3' X 6'
M.I.D: 1-4" RTNS: Caretaker 11 heads
SKIM: 1-3" LIGHT: LED
DOUBLE STEEL: Yes P.C.: N/A
WELL WATER: N/A GALLONS: 7,189
NOTES: _____

Deck Specifications

TYPE: Paver Deck w/ Brick Coping
DIMENSIONS: 21' x 41' AREA: 516 sqft
FOOTER: 83' 12x12 COPING: 110'
DRAIN: 41' CONCRETE RISER: 40'
PATIO: 397 sqft FENCE: N/A
TURN DOWN DECK EDGE:
+6" - +12" - +18" -
+24" - +30" - +36" -
NOTES: _____

SPA Specifications

STYLE: Round
AREA: 36' PERM: 22'
T-JETS: 4 RTNS: 2 - CFR
LIGHT: LED M.D: 2-3"
SPILLWAY: 4' TYPE: tile
HEIGHT: +12" BLOWER: 1 HP
NOTES: _____

Equipment

PUMP: JEP VS HP: 1.5
FILTER: CS SQ: 250
PUMP 2: N/A HP: N/A
CHLOR: TC 11 KU OZONE: N/A
POOL SWEEP: N/A
HEAT PUMP: N/A
GAS HEATER: JXI 400 TYPE: LP
CONTROLS: iQPump01 / Standard
NOTES: _____

Tile Specifications

+6" - +12" 28' +18" -
+24" - +30" - +36" -
DECK JETS: N/A BUBBLER: SUNSHELF

Misc. Options

OUTLETS: _____ GAS LINE: _____
CHASE PIPE: _____ HOSE: _____
SUMMER KITCHEN: _____
STUCCO: _____ COLOR: _____
STONE: _____ COLOR: _____
COUNTERTOP: _____
APPLIANCES: _____

Screen / Fence

ROOF SQ: 861 SQFT TYPE: DOME
WALL SQ: 747 SQFT WALL HGT: 9'
ELITE ROOF: N/A FAN BEAM: N/A
SCREEN COLOR: BRONZE
KICKPLATE: N/A
FENCE TYPE: N/A HGT: N/A
LENGTH: N/A COLOR: N/A
GATES: N/A

Site Specifications

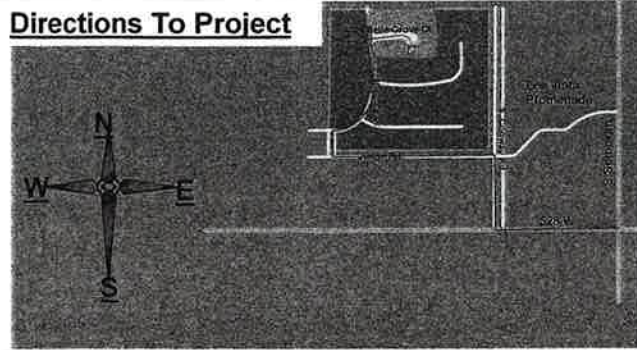
DIG TYPE: Dig & Haul / Shuttle
ELEVATION: TBD YARDS: 21
NOTES: _____

Designer

DESIGNER: Preston Dewey
CONTRACT DATE: 07/21/17
APPROVED BY: Samantha Young
DATE: 07/26/17

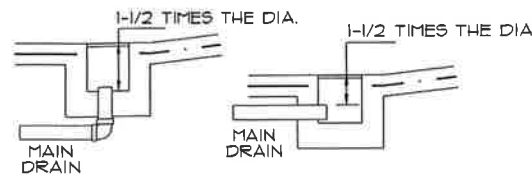
Builder / Customer: Rhett & Lindsay Iandram Job Address: 4214 Bella Grove Ct.
Street: 4214 Bella Grove CT. County: Orange City: Orlando Zip: 32812
City: Orlando State: FL Block: Lot #: 110
Zip: 32812 Home #: 954.599.8874 PB: 40 PG: 4
Cell #: 352.727.8114 Work #: Subdivision: Conway Groves
Gate Code: #7850

Job # 8606

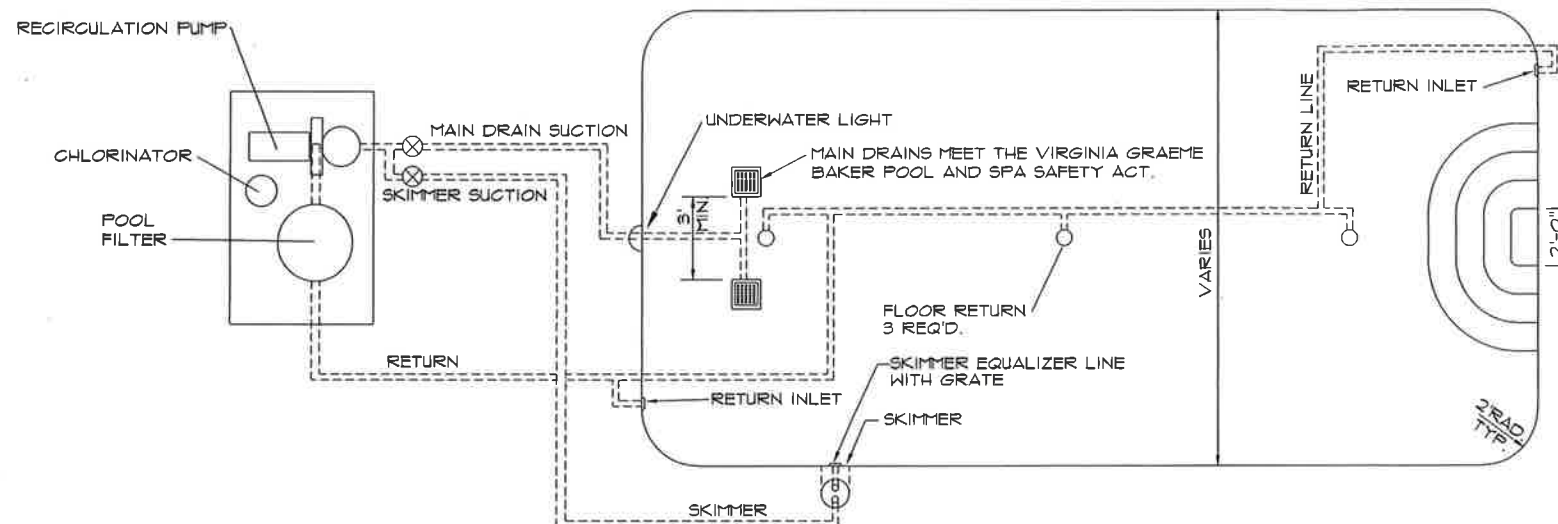


JOB SPECIFIC PIPE SIZING, TOTAL DYNAMIC HEAD CALCULATIONS AND EQUIPMENT SPECIFICATIONS AND DOCUMENTATION ARE TO BE PROVIDED BY THE POOL CONTRACTOR FOR EACH PROJECT. THE POOL CONTRACTOR MUST USE THE MAXIMUM FLOW CAPACITY OF THE SELECTED PUMP AND PROVIDE HYDRAULIC CALCULATIONS FOR TDH TO DETERMINE PROPER PUMP AND PIPING SIZING. THE MANUFACTURER'S EQUIPMENT SPECIFICATIONS AND OTHER DOCUMENTATION FOR PUMPS, FILTERS, HEATER EQUIPMENT AND MAIN DRAINS AND COVERS ARE TO BE SUBMITTED FOR REVIEW AND DOCUMENTATION FOR SIZING THE CIRCULATION SYSTEM.

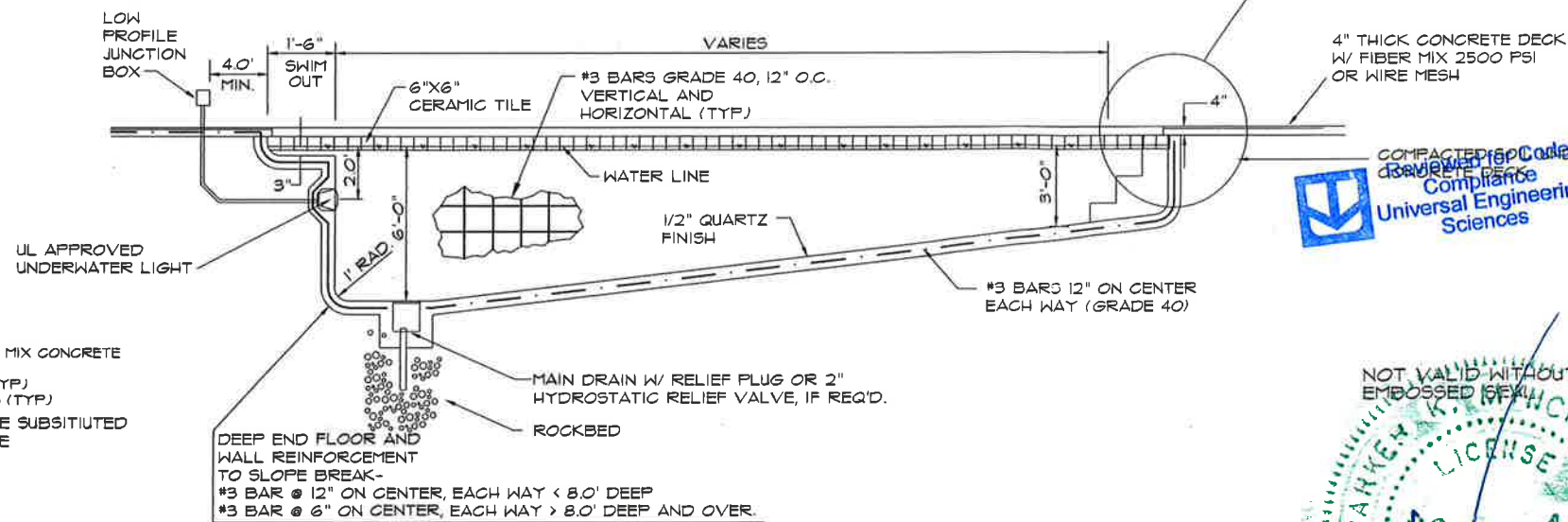
THE MAIN DRAIN PIPE INVERT NEEDS TO BE 1.5 TIMES THE DIAMETER DOWN FROM THE TOP OF THE MAIN DRAIN GRATE TO THE TOP OF THE MAIN DRAIN PIPE, IF THE PIPE COMES IN VERTICAL TO THE MAIN DRAIN BOX.
IF THE MAIN DRAIN PIPE COMES INTO THE MAIN DRAIN BOX HORIZONTALLY, THE COVER FROM THE TOP OF THE GRATE TO THE TOP OF THE MAIN DRAIN PIPE NEEDS TO BE 1.5 TIMES THE DIA. OF THE MAIN DRAIN PIPE.



- GENERAL NOTES:
1. POOL IS TO BE BUILT TO COMPLY WITH FLORIDA, COUNTY AND CITY BUILDING CODES.
 2. ALL METAL PARTS WITHIN 5 FT. WILL BE GROUNDED AS PER NATIONAL ELECTRIC CODE AND AS REQUIRED BY LOCAL INSPECTOR.
 3. FILTRATION SYSTEM WILL HAVE SUFFICIENT CAPACITY TO PROVIDE A COMPLETE TURNOVER OF POOL WATER IN (12) TWELVE HOURS OR LESS.
 4. POOL CONSTRUCTION TO BE THE SAME REGARDLESS OF SIZE AND SHAPE. IF FILL IS REQUIRED FOR 2 FT. TO 4 FT. OF WALL HEIGHT THEN WALLS HAVE TO BE REINFORCED WITH ADDITIONAL STEEL (8" O.C. BOTH WAYS) AND/ OR EXTRA WALL THICKNESS (8" TO 10").
 5. ALL PVC PIPE WILL BE SCHEDULE 40.
 6. ALL METAL FIXTURES AND POOL LIGHTS TO BE BONDED TO POOL STEEL AND GROUND WIRE.
 7. POOL ALARMS DO NOT NEED TO BE HARDWIRED.
 8. SOIL CONDITIONS AT POOL LOCATION ARE ASSUMED TO BE ADEQUATE FOR A SINGLE FAMILY DWELLING.
 9. TERMITE CONTROL WILL BE APPLIED UNDER ALL POOL DECKS.
 10. ALL PUMPS AND FILTERS WILL BE ANCHORED TO A CONCRETE PAD WITH TAP CON ANCHORS.
 11. 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 A.N.S.I./A.S.M.E. A112.19, 8M, "SUCTION FITTINGS FOR USE IN SWIMMING POOLS, SPAS, HOT TUBS, AND WHIRLPOOLS BATHTUB APPLIANCES"
 12. THE POOL DESIGN WILL MEET CHAPTERS 42 AND 45 OF THE 2014 FLORIDA BUILDING CODE 5TH EDITION.
 13. RESIDENTIAL POOLS MUST COMPLY WITH CHAPTERS 42 AND 45 OF THE 2014 FLORIDA BUILDING CODE 5TH EDITION.
 14. POOL CONSTRUCTION WILL MEET 2011 NATIONAL ELECTRIC CODE. SEE 680.26 (B)(2)(b) FOR PERIMETER BONDING USING AT LEAST ONE (1) #8 AWG BARE SOLID COPPER CONDUCTOR.
 15. FOR RESIDENTIAL POOLS UP TO A WATER DEPTH OF 8'-0" #3 REBAR 12" O.C.B.W. OVER 8'-0"; SPECIAL ENGINEERING IS REQUIRED AND IS NOT A PART OF THIS DRAWING SPECIFICATIONS. WALL THICKNESS SHALL PROVIDE CODE COVER OVER REINFORCING. FOR OVER 8'-0" A SPECIAL DESIGN WILL BE REQUIRED.
 16. RESIDENTIAL POOLS SHALL COMPLY WITH THE ANSI/APSP/ICC-5 2011 FOR RESIDENTIAL INGROUND POOLS, ANSI/APSP/ICC-3 2014 FOR PERMANENTLY INSTALLED RESIDENTIAL SPAS, AND ANSI/APSP/ICC-7 2013 FOR SUCTION ENTRAPMENT AVOIDANCE STANDARDS. AND ANSI/APSP/ICC-15A 2013 STANDARD FOR RESIDENTIAL SWIMMING POOL AND SPA ENERGY EFFICIENCY.
 17. DO NOT USE OR OPERATE POOL OR SPA IF THE SUCTION FITTING IS MISSING, BROKEN, OR LOOSE.
 18. IF THE SUCTION INLET SYSTEM, SUCH AS AN AUTOMATIC CLEANING SYSTEM, IS A VACUUM CLEANER SYSTEM WHICH HAS A SINGLE SUCTION INLET, OR MULTIPLE SUCTIONS INLETS WHICH CAN BE ISOLATED BY VALVES, THEN EACH SUCTION INLET SHALL PROTECT AGAINST USER ENTRAPMENT BY EITHER AN APPROVED ANTI-VORTEX COVER, 12" X 12" GRATE OR LARGER, OR OTHER APPROVED MEANS.



TYPICAL SWIMMING POOL



SWIMMING POOL SECTION

POOL SHELL 3000 PSI PUMP MIX CONCRETE PNEUMATICALLY APPLIED.
6"-7" IN VERTICAL WALLS (TYP)
6"-8" IN COVES AND FLOORS (TYP)
2500 MIN. GUNITE MAY BE SUBSTITUTED FOR 3000 PSI CONCRETE

DEEP END FLOOR AND WALL REINFORCEMENT TO SLOPE BREAK-
#3 BAR @ 12" ON CENTER, EACH WAY < 8.0' DEEP
#3 BAR @ 6" ON CENTER, EACH WAY > 8.0' DEEP AND OVER.

COMPACTION CODE COMPLIANCE
Universal Engineering Sciences

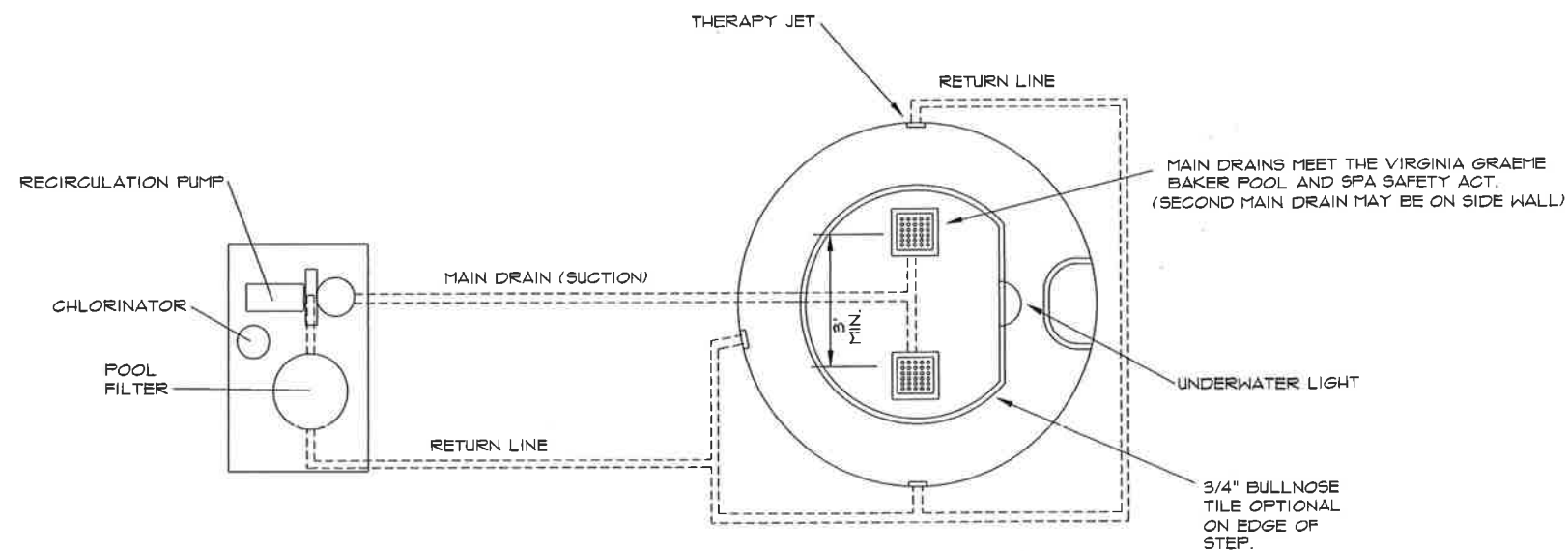


PARKER MYNCHENBERG, P.E. #32645

PARKER MYNCHENBERG & ASSOC. INC.
PROFESSIONAL ENGINEERS LANDSCAPE ARCHITECTS
1729 RIDGEWOOD AVENUE HOLLY HILL FLORIDA 32118
(386) 677-6891 FAX (386) 677-2114

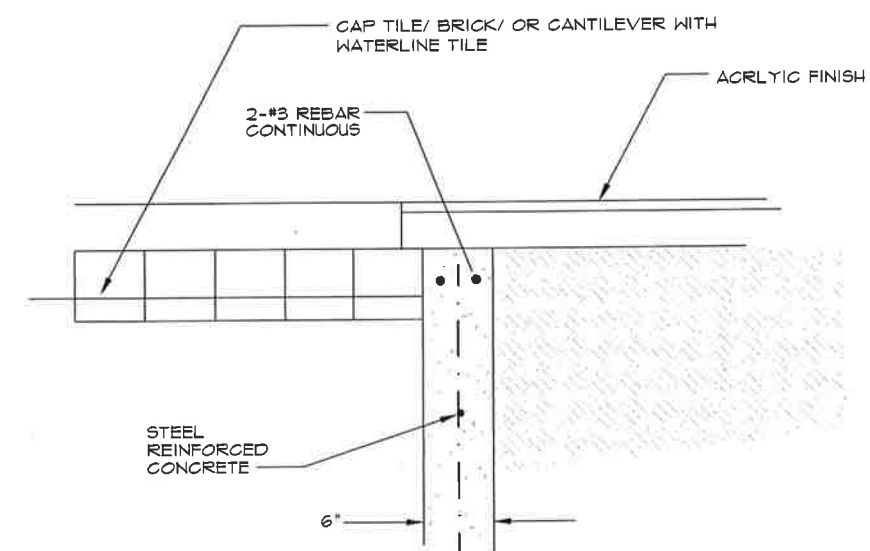
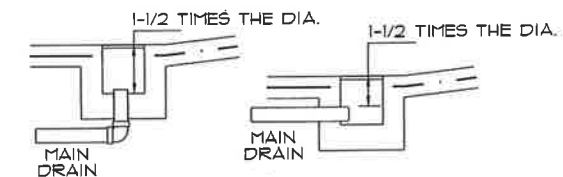
TYPICAL RESIDENTIAL SW/POOL DESIGN FOR ALL SEASONS POOLS & SERVICE
185 EAST AIRPORT BLVD.
SANFORD, FLORIDA
407-871-2020

THIS SIGNED AND SEALED SHEET IS TO BE USED AS A MASTER FILE COPY. IT WILL BE USED FOR A MAXIMUM PERIOD OF ONE YEAR EXPIRING ON 12/31/17. IF THE FLORIDA BUILDING CODE IS ALTERED OR MODIFIED BEFORE THAT DATE, THIS DRAWING MAY BE RENDERED VOID.

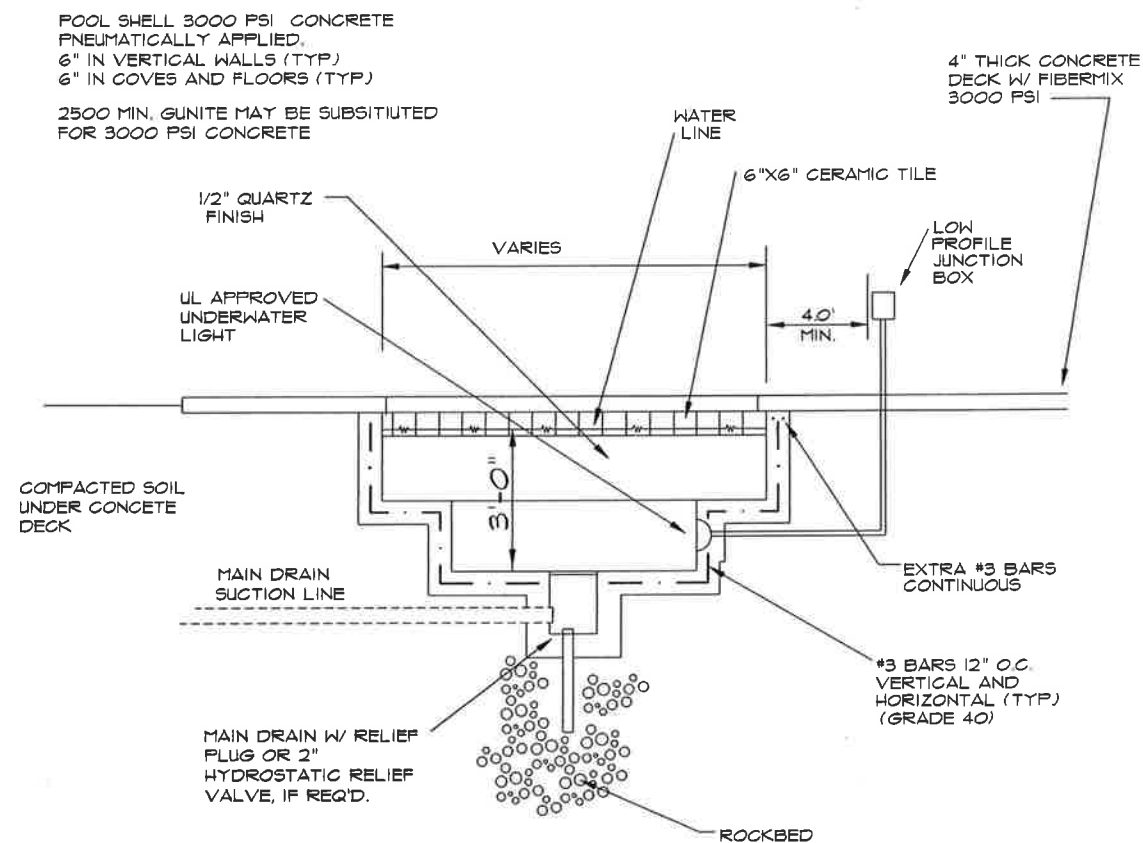


TYPICAL SPA POOL - 2 MAIN DRAINS ON FLOOR

THE MAIN DRAIN PIPE INVERT NEEDS TO BE 1.5 TIMES THE DIAMETER DOWN FROM THE TOP OF THE MAIN DRAIN GRATE TO THE TOP OF THE MAIN DRAIN PIPE, IF THE PIPE COMES IN VERTICAL TO THE MAIN DRAIN BOX.
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DECK AND TILE DETAIL



SECTION

Reviewed for Code Compliance
 Universal Engineering Sciences

PARKER MYNCHENBERG & ASSOC. INC.
 PROFESSIONAL ENGINEERS LANDSCAPE ARCHITECTS
 1729 RIDGEWOOD AVENUE HOLLY HILL FLORIDA 32118
 (386) 671-6891 FAX (386) 671-2114

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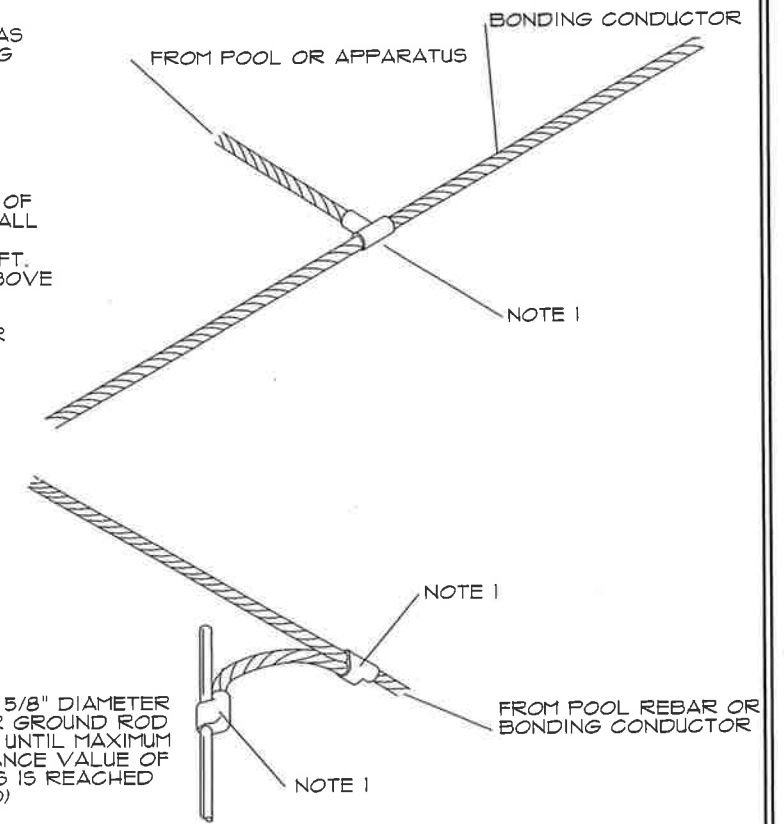


PARKER MYNCHENBERG, P.E. #32645

POOL BONDING NOTES:

- EQUIPOTENTIAL BONDING OF PERIMETER SURFACES REQUIRES A COPPER CONDUCTOR; MINIMUM #8 AWG BARE SOLID COPPER CONDUCTOR WHICH FOLLOWS THE CONTOUR OF THE PERIMETER SURFACE OF THE POOL FROM 18" TO 24" FROM THE INSIDE WALLS OF THE POOL AND WHICH IS SECURED WITHIN OR UNDER THE PERIMETER SURFACE 4" TO 6" BELOW SUBGRADE. THE PERIMETER BONDING SHALL BE ATTACHED TO THE POOL REINFORCING SHELL AT A MINIMUM OF 4 POINTS UNIFORMLY SPACED AROUND THE PERIMETER OF THE POOL.
- ALL UNDERGROUND OR UNDER SLAB CONNECTIONS SHALL BE BY LISTED MEANS PER NEC 250.8. BONDING CABLES UNDER SLAB SHALL BE PLACED AT THE BOTTOM OF EXCAVATION.
- WHEN REBAR IS UTILIZED FOR THE CONSTRUCTION OF PLANTERS AND FOOTERS ADJACENT TO THE POOL (WITHIN 5 FT), THIS REBAR SHALL BE BONDED USING #8 AWG BARE SOLID COPPER CONDUCTOR BY LISTED MEANS PER NEC 250.8 TO THE BONDING CONDUCTOR.
- LOCATION OF COPPER BONDING CONDUCTOR, BONDING JUMPERS, AND CONNECTIONS SHOWN ARE DIAGRAMMATIC ONLY. CONTRACTOR SHALL FIELD ROUTE TO DETERMINE EXACT LOCATION. BONDING CONDUCTOR SHALL CONFORM TO THE SHAPE OF THE POOL WHILE MAINTAINING SMOOTH RADIAL CURVES - NO 90° RADIUS SHALL BE PERMITTED.
- RESISTANCE OF THE GROUND SYSTEM SHALL NOT EXCEED 25 OHMS.
- IF REQUIRED, ALL GROUND RODS SHALL BE 5/8" COPPER CLAD STEEL, 8' LONG AND DRIVEN TO A DEPTH OF 28" BELOW FINISHED GRADE, MINIMUM, AND WHERE USED SHALL BE BONDED USING #8 AWG BARE SOLID COPPER CONDUCTOR BY LISTED MEANS PER NEC 250.8 TO THE BONDING CONDUCTOR.
- SPECIAL CASES MAY INCLUDE, BUT ARE NOT LIMITED TO, VANISHING EDGE POOLS, POOLS WITH PERIMETERS OF VARYING (VERTICAL) GRADES, DIMINISHED PERIMETER SURFACES LIKE EDGE PLANTERS, STOP/RETAINING WALLS, AND ZERO-LOT LINES. IN THESE CASES, THE BONDING CONDUCTOR SHALL BE INSTALLED IN ACCORDANCE WITH NEC 680.26, NOTE 1 (ABOVE), AND DIRECTION FROM THE AUTHORITY HAVING JURISDICTION (AHJ). THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF THE BONDING WITH THE AHJ IN THE DETERMINATION OF ITS TYPICAL APPLICATION OF THE NEC.

- COPPER BONDING CONDUCTOR SHALL BE BONDED TO THE POOL AND SPA REBAR AS SHOWN, 4 LOCATIONS, MINIMUM AT EACH SEPARATE BODY OF WATER, USING A #8 AWG BARE SOLID COPPER CONDUCTOR. FOR NON-CONDUCTIVE POOL SHELLS, BONDING AT 4 POINTS SHALL NOT BE REQUIRED.
- COPPER BONDING CONDUCTOR SHALL BE BONDED TO THE EQUIPMENT GROUND OF THE POOL PUMP MOTOR AND OTHER ELECTRICAL COMPONENTS AS REQUIRED BY NEC 680.26 (VERIFY LOCATIONS) USING #8 AWG BARE SOLID COPPER WIRE.
- COPPER BONDING CONDUCTOR SHALL BE BONDED TO ALL METALLIC COMPONENTS OF THE POOL AND SPA AND THE METAL STRUCTURES, INCLUDING, BUT NOT LIMITED TO, ALL HANDRAILS, DIVING BOARDS, AND LADDER GRABRAILS IN THE POOL AND SPA AND AND INCLUDE ALL METAL WIRING AND ALL FIXED METAL PARTS THAT ARE WITHIN 5 FT. HORIZONTALLY OF THE INSIDE WALL OF THE POOL (SPA) AND 12 FT VERTICALLY ABOVE THE MAXIMUM WATER LEVEL OF THE POOL USING #8 AWG BARE SOLID COPPER WIRE.
- ALL POOL AND SPA LIGHTING NICHES SHALL BE BONDED TO POOL AND SPA REBAR PER NEC 680. THE COPPER BONDING CONDUCTOR SHALL BE BONDED TO THE REBAR AT BOTH THE POOL AND THE SPA, PER NOTE 8, ABOVE, WHICH SHALL, IN TURN, PROVIDE BONDING OF THE LUMINAIRE NICHES.
- ELECTRICAL CONTRACTOR SHALL CALL FOR THE INSPECTION OF THE BONDING OF THE POOL AND ITS PERIMETER SURFACES PRIOR TO COVER-UP OF THESE AREAS.

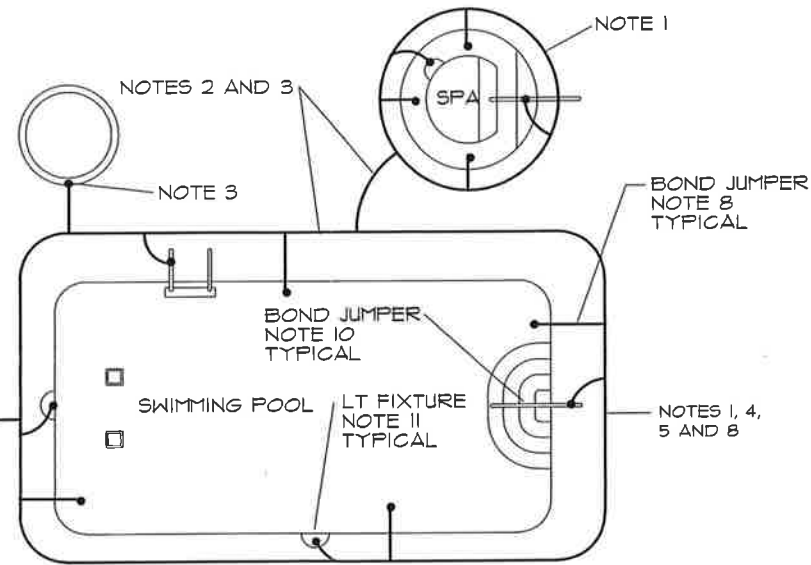


TYPICAL BONDING TYPES

NOT TO SCALE

NOTES:

- SPLICES (WELDED OR MECHANICAL) SHALL BE PERFORMED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

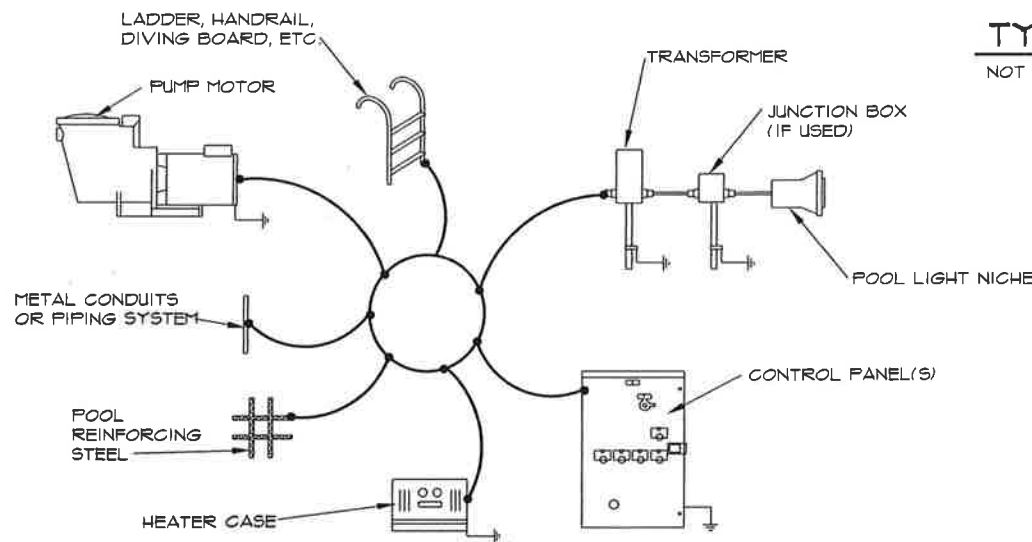


TYPICAL POOL BONDING PLAN

NOT TO SCALE

BONDING LEGEND

- BOND CONNECTION, PER NEC 250.8
- PARALLEL TAP CONNECTION, PER NEC 250.8
- UNDERGROUND BONDING CONDUCTOR, #8 AWG (MINIMUM)



TYPICAL POOL BONDING SCHEMATIC

NOT TO SCALE

SCHEMATIC NOTES:

- THE EQUIPOTENTIAL BONDING OF ALL CONDUCTIVE POOL SHELLS, PERIMETER SURFACES, METALLIC COMPONENTS, UNDERWATER LIGHTING, METAL FITTINGS, ELECTRICAL EQUIPMENT, AND METAL WIREWAYS/CONDUITS SHALL BE IN ACCORDANCE WITH NEC 680.26. OR, AS ACCEPTED BY THE AUTHORITY HAVING JURISDICTION (AHJ).



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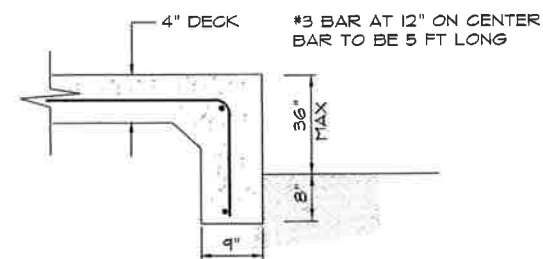
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PROFESSIONAL ENGINEERS LANDSCAPE ARCHITECTS
1729 RIDGEWOOD AVENUE HOLLY HILL FLORIDA 32118
(386) 677-6891 FAX (386) 677-2114

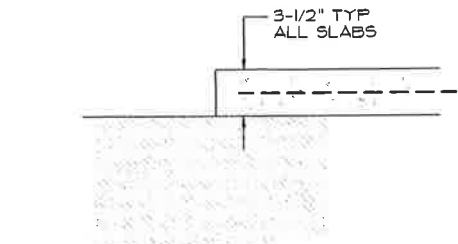
TYPICAL RESIDENTIAL SW/POOL DESIGN FOR ALL SEASONS POOLS & SERVICE

185 EAST AIRPORT BLVD.
SANFORD, FLORIDA
407-871-2020

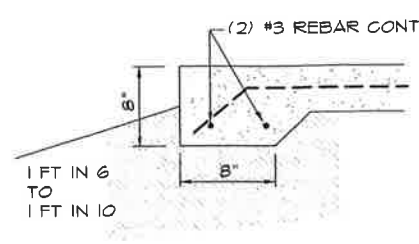
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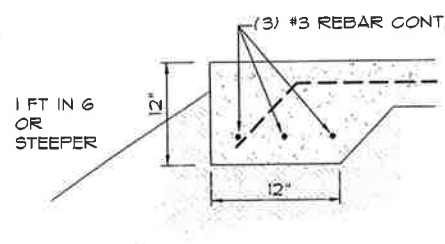
TURN DOWN FOOTER DETAIL



FLAT SLOPE/NO FOOTING TYPE 1



MODERATE SLOPE FOOTING TYPE 2

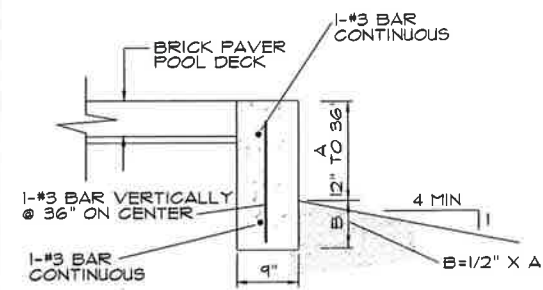
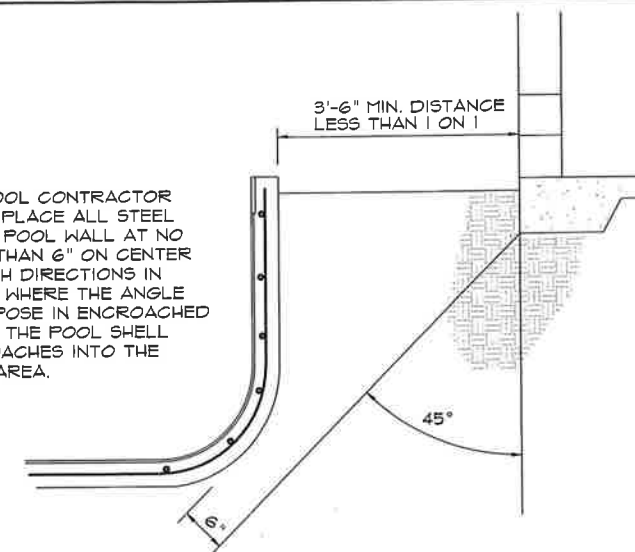


STEEP SLOPE FOOTING TYPE 2

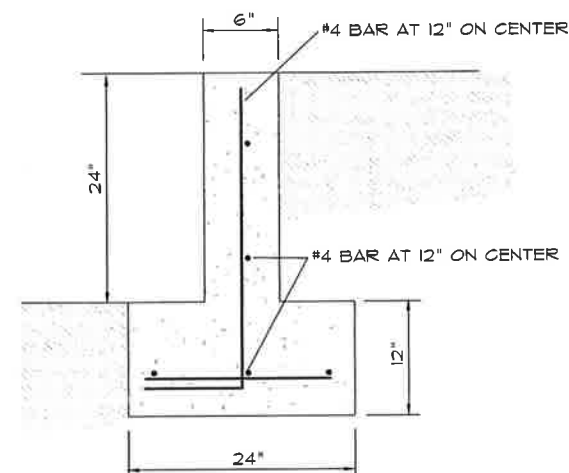
SLAB-FOOTING DETAILS

2500 MIN. GUNITE MAY BE SUBSTITUTED FOR 3000 PSI CONCRETE
 USE 6X6 10/10 W/M OR FIBER MESH
 CURE FOR ONE WEEK BEFORE INSTALLING ANCHORS.

THE POOL CONTRACTOR SHALL PLACE ALL STEEL IN THE POOL WALL AT NO MORE THAN 6" ON CENTER IN BOTH DIRECTIONS IN AREAS WHERE THE ANGLE OF REPOSE IS ENCLOSED ON OR THE POOL SHELL ENCLOSED INTO THE 1 TO 1 AREA.

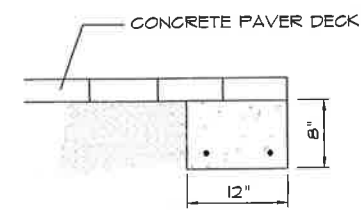


PAVER DECK TURNDOWN DETAIL



2 FT RETAINING WALL

RETAINING WALL 3000 PSI PUMP MIX CONCRETE PNEUMATICALLY APPLIED.



RIBBON FOOTING W/ PAVER DECK

3000 PSI CONCRETE W/ 2-#3 REBARS

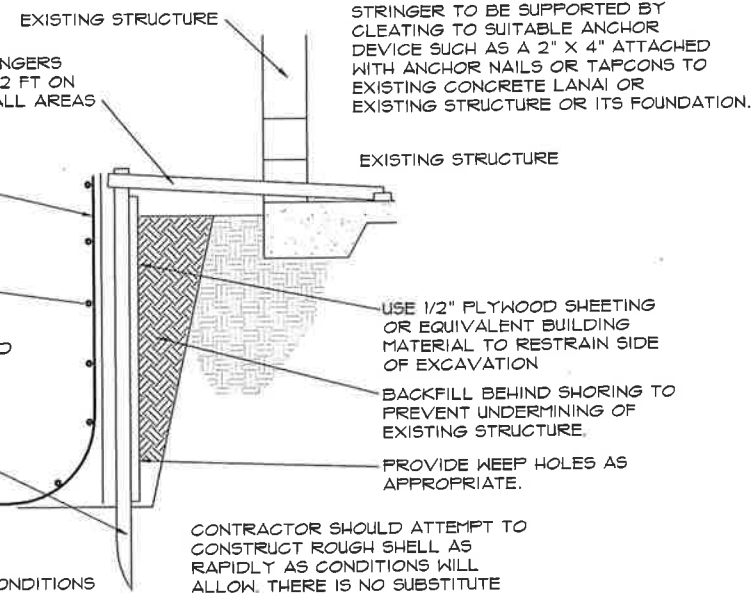
STEEL TEX FORM W/ STRUCTURAL STEEL IN PLACE TO BE INDEPENDENTLY SUPPORTED AWAY FROM SHORING.

THE POOL SHELL WALL SHALL BE CONSTRUCTED AT 6" THICKNESS. # 3 REBARS AT 6" ON CENTER BOTH WAYS IN AREAS THAT EXTEND INTO THE ANGLE OF REPOSE

STRINGER MAY BE DRIVEN INTO GROUND MIN. 4' OR OTHERWISE SUPPORTED TO PREVENT FROM KICKING OUT AT BASE.

SHORING DETAIL

IN LOCATIONS WHERE EXISTING FOUNDATION IS THREATENED BY UNDERMINING DUE TO ADVERSE CONDITIONS AT THE TIME OF EXCAVATION SHORING MAY BE REQUIRED.



STRINGER TO BE SUPPORTED BY CLEATING TO SUITABLE ANCHOR DEVICE SUCH AS A 2" X 4" ATTACHED WITH ANCHOR NAILS OR TAPCONS TO EXISTING CONCRETE LANAI OR EXISTING STRUCTURE OR ITS FOUNDATION.

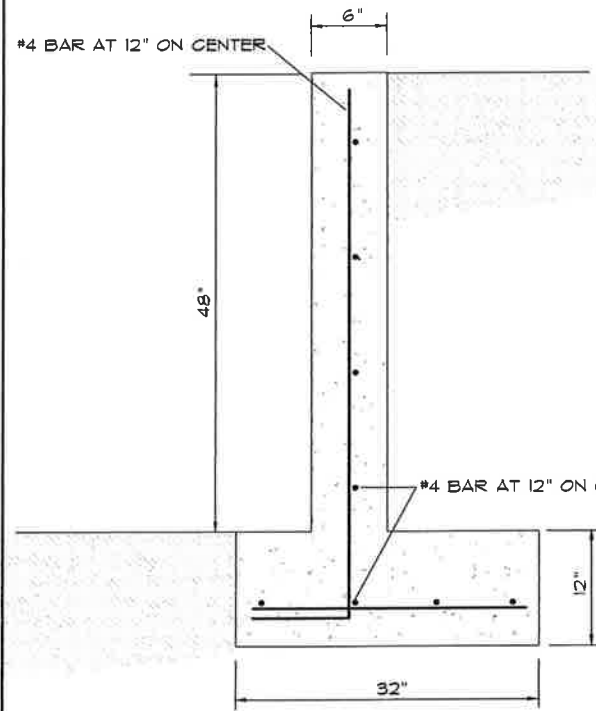
EXISTING STRUCTURE

USE 1/2" PLYWOOD SHEETING OR EQUIVALENT BUILDING MATERIAL TO RESTRAIN SIDE OF EXCAVATION

BACKFILL BEHIND SHORING TO PREVENT UNDERMINING OF EXISTING STRUCTURE.

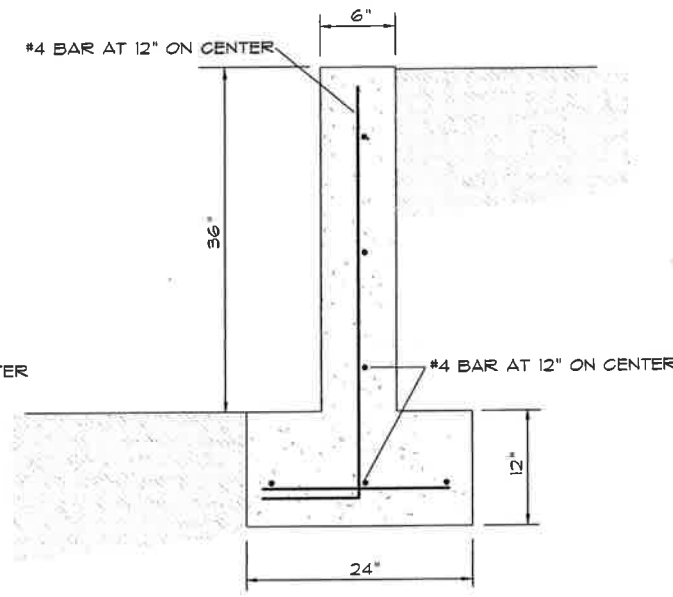
PROVIDE WEEP HOLES AS APPROPRIATE.

CONTRACTOR SHOULD ATTEMPT TO CONSTRUCT ROUGH SHELL AS RAPIDLY AS CONDITIONS WILL ALLOW. THERE IS NO SUBSTITUTE FOR RAPIDLY BACKFILLING EXCAVATION TO PREVENT UNDERMINING OF ADJACENT STRUCTURE.



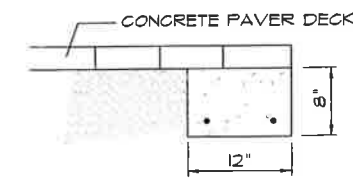
4 FT RETAINING WALL

RETAINING WALL 3000 PSI PUMP MIX CONCRETE PNEUMATICALLY APPLIED.



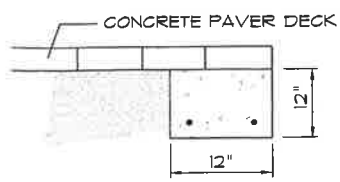
3 FT RETAINING WALL

RETAINING WALL 3000 PSI PUMP MIX CONCRETE PNEUMATICALLY APPLIED.



RIBBON FOOTING W/ PAVER DECK SIDE WALLS

3000 PSI CONCRETE W/ 2-#3 REBARS



RIBBON FOOTING W/ PAVER DECK FRONT WALL

3000 PSI CONCRETE W/ 2-#3 REBARS

Reviewed for Code Compliance
 Universal Engineering Sciences



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