

(305) 809-3956

DANIEL'S DEV. CO OF SW FLORIDA
P.O. BOX 7926
ST PETERSBURG FL 33734
(727) 400-7233

Valuation	0
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Construction of 329 sq ft pool and 64 sq ft spa. (noc
required). **No HARC required, per KP. HARC does not have
jurisdiction on pool/spa**
T/S: 10/29/2015 10:28 AM KEYWVXC ---

Other Fees	DCA SURCHARGE: FS553.721	6.20
	APPLICATION FEE POOL NEW	50.00
	EDUCATION FEE	2.00
	PLAN REVIEW FEE	88.62
	DBPR SURCHARGE: FS468.631	6.20

Fee summary	Charged	Paid	Credited	Due
Permit Fee Total	275.00	.00	.00	275.00
Other Fee Total	153.02	50.00	.00	103.02
Grand Total	428.02	50.00	.00	378.02

THE PROPOSED CONSTRUCTION IS PERMITTED ON CONDITION OF COMPLIANCE WITH ALL APPLICABLE CODES AND ORDINANCES AND IN CONFORMANCE WITH ALL PLANS, SPECIFICATIONS AND ESTIMATES SUBMITTED WITH THE SUBJECT APPLICATION. PERMIT VOID UNLESS CONSTRUCTION COMMENCED WITHIN 180 DAYS OF ISSUE.

Open: MEYER, D. Type: OC. Drawer: 1
Date: 11/12/15 50 Receipt no.: 3503
2015 4400

PT * BUILDING PERMITS-NEN
Trans number: 1.00 \$378.02
JN_VISA/MASTERC 13072236
\$378.02

Trans date: 11/12/15 Time: 9:22:10

DATE ISSUED

BY

COMBINATION APPLICATION: FLOODPLAIN, CONSTRUCTION AND HARC

\$50.00 APPLICATION FEE NON-REFUNDABLE



City of Key West

3140 FLAGLER AVENUE
KEY WEST, FLORIDA 33040

Phone: 305.809.3956

HARC PERMIT NUMBER	BUILDING PERMIT NUMBER 15-4480	INITIAL & DATE
FLOODPLAIN PERMIT		REVISION #
FLOOD ZONE AE7	PANEL #	ELEV. L. FL.
SUBSTANTIAL IMPROVEMENT <input type="checkbox"/> YES <input type="checkbox"/> NO		%

ADDRESS OF PROPOSED PROJECT:

RE # OR ALTERNATE KEY:

NAME ON DEED:

OWNER'S MAILING ADDRESS:

CONTRACTOR COMPANY NAME:

CONTRACTOR'S CONTACT PERSON:

ARCHITECT / ENGINEER'S NAME:

ARCHITECT / ENGINEER'S ADDRESS:

3725

3725 Eagle Ave.

RE# 00053670-000000 AK: 1054283

John and Oksana Evans

PHONE NUMBER 305-923-5484

3728 Eagle Ave.

EMAIL

Key West, Florida 33040

Daniels Development

PHONE NUMBER 239-219-6462

Steeven Knight / Craig Mulderig

EMAIL islandpsf1@gmail.com

Unique Engineering / Doug Hall

PHONE NUMBER 813-299-5519

4177 Corporate Court

EMAIL

Palm Harbor, Florida 34683

HARC: PROJECT LOCATED IN HISTORIC DISTRICT OR IS CONTRIBUTING: ☐ YES ☒ NO (SEE PART C FOR HARC APPLICATION.)

CONTRACT PRICE FOR PROJECT OR ESTIMATED TOTAL FOR MAT'L., LABOR & PROFIT:

88,618.00

FLORIDA STATUTE 837.06: WHOEVER KNOWINGLY MAKES A FALSE STATEMENT IN WRITING AND WITH THE INTENT TO MISLEAD A PUBLIC SERVANT IN THE PERFORMANCE OF HIS OR HER OFFICIAL DUTY SHALL BE GUILTY OF A MISDEMEANOR OF THE SECOND DEGREE PUNISHABLE PER SECTION 775.082 OR 775.083.

PROJECT TYPE:	<input checked="" type="checkbox"/> ONE OR TWO FAMILY	<input type="checkbox"/> MULTI-FAMILY	<input type="checkbox"/> COMMERCIAL	<input type="checkbox"/> NEW	<input type="checkbox"/> REMODEL
	<input type="checkbox"/> CHANGE OF USE / OCCUPANCY	<input type="checkbox"/> ADDITION	<input type="checkbox"/> SIGNAGE	<input type="checkbox"/> WITHIN FLOOD ZONE	
	<input type="checkbox"/> DEMOLITION	<input type="checkbox"/> SITE WORK	<input type="checkbox"/> INTERIOR	<input type="checkbox"/> EXTERIOR	<input type="checkbox"/> AFTER-THE-FACT

DETAILED PROJECT DESCRIPTION INCLUDING QUANTITIES, SQUARE FOOTAGE ETC., Construction of 329 sq. ft. pool and 64 sq.ft. spa

No HARC req'd, per KP 10/29/15

HARC does not have jurisdiction on pool/spa.

I'VE OBTAINED ALL NECESSARY APPROVALS FROM ASSOCIATIONS, GOVT AGENCIES AND OTHER PARTIES AS APPLICABLE TO COMPLETE THE DESCRIBED PROJECT.	
OWNER PRINT NAME:	QUALIFIER PRINT NAME: Scott E Badziak
OWNER SIGNATURE:	QUALIFIER SIGNATURE: [Signature]
Notary Signature as to owner:	Notary Signature as to qualifier: [Signature]
STATE OF FLORIDA; COUNTY OF MONROE, SWORN TO AND SCRIBED BEFORE ME THIS ____ DAY OF ____, 20__.	STATE OF FLORIDA; COUNTY OF MONROE, SWORN TO AND SCRIBED BEFORE ME THIS 28 DAY OF October, 2015.
Personally known or produced _____ as Identification.	<p>CHRISTINE L. HALL MY COMMISSION # FF 102225 EXPIRES: April 19, 2018 Bonded thru Budget Notary Services</p>
Personally known or produced _____ as Identification.	Personally known or produced _____ as Identification.

Planning Department Nov. 1, 2015 M Lobo

45016-13521-01K

PART B:**SUPPLEMENTARY PROJECT DETAILS TO AVOID DELAYS / CALL-BACKS**

PROPERTY STRUCTURES AFFECTED BY PROJECT: ☐ MAIN STRUCTURE ☐ ACCESSORY STRUCTURE ☒ SITE

ACCESSORY STRUCTURES: ☐ GARAGE / CARPORT ☐ DECK ☐ FENCE ☐ OUTBUILDING / SHED

FENCE STRUCTURES: ☐ 4 FT. ☐ 6 FT. SOLID ☐ 6 FT. / TOP 2 FT. 50% OPEN

POOLS: ☒ INGROUND ☐ ABOVE GROUND ☒ SPA / HOT TUB ☒ PRIVATE ☐ PUBLIC

PUBLIC POOLS REQUIRE BD. OF HEALTH LICENSE APPLICATION AT TIME OF CITY APPLICATION.

PUBLIC POOLS REQUIRE BD. OF HEALTH LICENSE PRIOR TO RECEIVING THE CITY CERTIFICATE OF OCCUPANCY.

ROOFING: ☐ NEW ☐ ROOF-OVER ☐ TEAR-OFF ☐ REPAIR ☐ AWNING

☐ 5 V METAL ☐ ASPLT. SHGLS. ☐ METAL SHGLS. ☐ BLT. UP ☐ TPO ☐ OTHER

FLORIDA ACCESSIBILITY CODE: ☐ 20% OF PROJECT FUNDS INVESTED IN ACCESSIBILITY FEATURES.

SIGNAGE: ☐ # OF SINGLE FACE ☐ # OF DOUBLE FACE ☐ REPLACE SKIN ONLY ☐ BOULEVARD ZONE

☐ POLE ☐ WALL ☐ PROJECTING ☐ AWNING ☐ HANGING ☐ WINDOW

SQ. FT. OF EACH SIGN FACE:

SUBCONTRACTORS / SPECIALTY CONTRACTORS SUPPLEMENTARY INFORMATION:

☐ MECHANICAL: ☐ DUCTWORK ☐ COMMERCIAL EXH. HOOD ☐ INTAKE / EXH. FANS ☐ LPG TANKS

A/C: ☐ COMPLETE SYSTEM ☐ AIR HANDLER ☐ CONDENSER ☐ MINI-SPLIT

☒ ELECTRICAL: ☒ LIGHTING ☐ RECEPTACLES ☒ HOOK-UP EQUIPMENT ☐ LOW VOLTAGE

SERVICE: ☐ OVERHEAD ☐ UNDERGROUND ☐ 1 PHASE ☐ 3 PHASE _____ AMPS

☒ PLUMBING: ☐ ONE SEWER LATERAL PER BLDG. ☐ INGROUND GREASE INTCPTRS. ☐ LPG TANKS

RESTROOMS: ☐ MEN'S ☐ WOMEN'S ☐ UNISEX ☐ ACCESSIBLE

PART C:**HARC APPLICATION FOR A CERTIFICATE OF APPROPRIATENESS**

APPLICATION FEES: PAINTING SINGLE FAMILY: \$10 ☐ STAFF APPROVAL: \$50 ☐ COMMISSION REVIEW \$100 ☐

PLEASE ATTACH APPROPRIATE VARIANCES / RESOLUTIONS FROM HARC, PLANNING BOARD OR TREE COMMISSION.

ATTENTION: NO BUILDING PERMITS WILL BE ISSUED PRIOR TO HARC APPROVAL.

PLEASE SEND ELECTRONIC SUBMISSIONS TO: harc@cityofkeywest-fl.gov

INDICATE TYPE OF CERTIFICATE OF APPROPRIATENESS: ☒ GENERAL ☐ DEMOLITION ☐ SIGN ☐ PAINTING ☐ OTHER

ADDITIONAL INFORMATION: _____

PROJECT SPECIFICATIONS: PLEASE PROVIDE PHOTOS OF EXISTING CONDITIONS, PLANS, PRODUCT SAMPLES, TECHNICAL DATA

ARCHITECTURAL FEATURES TO BE ALTERED:	ORIGINAL MATERIAL:	PROPOSED MATERIAL:

DEMOLITION: PLEASE FILL OUT THE HARC APPENDIX FOR PROPOSED DEMOLITION.

DEMOLITION OF HISTORIC STRUCTURES IS NOT ENCOURAGED BY THE HISTORIC ARCHITECTURAL REVIEW COMMISSION.

SIGNAGE: (SEE PART B) ☐ BUSINESS SIGN ☐ BRAND SIGN ☐ OTHER: _____

BUSINESS LICENSE #

IF FAÇADE MOUNTED, SQ. FT. OF FAÇADE _____

SIGN SPECIFICATIONS		
SIGN COPY:	PROPOSED MATERIALS:	SIGNS WITH ILLUMINATION:
		TYPE OF LTG.:
		LTG. LINEAL FTG.:
MAX. HGT. OF FONTS:		COLOR AND TOTAL LUMENS:
IF USING LIGHT FIXTURES PLEASE INDICATE HOW MANY: INCLUDE SPEC. SHEET WITH LOCATIONS AND COLORS.		

OFFICIAL USE ONLY:			HARC STAFF OR COMMISSION REVIEW		
<input type="checkbox"/> APPROVED	<input type="checkbox"/> NOT APPROVED	<input type="checkbox"/> DEFERRED FOR FUTURE CONSIDERATION	<input type="checkbox"/> TABLED FOR ADD'L. INFO.	<input type="checkbox"/>	
HARC MEETING DATE:		HARC MEETING DATE:		HARC MEETING DATE:	
REASONS OR CONDITIONS:					
STAFF REVIEW COMMENTS:					
HARC PLANNER SIGNATURE AND DATE:			HARC CHAIRPERSON SIGNATURE AND DATE:		

PART D: STATE OF FLORIDA OFFICIAL NOTIFICATIONS AND WARNINGS

FLORIDA STATUTE 713.135: 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 WITH THE COUNTY RECORDER AND A COPY POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING A NOTICE.

FLORIDA STATUTE 469: ABESTOS ABATEMENT. AS OWNER / CONTRACTOR / AGENT OF RECORD FOR THE CONSTRUCTION APPLIED FOR IN THIS APPLICATION, I AGREE THAT I WILL COMPLY WITH THE PROVISIONS F. S. 469.003 AND TO NOTIFY THE FLORIDA D. E. P. OF MY INTENT TO DEMOLISH / REMOVE ASBESTOS. IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT APPLICATION, THERE MAY BE DEED RESTRICTIONS AND / OR ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF MONROE COUNTY AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENT ENTITIES SUCH AS AQUADUCT AUTHORITY, FLORIDA DEP OR OTHER STATE AGENCIES; ARMY CORPS OF ENGINEERS OR OTHER FEDERAL AGENCIES.

FEDERAL LAW REQUIRES LEAD PAINT ABATEMENT PER THE STANDARDS OF THE USDEP ON STRUCTURES BUILT PRIOR TO 1978.

OFFICIAL USE ONLY BY PLANS EXAMINER OR CHIEF BUILDING OFFICIAL:				CBO OR PL. EXAM. APPROVAL:
HARC FEES:	BLDG. FEES:	FIRE MARSHAL FEE:	IMPACT FEES:	
	250.00 75.00 88.60 6.20 6.20 2.00 428.02			J.C. DATE: 11-02-2015



Scott P. Russell, CFA
Property Appraiser
Monroe County, Florida

Key West (305) 292-3420
Marathon (305) 289-2550
Plantation Key (305) 852-7130

Property Record Card -

Maps are now launching the new map application version.

Alternate Key: 1054283 Parcel ID: 00053670-000000

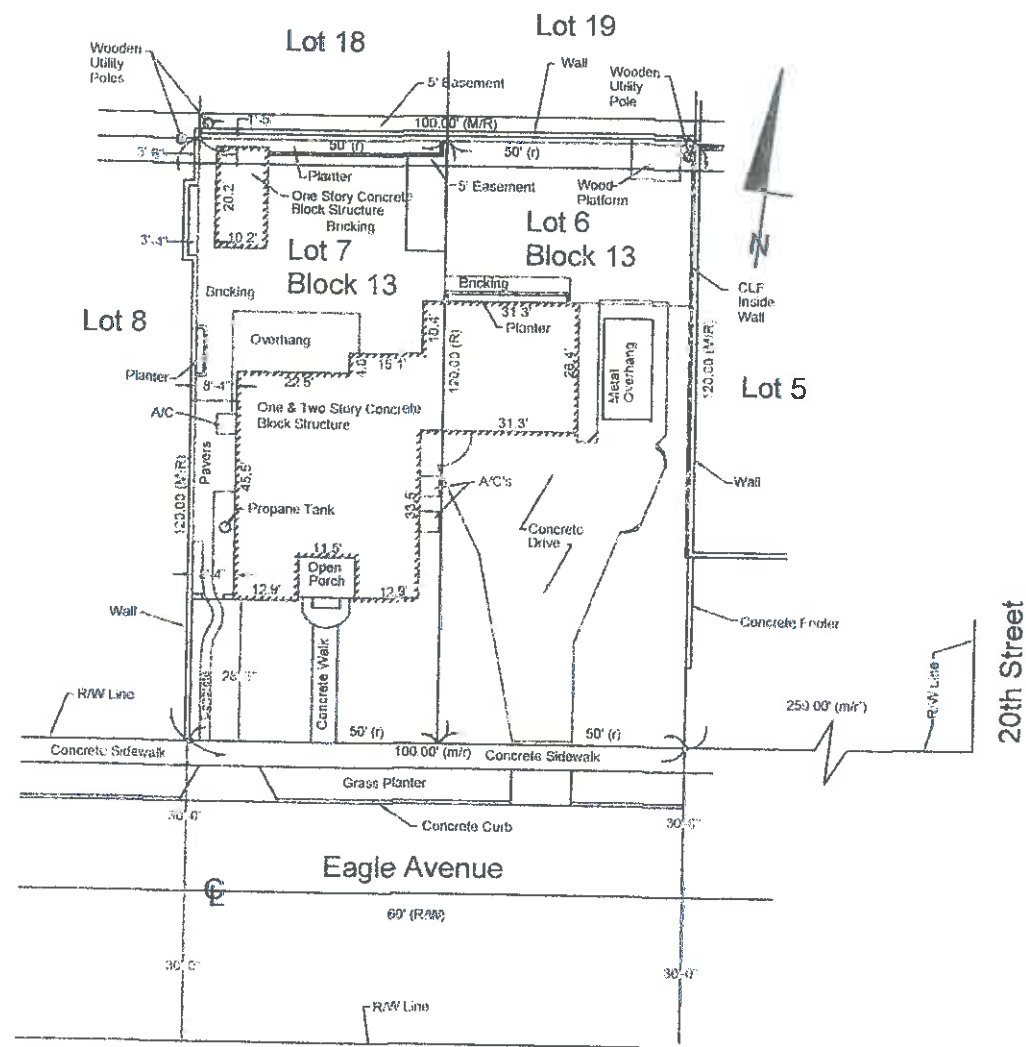
Ownership Details

Mailing Address:
EVANS JOHN AND OKSANA
3725 EAGLE AVE
KEY WEST, FL 33040-4524

Property Details

PC Code: 01 - SINGLE FAMILY
Millage Group: 10KW
Affordable Housing: No
Section-Township-Range: 34-67-25
Property Location: 3725 EAGLE AVE KEY WEST
Subdivision: Key West Foundation Co's Plat No 1
Legal Description: KW KW FWDN SUB PLAT 1 PB1-155 LOTS 6 AND 7 SQR 13 OR246-454/55 OR314-106/07 OR665-108 OR2087-1540 OR2409-2365/66C/T OR2416-1310/11ORD OR2453-115C/T OR2463-1166/78R/S OR2639-1990D/C OR2712-1944/46

Click Map Image to open interactive viewer



EXISTING SITE PLAN

TOTAL LOT SIZE = 12,000 SF
 TOTAL EXISTING IMPERVIOUS AREA = 5,582 SF (46.5%)
 TOTAL OPEN SPACE AREA = 6,418 SF (53.5%)

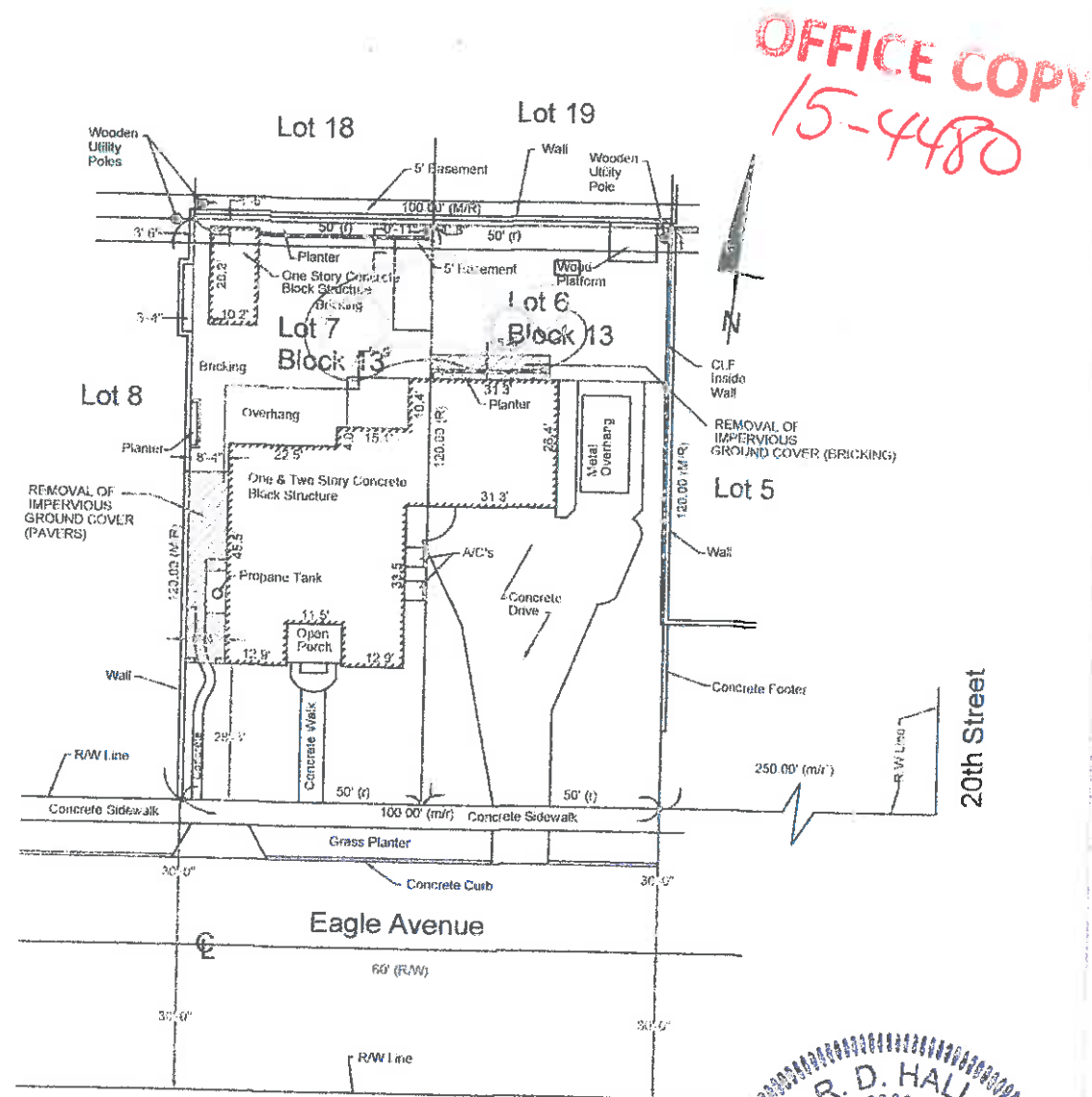
KEYS ENERGY SERVICES (KEYS) HAS APPROVED METER LOCATION ONLY. THE CUSTOMER NEEDS TO CONTACT KEYS ENGINEERING DEPARTMENT PRIOR TO INSTALLATION, TO VERIFY LOCATION.

1. All electrical work must meet all current City and/or County Codes, KEYS' policies and National Electric Safety Code Rules And Regulations.

Any revisions to these plans must be resubmitted for KEY to review.

Keys OK with proposed pool location, pool may not encroach into utility easement.

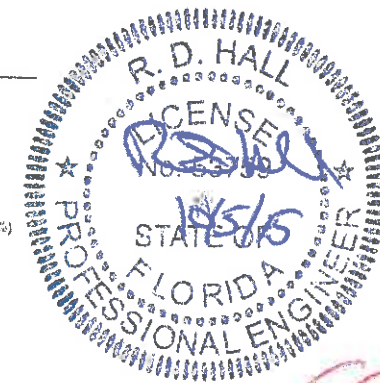
Approved By Cassie
 Date 10/20/2015



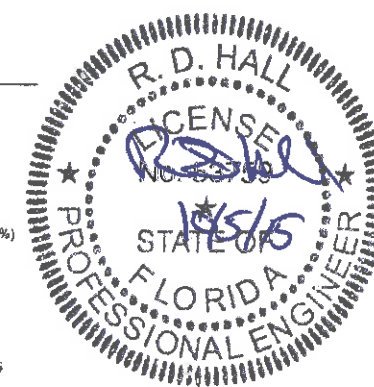
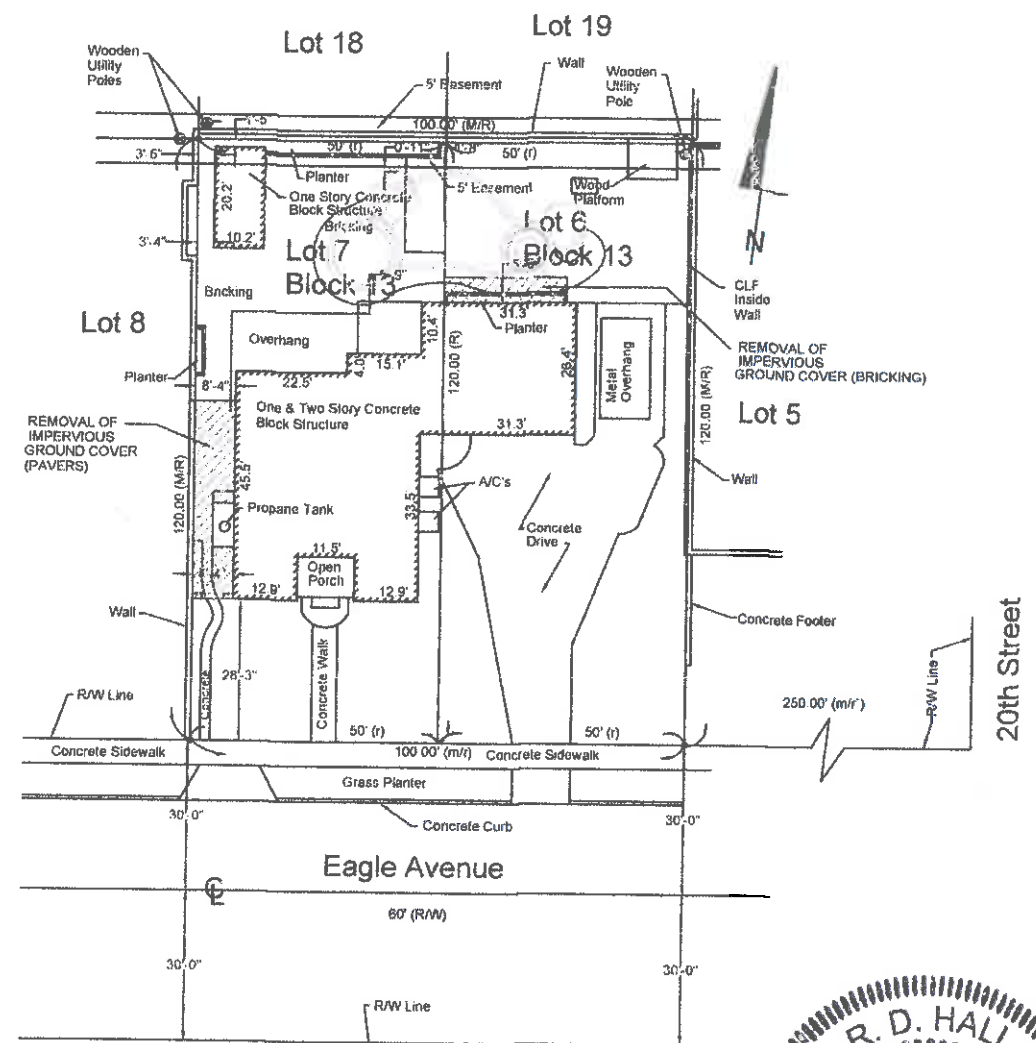
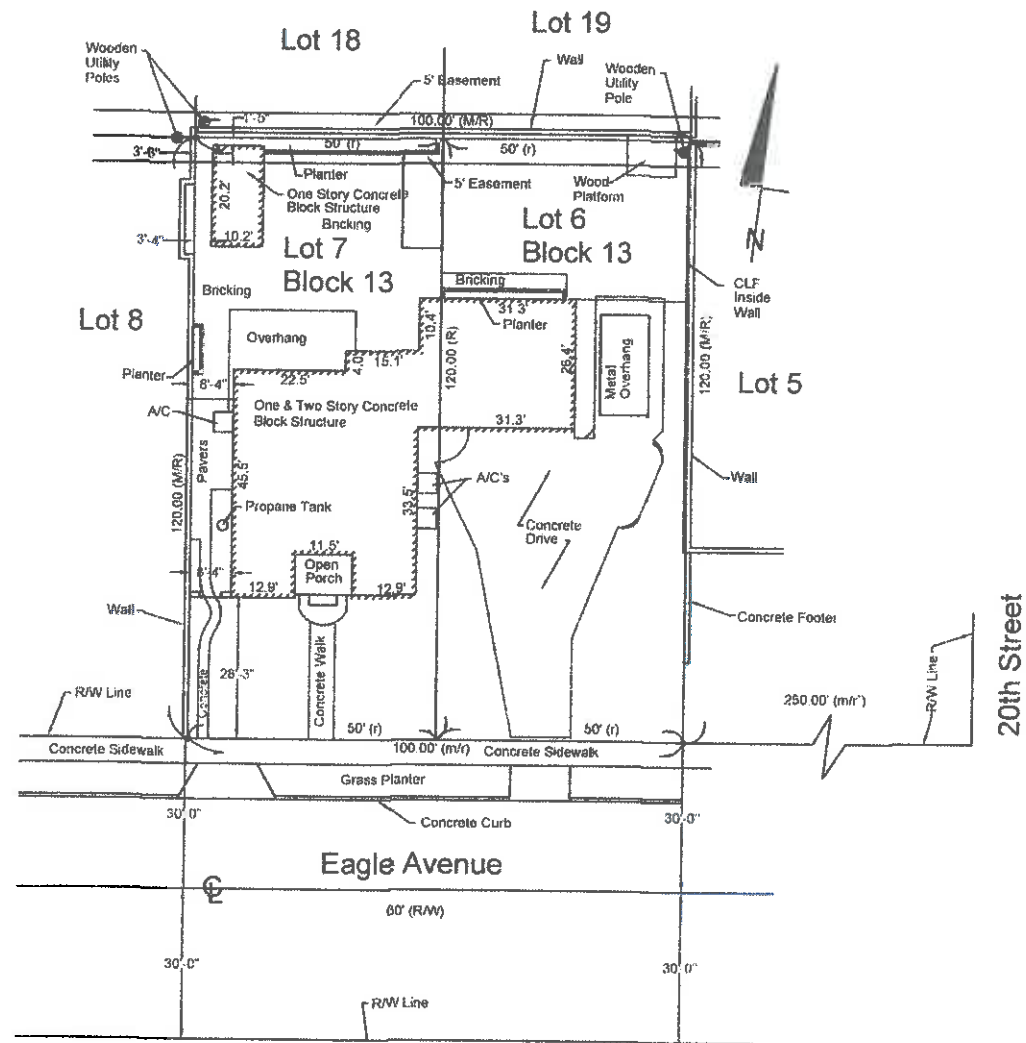
PROPOSED SITE PLAN

TOTAL LOT SIZE = 12,000 SF
 TOTAL EXISTING IMPERVIOUS AREA = 5,582 SF (46.5%)
 PROPOSED IMPERVIOUS MODIFICATIONS:
 PROPOSED POOL = 329 SF *
 PROPOSED POOL DECK = 182 SF
 STORAGE AT GRADE = 62 SF
 PROPOSED POOL EQUIPMENT = 15 SF
 REMOVAL OF EXISTING IMPERVIOUS SURFACE = 415
 NET IMPERVIOUS CHANGE = 688 SF
 TOTAL PROPOSED IMPERVIOUS AREA = 6,270 SF (52.2%)
 TOTAL OPEN SPACE AREA = 5,730 SF (47.8%)

* 511 TOTAL SQ. FT. POOL - 329 SQ. FT. CHANGE REPLACEMENT OF EXISTING PERVIOUS



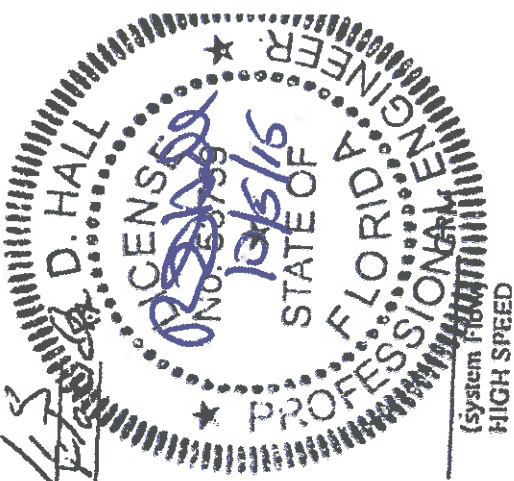
PLANS REVIEWED BY BUILDING DEPT. 11/2/15
 I HEREBY AGREE TO COMPLY WITH ALL ORDINANCES OF THE CITY OF KEY WEST AND ALL FEDERAL, STATE AND MONROE COUNTY LAWS WHETHER SHOWN ON THIS PLAN OR NOT.
 OWNER/AGENT [Signature]



EXISTING TOOL SITE PLAN
 JOHN EVANS

SIMPLIFIED TOTAL DYNAMIC HEAD (TDH) CALCULATIONS WORKSHEET

Home Owner/Property Name: John & CKSANA FVADIS Date: 9/29/13
Property Address: 3725 Eagle City: Key West



"This form must be filled out for each pump on the above listed project"

DETERMINE MAXIMUM SYSTEM FLOW RATE:

1. Calculate Pool Volume: $\frac{511}{(\text{surf. Area})} \times \frac{4}{(\text{Avg. Depth})} \times 7.48 (\text{gal/cubic foot}) = \frac{15289}{(\text{Vol. In Gal.})} \text{ Gal.}$
2. Determine preferred Turnover Time in Hours: $\frac{2.3}{(\text{hours})} \times 60 (\text{min/hour}) = \frac{139}{(\text{Turnover in Min.})}$
3. Determine Max. Flow Rate: $\frac{15289}{(\text{Vol. In Gal.})} \times \frac{139}{(\text{Turnover Mins.})} = \frac{110}{(\text{Pool Flow Rate})} + \frac{139}{(\text{Turnover in Min.})}$
4. Spa Jets: $\frac{8}{(\text{No. of Jets})} \times \frac{13}{(\text{Jet Flow})} \text{ gpm per jet} = \frac{104}{(\text{total jet flow rate})} \text{ GPM (Spa Flow Rate)}$

(For single pump /spa combo, use the higher of No. 3 or No. 4 in the following calculations for the pool and spa)
110
Larger System Flow

DETERMINE PIPE SIZE:

Branch Piping to be: 3 to keep velocity @ 6 fps max. at 110 gpm Max. System Flow Rate
Trunk Piping to be: 3 1/2 to keep velocity @ 8 fps max. at 110 gpm Max. System Flow Rate
Return Piping to be: 3 1/2 to keep velocity @ 10 fps max. at 110 gpm Max. System Flow Rate

DETERMINE SIMPLIFIED TDH:

1. Friction loss (in suction pipe) in 3" inch pipe per 1 ft 110 gpm = 0.04 (from pipe flow/friction loss chart)
2. Friction loss (in return pipe) in 2.5" inch pipe per 1 ft. 110 gmp = 0.13 (from pipe flow/friction loss chart)
3. Length of Suction Pipe (in linear feet) 30 x 0.04 = 1.2 (from pipe flow/friction loss chart)
4. Length of Return Pipe (in linear feet) 58 x 0.13 = 7.5

TDH in Piping: 17.8 (add 3 and 4 from above)
Filter loss in TDH: 16.6 (from filter data sheet)
Heater loss in TDH: 10.0 (from heater data sheet)
Total all other loss: 16.0 (Record additional loss items on "ADDITIONAL NOTES" - Sheet 2)
Total simplified TDH: 60.4

FLOW AND FRICTION LOSSES PER FOOT-SCH 40 PVC PIPE					
Pipe sz.	Velocity-Feet Per Second				
	6 FT/S	8 FT/s	10 FT/s	12 FT/s	14 FT/s
1"	16 gpm.	0.14'	21 gpm.	0.23'	26 gpm.
1 1/2"	37 gpm.	0.08'	50 gpm.	0.14'	62 gpm.
2"	62 gpm.	0.06'	82 gpm.	0.10'	103 gpm.
2 1/2"	88 gpm.	0.05'	117 gpm.	0.09'	146 gpm.
3"	138 gpm.	0.04'	181 gpm.	0.07'	227 gpm.
4"	234 gpm.	0.03'	313 gpm.	0.05'	392 gpm.
5"	534 gpm.	0.02'	712 gpm.	0.03'	890 gpm.

SIMPLIFIED TOTAL DYNAMIC HEAD (TDH) CALCULATIONS WORKSHEET

Pump Selection: JANCOY VSS NP (manufacturer) 25 x 27 (size / HP) Using pump curve for Simplified TDH and System Flow Rate.
Main Drain Cover: Custom Model 25516-400 (model) 416 (Max under flow rate) 5 years (Cover Replacement Date)
(System Flow Rate must not exceed approved cover flow rate)

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

MAIN DRAIN PLUMBING METHOD USED: (Check one)

- ☒ A. Dual outlets in parallel to one pump
☐ B. Dual outlets in parallel to dual pumps in parallel outlets
☐ C. Parallel dual outlets to two pumps
☐ D. Dual outlets on different planes
☐ E. Three or more outlets in parallel symmetric piping
☐ F. Three or more outlets in parallel eccentrically tapped piping
☐ G. Three or more outlets in parallel looped piping
☐ H. Single unblockable channel outlets to single pump (channel drain @316 gpm. Max. flow rate).
☐ I. Single unblockable channel outlets to two pumps (channel drain @ 217 w/2 ports & 278 gpm w/3 ports (See Note 4)

Two Pumps each having Dual outlets
1) Filter Pump
1) Feature Pump

Notes:

1. If a variable speed pump is used, use the max. pump flow in calculations.
2. For side wall drains, use appropriate side wall drain flow as published by manufacturer.
3. Insert manufacturer's name and approved maximum flow.
4. See installation instruction for number of ports to be used.
5. In floor suction outlets cover/grate must conform to most recent edition of ASME/ANSI A112.19.8 and be embossed with that edition approval.
6. Pump and Filter make, model and location cannot change without submitting a revised plan TDH worksheet.
7. Pump curve for pump specified shall be attached to these sheets.

ADDITIONAL NOTES

Additional notes estimating Head Losses in Fittings
45, 90 and Tees

Scott Bodziak

Contractor Name:

CBC 059051

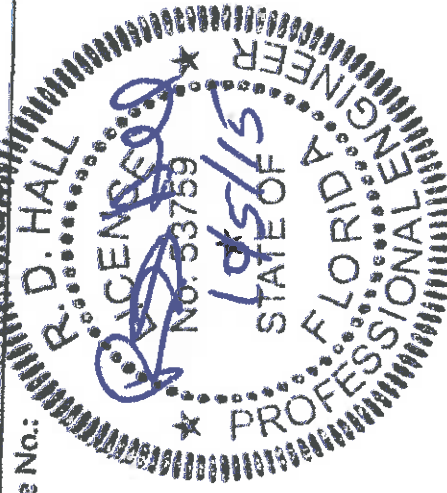
Contractor License No.

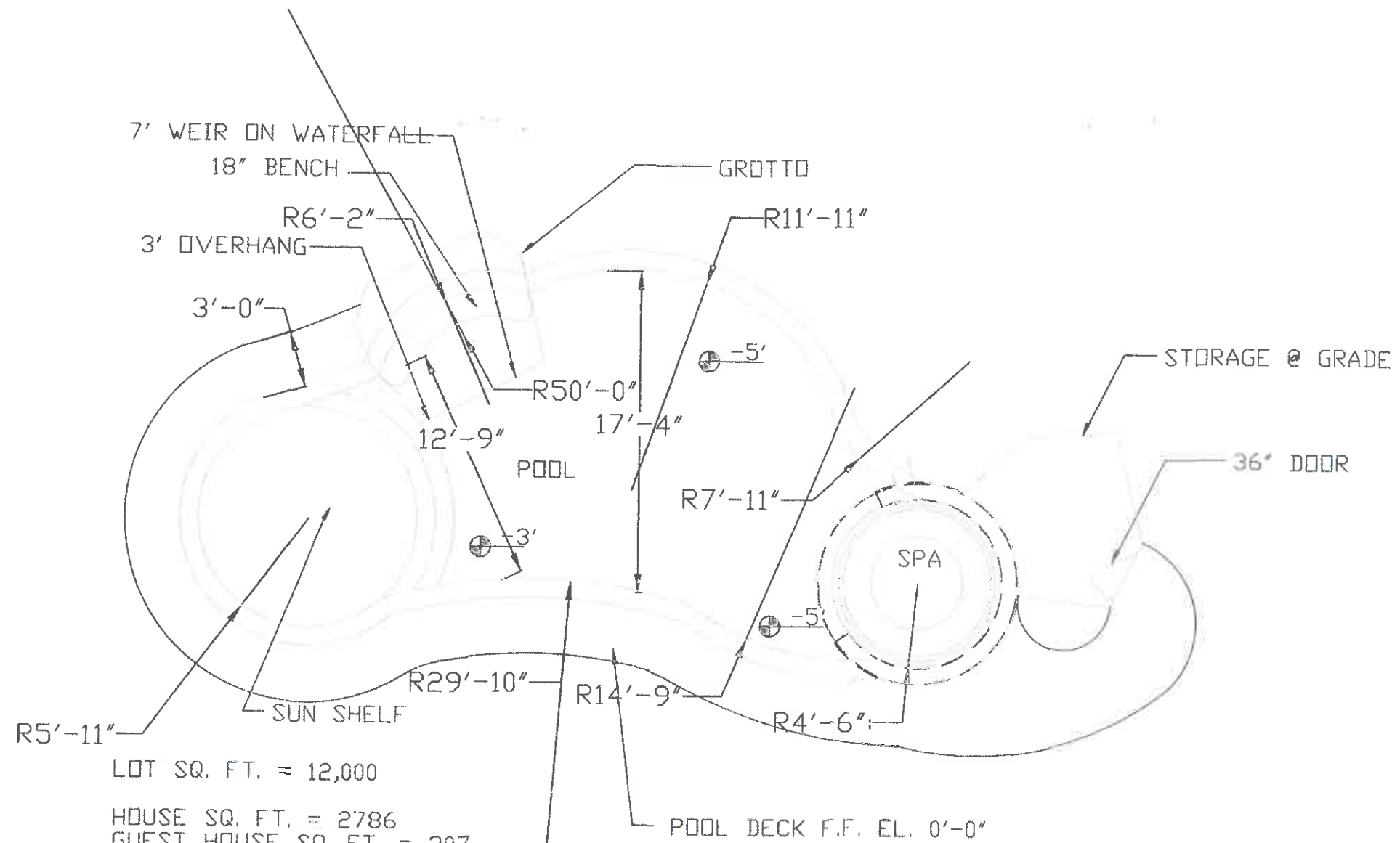
(239) 219 6443

Telephone No.:

TS/aobps1@gmail.com

E-Mail Address:





LOT SQ. FT. = 12,000
 HOUSE SQ. FT. = 2786
 GUEST HOUSE SQ. FT. = 207
 CONC. DRIVE SQ. FT. = 2021
 CONC. WALK SQ. FT. = 158
 CONC. PAVERS SQ. FT. = 271
 A/C PADS SQ. FT. = 32
 BRICKING SQ. FT. = 75
 SUB TOTAL 1 SQ. FT. = 5582
 POOL DECK SQ. FT. = 320
 POOL SQ. FT. = 525
 SPA SQ. FT. = 64
 STORAGE SQ. FT. = 62
 GROTTO SQ. FT. = 42
 SUB TOTAL 2 SQ. FT. = 1013
 GRAND TOTAL SQ. FT. = 6595

JOHN EVANS IMPERVIOUS
 SCALE: 3/32"=1'-0"

POOL LAYOUT
 SCALE: 3/32"=1'-0"

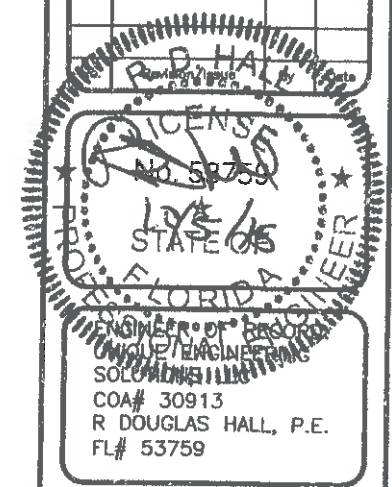
PLANS PREPARED FOR:
 ISLAND CONSTRUCTION

THIS ENGINEERING DRAWING IS GIVEN IN CONFIDENCE
 NO USE OR DISSEMINATION MAY BE MADE WITHOUT
 PRIOR WRITTEN CONSENT OF THE ENGINEER. ALL
 RIGHTS ARE HEREBY RESERVED.
 WRITTEN DIMENSIONS ON DRAWINGS SHALL HAVE
 PRECEDENCE OVER SCALED DIMENSIONS.
 CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE
 FOR ALL DIMENSIONS AND CONDITIONS OF THE
 PROJECT. R. D. HALL, P.E. MUST BE NOTIFIED
 OF ANY VARIATIONS FROM DIMENSIONS AND
 CONDITIONS SHOWN BY THESE DRAWINGS. WHERE
 REQUIRED, SHOP DETAILS AND DRAWINGS MUST BE
 SUBMITTED TO R. D. HALL, P.E. FOR APPROVAL.
 BEFORE PROCEEDING WITH FABRICATION.
 PLANS ARE DESIGNED PER FLORIDA BUILDING
 CODE, 8th EDITION (2014) AND 2014 NATIONAL
 ELECTRIC CODE, UNLESS NOTED OTHERWISE.

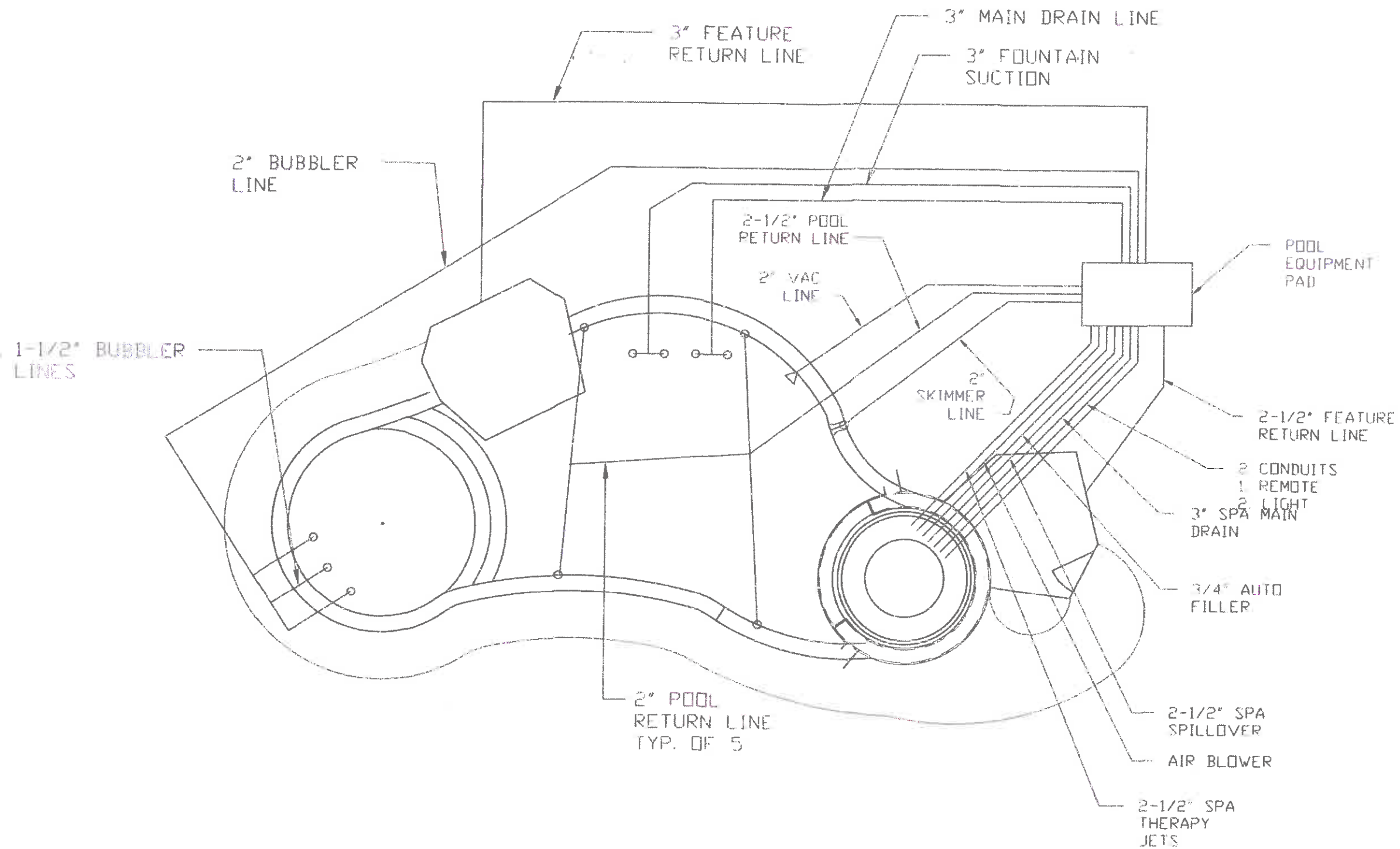
SITE PLAN/POOL LAYOUT

EVANS_RESIDENCE

3725_EAGLE_AVENUE
 KEY_WEST_FL_33040



Date	10/1/15	RP1
Drawn by:	L.H.	
Checked by:	S.K.	
Job No.	5010	
Scale	SCALE	



PLUMBING PLAN
SCALE: 3/32"=1'-0"

PLANS PREPARED FOR:
ISLAND CONSTRUCTION

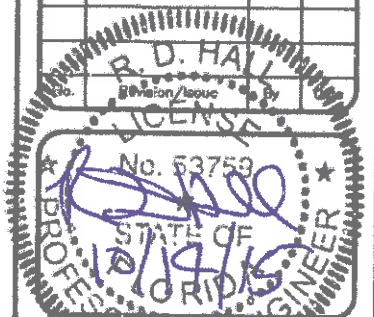
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REQUIRED, SHOP DETAILS AND DRAWINGS MUST BE
SUBMITTED TO ENGINEER FOR APPROVAL.
BEFORE PROCEEDING WITH FABRICATION.
PLANS ARE DESIGNED PER FLORIDA BUILDING
CODE, 9th EDITION (2014) AND 2014 NATIONAL
ELECTRIC CODE, UNLESS NOTED OTHERWISE.

POOL PLUMBING PLAN

EVANS_RESIDENCE

3725_EAGLE_AVENUE
KEY_WEST_FL



ENGINEERING RECORD:
UNIQUE ENGINEERING
SOLUTIONS LLC
COA# 30913
R DOUGLAS HALL, P.E.
FL# 53759

Date	8/21/15	RP2
Drawn by:	LH	
Checked by:	S.K.	
Job No.	5010	
Scale	SCALE	

2014 Florida Building Code 6th Edition R4501.3

R4501.3 Mechanical Requirements. Unless otherwise specified in this code, all piping, equipment and materials used in the process piping system of swimming pools that are built in place shall conform to the *Florida Building Code, Plumbing*.

R4501.4 Approvals.

R4501.4.1 Compliance. All Materials, piping, valves equipment or appliances entering into the construction of swimming pools or portions thereof shall be of a type complying with code or of a type recommended and approved by a nationally recognized testing agency or conforming to other recognized standards acceptable to the administrative authority.

R4501.4.2 Items not covered. For any items not specifically covered in these requirements, the administrative authority is hereby authorized to require that all equipment, materials, methods of construction and design features shall be proven to function adequately, effectively and without excessive maintenance and operational difficulties.

R4501.4.2.1 Flood hazard areas. Pools installed in flood hazard areas established in Section R322 shall comply with Section R322.2.4 (A Zones) or R322.3.3.1 in coastal high-hazard areas (V Zones).

R4501.4.3 Applicant Responsibility. It shall be the responsibility of the applicant to provide such data, tests or other adequate proof that the device, material or product will satisfactorily perform the function for which it is intended, before such item shall be approved or accepted for tests.

R4501.5 Alternate materials and methods of construction.

R4501.5.1 Approval and authorization. The provisions of this code are not intended to prevent the use of any alternate material, method of construction, appliance or equipment, provided any such alternate has been first approved and its use authorized by the administrative authority.

R4501.5.2 Required tests. When there is insufficient evidence to substantiate claims for alternates, the administrative authority may require tests, as proof of compliance, to be made by an approved agency at the expense of the applicant.

R4501.6 Engineering design.

R4501.6.1 Conformance standard. Design, construction and workmanship shall be in conformity with the requirements of ANSI/NSPI 3; ANSI/APSP/ICC 4; ANSI/APSP/ICC 5; ANSI/APSP/ICC 6; and ANSI/APSP 7

R4501.6.2 Required equipment. Every swimming pool shall be equipped complete with approved mechanical equipment consisting of filter, pump, piping valves and component parts

Exception: Pools with a supply of fresh water equivalent to the volume of the pool in the specified turnover time will be allowed.

R4501.6.3 Water Velocity. 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. Main suction outlet velocity must comply with ANSI/APSP 7.

Exception: Jet inlet fittings shall not be deemed subject to this requirement.

R4501.6.4 Piping to heater. Water flow through the heater, any bypass plumbing installed, any back-siphoning protection, and the use of heat sinks shall be done in accordance with the manufacturer's recommendations.

R4501.6.5 Piping installation. All piping materials shall be installed in strict accordance with the manufacturer's installation standards.

Exception: Primer and glue on exposed above-ground piping not required to be colored.

R4501.6.6 Entrapment protection. Entrapment protection for suction outlets shall be installed in accordance with requirements of ANSI/APSP 7

R4501.7 Pumps.

R4501.7.1 Strainer. Pool circulating pumps shall be equipped on the inlet side with an approved type hair and lint strainer when used with a pressure filter.

R4501.7.2 Installation. Pumps shall be installed in accordance with manufacturer recommendations

R4501.7.3 Capacity. Pumps shall have design capacity at the following heads:

1. Pressure diatomaceous earth-At least 60 feet (18288 mm).
2. Vacuum diatomaceous earth-20-inch (508 mm) vacuum on the suction side and 40-foot (12192 mm) total head.
3. Rapid sand-At least 45 feet (13716 mm).
4. High rate sand- At least 60-feet (18288)

R4501.7.4 Materials. Pumps impellers, shafts, wear rings and other working parts shall be of corrosion-resistant materials.

R4501.8 Valves.

R4501.8.1 General. Valves shall be made of materials that are approved in the *Florida Building Code, Plumbing*. Valves located under concrete slabs shall be set in a pit having a least dimension of five pipe diameters with a minimum of at least 10 inches (254 mm) and fitted with a suitable cover. All valves shall be located where they will be readily accessible for maintenance and removal.

R4501.8.2 Full-way (gate) valves. Full-way valves shall be installed to insure proper functioning of the filtration and piping system. When the pump is located below the overflow rim of the pool, a valve shall be installed on the discharge outlet and the suction line.

R4501.8.3 Check Valves. Where check valves are installed they shall be of the swing, spring or vertical check patterns.

R4501.8.4 Combination valves. Combination valves shall be installed per manufacturer's installation instructions

R4501.9 Water supply. Unless an approved type of filling system is installed, any water supply which, in the judgment of the administrative authority may be used to fill the pool shall be equipped with backflow protection. No over the rim fill spout shall be accepted unless located under a diving board, or properly guarded.

R4501.10 Waste water disposal.

R4501.10.1 Connection limitations. Direct or indirect connections shall not be made between any storm drain, sewer, drainage system, seepage pit underground leaching pit, or subsoil drainage line, and any line connected to a swimming pool unless approved by the administrative authority.

R4501.10.2 Disposal through public sewer. When the waste water from a swimming pool is to be disposed of through a public sewer, a 3-inch (76mm) P-trap shall be installed on the lower terminus of the building drain and the tail piece from the trap shall extend a minimum of 3-inches (76mm) above finished grade and below finished floor grade. This trap need not be vented. The connection between the filter waste discharge piping and the P-trap shall be made by means of an indirect connection

R4501.10.3 Deviations. Plans and specifications for any deviation from the above manner of installation shall first be approved by the administrative authority before any portion of any such system is installed. When waste water disposal is to seepage pit installation, it shall be installed in accordance with the approval granted by the administrative authority.

R4501.11 Separation tank. A separation tank of an approved type may be used in lieu of the aforementioned means of waste water disposal when connected as a reclamation system.

R4501.12 Tests.

R4501.12.1 Pressure test. 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 35 pounds per square inch (psi) (241 kPa) for 15 minutes.

Exception: Circulation pumps need not be tested as required in this section

R4501.12.2 Drain and waste piping. All drain and waste piping shall be tested by filling with water to the point of overflow and all joints shall be tight.

R4501.13 Drain Piping.

R4501.13.1 Slope to discharge. Drain piping serving gravity overflow gutter drains and deck drains shall be installed to provide continuous grade to point of discharge.

R4501.13.2 Joints and connections. Joints and connections shall be made as required by the *Florida Building Code, Plumbing*.

R4501.14 Water heating equipment.

R4501.14.1 Labels. Swimming pool water heating equipment shall conform to the design, construction and installation requirements in accordance with accepted engineering practices and shall bear the label of a recognized testing agency, and shall include a consideration of combustion air, venting and gas supply requirements for water heaters.

R4501.14.2 Water retention. If a heater is not equipped or designed for an approved permanent bypass or anti-siphon device, an approved permanent bypass or anti-siphon device shall be installed to provide a positive means of retaining water in the heater when the pump is not in operation.

R4501.14.3 Pit Drainage. When the heater is installed in a pit, the pit shall be provided with approved drainage facilities.

R4501.14.4 Connections. All water heating equipment shall be installed with flanges or union connection adjacent to the heater.

R4501.14.5 Relief valve. When water heating equipment which is installed in a closed system has a valve between the appliance and the pool, a pressure relief valve shall be installed on the discharge side of the water heating equipment. For units up to and including 200,000 Btu/hour input, the relief valve shall be rated by the American Gas Association.

R4501.16 Gas Piping. Gas piping shall comply with the *Florida Building Code, Fuel Gas*.

R4501.16 Electrical. Electrical wiring and equipment shall comply with the *Florida Building Code*.

R4501.17 Residential swimming barrier requirement. Residential swimming pools shall comply with Sections R4501.12.1 through R4501.17.3

Exception: A swimming pool with an approved safety pool cover complying with ASTM F 1346.

R4501.17.1.1 The top of the barrier shall be at least 48 inches (1219 mm) above grade, measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier may be at ground level or mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).

R4501.17.1.2 The barrier may not have any gaps, openings, indentations, protrusions, or structural components that could allow a young child to crawl under, squeeze through, or climb over the barrier as herein described below. One end of a removable child barrier shall not be removable without the aid of tools. Openings in any barrier shall not allow passage of a 4-inch diameter (102mm) sphere.

R4501.17.1.3 Solid barriers which do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

R4501.17.1.4 Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1 ½ inches (44mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 ½ inches (44mm) in width.

R4501.17.1.5 Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143mm) or more, spacing between vertical members shall not exceed 4 inches (102mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 ½ inches (44mm) in width.

R4501.17.1.6 Maximum mesh size for chain link fences shall be a 2 ¼ inch square (57mm) unless the fence is provided with slats fastened at the top or bottom which reduce the openings to no more than 1 ½ inches (44mm).

R4501.17.1.7 Where the barrier is composed of diagonal members, the maximum opening formed by the diagonal members shall be no more than 1 ½ inches (44mm).

R4501.17.1.8 Access gates, when provided, shall be self-closing and shall comply with the requirements of Sections R4501.17.1.1 through R4501.17.1.7 and shall be equipped with a self-latching locking device located on the pool side of the gate. Where the device release is located no less than 54 inches (1372mm) from the bottom of the gate, the device release mechanism may be located on either side of the gate and so placed that it cannot be reached by a young child over the top or through any opening or gap from the outside. Gates that provide access to the swimming pool must open outward away from the pool. The gates and barrier shall have no opening greater than ½ inch (12.7mm) within 18 inches (457mm) of the release mechanism.

R4501.17.1.9 Where a wall of a dwelling serves as part of the barrier, one of the following shall apply:

1. All doors and windows providing direct access from the home to the pool shall be equipped with an exit alarm complying with UL 2017 that has a minimum sound pressure rating of 85 dBA at 10 feet (3048mm). Any deactivation switch shall be located at least 54 inches (1372mm) above the threshold of the access. Separate alarms are not required for each door or window if sensors are wired to a central alarm sound when contact is broken at any opening.

Exceptions:

- a. Screened or protected windows having a bottom sill height of 48 inches (1219mm) or more measure from the interior finished floor at the pool access level.
- b. Windows facing the pool on floor above the first story.
- c. Screened or protected pass-through kitchen windows 42 inches (1067mm) or higher with a counter beneath.

2. All doors providing direct access from the home to the pool must be equipped with a self-closing, self-latching device with positive mechanical latching/locking installed a minimum of 54 inches (1372mm) above the threshold, which is approved by the authority having jurisdiction.

R4501.17.1.10 Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, the ladder or steps either shall be capable of being secured, locked or removed to prevent access, or the ladder or steps shall be surrounded by a barrier which meets the requirements of Sections R4501.17.1.1 through R4501.17.1.9 and Sections R4501.17.1.12 through R4501.17.2.14. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch diameter (102mm) sphere.

R4501.17.1.11 Standard screen enclosures which meet the requirements of Section R4501.17 may be utilized as part, or all, of the "barrier" and shall be considered a "non-dwelling" wall. Removable child barriers shall have one end of the barrier non-removable without the aid of tools.

R4501.17.1.12 The barrier must be placed around the perimeter of the pool and must be separate from any 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, is being used as a part of the barrier, and meets the barrier requirements of this section.

R4501.17.1.13 Removable child barriers must be placed sufficiently away from the water's edge to prevent a young child or medically frail elderly person who may manage to penetrate the barrier from immediately falling into the water. Sufficiently away from the water's edge shall mean no less than 20 inches (508mm) from the barrier to the water's edge. Dwelling or non-dwelling walls including screen enclosures, when used as part or all of the "barrier" and meeting the other barrier requirements, may be as close to the water's edge as permitted by this code.

R4501.17.1.14 A wall of a dwelling may serve as part of the barrier if it does not contain any door or window that opens to provide direct access from the home to the swimming pool.

R4501.17.1.14.1 Adjacent waterways. Permanent natural or permanent man-made features such as bulkheads, canals, lakes, navigable waterways, etc., adjacent to a public or private swimming pool or spa may be permitted as a barrier when approved by the authority having jurisdiction. When evaluating such barrier features, the authority may perform on-site inspections and review evidence such as surveys, aerial photographs, water management agency standards and specifications, and any other similar documentation to verify, at a minimum, the following:

1. The barrier feature is not subject to natural changes, deviations, or alterations and is capable of providing an equivalent level of protection as that provided by the code.
2. The barrier feature clearly impedes, prohibits or restricts access to the swimming pool or spa.

R4501.17.1.15 A mesh safety barrier meeting the requirements of Section R4501.17 and the following minimum requirements shall be considered a barrier as defined in this section:

1. Individual component vertical support posts shall be capable of resisting a minimum of 52 pounds (229 N) of horizontal force prior to breakage when measure at a 36-inch (914mm) height above grade. Vertical posts of the child mesh safety barrier shall extend a minimum of 3 inches (76mm) below deck level and shall be spaced no greater than 36 inches (914mm) apart.
2. The mesh utilized in the barrier shall have a minimum tensile strength according to ASTM D 5034 of 100 pounds per foot (149 kg/m), and a minimum ball burst strength according to ASTM D 3787 of 150 pounds per foot (223 kg/m). The mesh shall not be capable of deformation such that a ¾ inch (6.4mm) round object could pass through the mesh.

The mesh shall receive a descriptive performance rating of no less than "trace discoloration" or "slight discoloration" when tested according to ASTM G 53 (Weatherability, 1,200 hours).

3. When using a molding strip to attach the mesh to the vertical posts, this strip shall contain: at a minimum, #8 by ½ inch (12.7mm) screws with a minimum of two screws at the top and two at the bottom with the remaining screws spaced a maximum of 6 inches (152mm) apart on center.
4. Patio deck sleeves (vertical post receptacles) placed inside the patio surface shall be of a non-conductive material.

5. A latching device shall attach each barrier section at a height no lower than 45 inches (11613mm) above grade. Common latching devices that include, but are not limited to, devices that provide the security equal to or greater than that of a hook and eye type latch incorporating a spring actuated retaining lever (commonly referred to as a safety gate hook).

6. The bottom of the child mesh safety barrier shall not be more than 1 inch (25mm) above the deck or installed surface (grade).

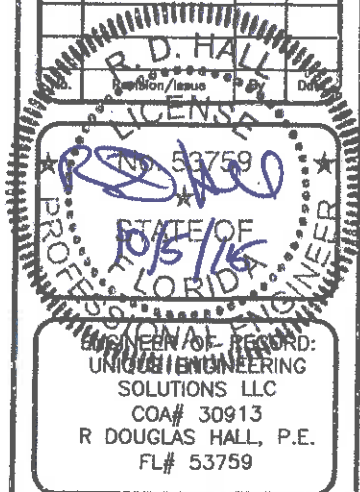
PLANS PREPARED FOR:
ISLAND CONSTRUCTION

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BEFORE PROCEEDING WITH FABRICATION.
PLANS ARE DESIGNED PER 2014 FLORIDA BUILDING
CODE AND 2014 NATIONAL ELECTRICAL CODE/NEC
NOTED OTHERWISE.

GENERAL NOTES

EVANS RESIDENCE
3725 EAGLE AVENUE
KEY WEST FL 33040



Date	10/1/15	
Drawn by:	L.H.	
Checked by:	S.K.	1 OF 4
Job No.	5010	
Scale	SCALE	

R4501.17.2 Indoor swimming pools. All walls surrounding indoor swimming pools shall comply with Section R4501.17.1.9

R4501.17.3 Prohibited Locations. A barrier may not be located in a way that allows any permanent structure, equipment, or window that opens to provide access from the home to the swimming pool.

R4501.18 Ladders and steps. All pools whether public or private shall be provided with a ladder or steps in the shallow end where water depth exceeds 24 inches (610mm). In private pools where water depth exceeds 5 feet (1524mm), there shall be ladders, stairs or underwater benches/swim-outs in the deep end. Where manufactured diving equipment is to be used, benched 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 are required. A bench, swim-out or ladder may be used at all additional shallow ends in lieu of an additional set of steps.

R4501.19 Final inspection. Final electrical and barrier code inspection shall be completed prior to filling the pool with water.

Exception: Vinyl liner and fiberglass pools are required to be filled with water upon installation.

R4510.20 Filters. Components shall have sufficient capacity to provide a complete turnover of pool water in 12 hours or less.

R4510.20.1 Sand Filters.

R4510.20.1.1 Approved types. Rapid sand filters (flow up to 5 gpm per sq/ft) shall be constructed in accordance with approved standards. Where high rate sand filters (flow in excess of 5 gpm per sq/ft) are used, they shall be of an approved type. The circulation system and backwash piping shall be adequate for proper backwashing of said filter and shall provide backwash flow rates of at least 12 gpm per sq/ft for rapid sand filters or 15 gpm per sq/ft for high rate sand filters.

R4510.20.1.2 Instructions. Every filter system shall be provided with written operating instructions.

R4510.20.1.3 Filter system equipment. On pressure type filters, a means shall be provided to permit the release of internal pressure. A filter incorporating an automatic internal air release as its principal means of air release shall have lids which provide a slow and safe release of pressure as part of its design. A separation tank used in conjunction with a filter tank shall have as part of its design a manual means of air release or a lid which provides a slow and safe release of pressure as it is opened.

R4510.20.2 Diatomite-type filters.

R4501.20.2.1 Design. Diatomite-type filters shall be designed for operation under either pressure or vacuum filters shall not exceed 2 gpm per sq/ft of effective filter area.

R4501.20.2.2 Filter aid. Provision shall be made to introduce filter aid into the filter in such a way as to evenly precoat the filter septum.

R4501.21 Pool fittings.

R4501.21.1 Approved type. Pool fittings shall be of an approved type and design as to be appropriate for the specific application.

R4501.21.2 Skimmers. 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 sq/ft (74m²) of surface area or fraction thereof, and shall be designed for a flow rate of at least 25 gpm (1.6 L/s) per skimmer.

R4501.21.3 Main outlet. An approved main outlet, when provided, shall be located on a wall or floor at or near the deepest point in the pool for emptying or circulation, or both, of the water in the pool.

R4501.21.4 Hydrostatic relief device. In areas of anticipated water table, an approved hydrostatic relief device shall be installed.

Exception: Plastic liner pools (where there is no structural bottom to the pool).

R4501.21.5 Inlet fittings. Approved manufactured inlet fittings for the return of recirculated pool water shall be provided on the basis of at least one per 300 sq/ft (28m²) 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 (3048mm).

R4501.22 Equipment foundations and enclosures. All pool motors and equipment shall be installed in compliance with the manufacturer's recommendations. All heating and electrical equipment, unless approved for outdoor installation, shall be adequately protected against the weather or installed within a building.

R4501.23 Accessibility and clearances. Equipment shall be so installed as to provide ready accessibility for cleaning, operating, maintenance and servicing.

GENERAL FILTRATION NOTES

1. THESE PLANS ARE COMPLIANT WITH FLORIDA BUILDING CODES 5TH EDITION (2014).
2. PER ANSI/APSP-15 2011 FILTRATION RATES FOR A PUMP'S TOTAL HORSEPOWER OF 1 OR GREATER SHALL NOT EXCEED THE VOLUME OF THE POOL/360 IN GPM.
3. ANSI/APSP-7 2006 VELOCITIES APPLY TO THERAPY AND FEATURE PUMPS ONLY, SEE SHEET 2.

PLANS PREPARED FOR: ISLAND CONSTRUCTION

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GENERAL NOTES

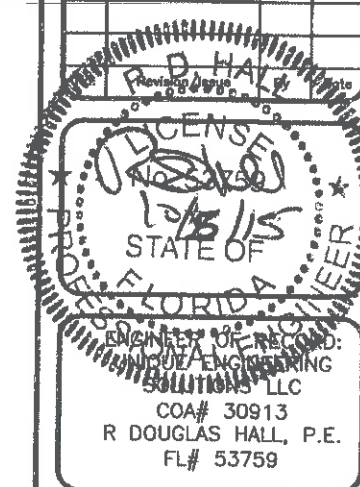
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KEY WEST FL 33040

Pool/Spa General Notes:

1. Design per Florida Building Code 2014 5th Edition, Chapter R4501.3 & ANSI/APSP-7
2. Pool/Spa finish is to be exposed aggregate, marcite, tile or manufacturer approved finish.
3. Shot-crete or Gunitite shall be 3,500 psi min. @ 28 days.
4. Reinforcing shall be #3 rebar @ 12" o.c. ASTM A615 Grade 40 with 18" lap splice UNO.
5. Verify all elevations and locations with architectural elevation.
6. All soil beneath Pool/Spa structure is to have a minimum bearing capacity of 2,000 PSF.
7. Pool/Spa structure shall be backfilled with clean soil free of organics in 8" lifts and compacted to 95% of the modified proctor per ASTM-D 1557.
8. No fill will intrude into the velocity zone.
9. Pipe bending must be greater than 30° minimum bend to be 5 times the diameter of the pipe's o.d., excessive burn marks and creasing of pipe is not allowed.
10. Glass within 5 ft. of water's edge shall be tempered.

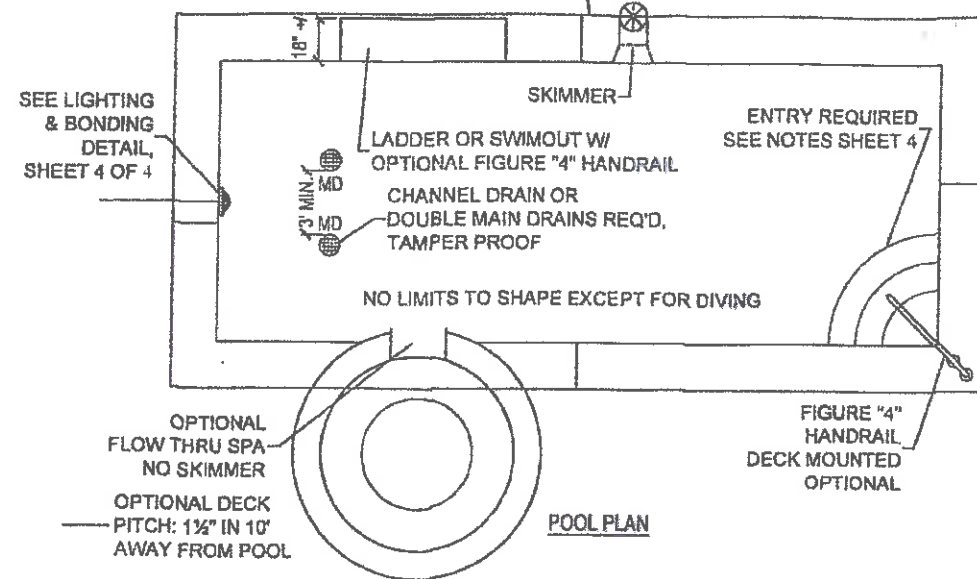
Equipment General Notes:

1. All equipment below static water elevation is to have positive valve shut off for service.
2. All electrical per NEC 2008
3. All pumps, heaters, deck, handrails, ladders, lights, screen and metal shall be bonded per NEC 2008.



Date	10/1/15	
Drawn by:	L.H.	
Checked by:	S.K.	2 OF 4
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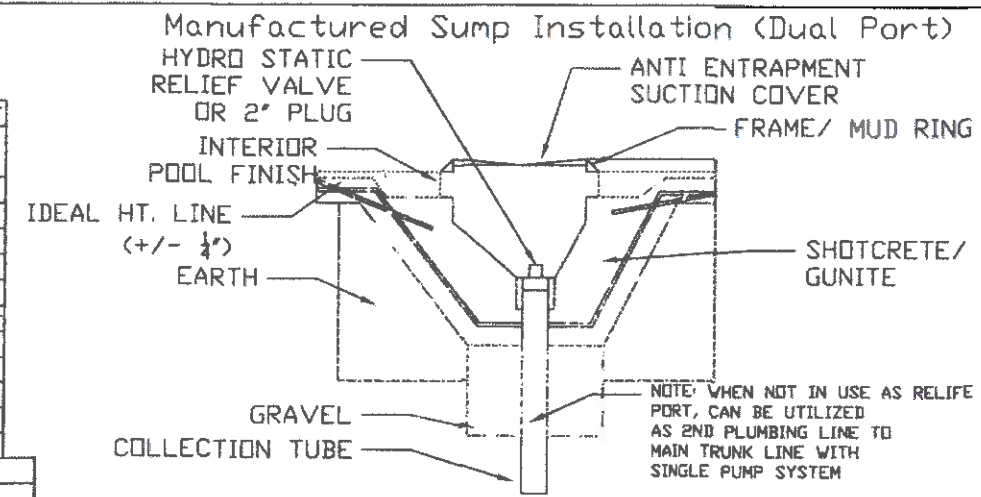
EQUIPOTENTIAL BONDING GRID PER
2014 FLORIDA BUILDING CODE
& 2014 NEC. SEE DETAIL SHEET 4



SCHEMATIC EQUIPMENT/ELECTRICAL CHART	
TAG	EQUIPMENT
(A)	RECIRC. PUMP
(B)	FILTER
(C)	CHLORINATOR
(D)	HEATER (OPTIONAL)
(E)	BLOWER
(F)	ELECTRICAL SUB-PANEL OR DISCONNECT
(G)	TIME CLOCK/CONTROLLER
(H)	100W OR 300W TRANSFORMER
(I)	JUNCTION BOX
(J)	LED 100W OR 300W POOL/SPA LIGHT
(K)	NEG. EDGE/FEATURE/THERAPY PUMP

SHEMATIC PIPE CHART	
TAG	PIPE
1	POOL MAIN DRAIN
2	SPA MAIN DRAIN
3	POOL VACUUM (OPTIONAL)
4	POOL SKIMMER
5	AIR LINE TO SPA JETS
6	POOL RETURN
7	SPA RETURN
8	SPA THERAPY RETURN
9	FEATURE RETURN (OPTIONAL)
10	WIRING & CONDUIT SIZES PER NEC 2005
11	LIGHT CORD, 12V 10
12	NEG. EDGE BASIN/FEATURE/THERAPY SUCTION
13	NEG. EDGE BASIN/FEATURE/THERAPY RETURN

NON-FILTRATION F.B.C. R4501.6.3 & APSP-7-2006 SCH. 40 PVC PIPE MAXIMUM VOLUMETRIC FLOW RATE (GPM)			
NOMINAL PIPE SIZE	VELOCITY 8FT/S SUCTION MAIN DRAIN BRANCH	VELOCITY 8FT/S SUCTION	VELOCITY 10FT/S PRESSURE
1 1/2"	38 GPM	51 GPM	63 GPM
2"	63 GPM	84 GPM	104 GPM
2 1/2"	90 GPM	119 GPM	149 GPM
3"	138 GPM	184 GPM	230 GPM
4"	238 GPM	317 GPM	396 GPM



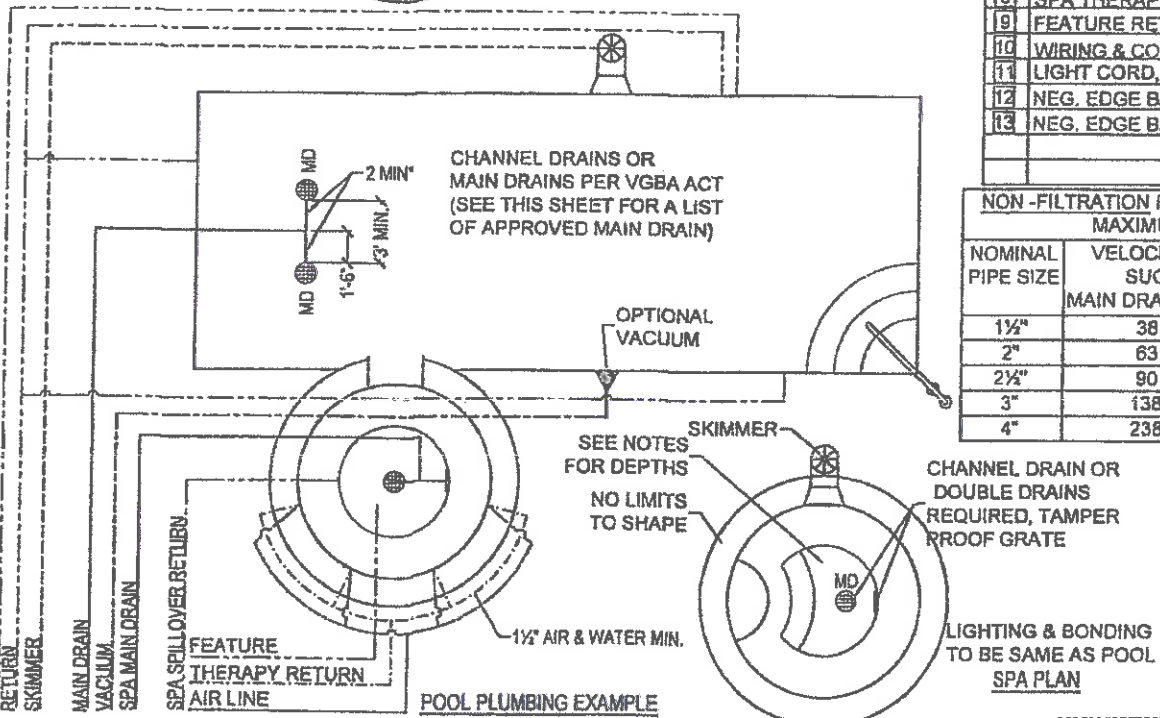
IMPORTANT:

- * SINGLE MULTIPLE DRAIN USE
- * MODELS SB, DD OR DDSB (SB=STD SUMP BUCKET, DD= DEEP SUMP/FRAME, DDSB= DEEP SUMP BUCKET) WITH 10AVRXXX, 10AV, 10LTXXX, 8HPXXX, ABXXX, 8AVXXX, LPBAVXXX, WAV9XXX, WAV12XXX, SUN99XXX, SUN12XXX, 1216XXX, R1216XXX, 914XXX, R914XXX, ABRXXX, 8FUWXXX (AV= ANTI-VORTEX)
- * NOTE 8" ROUND SB AVAILABLE IN 3 STYLES
- REGULAR COLLAR (FRAME) WITH SIDE/BOTTOM PORTS
- ADJUSTABLE COLLAR (FRAME) (AC) WITH SIDE/BOTTOM PORTS
- VINYL/FIBERGLASS (V) WITH SIDE/BOTTOM PORTS
- * NOTE 9" AND 12" SQUARE AND 10" ROUND DDSB AVAILABLE IN 1 STYLE (12" DEEP)
- REGULAR COLLAR (FRAME) WITH PORTS ON BOTTOM ONLY (NO SIDE PORTS)

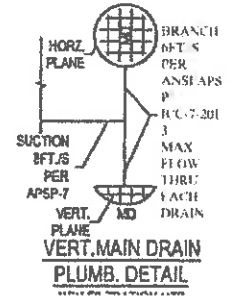
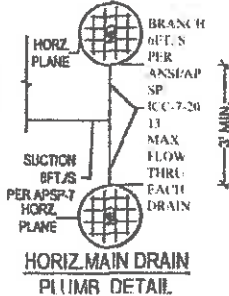
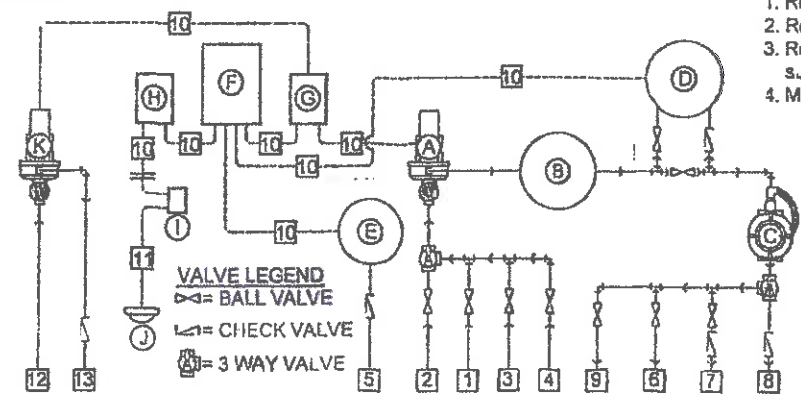
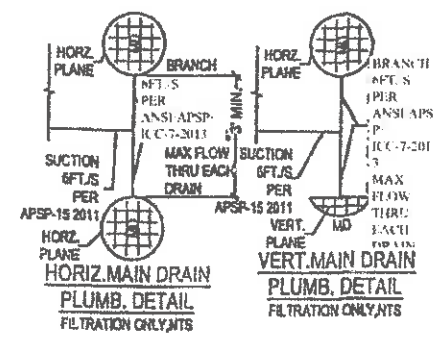
ANSI/APSP-16 2011 Approved Main Drain Cover List					
MFR.	Model #	Size	Open Area (Sq. In.)	Flow Rate (GPM) Floor	Flow Rate (GPM) Wall
1,3,4 Waterway Plastics	640-231XV	8"	11.83	100	64
2,3,4 CMP	25516-400	10" DIA.	13.4	150	118
2,3,4 Aquastar	8AVxxx	8" DIA.	14.2	88	70
2,3,4 Aquastar	10AVxxx	10" DIA.	25.9	316	206
2,3,4 Aquastar	32CDLFLxxx	32" Channel	25.9	316	206

NOTE:

1. Replace cover and screws within 7 years after certified mfr. date.
2. Replace cover and screws within 5 years after certified mfr. date.
3. Replace damaged, broken, cracked, missing, or not securely attached suction outlet components immediately.
4. Mfr. sumps are to accompany main drain frame & grates.



FILTRATION ANSI/APSP/ICC-15A2013 SCH. 40 PVC PIPE MAXIMUM VOLUMETRIC FLOW RATE (GPM)		
NOMINAL PIPE SIZE	VELOCITY 8FT/S SUCTION MAIN DRAIN	VELOCITY 8FT/S RETURN
1 1/2"	38 GPM	51 GPM
2"	63 GPM	84 GPM
2 1/2"	90 GPM	119 GPM
3"	138 GPM	184 GPM
4"	238 GPM	317 GPM



PLANS PREPARED FOR:
ISLAND CONSTRUCTION

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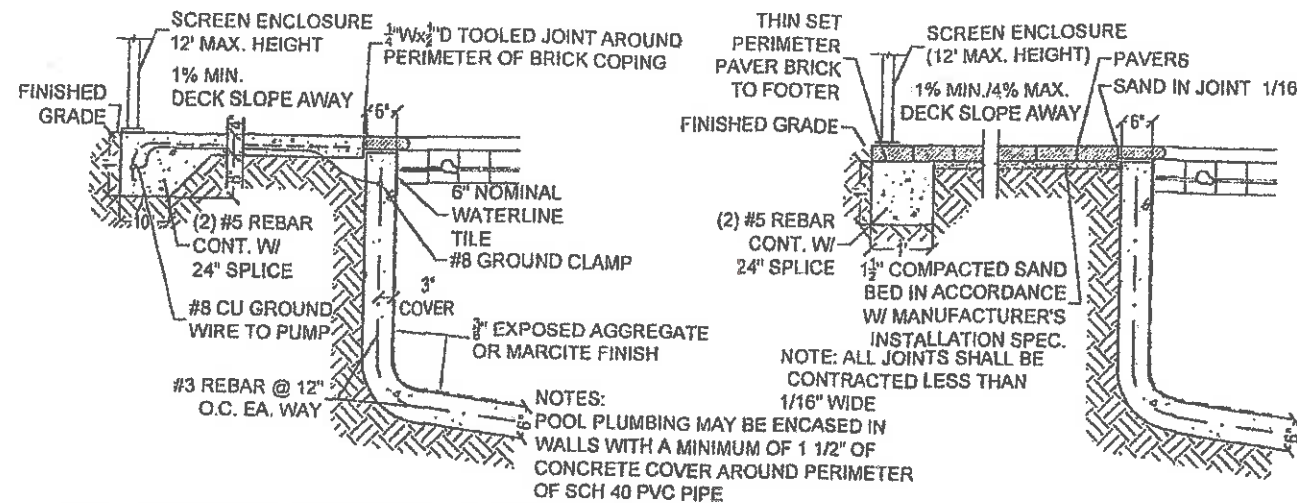
POOL/SPA PLUMBING & EQUIPMENT PLAN

EVANS RESIDENCE
3725 EAGLE AVENUE
KEY WEST, FL 33040

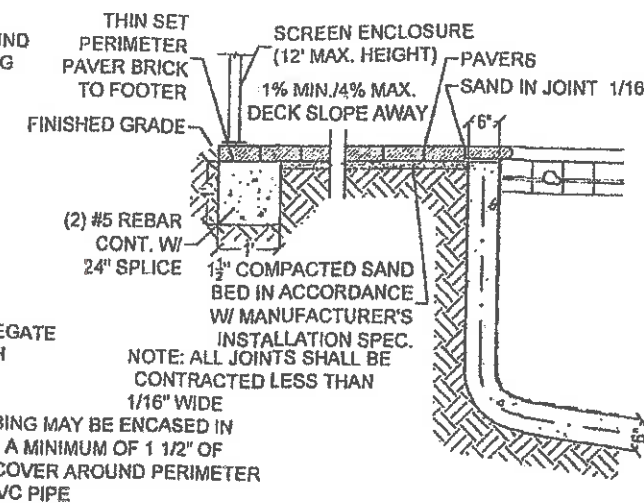
R. D. HALL
P.E.
No. 53759
STATE OF FLORIDA
PROFESSIONAL ENGINEER

ENGINEER OF RECORD:
UNIQUE ENGINEERING
SOLUTIONS LLC
COA# 30913
R DOUGLAS HALL, P.E.
FL# 53759

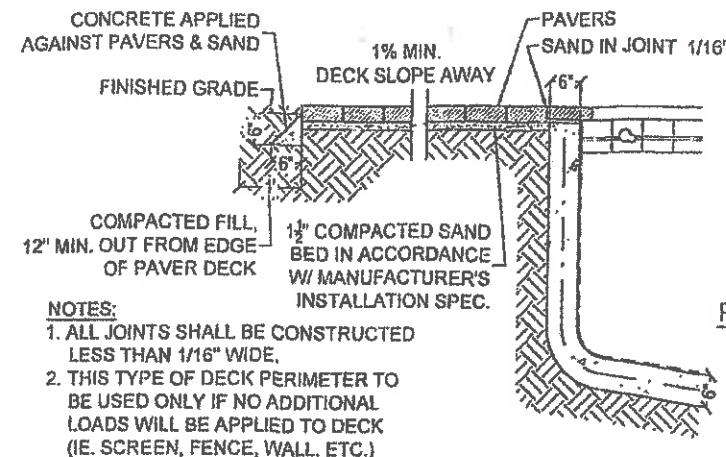
Date	10/1/15
Drawn by:	C.M.
Checked by:	S.K.
Job No.	5010
Scale	NTS



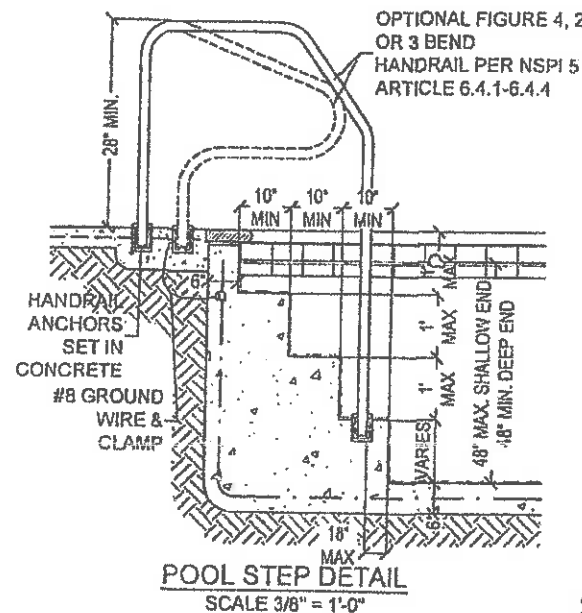
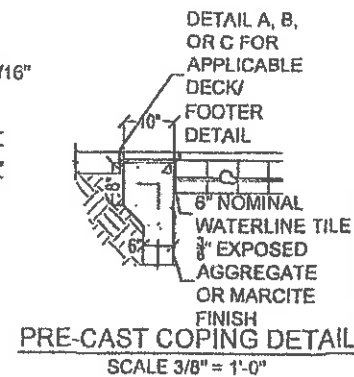
A TYP. CONCRETE DECK/ BEAM/ FLOOR DETAIL
SCALE 3/8" = 1'-0"



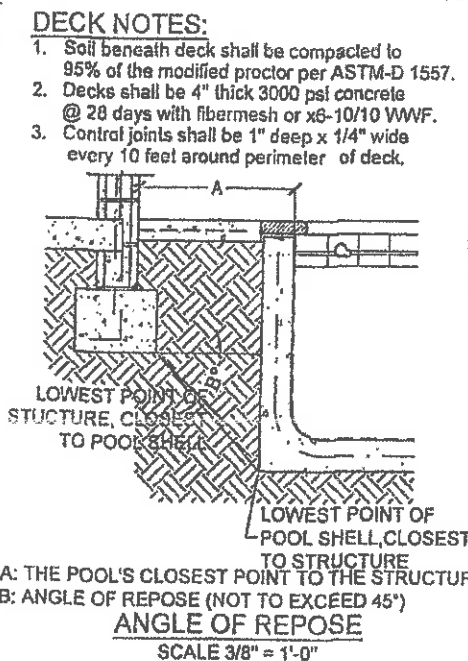
B TYP. EDGE LOAD BEARING INTERLOCKING PAVER DECK/ FOOTER DETAIL
SCALE 3/8" = 1'-0"



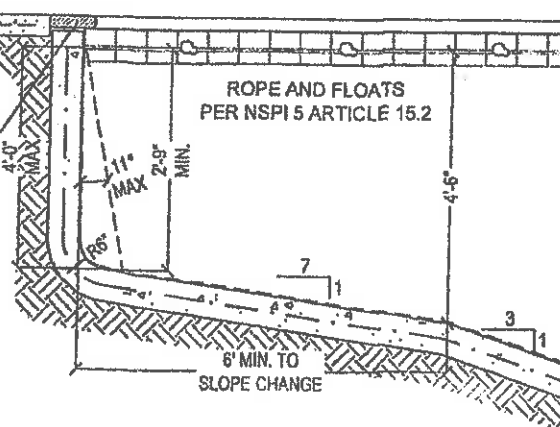
C TYP. EDGE NON-LOAD BEARING INTERLOCKING PAVER RESTRAINT/ PAVER DECK DETAIL
SCALE 3/8" = 1'-0"



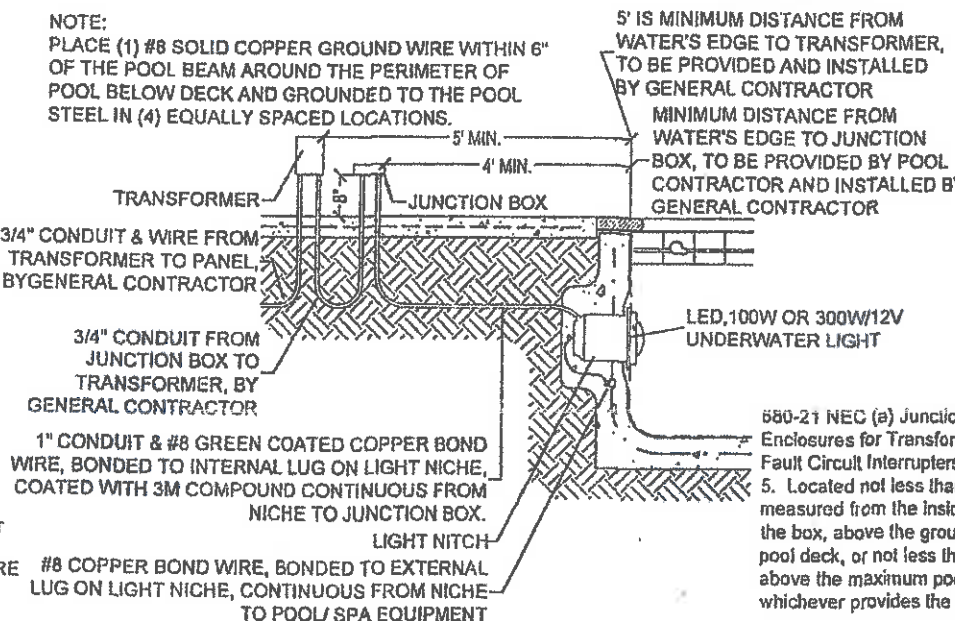
HANDHOLDS SHALL BE PROVIDED AROUND POOL EDGE IN ANY AREA WHERE THE WATER DEPTH EXCEEDS 4 FEET. HANDHOLD SHALL BE ACCESSIBLE WITHIN 4 FEET NOT TO EXCEED 8 FEET AT ANY 2 POINTS ALONG THE INSIDE OF THE POOL PERIMETER WHERE THE WATER DEPTH EXCEEDS 4 FEET. HANDHOLDS MAY INCLUDE BUT NOT LIMITED TO ANY ONE OR COMBINATION OF THE FOLLOWING ITEMS LISTED: DECK, COPING AND LEDGES LOCATED NOT MORE THAN 12 INCHES ABOVE THE WATERLINE ROCKS, MASONRY JOINTS AND TOOLED JOINTS THAT ALLOW A HANDHOLD WITHIN 12 INCHES OF WATERLINE. LADDER, STAIRS AND UNDERWATER SEATS OR LEDGES SECURED ROPE OR RAIL PLACED WITHIN 12 INCHES ABOVE THE WATERLINE. ANY FINISH OR DESIGN THAT WILL AFFORD A SINGLE ANDHOLD WITHIN 12 INCHES OF THE WATERLINE. PER ANSI 15.1 THROUGH 15.1.1.5.



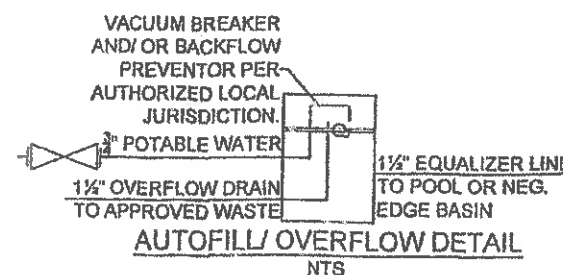
**A: THE POOL'S CLOSEST POINT TO THE STRUCTURE
B: ANGLE OF REPOSE (NOT TO EXCEED 45°)
ANGLE OF REPOSE**
SCALE 3/8" = 1'-0"



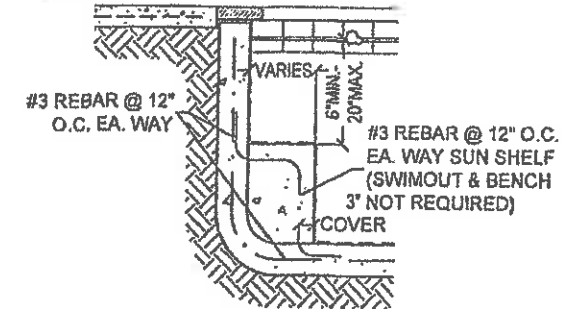
POOL SECTION
SCALE 3/8" = 1'-0"



POOL LIGHT & EQUIPOTENTIAL BONDING GRID DETAIL
SCALE 3/8" = 1'-0"



AUTOFILL/ OVERFLOW DETAIL
NTS



ANSI-5 6.7 UNDERWATER SEATS, BENCHES, SWIMOUTS THE DESIGN AND CONSTRUCTION OF UNDERWATER SEATS BENCHES AND SWIMOUTS SHALL CONFORM TO 6.7.1 THROUGH 6.7.3.
TYP. BENCH, SWIMOUT, SUN SHELF DETAIL
SCALE 3/8" = 1'-0"

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ISLAND CONSTRUCTION

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POOL/SPA DETAIL

EVANS RESIDENCE
3725 EAGLE AVENUE
KEY WEST FL 33040

PROFESSIONAL ENGINEER
No. 53759
10/5/15
STATE OF FLORIDA
ENGINEER OF RECORD
UNIQUE ENGINEERING SOLUTIONS
COA# 30913
R DOUGLAS HALL, P.E.
FL# 53759

Date	10/1/15	4 OF 4
Drawn by:	R.L.	
Checked by:	S.K.	
Job No.	5010	
Scale	AS-SHOWN	



8:47:19 AM 12/11/2015

Licensee Details**Licensee Information**

Name: **BODZIAK, SCOTT EDMUND** (Primary Name)
DANIEL'S DEVELOPMENT CO OF SW FLORIDA (DBA Name)
 Main Address: **PO BOX 7926**
ST. PETERSBURG Florida 33734
 County: **PINELLAS**

License Mailing:

727-400-7233

License Location:

12/11/2015 - 9am - notified Scott
 of SWO. - PHW
 ↗

License Information

License Type: **Certified General Contractor**
 Rank: **Cert General**
 License Number: **CGC059051**
 Status: **Current, Active**
 Licensure Date: **04/30/1997**
 Expires: **08/31/2016**

Island Pools

Special Qualifications **Qualification Effective**
Construction Business **11/09/2012**

Alternate Names**View Related License Information****View License Complaint**1940 North Monroe Street, Tallahassee FL 32399 :: Email: [Customer](#)

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Under Florida law, email addresses are public records. If you do not want your request, do not send electronic mail to this entity. Instead, contact the office of the state attorney, please contact 850.487.1395. *Pursuant to Section 455.275(1), if licensed under Chapter 455, F.S. must provide the Department with an email address used for official communication with the licensee. However email addresses are not public records. If you wish to have your email address made available to the public, please provide the Department with an email address which can be made available to the public. Please see our [Chapter 455](#) page to determine if you are affected by this change.

Need to make Revision
 App for storage & Deck
 - Has to be reviewed by
 Warren Speck on 12/11/2015
 - Needs to satisfy FPM

Steven Knight
 239-641-2628

Complaint Details

Below is a listing of public complaints regarding the person or entity selected. This may not reflect all public complaints filed with the Department; for example, all against Community Association Managers (CAMs) are available to the public, regardless of whether any appear below, and may be requested directly from the Department. The Department is also precluded from disclosing any complaints which are confidential pursuant to Florida Statutes.

If you would like a full list of public complaints against an individual or entity or to make a public records request for complaints listed please visit our [Public Records](#)

You can search for public records pertaining to unlicensed activity complaints through an additional database by visiting our [Search Unlicensed Activity Complaints](#). For more information about CAM complaints, please visit the [CAMs page](#).

Name: BODZIAK, SCOTT EDMUND

The Status and Discipline Description below is only the status of a complaint. To see the status of this license select the "Back" button to return to the Licensee Details

Number	Class	Incident Date	Status	Disposition	Disposition Date	Discipline Date - Description
2010059273	Licensed Activity	01/25/2010	Closed	Final Order	01/23/2012	01/23/2012 - Fine 01/23/2012 - Education 01/23/2012 - Cost

[1940 North Monroe Street, Tallahassee, FL 32399](#) :: Email: [Customer Contact Center](#) :: Customer Contact Center: 850.487.1395

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BP210I01

CITY OF KEY WEST
Special Notes Display

10/29/15
10:16:36

Property address : 3725 EAGLE AVE
RE #/PARCEL #/TAX ID etc : 0005-3660-000000- -

Source	Misc info code	Note	Date
LAND	BPCM	***** ALERT - HARC REQUIRED *****	4/10/03

Press Enter to continue.
F3=Exit F12=Cancel



UTILITY BOARD OF THE CITY OF KEY WEST, FLORIDA
MAIN OFFICE: Phone (305)295-1000 * Customer Service fax (305)295-1085

METER LOCATION FORM

Date: 10/19/2015

Customer Service Representative: CN Account# 5471350-17
Customer Name JOHN EVANS Phone No.:
Legal Description: Lot _____ Block _____ Street Address: 3725 EAGLE AVE
Subdivision: _____ Key KEY WEST
Mailing Address: _____
Electrical Contractor: WINDWARD ISLAND CONSTRUCTION PATTY WESTERLUND Phone No: (828) 550-7657
Cell Phone No: _____ Beeper No: _____
Service Type: _____ Panel Size: _____ Voltage: 120/240
Single Phase YES Three Phase: _____ Pole No: _____
Residential YES Commercial: _____ New/Upgrade: M21-6
Deposit: _____ Service Charge: _____
Line Extension Charge: _____ Contract No: _____
Notes: POOL PLANS

Keys Energy Services will not cross private property to connect a service drop. It is the customer's responsibility to locate the weather head accordingly. All work must conform to NEC & NESC.

KEYS ENERGY SERVICES (KEYS) HAS APPROVED METER

LOCATION ONLY. THE CUSTOMER NEEDS TO

CONTACT KEYS ENGINEERING DEPARTMENT FIRST

TO INSTALLATION, TO VERIFY LOCATION.

Below to be completed in the field by KEYS

ENGINEERING DEPARTMENT

Line Extension: Yes ☐ No ☒

Number of Poles: _____

1. All electrical work must meet all current City and/or County Codes, KEYS' policies and National Electric Safety Code Rules And Regulations.

2. Any revisions to these plans must be resubmitted for KEY to review.

Approved By

Cassie

Date

10/20/2015

Profile View (Side)

Plain View (Top)

Contractor Requirements:

1 _____
2 _____

Comments:

Keys ok with proposed pool location, pool may not encroach into Utility Easement.

Approximate Service Date:

KEYS Field Representative:

Field Contact Signature:

Cassie

Date

10/20/2015