



CITY OF TUCSON

Planning & Development
Services Department

ACTIVITY T19BU00078

Telephone keypad conversion for activity:

T = 8, CM = 26, DP = 37 (**DP ONLY:** DO NOT enter dash. DO enter # at the end of activity number)

PROJECT ADDRESS: 2121 N EVELYN AV TUC

CONTRACTOR:

DESCRIPTION OF PROPOSED WORK: POOL RENOVATION

REQUIRED INSPECTIONS:

Item: 08005 POOL/SPA PRE-GUNITE

Item: 08030 POOL/SPA PLUMBING

Item: 08035 POOL/SPA ELECTRIC

Item: 08050 POOL/SPA BONDING GRID

Item: 08090 POOL/SPA FINAL/BARRIER

***** Scheduling Inspections *****

MUST SCHEDULE PRIOR TO 3:15 P.M. FOR NEXT BUSINESS DAY

Online (Registration Required) @
<http://www.tucsonaz.gov/velocityhall>

Or by phone: 520-791-3111

Telephone instructions can be found @ <http://www.tucsonaz.gov/pdsd/ivr>

Inspections are made between the hours of 7:30am to 3:30pm. Appointments are not available but you may leave a message when scheduling an inspection, with your , call back number, and if you need to speak with your inspector. If you have questions on inspections outside of PDSD dial:

724-7908 Pima County Health Department

791-3234 Fire Inspections

791-4371 Department of Transportation

NOTE: ACTUAL INSPECTION CARD, APPROVED PLANS AND PREVIOUS INSPECTION RESULTS MUST BE POSTED AT JOB SITE. MAINTAINING THIS SCHEDULE OF REQUIRED INSPECTIONS IS THE RESPONSIBILITY OF THE PERMIT HOLDER. UNCOVERING OF WORK THAT HAS NOT BEEN INSPECTED AND APPROVED MAY BE REQUIRED BY THE INSPECTOR.



CITY OF TUCSON

Development Services Department

201 N. STONE AVENUE, 1ST FLOOR TUCSON, AZ 85701
PHONE: (520) 791-5550

CITY OF TUCSON PERMIT

ACTIVITY T19BU00078

SITE ADDRESS: 2121 N EVELYN AV TUC

PARCEL NUMBER: 133-04-431A

LEGAL DESCRIPTION: PARK LOT A COMMON AREA PRIVATE PARK EXC WLY PTN - 33094

TOWNSHIP-RANGE-SECTION: 14-15E-03

ZONING: BASE MAP:

TOTAL BLDG. SQUARE FOOTAGE: 0

PLAN NUMBER: T19BU00078

TOTAL VALUATION: \$50,000.00

TYPE OF PERMIT: POOL/SPA

TYPE OF APPLICATION: PCOM

DESCRIPTION OF PROPOSED WORK: POOL RENOVATION

NOTICE: THE PLANS AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION FOR THIS PERMIT, AS APPROVED BY THIS DEPARTMENT, MAY NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT THE WRITTEN APPROVAL FROM THIS DEPARTMENT AND ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPROVED PLANS.

THIS PERMIT BECOMES NULL AND VOID IF WORK OR CONSTRUCTION DOES NOT START WITHIN 180 DAYS OR IF WORK OR CONSTRUCTION IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AT ANY TIME AFTER WORK IS COMMENCED. SUCH TIME PERIODS SHALL BE EVIDENCED BY A RECORDED REQUEST FOR INSPECTION. THE PERMIT HOLDER HAS THE RESPONSIBILITY TO DETERMINE THE LOCATION OF EXISTING UNDERGROUND UTILITIES, SEWAGE DISPOSAL SYSTEMS OR OTHER OBSTACLES THAT MAY INTERFERE WITH THE WORK AUTHORIZED BY THIS PERMIT.

CERTIFICATION: I HEREBY CERTIFY THAT I HAVE READ AND EXAMINED THIS PERMIT AND KNOW THE INFORMATION TO BE TRUE AND CORRECT. ALL PROVISIONS OF LAWS AND ORDINANCES GOVERNING THIS WORK WILL BE COMPLIED WITH WHETHER SPECIFIED HEREIN OR NOT. THE GRANTING OF A PERMIT DOES NOT PRESUME TO GIVE THE AUTHORITY TO VIOLATE OR CANCEL THE PROVISIONS OF ANY STATE OR LOCAL LAW REGULATING CONSTRUCTION OR THE PERFORMANCE OF CONSTRUCTION. REPRESENTATIVES OF THIS DEPARTMENT MAY ENTER UPON THE PROPERTY FOR THE PURPOSE OF CONDUCTING INSPECTIONS OF THE WORK.

CHECK ONE OF THE FOLLOWING: LICENSED CONTRACTOR: I HEREBY AFFIRM THAT I AM A CONTRACTOR LICENSED AND REGULATED BY THE PROVISIONS OF A.R.S. TITLE 32, CHAPTER 10 (SECTION 32-1101 THROUGH SECTION 32-1198,05 OR AS AMENDED).

ARCHITECT/ENGINEER: I AM EXEMPT FROM THE LICENSING REQUIREMENTS AS I AM AN ARCHITECT OR ENGINEER ENGAGING IN MY PROFESSIONAL PRACTICE AS DEFINED IN A.R.S. TITLE 32, CHAPTER 1 (SECTION 32-101 AND FOLLOWING). I DO NOT ENGAGE IN THE ACTIVITY OF A CONTRACTOR AS DEFINED IN A.R.S. TITLE 32, CHAPTER 10 (SECTIONS 32-1101 AND 32-1102).

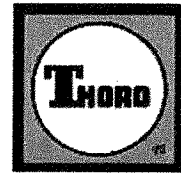
OWNER/BUILDER: I HEREBY AFFIRM THAT THE WORK FOR WHICH THIS PERMIT IS ISSUED WILL BE DONE BY ME AS OWNER-OCCUPANT.

OTHER: I AM AN AUTHORIZED REPRESENTATIVE OF THE OWNER.

SIGNATURE _____

DATE: 02-26-2019

SEE REVERSE SIDE FOR ADDITIONAL INFORMATION AND SPECIAL CONDITIONS



THOROSEAL®

Cement based coating for waterproofing concrete and masonry

Description of product

THOROSEAL is a blend of Portland cements, well-graded sands and additives supplied in powder form.

Uses

- For interior and exterior waterproofing of concrete and masonry, above and below ground level, for example, tanking of basements, water reservoirs, tunnels, swimming pools, lift pits, concrete pipes, etc.
- As a replacement for external rendering systems.
- As a waterproof coating on walls and floors of showers, bathrooms and toilets before the fixing of tiles.

Benefits

- **Durable**
 - Resists positive and negative water pressure.
 - Above and below ground level.
 - Water vapour permeable.
 - High bond strength, becomes integral part of the substrate.
 - Blocks the pores of concrete through penetration.
- **Cost effective**
 - Good application rate.
- **Easy to apply**
 - Can be brushed or sprayed.
 - To be applied on a damp substrate.
 - Equipment to be cleaned simply with water.
- **Environmentally friendly**
 - Cement based.
 - No solvents.

CE	
0749	
BASF Belgium Coordination Center Comm. V. Business Belux - Construction Chemicals Nijverheidsweg 89, B-3945 Ham	
09	
BE0021/01	
EN 1504-2 Rigid cementitious waterproofing coating	
EN 1504-2 Principles 1.3 / 2.2 / 8.2	
Compressive strength	Class I
Coefficient of thermal expansion	$\leq 30 \times 10^{-6}/K$
Water vapour permeability	Class I
Capillary water absorption	$w \leq 0,1 \text{ kg/m}^2 \times \text{h}^{0,5}$
Adhesion strength by pull-off test	$\geq 1,0 \text{ MPa}$
Adhesion after thermal compatibility	
- Freeze/Thaw with salt	$\geq 1,0 \text{ MPa}$
- Thunder/Shower	$\geq 1,0 \text{ MPa}$
Artificial weathering	Pass
Fire resistance	A 1
Dangerous substances	Complies with 5.4

Product data

Typical physical properties^(a)

Maximum grain size		0.8 mm
Resistance to negative water pressure		4 bar
Capillary water absorption (EN 1062-3)		$0.09 \text{ kg/m}^2 \times \text{h}^{-0,5}$
Water vapour permeability - $\mu\text{H}_2\text{O}$ (DFT = 3.1 mm) (EN ISO 7783-1)		96
Artificial Weathering (EN 1062-11)		Pass
Mechanical properties		
Compressive strength (EN 12190)	28 d.	48 N/mm ²
Flexural (EN 12190)	28 d.	9.7 N/mm ²
Adhesive Bond (EN 1542)	28 d.	3.69 N/mm ²
Adhesive Bond after Freeze/Thaw (EN 13687-1)	28 d.	3.63 N/mm ²

(a) Typical values. All tests were carried out under controlled conditions.

Clean up and spillages

Not hardened material may simply be removed with water.

Additional information

THOROSEAL fills pores and voids, forms a closely-meshed material and contains water-repellent additives. Condensation may occur after waterproofing basement areas. It could last for a considerable period in poorly ventilated areas and is most likely to form in areas which were previously damp. The formation of condensation can be alleviated by increasing the ventilation and/or plastering the walls with a lightweight, cement-based plaster.

THOROSEAL is not suitable for retaining water with a low calcium hardness and/or a pH of less than 7,2 (THOROSEAL FX100 may be used for this application). Nor is suitable for application to horizontal surfaces that are subject to freeze/thaw cycles or vehicular traffic.

If THOROSEAL is used to waterproof a potable water reservoir, a swimming pool or a fish tank, it should be washed down after the curing completed with a saline solution (salt brine), 12,5% of salts in water, and thoroughly rinsed with clean water. This process should be repeated until the required pH conditions are obtained.

Sulphate contaminated substrates exposed to negative water pressure should be treated with THOROSEAL WR.

Health and safety

THOROSEAL is based on cement and can be irritating to the skin and eyes. Gloves and eye protection should be worn. The use of dust masks is recommended. Accidental splashes of the material to the skin or eyes should be immediately washed off with clean water. In the event of prolonged irritation seek medical advice. In the case of ingestion give water or milk to drink and treat symptomatically. Medical advice should be sought.

A Material Safety Data Sheet is available on request.

Thoro

BASF Belgium Coordination Center Comm. V.- Business Belux – Construction Chemicals

Nijverheidsweg 89

B-3945 Ham

www.thoro.com

Tel. +32 11 34 04 32

Fax +32 11 40 13 92

B.T.W./T.V.A. BE 0862.390.376

RPR/RPM Antwerpen

Your distributor:

Important note: Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to make sure that each product is appropriate for the purpose for which he intends to use it and that the actual conditions of use are suitable.
This edition replaces all previous editions.



DIGITAL GAS

POOL AND SPA HEATER

**RUGGED-STEEL
CONSTRUCTION**

**ENERGY
EFFICIENT**

**CRYSTAL
DIGITAL
CONTROLS**



The Raypak

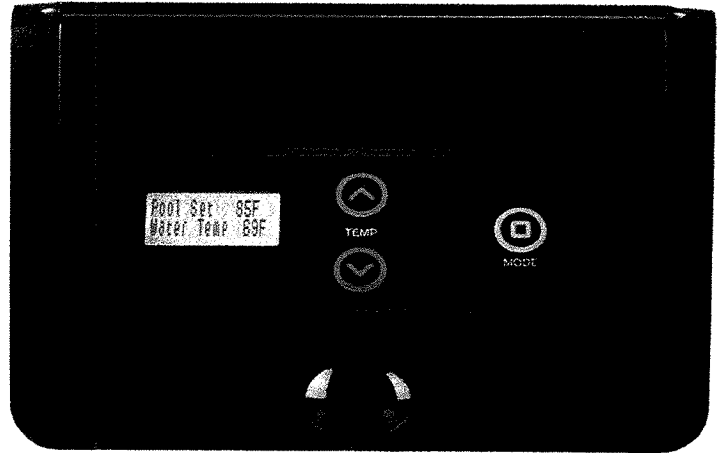
Digital Control

Microprocessor-Controlled Thermostat

Spa Set 104F
Heating

The Raypak Digital gas heater is equipped with a microprocessor-based control. This control allows you to set your pool and spa temperature precisely at your preferred setting just by pressing an up or down temperature control button. The digital display tells you when the water is being heated and notifies you when your target temperature has been reached.

Spa Set 104F
No Demand



Self-Diagnostic

Spa Set 104F
Sensor Failure

Troubleshooting a Raypak gas heater has never been easier. The Raypak Digital has on-board diagnostic controls that let the user and the

service professional know what is going on with the heater at all times. The display uses real English, with no cryptic codes to decipher.

Spa Set 104F
No Pilot Sensed

Remote-Compatible

Remote Pool 104F
Water Temp 69F

The Raypak Digital is compatible with most major pool control and remote systems on the market today. Any two- or three-wire remote can connect to the

Raypak Digital and be integrated into the pool control system of your choice. The display clearly shows the heater is under control of a remote system.

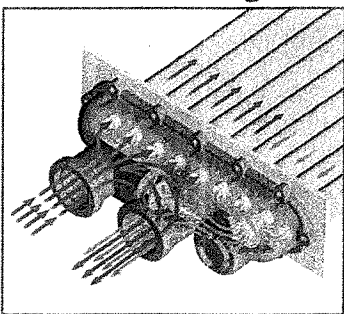
Run Time and Cycle Meter

Run Time 100h
Cycles 134

Yet another industry first, the Raypak pool heater can report how long it has run and how many times it has fired. This is valuable feedback for the service professional.

Multi-unit installations can monitor the run time of each unit and balance out the duty load, thus avoiding over working one individual heater.

Heat Exchanger



Condensation-Free Operation

Both water temperature and flow rate inside the heater are controlled to help eliminate condensation, sooting and scale buildup that can shorten the life of a heater. Raypak engineered the Unitherm Governor specifically for pool heater applications, regulating low-temperature incoming water to help reduce condensation. The built-in automatic bypass helps prevent scaling and erosion by balancing the flow going into the heat exchanger.

Rust-Free Waterways

The Raypak Digital, with polymer headers, is equipped with an integral copper finned-tube heat exchanger and stainless steel tube sheets. Even the smallest details such as the studs and nuts are made out of stainless steel. The payoff? A heater that will last year after year and can easily be serviced if the need should ever arise.

Burners

Stainless Steel Burners

Burner design is a critical component in any gas heater. The stainless steel burner system used in the Raypak Digital is inherently forgiving and extremely robust. The burner is self-adjusting to compensate for gas pressure fluctuations, allowing the heater to always burn clean and safe.

Smooth Light Off

The soft-opening gas valve ensures smooth turn-on; no "Hard Light" to worry about. The easily removable burner tray and pilot assembly make service and maintenance a simple task.

Pilot Ignition

The Raypak Digital use a spark-to-pilot ignition system. This is the most reliable and robust ignition system available—an industry proven standard for over 30 years.

Flame Strength Indicator

Flame Strength
■■■■■■■ 8 Good

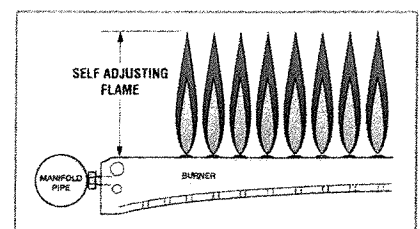
Raypak leads the way with the first control in the pool industry to monitor and measure the pilot flame signal. Known for our high quality, leading edge commercial boilers, it just made sense for Raypak to use this existing commercial technology on our residential pool heaters. This little tool is a service tech's dream. Raypak also uses this function on the end of line test, making sure every heater leaves with a robust flame signal.

On Board Voltmeter

Supply Voltage
28.2

The Raypak Digital monitors the low voltage electrical supply. This helps ensure the heater is wired properly during installation. The heater will also let you know if the voltage has dropped too low to function properly. No other pool heater takes care of you like a Raypak.

Spa Set 104F
Low Voltage



The right tube for the right application

Copper Fin Tube - Residential

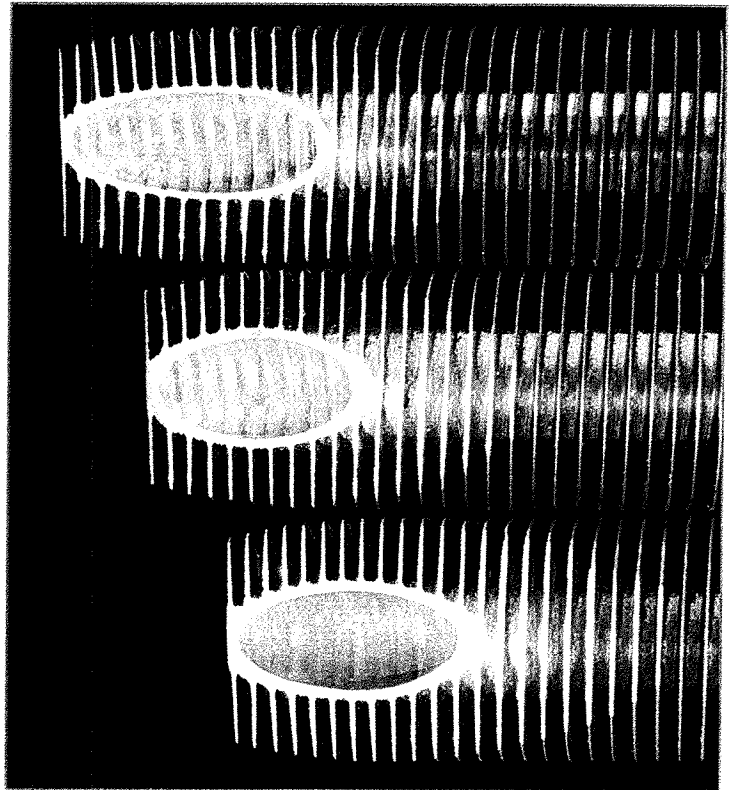
The Raypak Digital is built to last with the highest quality integral copper fin tube available. Copper is well known for its ability to efficiently transfer heat, and is the first choice for pool and spa heat exchanger construction. Pure copper has stood the test of time as the industry standard for efficiency, quality and product life.

ASME Copper Fin Tube - Commercial

The Raypak Digital ASME is designed specifically to meet State and local code requirements for public pools and commercial applications. This heater is equipped with a thicker walled fin tube allowing it to meet the ASME certification requirements.

Cupro-Nickel Fin Tube - Specialty

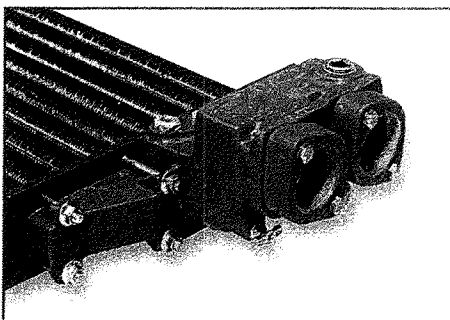
Raypak Digital heaters can be ordered with cupro-nickel fin tube heat exchangers for added protection against aggressive water chemistry. Although rare, there are certain applications, like health club spa's, where copper is just not the best choice. Cupro-nickel offers superior tolerance to bad and fluctuating water chemistry, thanks to a harder surface and a thicker walled fin tube.



ASME



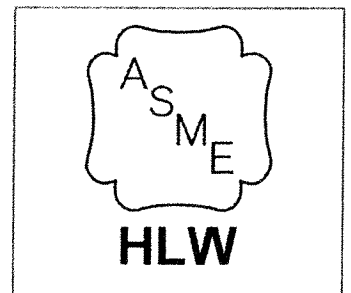
On-site state inspectors



Cast iron headers

ASME

The Raypak Digital heater is also available in an optional ASME version. Raypak has state inspectors on-site daily performing certifications for our pool heater and commercial boiler production that require ASME. Being in the boiler business for over 60 years truly makes Raypak the leader for your commercial needs. Why ASME? Most local codes require that public pools, pools that are in condominiums, apartments, or other commercial applications, be ASME certified. ASME stands for American Society of Mechanical Engineers, a non-profit group which sets many industrial and manufacturing standards. A pool heater that is made to ASME standards must perform to a set of specifications as determined by ASME, specifically in relation to the operating water pressure the appliance can handle. Each and every ASME heat exchanger that goes into a Raypak heater is certified by a state inspector to make sure it complies with all ASME codes for pool heaters.



Glass-Lined Cast Iron Headers

Raypak has applied its years of commercial boiler experience to the design of the cast iron glass-lined header. A metal header design allows for the higher working pressures required by ASME. Only after the material meets the stress analysis and metal composition tests is it approved for use in an ASME unit.

Anything BUT BASIC

Cabinet

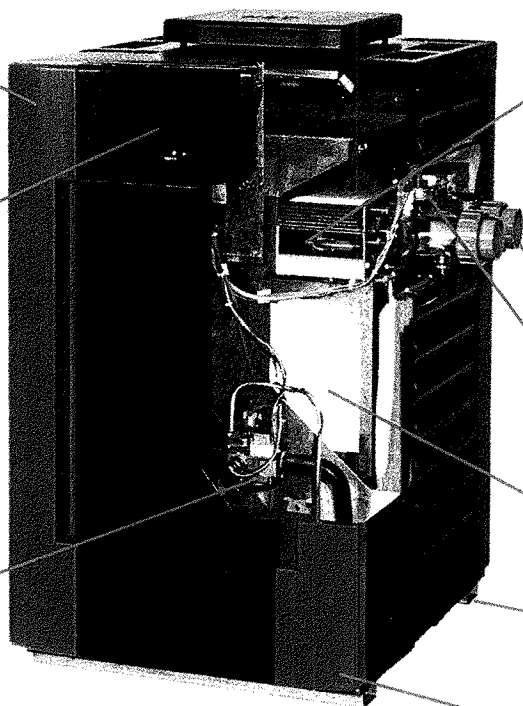
- Outdoor top - (standard)
- Wind-resistant design
- Channels rainwater out
- Textured powder-coat finish
- Optional indoor top

Digital Controls

- Microprocessor-controlled
- Built-in diagnostics
- Back-lit LCD display
- Pool and spa settings
- Lexan cover- with snap closure
- Remote-compatible
- Flame strength meter
- Cycle and run time log
- Transformer output monitor
- Fault history-last 10

Burner Tray

- Easily removable
- Stainless steel burners
- Brass orifices
- Aluminized metals
- Stainless steel heat shield
- Spark-to-pilot ignition
- Soft-opening gas valve



Heat Exchanger

- Integral copper fin tube - (standard)
- Automatic bypass
- Unitherm governor
- Polymer headers
- Stainless steel tube sheet
- Reversible for left-side water connections.
- ASME - (optional)
- Cupro-nickel - (optional)

2" CPVC Connections

High Limits and Controls

- Mounted on the in/out header

Ceramic Fiber Combustion Chamber

Non-Combustible Base

- Heater can be installed on a combustible surface

Base - Interior Floor

- Stainless steel

120/240V

- Incoming power can be connected to the right or left side.

	copper (polymer headers) ASME copper and cupro	cupro-nickel (polymer headers)
Model	BTUH Input	BTUH Input
206	199,500	180,000
266	266,000	240,000
336	332,500	300,000
406	399,000	360,000

Optional D-2 Power Vent

D-2 Power Vent

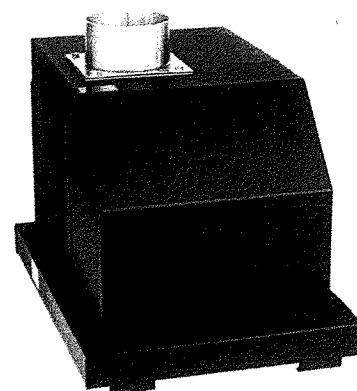
Sometimes, equipment rooms or unusual venting configurations require the use of a power vent. Being the heater experts, we have this option for you when the need may arise.

Through-the-Wall Capable

The D-2 Power Vent assembly is a Category III mechanical draft venting system that operates under a positive static pressure and prevents excessive condensate production in the vent. All sizes are capable of relieving flue gases up to a maximum of 100 equivalent feet of vent length. All models have a standard 4"-diameter exhaust connection.

Multi-Position

Using the Raypak-supplied adjustable 90° elbow, the flue gases may be discharged in any direction (see D-2 Power Vent manual for details). The D-2 Power Vent is also dual-voltage capable (120/240 volt) and engineered for long life and smooth operation.



D-2 Power Vent

For dimensions and technical specifications, see catalog number 6000.35.

In keeping with its policy of continuous progress and product improvement, Raypak reserves the right to make changes without notice.

www.raypak.com

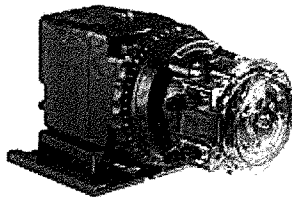
2151 Eastman Avenue | Oxnard, CA 93030 | 805-278-5300

Litho in U.S.A. ©2018 Raypak, Inc. 6000.12-I Effective 12-01-18 Replaces 05-01-15

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3/8" 170GPD DUAL CONTROL PUMP (GHS-45-8503)

Product # : GHS-45-8503

Mfg : STENNER PUMP COMPANY

Mfg # : 170DL5A3SMAA

Department : FEEDERS | CHLORINATORS | SANTIZERS

Product Line : Chem Feeders, Commercial

UOM (Default) : EA

Obsolete : This product is not obsolete.

Ship Weight (lbs) : 11.45

Dimensions : 17.50x9.50x8.00

UPC Code :

[Additional Info](#)

Size	34.7 Inch H x 9 Inch W
FinishColor	Gold
Includes	Drain Cover (Pebble Top), Baffle, Pressure Plug, Hydrostatic Plug, Hydrostatic Relief Valve Connection, Dual Suction Drain Sump, 10 Torx Screws
FlowRate	208 gpm
BottomOutletPipeSize	3 Inch or 2-1/2 Inch

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3HP 230V INTELLIFLO VSF VARIABLE SPEED & FLOW PUMP (PUR-10-1662)

Product # : PUR-10-1662
Mfg : PENTAIR WATER POOL & SPA, INC.
Mfg # : 011056
Department : PUMPS
Product Line : Pumps - Variable Speed
UOM (Default) : EA
Obsolete : This product is not obsolete.
Ship Weight (lbs) : 51.60
Dimensions : 28.00x16.00x13.00
UPC Code : 788379861506

[Additional Info](#)

[Features](#)

Description

Pentair, IntelliFlo(R), IntelliFlo(R) VSF; Variable Speed & Flow Pool & Spa Pump, Input: 208-230VAC, 50/60Hz, 3200 Watts Max., 1 Phase, Circuit Protection: Two-Pole 20 AMP device at the Electrical Panel, Dimensions: 28.5"L x 12.5"W x 16.5"H

AMMTEC CONSULTANTS, PLLC

CONSULTING ENGINEERING SERVICES

February 19, 2019
Job Number: AZ-2402.001

Imperial Pools and Design LLC
1870 W Prince Rd #56
Tucson, AZ 85705
Attention: Steve Rosales

SUBJECT: Pool Shell Construction within an Existing Pool Shell
Fountain Park
2121 North Evelyn Avenue
Tucson, Arizona

Dear Mr. Rosales:

This letter summarizes our discussions regarding pool construction at the subject site. We understand it is proposed to construct a new pool shell within the limits of an existing pool shell. The existing pool shell is exceeds 20 years of age and shows no significant evidence of distress. No demolition of the existing pool shell is anticipated.

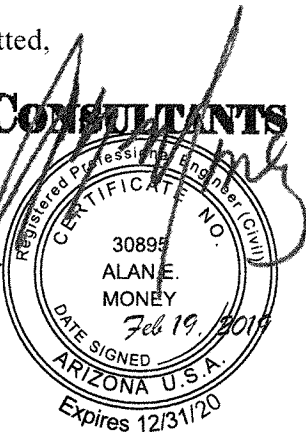
The existing structure is considered to create minimal active pressure on the new structure. Therefore, it is AMMTEC's professional opinion that the AMMTEC Standard Gunite and Reinforcement Detail Plan can be used for construction of the new pool shell. For pool shell construction, Soil Surcharge Category A of the AMMTEC Standard Plan may be used, however, it is recommended that a cap or water proof sealant be placed at the seam between the new structure and the existing pool shell. It is the responsibility of the contractor to ensure and document that water is not allowed to penetrate between exiting and new structures. All plumbing and recirculation penetrations are also the responsibility of the contractor.

No further engineering is required as it relates to the pool shell construction within an existing pool shell. We trust this provides you with the necessary information at this time, if you have any questions regarding this letter, please contact us


Respectfully submitted,

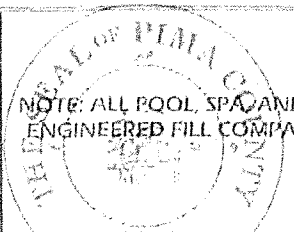
AMMTEC CONSULTANTS

Alan E. Money P.E.
Senior Engineer



REVIEWED FOR CODE COMPLIANCE

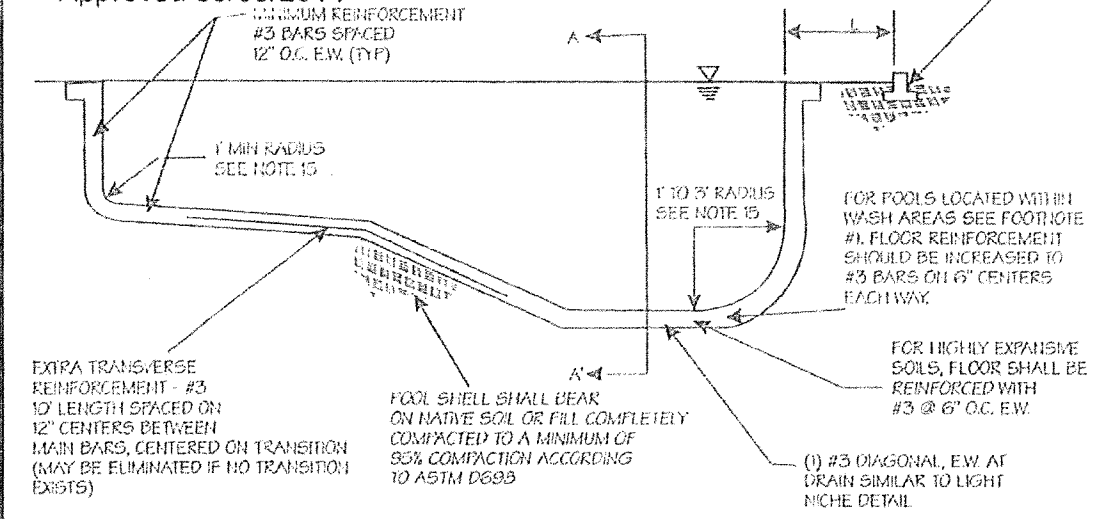
 2-26-19
City of Tucson
Planning & Development Services
Architectural & Structural



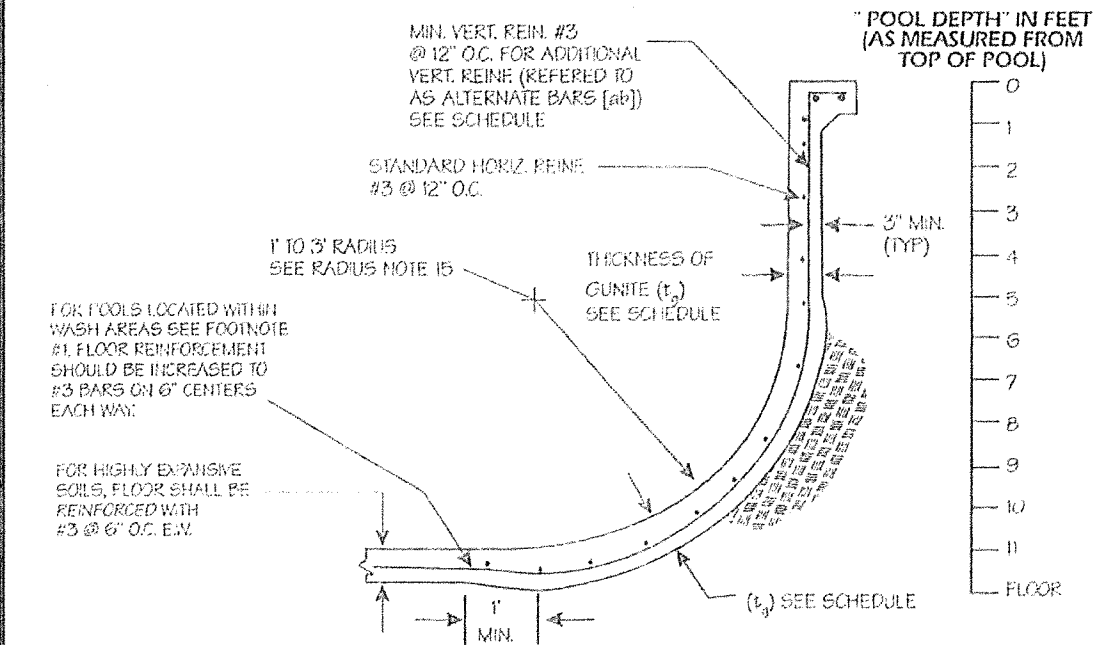
DETAIL A - TYPICAL POOL SECTION

NOTE: ALL POOL, SPA, AND WATER FEATURES SHALL BE BUILT ON FIRM UNDISTURBED NATIVE SOIL OR ENGINEERED FILL COMPACTED TO A MINIMUM OF 95% MAX. DENSITY AS DETERMINED BY ASTM D698

P14-M0057 PRES: POOL / SPA
Approved 09/05/2014



LONGITUDINAL SECTION
NOT TO SCALE



SECTION A-A' DETAIL
NOT TO SCALE

REINFORCEMENT AND GUNITE THICKNESS SCHEDULE

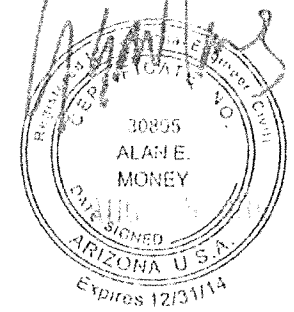
Column	5-A	5-B	5-C	6-A	6-B	6-C	7-A	7-B	7-C	8-A	8-B	8-C	9-A	9-B	9-C		
Soil Category	A'	B'	C'	A	B	C	A	B	C	A	B	C	A	B	C		
Pool Depth	5.0 ft.			6.0 ft.			7.0 ft.			8.0 ft.			9.0 ft.				
Depth (ft)	ab ¹	tg ¹	ab	tg	ab	tg	ab	tg	ab	tg	ab	tg	ab	tg	ab	tg	Depth (ft)
0.0	0	6	0	6	1	6	0	6	0	6	0	6	0	6	0	6	0.0
0.5																	0.5
1.0																	1.0
1.5																	1.5
2.0																	2.0
2.5																	2.5
3.0																	3.0
3.5			6	7					2								3.5
4.0			6	7													4.0
4.5			6	7													4.5
5.0	0	6	0	7													5.0
5.5																	5.5
6.0					0	6	1	6	1	7	7	7					6.0
6.5																	6.5
7.0									1	6	1	8	2				7.0
7.5																	7.5
8.0																	8.0
8.5																	8.5
9.0																	9.0
floor	0	6	0	6	1 ⁶	7	0	6	1 ⁶	6	1 ⁶	7	1 ⁶	6	2 ⁷	7	floor

Column	10-A	10-B	10-C	11-A	11-B	11-C	FREESTANDING WALL (Both Normal and Expansive Soil) ¹¹												Column				
Soil Category	A'	B'	C'	A	B	C	H	I	J	K	L	M		Column									
Pool Depth	10.0 ft.			11.0 ft.			H = 2.0 ft.		H = 3.0 ft.		H = 4.0 ft.		H = 5.0 ft.		H = 6.0 ft.		H = 7.0 ft.		Freestanding Depth				
Depth (ft)	ab ¹	tg ¹	ab	tg	ab	tg	ab	T ₁	T ₂	ab	T ₁	T ₂	ab	T ₁	T ₂	ab	T ₁	T ₂	ab	T ₁	T ₂	Depth (ft)	
0.0	0	7	0	7	1	7	0	3	4	0	3	4	0	3	4	0	3	4	0	3	4	0.0	
0.5																							0.5
1.0																							1.0
1.5																							1.5
2.0																							2.0
2.5																							2.5
3.0	0	7	0	7	1	7	0	3	4	0	3	4	0	3	4	0	3	4	0	3	4	3.0	
3.5																							3.5
4.0																							4.0
4.5																							4.5
5.0																							5.0
5.5																							5.5
6.0	1	7	1	7	2	7	1	3	4	1	3	4	1	3	4	1	3	4	1	3	4	6.0	
6.5	2	7	2	7	3	7	2	3	4	2	3	4	2	3	4	2	3	4	2	3	4	6.5	
7.0																							7.0
7.5																							7.5
8.0																							8.0
8.5																							8.5
9.0																							9.0
9.5																							9.5
10.0	2	7	2	7	3	7	2	3	4	2	3	4	2	3	4	2	3	4	2	3	4	10.0	
10.5																							10.5
11.0																							11.0
floor	2 ⁷	7	2 ⁷	7	3 ⁸	8	2 ⁷	3	3	1 ⁶	3	3	1 ⁶	3	3	2 ⁷	3	3	2 ⁷	3	3	2 ⁷	floor

¹¹Where wall thickness exceeds 10", a second section of reinforcement consisting of #3 @ 12" O.C. Each way should be placed @ 3" from waterside face of gunite

ARIZONA STANDARD GUNITE & REINFORCEMENT DETAIL PLAN
COPYRIGHT © 2014 AMMTEC CONSULTANTS, PLLC

REVIEWED FOR CODE COMPLIANCE
Emi 2-26-19
City of Tucson
Planning & Development Services
Architectural & Structural



DESIGNED BY: KFM / AEM
REVIEWED BY: KFM
DATE: 08/15/2012
PLAN IBC 2012AZ

AMMTEC CONSULTANTS
2447 West 12th Street, Ste #1
Tempe, Arizona 85281
Ph: (480) 927-9698
Fax: (480) 927-9797
ammtec@ammtec.com

PLAN NOT VALID UNLESS BEARING ORIGINAL STAMP AND SIGNATURE OR COPIES INCLUDING MUNICIPALITY APPROVAL STAMP AND NUMBER

P14-M0057 PRES. POOL / SPA
Approved 09/05/2014

DETAIL N: TYPICAL BOND BEAM CANTILEVER DECK OR COPING
NOT TO SCALE

DETAIL R: CARVED - ROCK ON BOND BEAM
NOT TO SCALE

DETAIL Q: LIGHT NICHE
NOT TO SCALE

- FOOTNOTES TO REINFORCEMENT & GUNITE SCHEDULE**
- Soil category A considered normal soil GI, GW, SP, SW. Assumed to have the following properties:
Unit Weight = 120 PCF As classified by IBC 2012 Table 1806.2
 - Soil Category B considered expansive soil SM, SC, ML, CL or normal soil with a 2:1 (H:V) slope. Assumed to have the following properties:
Unit Weight = 125 PCF As classified by IBC 2012 Table 1806.2
 - Soil Category C considered critically expansive soil or expansive soil with a 2:1 slope. Assumed to have the following properties: Unit Weight = 125 PCF As classified by 2012 Table 1806.2
 - ab, Alternate Bars (# of vertical alternate reinforcing bars in addition to #3 @ 12" o.c.)
 - tg, Thickness of Gunite (minimum gunite thickness, inches)
 - Continue alternate reinforcement 1.0 ft. past end of radius into pool floor.
 - Continue alternate reinforcement 2.0 ft. past end of radius into pool floor.
 - Continue alternate reinforcement 3.0 ft. past end of radius into pool floor.
 - Continue alternate reinforcement 4.0 ft. past end of radius into pool floor.
 - Site Conditions that require the use of a freestanding wall usually involve construction of the pool on or near a slope. If the toe of the free-standing wall is within 10 feet of a slope greater than 5:1 (horizontal to vertical) or if the excavation for the pool is not carried through the generally lower surface soils, the engineer should be contacted to determine in writing if a site specific soil investigation is warranted.

DETAIL V: MINIMAL BOND BEAM
NOT TO SCALE
(SEE NOTE 21 FOR APPLICATION)

DETAIL S: SKIMMER
NOT TO SCALE

DETAIL T: SPA
NOT TO SCALE

- GENERAL NOTES**
- Soil category A soil. Non expansive soils assumed to have the following properties:
Equivalent fluid pressure = 30 pounds per square foot (PSF) Unit Weight = 120 PCF
Soil Category B. Expansive soils assumed to have the following properties:
Equivalent fluid pressure = 45 PSF Unit Weight = 125 PCF
Soil Category C. Highly expansive soil assumed to have the following properties:
Equivalent fluid pressure = 60 PSF Unit Weight = 125 PCF
 - For an adjacent structure: footing distance for a one or two story structure, or up to four foot retaining wall (L) away from pool edge, add the indicated "surcharge" to the EFP when determining additional reinforcement and gunite requirements from the above schedule: (Applies to footings which run parallel to pool wall) (Does not apply to non-retaining screen walls)
L=0 to 1.9 ft., check w/ engineer, may require special engineering
L=2.0 to 4.9 ft., add 30 PSF to EFP
L=5.0 to 7.0 ft., add 15 PSF to EFP
 - Gunite shall be proportioned and placed according to IBC 2012 & ACI 506. Cement to aggregate, in dry weight, shall not be less than five to one.
 - Design based on 28 day compressive strength of 2,500 psi. Type V cement only. If water soluble sulfate in soil is less than 0.10% by weight, then min. 2,500 psi gunite can be used.
 - Reinforcement steel shall meet ASTM A615-40. Lap splices shall be at least 40 bar diameters. All heads shall be sharp. IBC 2012 shall be used as a guideline.
 - Rebar placement should be such that the distance from the inside grout face to rebar should be a minimum of "ty" minus 3 inches.
 - 1 (one) alternate #4 bar may be substituted for 2 alternate #3 bars.
 - For areas where a ramp has been excavated and backfill is not compacted to a minimum of 95 percent of the maximum dry density of the ASTM D698 Compaction Test. Reinforcement should consist of #3 bars at 6 inch centers, each way (both horizontal and vertical). The extra horizontal reinforcement should extend a minimum of 3 feet past the edge of the ramp excavation on either side. Minimum cover of gunite over the reinforcement on the outside of the pool should be increased from 3 to 4 inches.
 - A pressure relief valve shall be installed in pools located in areas where the ground water table or potential perched water intersects the pool during any period of any given year.
 - Up to 2 inch diameter pipe may be placed in the lower outside corner of the bond beam provided a minimum clearance equal to 0.75 times the nominal maximum aggregate size (i.e., 1/4 inch for gunite and/or shotcrete) is maintained between the pipe and any parallel reinforcement per IBC 2012. If metal piping is used and is placed in gunite, it shall be wrapped with vitriol or heavy brown paper, except where it passes perpendicularly through the gunite.
 - Soil shall have minimum bearing value of 1,000 psf.
 - Gunite shall be placed on or against firm undisturbed soil.
 - If expansive soils (clays) are encountered, the sides and bottom of the pool excavation must be in moist condition immediately prior to placement of gunite.
 - If slopes are greater than 2:1 or if slopes are encountered in expansive soils with raised bond beam, the engineer should be contacted before proceeding.
 - Minimum radius for wall to floor transition for straight walls is as follows:
Depth, ft. Min. Radius, ft. Depth, ft. Min. Radius, ft.
5.0 1.0 7.0 2.0
6.0 2.0 8.0 3.0
 - All electrical shall be securely grounded before gunite is placed.
 - All applicable state and local laws and codes shall be followed.
 - Any condition not specifically covered in this plan or unusual conditions encountered during excavation shall be brought to the attention of the engineer before proceeding.
 - If the raised bond beam portion exceeds 2.0 ft and serves as a retaining wall for soil, the raised portion should have wall drainage installed as shown to prevent build-up of hydrostatic pressures.
 - If free standing wall detail is used due to the presence of loose fill soil on the outside of the wall, then inside thickness of gunite (T) should be as indicated in the above "REINFORCEMENT AND GUNITE THICKNESS SCHEDULE" minus 3.0 inches.
 - Minimal Bond Beam may be used with sand gravel or rock soil conditions only.
 - For pools in excess of 50 feet and up to 75 feet, add longitudinal rebar at 6 inches O.C.
 - Max spa length 30 feet.
 - Pool shall be maintained full of water except during change of water or similar short term maintenance activities.
 - PLAN IN COMPLIANCE WITH IRC 2012

DETAIL U: FREESTANDING WALL
NOT TO SCALE

DETAIL P: PILASTER
NOT TO SCALE

DETAIL W: RAISED NOTCHED BOND BEAM (ROCK) & WATERFALL SI AN (EITHER RAISED OR AT GRADE)
NOT TO SCALE

NEGATIVE EDGE VERTICAL WALL SCHEDULE

H	VERTICAL REIN.	1
2.0	#3 @ 12" O.C.	A
3.0	#3 @ 12" O.C.	B
4.0	#3 @ 12" O.C.	B
5.0	#3 @ 12" O.C.	A
6.0	#3 @ 6" O.C.	9
7.0	#3 @ 6" O.C.	11
8.0	#3 @ 4" O.C.	12

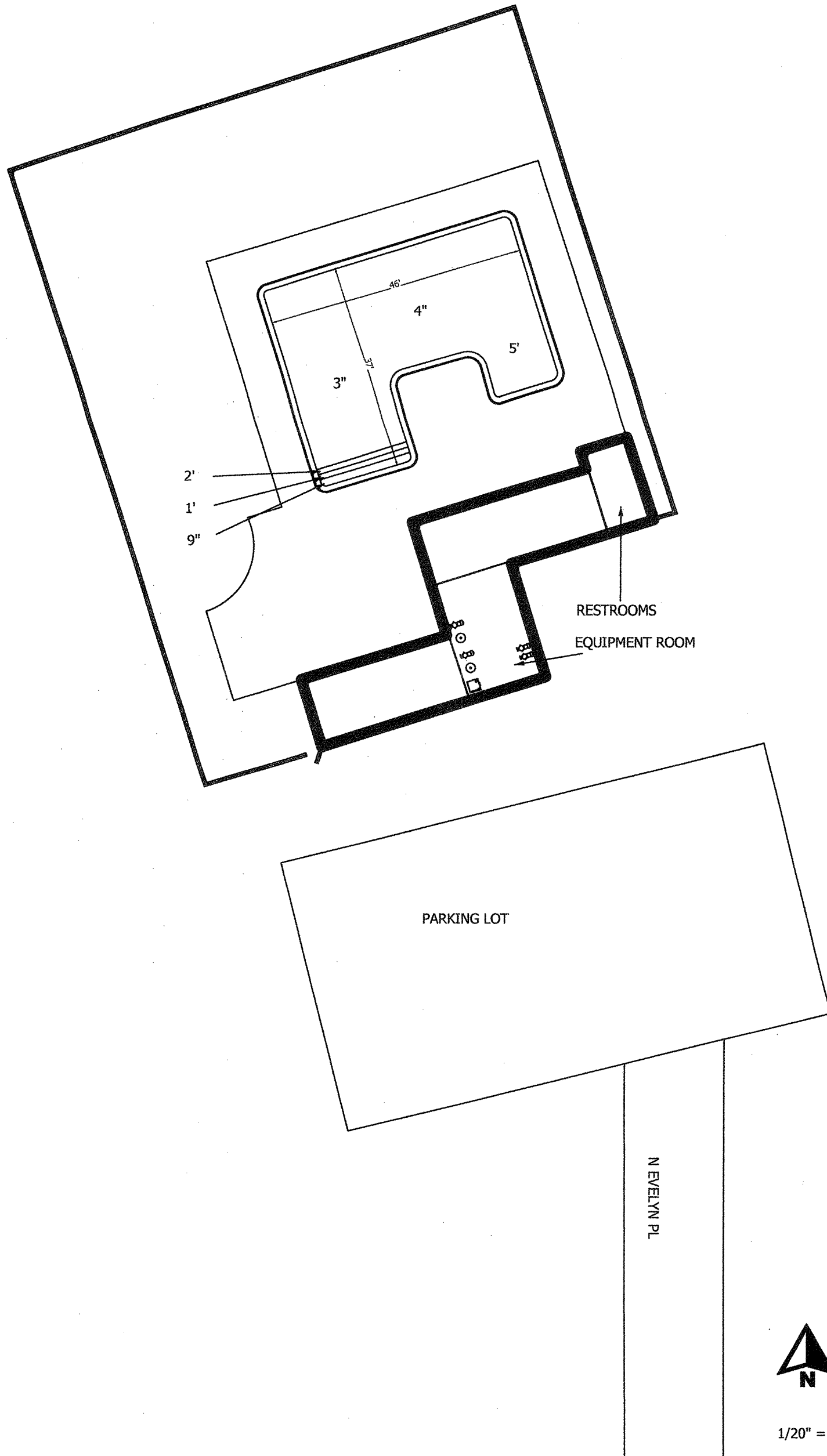
DETAIL Y: NEGATIVE EDGE
NOT TO SCALE

DETAIL X: RAISED BOND BEAM
NOT TO SCALE

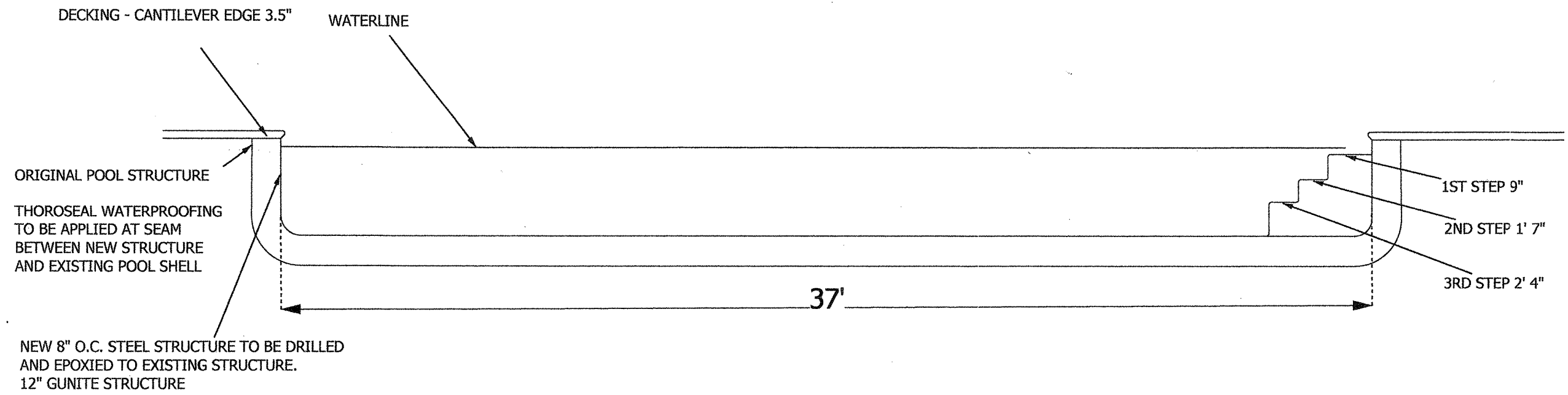
- 11 Soil shall have minimum bearing value of 1,000 psf.
- 12 Gunite shall be placed on or against firm undisturbed soil.
- 13 If expansive soils (clays) are encountered, the sides and bottom of the pool excavation must be in moist condition immediately prior to placement of gunite.
- 14 If slopes are greater than 2:1 or if slopes are encountered in expansive soils with raised bond beam, the engineer should be contacted before proceeding.
- 15 Minimum radius for wall to floor transition for straight walls is as follows:
Depth, ft. Min. Radius, ft. Depth, ft. Min. Radius, ft.
5.0 1.0 7.0 2.0
6.0 2.0 8.0 3.0
- 16 All electrical shall be securely grounded before gunite is placed.
- 17 All applicable state and local laws and codes shall be followed.
- 18 Any condition not specifically covered in this plan or unusual conditions encountered during excavation shall be brought to the attention of the engineer before proceeding.
- 19 If the raised bond beam portion exceeds 2.0 ft and serves as a retaining wall for soil, the raised portion should have wall drainage installed as shown to prevent build-up of hydrostatic pressures.
- 20 If free standing wall detail is used due to the presence of loose fill soil on the outside of the wall, then inside thickness of gunite (T) should be as indicated in the above "REINFORCEMENT AND GUNITE THICKNESS SCHEDULE" minus 3.0 inches.
- 21 Minimal Bond Beam may be used with sand gravel or rock soil conditions only.
- 22 For pools in excess of 50 feet and up to 75 feet, add longitudinal rebar at 6 inches O.C.
- 23 Max spa length 30 feet.
- 24 Pool shall be maintained full of water except during change of water or similar short term maintenance activities.
- 25 PLAN IN COMPLIANCE WITH IRC 2012

REVISIONS:

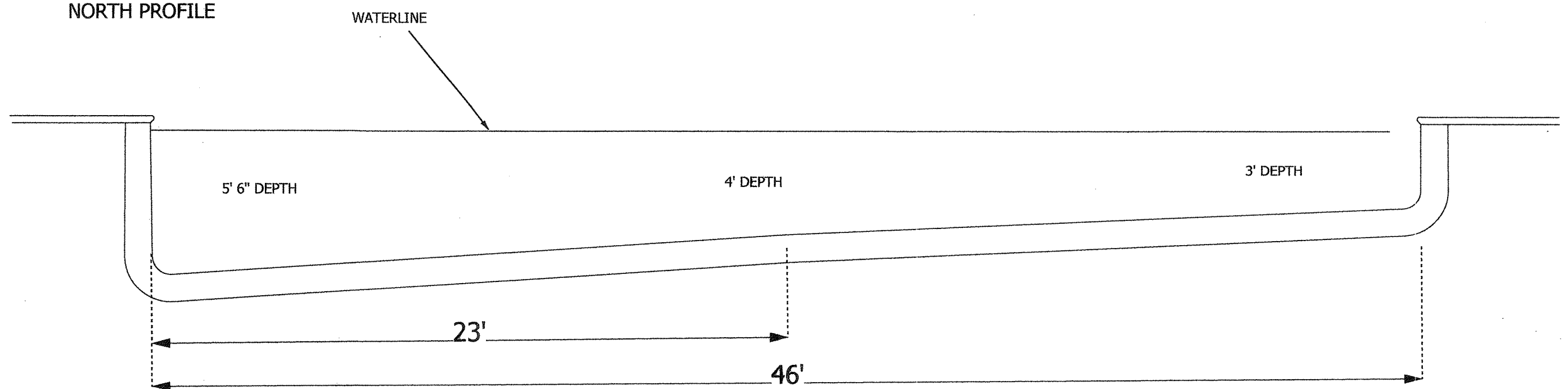
REV #	DATE	DESCRIPTION
1	2/11	BARRIER VERBIAGE UPDATED
2	2/25	THOROSEAL VERBIAGE ADDED
2	2/25	VERBIAGE RE: STEEL STRUCTURE UPDATED



WEST PROFILE



NORTH PROFILE



NEW POOL STRUCTURE TO BE BUILT WITHIN EXISTING POOL STRUCTURE, NEW POOL STRUCTURE BONDING TO BE TIED INTO EXISTING POOL STRUCTURE

THOROSEAL CEMENT BASED COATING FOR WATERPROOFING CONCRETE AND MAONRY; TO BE APPLIED AT THE SEAM BETWEEN NEW STRUCTURE AND EXISTING POOL SHELL PER MANUFACTURER'S RECOMMENDATION (SEE THOROSEAL SPECS)

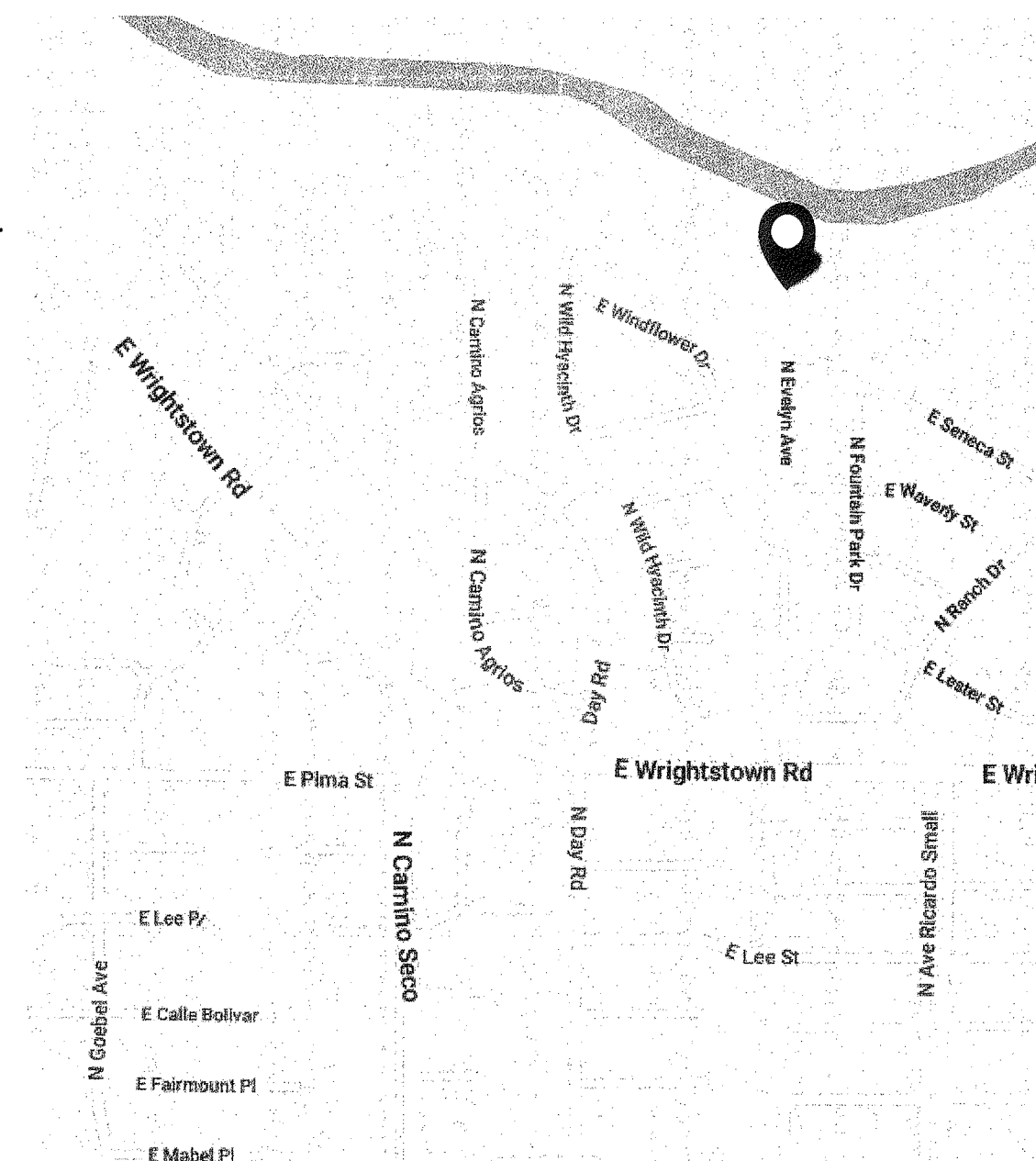
NEW 8" O.C. STEEL STRUCTURE TO BE DRILLED AND EPOXIED TO EXISTING STRUCTURE.

ALL PLUMBING/ELECTRICAL LINES EXISTING AND REROUTED TO NEW POOL STRUCTURE
EXISTING LINES TO CODE, EXISTING ELECTRICAL AND PLUMBING RUNS TO CODE

BARRIER FENCE TO BE ADDRESSED TO ENSURE CODE COMPLIANCE:

NEW SOUTH GATE LATCH TO BE INSTALLED 54" FROM GROUND, NEW FENCING TO BE INSTALLED TO ENSURE GAPS NO LESS THAN 4" UNDER FENCE AND BETWEEN VERTICAL SLATS, ALL APPLICABLE STATE & LOCAL CODES SHALL BE FOLLOWED.

REVIEWED FOR CODE COMPLIANCE
[Signature]
2/26/19
City of Tucson
Planning & Development Services
Architectural & Structural



TITLE: LAYOUT PLAN REVISION 2		DRAWING # 1 OF 3
DRAWN BY/DATE: AK 2/25/19		SCALE: VARIED
PROJECT NAME:	FOUNTAIN PARK RENOVATION	
ADDRESS:	2121 N EVELYN PL TUCSON, AZ 85715	

POOL:		SPA:	
PERIMETER:	180'	PERIMETER:	N/A
AREA:	1365 FT ²	AREA:	N/A
INT SURFACE	1974 FT ²	INT SURFACE	N/A
VOLUME:	36,000 GAL	VOLUME:	N/A

copy

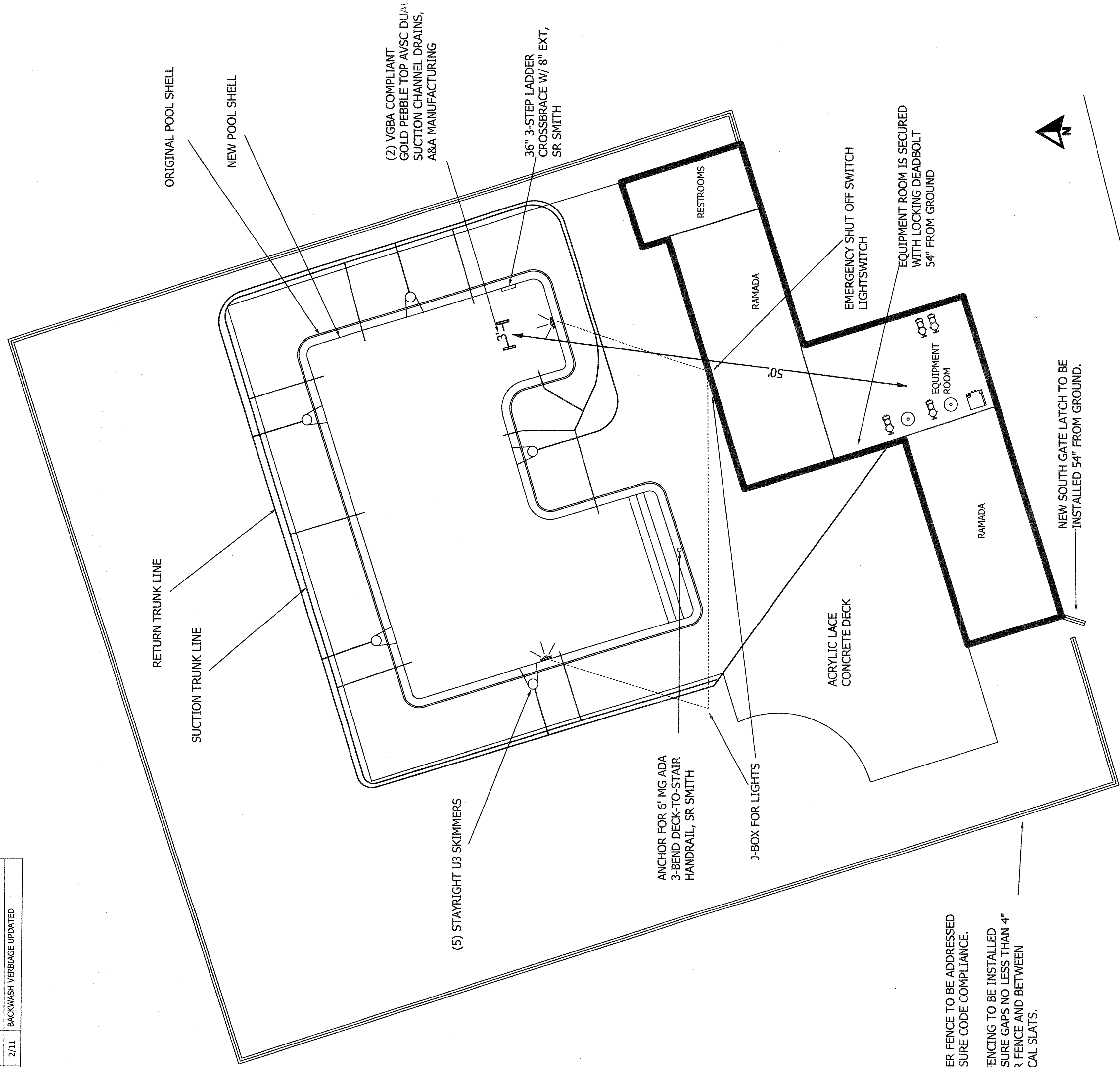
IMPERIAL
pools & design

3805 W RIVER RD. SUITE 105 TUCSON, AZ 85741
(520) 884-7665 KA6 DUAL ROC #316814

PROJECT: FOUNTAIN PARK RENOVATION

REVISIONS:

REV #	DATE	DESCRIPTION
1	2/11	BARRIER VERBIAGE UPDATED
1	2/11	HANDRAIL/LADDER INFO UPDATED
1	2/11	2ND CHANNEL DARIN ADDED, INFO UPDATED
1	2/11	EQUIPMENT ROOM VERBIAGE UPDATED
1	2/11	EMERGENCY SHUT OFF SWITCH CALLED OUT
1	2/11	BACKWASH VERBIAGE UPDATED



BARRIER FENCE TO BE ADDRESSED TO ENSURE CODE COMPLIANCE.

NEW FENCING TO BE INSTALLED TO ENSURE GAPS NO LESS THAN 4" UNDER FENCE AND BETWEEN VERTICAL SLATS.

ALL SUCTION AND RETURNS TO BE LOOPED, LINES MEASURE 236'

2 1/2" SCHED 40 RETURN TRUNK LINE REDUCED TO 1 1/2" SCHED 40 PIPING AT EQUIPMENT ROOM
3" SCHED 40 PIPING TRUNK LINE FOR SUCTION

ALL EXISTING LINES REPLUMBED TO NEW POOL SHELL, EXISTING BACKFLOW LINES TO WASH CONNECTION SHALL BE THROUGH EXISTING AIR GAP

WATERLINE AND DECK DEPTH MARKERS TO BE PLACED AT 3', 4', AND 5' 6" DEPTHS AT MINIMUM OF EVERY 15' AROUND POOL
INTL NO DIVING SIGN TO BE PLACED ON PREMISES

SR SMITH 3HR-6ADA-MG 3-BEND STAIR RAIL; 34 INCH TOP HEIGHT X 34 INCH BOTTOM HEIGHT X 6FT WIDTH, 0.065 INCH WALL THICKNESS, 316L MARINE GRADE STAINLESS STEEL

SR SMITH LFB-36S-3B 3-STEP 304 STAINLESS STEEL LADDER WITH CROSSBRACE & 8" EXTENSION; 36 INCH WIDTH

REVIEWED FOR CODE COMPLIANCE

E. J. Smith 2-26-19
City of Tucson
Planning & Development Services
Architectural & Structural

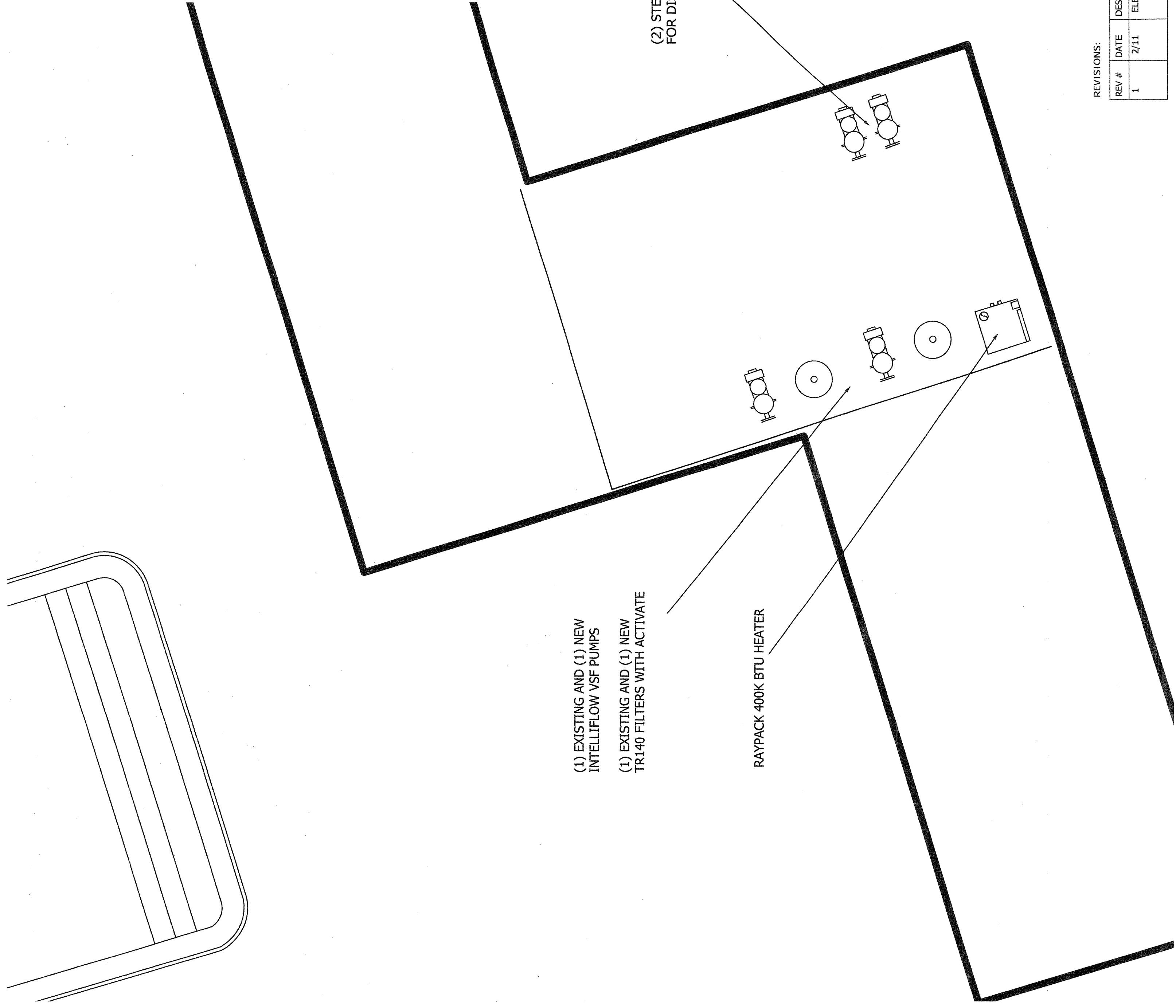
TITLE:	PLUMBING AND CONSTRUCTION PLAN REVISION 1
DRAWING #	2 OF 3
SCALE:	1/8" = 1'
DRAWN BY/DATE:	AK 2/11/19

PROJECT NAME:	FOUNTAIN PARK RENOVATION
ADDRESS:	2121 N EVELYN PL TUCSON, AZ 85715

POOL:	SPA:
PERIMETER: 180'	PERIMETER: N/A
AREA: 1365 FT ²	AREA: N/A
INT SURFACE: 1974 FT ²	INT SURFACE: N/A
VOLUME: 36,000 GAL	VOLUME: N/A

IMPERIAL
pools & design
3805 W RIVER RD. SUITE 105 TUCSON, AZ 85741
(520) 884-7665 KA6 DUAL ROC #316814
PROJECT: FOUNTAIN PARK RENOVATION





(1) EXISTING AND (1) NEW
INTELLIFLOW VSF PUMPS

(1) EXISTING AND (1) NEW
TR140 FILTERS WITH ACTIVATE

RAYPACK 400K BTU HEATER

(2) STENNER PUMPS
FOR DISINFECTION

- (2) PENTAIR INTELLIFLOW VSF 3HP VARIABLE SPEED PUMPS, 208-230VAC, 50/60HZ, 3200 WATTS MAX, 1 PHASE CIRCUIT PROTECTION
- (2) PENTAIR 25" TR140 FILTERS, SLIDE VALVE WITH ACTIVATE GLASS FILTER MEDIA
- (2) 3/8" 170GDP DUAL CONTROL PUMP, 1/30HP EX POOL SECONDARY SANITATION SYSTEM FLOWVIS FLOW METER

ELECTRICAL SCHEDULE:

AMPS:	DESCRIPTION:	DESCRIPTION:	AMPS:
15	LIGHT	MAIN	20
20	INTELLIFLOW PUMP	170GDP PUMP	20
20	170GDP PUMP		

REVIEWED FOR CODE COMPLIANCE
[Signature] 2-26-19
 City of Tucson
 Planning & Development Services
 Architectural & Structural

REVISIONS:

REV #	DATE	DESCRIPTION
1	2/11	ELEC SCHED UPDATED

TITLE:

EQUIPMENT ROOM REVISION 1	DRAWING # 3 OF 3
DRAWN BY/DATE: AK 2/11/19	SCALE: NTS
PROJECT NAME: FOUNTAIN PARK RENOVATION	ADDRESS: 2121 N EVELYN PL TUCSON, AZ 85715

POOL:

PERIMETER:	SPA:	PERIMETER:	PERIMETER:
180'	N/A	PERIMETER:	N/A
AREA:	1365 FT ²	AREA:	N/A
INT SURFACE:	1974 FT ²	INT SURFACE:	N/A
VOLUME:	36,000 GAL	VOLUME:	N/A

IMPERIAL
 pools & design
 3805 W RIVER RD. SUITE 105 TUCSON, AZ 85741
 (520) 884-7665 KA6 DUAL ROC #316814
 PROJECT: FOUNTAIN PARK RENOVATION



PIMA COUNTY
CONSUMER HEALTH AND FOOD SAFETY
APPROVED Health Plan Review
3950 S. Country Club Rd., Tucson, AZ 85714
520-724-7908

THE PIMA COUNTY HEALTH DEPARTMENT
MUST APPROVE ALL CHANGES FROM THE SUBMITTED PLANS BEFORE
CONSTRUCTION OR EQUIPMENT INSTALLATION

PLAN REVIEW #: P19HD00031

REMODEL

Name of Facility: Fountain Park Community Pool

Address: 2121 N Evelyn Pl.

City: Tucson

Zip: 85715

License Type or Descriptive Classification: 7000 S

CERTIFICATE OF CONDITIONAL APPROVAL
TO CONSTRUCT OR REMODEL A PUBLIC OR SEMI PUBLIC POOL OR SPA

Plans Conditionally Approved by:

Jack Kincaid R.S.

Date: 02/14/2019

Certificate of Approval Expires
One Year from Date of Issue

- Approval is hereby granted to construct the above-described facilities, as represented in the approved plan documents, subject to the following stipulations, which are also noted on the approved plan and documents attached. Approval of plan documents does not grant approval of construction, equipment or operations that are in violation of the Pima County Code Chapter 8.32- Swimming Pools and Spas and Arizona Administrative Code Title 18: Environmental Quality; Article 2: Public And Semipublic Swimming Pools And Spas

All approved plan documents must
be kept on the job site at all times.

Unless otherwise documented by the Health Department, the establishment must comply with the stipulations of this plan review to be issued an operating license.

For guidelines on plan review consult these resources.

- Pima County Code Chapter 8.32- Swimming Pools and Spas
- Arizona Administrative Code Title 18: Environmental Quality ;Article 2: Public And Semipublic Swimming Pools And Spas
- Submit plan review application for approval to construct or remodel Public or Semi Public pools

Plan Review Comments: (Responses provided by Anna kanto from Imperial pools and design)

(NOTE)

• **8.04.060 - Certificate of approval to construct.**

If plans and specifications submitted to the department comply with the requirements of this title, the health officer will issue a certificate of approval to construct. If construction is not completed within one year after the date of issue, the certificate of approval to construct is void, unless a written extension of time is granted by the health officer.

• **8.04.100 - Extension of certificate of approval to construct.**

A regulated establishment may request a six-month extension of the certificate of approval to construct by submitting a written request to the department together with the appropriate fee. Additional six-month extensions may be requested in the same manner. The department may deny an extension if the plans no longer comply with the health code.

SPECIFICATION DATA:

TYPE OF POOL

Type of Pool: Swimming Spa Wading Other

Intended Use Public Semipublic Special Use

DESIGN DATA

Filtration Rate: Pool (8 hour) Indoor Exercise (6 hour)

Spa (30 min.) Wading Pool (2 hours)

Surface Area: 1365 Sq. ft.

Periphery: Ft.

Water volume: 36,000 Gal.

Minimum Filtration Rate: 200 Gpm

Filter: High Rate Sand (25gpm/ft.)

Cartridge (.375 gpm/ft.)

Diatomaceous Earth

Other _____

Scum Gutter: Yes No

Skimmers: 5 (quantity)

Returns: Wall 14 (quantity)

Floor: 3 (quantity)

Equipment: Distance from Main Drain 50 Ft.

Pump Installed 1 Ft.

Above water level Below water level

FILTER PLANT

Mfg: Pentair

Model: TR 140

Filter Area (each): 7.56 Sq. Ft.

Number of filters: 2 (1 Existing)

Total Filter Area: 14.12 Sq. Ft

Maximum Filtration Rate: 38 Gpm

Pressure gauges: ? (quantity)

Flow Meter (mfg.) Flow Vis

Backwash: To sewer

Other (show details) Existing

CIRCULATION SYSTEM

Mfg. Pentair

Model: intelliflow VSF

Size: 3 HP

Full rated: 3 Hp. Number (2) 1 existing

T.D.H. / (estimated) Not provided

Expected Flow Rate: 170 Gpm

Turnover Rate: 211 Minutes

DISINFECTION SYSTEM

Disinfectant: Chlorine Bromine Other Ex Pool Oxygen

Type: Erosion Liquid Hypo. Gas Other

Mfg. Stenner Pump Model 170GPD Number 170DL5A3Sm77

Automatic Monitoring System Chemical Feeder

POOL STRUCTURE:

Type: Gunite Poured Concrete Other:

Trim and Finish: Pool Bottom and Walls Pebble Fina

Color: Classico Coping N/A

Tile: Cobalt Bluet textile concrete tile Color TBD

Deck: Type Acrylic laie Finish Tan Min. Width 7'

Depth Markets (desk &Tile, every foot to 5 ft.) placed at:

3 Ft, 4 ft, 5.6 ft., ft. ft. ft.

MAKE UP WATER

Above deck Below Deck * Auto Fill * Other*

* Requires Backflow/ Back Siphonage Protection Device

Mfg: Existing Model: Existing

EQUIPMENT

Diving board; (quantity) N/A Height N/A (requires detail)

Ladders: (quantity) 1 Tread Recessed Steps

Handrails: (quantity) 1

Test Kit: Mfg. Existing Model: Existing

Deck Area Lights: (quantity) Existing Watts (each) Existing

Underwater lights: (quantity) 2 Watts (each) 300

Automatic Cleaning System: Mfg. _____ Model _____

Raypack 400K BTU heater.

SAFETY EQUIPMENT

Ring Buoy Shepherds Crook First Aid Kit

Rules Posted Lifeguards: Yes No

Public Pools: Blankets Backboard Life Line

Lifeguard Chairs (quantity) 0 Rescue Tubes

POOL AREA

Enclosure: Material: Block, & Metal fence Height 5' Ft.

Restrooms/Shower:

Provided at Pools Area Yes

❖ Scope of work:

- New pool structure to be built within the existing pool structure. New pool structure bonding

Barrier:

- ❖ Plan notes the pool barrier is 5ft, and a combination of wrought iron & masonry, and meets code.

A routine inspection conducted 08/24/2018 by our department, noted several barrier violations.

- 1) South gate latch locking mechanism was less than the required 54" in height requirements.
- 2) Gaps were observed under the fence greater than 4"
- 3) Spaces between the vertical members of the fence were also greater than 4"

R18-5-240. Barriers

A. A public swimming pool or spa and deck shall be entirely enclosed by a fence, wall, or barrier that is at least 6 feet high. A semipublic swimming pool or spa and deck shall be entirely enclosed by a fence, wall, or barrier that is at least 5 feet high.

The height of the fence, wall, or barrier shall be measured on the side of the barrier which faces away from the swimming pool or spa.

B. Fences or walls shall:

1. Be constructed to afford no external handholds or footholds;
2. Be of materials that are impenetrable to small children;
3. Have no openings or spacings of a size that a spherical object 4 inches in diameter can pass through; and
4. Be equipped with a gate that opens outward from the swimming pool or spa. The gate shall be equipped with a self-closing and self-latching closure mechanism or a locking closure located at or near the top of the gate, on the pool side of the gate, and at least 54 inches above the floor.

C. The distance between the horizontal components of a fence shall not be less than 45 inches apart. The horizontal members shall be located on the interior side of the fence. Spacing or openings between vertical members shall be of a size that a spherical object 4 inches in diameter cannot pass through.

D. The maximum mesh size for a wire mesh or chain link fence shall be a 1 3/4 inches square.

E. Masonry or stone walls shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

F. If a wall of a building serves as part of the barrier around a public or semipublic swimming pool or spa, there shall be no direct access to the swimming pool or spa through the wall except as follows:

1. Windows leading to the swimming pool or spa area shall be equipped with a screwed-in place wire mesh screen or a keyed lock that prevents opening the window more than 4 inches.
2. A hinged door leading to the swimming pool or spa area shall be self-closing and shall have a self-latching device. The release mechanism of the self-latching device shall be located at least 54 inches above the floor.
3. If an additional set of doors is required by the fire code allowing access to the swimming pool or spa, they shall be self-closing and self-latching, equipped with panic bars no less than 54 inches from the floor to the bottom of the bar and designated "For Emergency Use Only."
4. Sliding doors leading to the swimming pool or spa area are prohibited except for sliding doors that are self-closing and self-latching.

G. If a barrier is composed of a combination concrete masonry unit and wrought-iron, the wrought iron portion shall be installed flush with the outside vertical surface of the concrete masonry unit. The space between the wrought iron and the concrete masonry unit shall be 1/2 inch or less. The vertical members of the wrought iron shall be spaced 4 inches on center.

H. Filtration, disinfection, and water circulation equipment shall be enclosed by a wall or fence.

→ Show the complete barrier on the plan. All entry points shall be shown, the type of locking mechanism, and its height AFF, the barrier design shall confirm there are no spacing's under the fence, or between the vertical members greater than 4". All barrier requirements applicable to your facility must be in compliance.

- ✓ **(Operator Response)** “Barrier fence to be addressed to ensure code compliance: New south gate latch to be installed 54” from the ground, new fencing to be installed to ensure gaps no less than 4” under, and between vertical slats. All applicable state & local codes shall be followed”

1. Equipment Layout/schedule Comments:

- a) Ladder, and handrail noted as ADA approved, but no equipment specs provided.

→ **Provide make and model numbers for both the handrail, and the ladder.**

R18-5-215. Ladders

A. At least one ladder shall be provided in the deep area of a public or semipublic swimming pool. If the width of the deep area of a swimming pool is greater than 20 feet, then one ladders shall be located on opposite sides of the deep area.

B. A swimming pool or spa ladder shall be equipped with two handrails.

C. All treads on ladders shall have slip-resistant surfaces.

D. Ladder treads shall have a minimum horizontal depth of 1 ½ inches. The distance between ladder treads shall range from a minimum of 7 inches to a maximum of 12 inches.

E. Below the waterline, there shall be a clearance of not more than 6 inches and not less than 3 inches between any ladder tread edge and the wall as measured from the side of the tread closest to the wall.

- ✓ **(Operator Response) Handrail:** Anchor for 6’ MG ADA 3-bend deck-to-to stair handrail, SR Smith.

Ladder: 36” 3 step ladder cross brace with 8” Ext, SR Smith.

There are no accent tiles called on the steps.

→ **Provide the material, and color of the required accent tiles on the steps.**

R18-5-214. Steps

A. Each set of steps shall be provided with at least one handrail to serve all treads and risers. Handrails shall be provided at one side or in the center of all steps. Handrails shall be installed in such a way that they can be removed only with tools.

B. Steps shall be permanently marked to be clearly visible from above and below the water level in a swimming pool or spa. The edges of steps shall be outlined with a sharply contrasting colored tile or other material that is clearly visible from the deck adjacent to the steps.

- ✓ **(Operator Response)** Accent Tiles will be Cobalt blue textile concrete tile, specification form updated.

- b) Equipment room noted on plan, but no details provided regarding the enclosure.

R18-5-240. Barriers: Filtration, disinfection, and water circulation equipment shall be enclosed by a wall or fence.

→ **Provide details confirming the equipment room is a secured enclosure.**

✓ **(Operator Response)** Verbiage updated on plans re: security of equipment room; room is locked with deadbolt 54" from ground.

2. Plumbing Comments:

a) The main drain is noted only as a VGBA compliant channel drain.

R18-5-226. Drains and Suction Outlets

A. A public and semipublic swimming pool shall be equipped with at least two main drains located in the deepest part of the swimming pool or a single gravity drain that discharges to a surge tank.

B. Each main drain shall be covered by a grate that is not be readily removable by users. The openings in the grate shall have a total area that is at least four times the area of the drain pipe.

C. The spacing of the main drains shall not be greater than 20 feet on centers and not more than 15 feet from each side wall.

D. A minimum of two suction outlets shall be provided for each pump in a suction outlet system for a public or semipublic spa. The suction outlets shall be separated by a minimum of 3 feet or located on two different planes [that is, one suction outlet on the bottom and one on a vertical wall or one suction outlet each on two separate vertical walls]. The suction outlets shall be plumbed to draw water through them simultaneously through a common line to the pump. Suction outlets shall be plumbed to eliminate the possibility of entrapping suction.

E. If the suction outlet system for a public or semipublic swimming pool or spa has multiple suction outlets that can be isolated by valves, then each suction outlet shall protect against user entrapment by either an antivortex cover, a grate, or other means approved by the Department.

→ **Provide the make and model of the channel drain, and a plumbing page confirming the required dual drains are provided.**

✓ **(Operator Response)** (2) VGBA compliant gold pebble top AVSC dual suction channel drains. A&A manufacturing

→ **Where is the filter back wash disposed of? There is no reference to the backwashing method. Show the required air gap, and the piping system that will be draining the backwash of the filtration system. System.**

R18-5-236. Disposal of Filter Backwash, Wasted Swimming Pool or Spa Water, and Wastewater

All sewage from plumbing fixtures, including urinals, toilets, lavatories, showers, drinking fountains, and floor drains, and other sanitary facilities shall be disposed of in a sanitary manner. Filter backwash and wasted swimming pool or spa water shall be discharged into a sanitary sewer through an approved air gap, an approved subsurface disposal system, or by other means that are approved by the Department. The method of disposal shall comply with applicable disposal requirements established by a county,

municipal, or other local authority. There shall be no direct physical connection between the sewer system and the water circulation system of a public or semipublic swimming pool or spa.

- ✓ **(Operator Response)** "Backwash, will be using existing backwash drainage system to wash with airgap"

3. Electrical Comments:

- a) New pool structure bonding to be tied into the new pool structure.

- b) **There is no emergency shut off switch called out on the plan.**

R18-5-225. Pumps and Motors (D) The pump shall be equipped with an emergency shut-off switch that is located within the swimming pool or spa enclosure to cut off power to the water circulation system if someone is entrapped on a main drain or suction outlet.

→ Show the required emergency shut off switch, within the pool enclosure.

- ✓ **(Operator Response)** Plans updated to show emergency shut off switch at light switch on Ramada.

4. Finish Schedule Comments:

- a) **The color of the pool interior has not been provided.**

R18-5-207. Construction Materials

The color, pattern, or finish of the interior of a public or semipublic swimming pool or spa shall not obscure objects, surfaces within the swimming pool or spa, debris, sediment, or algae. Surface finishes shall be **white, pastel, or other light color**. The interior finish shall completely line the swimming pool or spa to the coping, tile, or gutter system.

→ Provide the interior color of the pool.

- ✓ **(Operator Response)** Interior of pool will be Pebble Fina Classico, specification form updated.

5. General Comments:

Pre Guniting inspection required

The entire recirculation system must remain exposed until a complete inspection is made and approval given by a representative of the local county health department.

STANDARD REQUIREMENTS

1. Establishment must comply with any SMOKING ORDINANCE governing its jurisdiction.
2. SINKS
 - a. Hot and cold water provided to all sinks.
 - b. Water to the hand sinks, if tempered, must be at least 100°F.
 - c. No combination hand/mop sinks allowed.
 - d. All hand sinks or lavatories must be installed separately from mop (service) sinks.
3. CEILING and WALLS shall be washable, smooth, non-porous, durable and light-colored in all areas of food preparation and ware washing.
4. The MECHANICAL VENTILATION must be of sufficient capacity to keep rooms free of excessive heat, steam, condensation, vapors, obnoxious odors, smoke, and fumes. RESTROOMS require forced-air, mechanical ventilation. Exhaust fan shall be vented through the roof and activated by switch or run continuously during all hours that the building is occupied.
5. If the POWER WASH METHOD is used for cleaning floors, then cove base shall be installed to join floors with walls in affected areas.
6. SELF-CLOSING DOORS are required on all restrooms and entrances or exits to facility, except those exits that are designated emergency exits.



FINAL INSPECTION CHECKLIST--

For Final Inspection, Please Call 724-7908, 72 Hours in Advance.

Before the preliminary or final inspection:

- Step 1. Do you have the approved plans and other documents from the Health Department at the job site?
- Step 2. Have you reviewed the comments and revised construction as noted on the *Certificate of Approval to Construct or Remodel*? Contact the person who reviewed your plans if there are any questions about the comments. All variances from the approved plans or the sanitary code require approval by the Health Department. **The operating license/permit will not be approved until construction is altered to comply with comments or receives a variance from the Health Department.**

Pregunite Inspection

- Step 3. Pregunite inspection required before the final inspection? Contact the Health Department for a preliminary inspection and pay the required inspection fee

Final Inspection

- Step 4. Have you called the Health Department to request a final inspection? Contact the Health Department **72 hours** before completing construction to arrange for a final inspection date. Final inspections take place after, or in conjunction with, the final inspection by Building Safety. To keep your project on its schedule for grand opening, we suggest you schedule final inspections seven days before the grand opening date.
- Have you paid for the operating license(s) and inspection fees? Inspection fees and operating licenses must be paid before the final inspection can be done. Contact Consumer Health & Food Safety to make payment arrangements.

→ Final inspections require utilities to be connected and operating and key equipment, like refrigeration, mechanical hoods and water heaters to be functioning.

Step 5. Have you:

→ Installed all equipment?

→ Removed all construction materials and debris?

→ Connected all utilities?

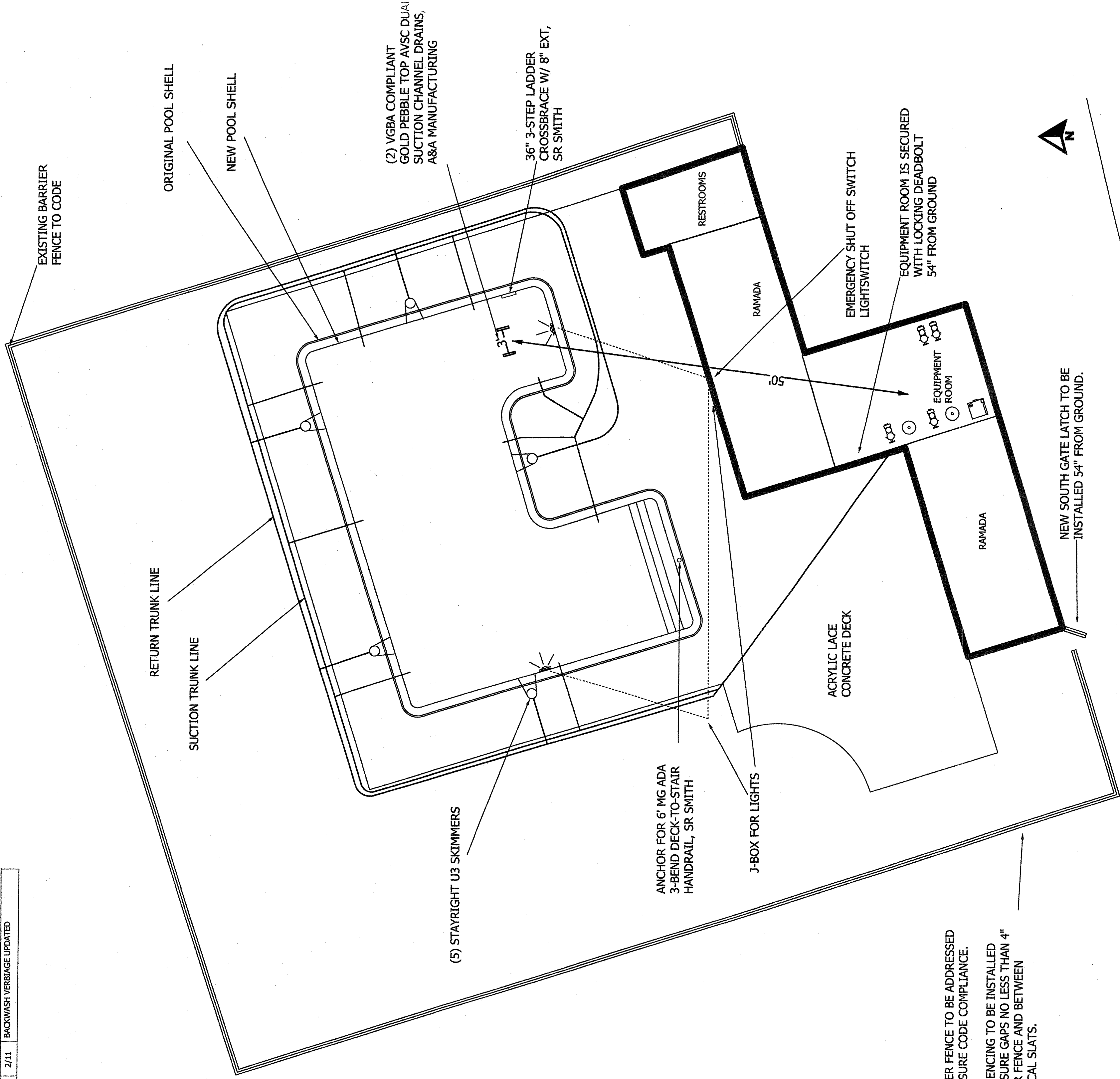
→ Turned on all equipment and the water heater?

→ Tested all reduced pressure backflow preventers (RPs) installed

cc: File

REVISIONS:

REV #	DATE	DESCRIPTION
1	2/11	BARRIER VERBIAGE UPDATED
1	2/11	HANDRAIL/LADDER INFO UPDATED
1	2/11	2ND CHANNEL DARIN ADDED, INFO UPDATED
1	2/11	EQUIPMENT ROOM VERBIAGE UPDATED
1	2/11	EMERGENCY SHUT OFF SWITCH CALLED OUT
1	2/11	BACKWASH VERBIAGE UPDATED



BARRIER FENCE TO BE ADDRESSED TO ENSURE CODE COMPLIANCE.

NEW FENCING TO BE INSTALLED TO ENSURE GAPS NO LESS THAN 4" UNDER FENCE AND BETWEEN VERTICAL SLATS.

ALL SUCTION AND RETURNS TO BE LOOPED, LINES MEASURE 236'

2 1/2" SCHED 40 RETURN TRUNK LINE REDUCED TO 1 1/2" SCHED 40 PIPING AT EQUIPMENT ROOM
3" SCHED 40 PIPING TRUNK LINE FOR SUCTION

ALL EXISTING LINES REPLUMBED TO NEW POOL SHELL, EXISTING BACKFLOW LINES TO WASH CONNECTION SHALL BE THROUGH EXISTING AIR GAP

WATERLINE AND DECK DEPTH MARKERS TO BE PLACED AT 3', 4', AND 5' 6" DEPTHS AT MINIMUM OF EVERY 15' AROUND POOL
INTL NO DIVING SIGN TO BE PLACED ON PREMISES

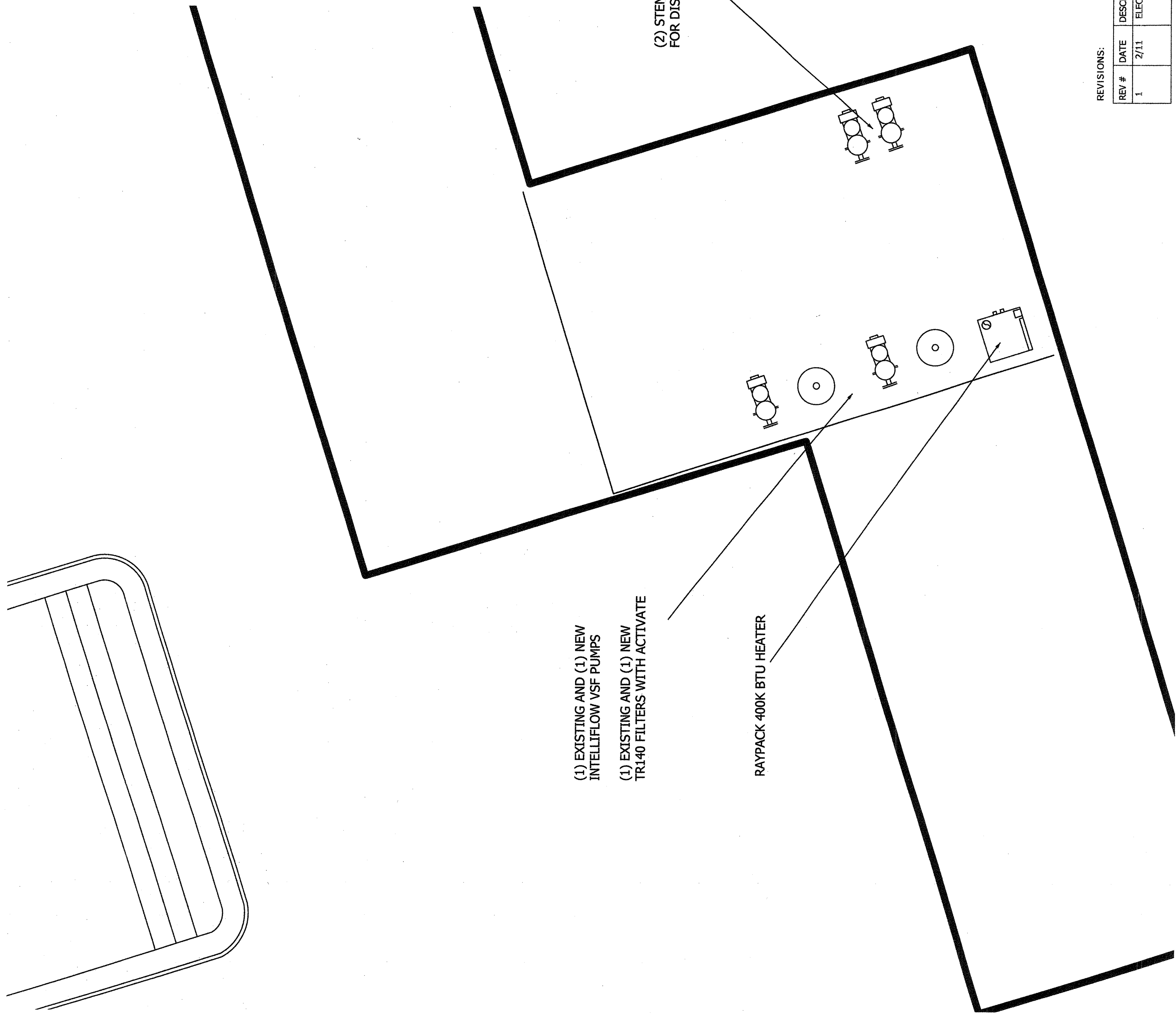
SR SMITH 3HR-6ADA-MG 3-BEND STAIR RAIL; 34 INCH TOP HEIGHT X 34 INCH BOTTOM HEIGHT X 6FT WIDTH, 0.065 INCH WALL THICKNESS, 316L MARINE GRADE STAINLESS STEEL

SR SMITH LFB-36S-3B 3-STEP 304 STAINLESS STEEL LADDER WITH CROSSBRACE & 8" EXTENSION: 36 INCH WIDTH

TITLE:	PLUMBING AND CONSTRUCTION PLAN REVISION 1	DRAWING #	2 OF 3
DRAWN BY/DATE:	AK 2/11/19	SCALE:	1/8" = 1'
PROJECT NAME:	FOUNTAIN PARK RENOVATION		
ADDRESS:	2121 N EVELYN PL TUCSON, AZ 85715		

POOL:			
PERIMETER:	180'	PERIMETER:	N/A
AREA:	1365 FT ²	AREA:	N/A
INT SURFACE	1974 FT ²	INT SURFACE	N/A
VOLUME:	36,000 GAL	VOLUME:	N/A

IMPERIAL
pools & design
3805 W RIVER RD. SUITE 105 TUCSON, AZ 85741
(520) 884-7665 K&6 DUAL ROC #316814
PROJECT: FOUNTAIN PARK RENOVATION



(1) EXISTING AND (1) NEW INTELLIFLOW VSF PUMPS

(1) EXISTING AND (1) NEW TR140 FILTERS WITH ACTIVATE

RAYPACK 400K BTU HEATER

(2) STENNER PUMPS FOR DISINFECTION

(2) PENTAIR INTELLIFLOW VSF 3HP VARIABLE SPEED PUMPS, 208-230VAC, 50/60HZ, 3200 WATTS MAX, 1 PHASE CIRCUIT PROTECTION

(2) PENTAIR 25" TR140 FILTERS, SLIDE VALVE WITH ACTIVATE GLASS FILTER MEDIA

(2) 3/8" 170GDP DUAL CONTROL PUMP, 1/30HP EX POOL SECONDARY SANITATION SYSTEM

FLOWVIS FLOW METER

ELECTRICAL SCHEDULE:

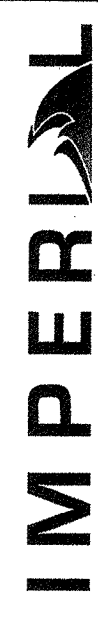
AMPS:	DESCRIPTION:	DESCRIPTION:	AMPS:
15	LIGHT	MAIN	20
20	INTELLIFLOW PUMP	170GDP PUMP	20
20	170GDP PUMP		

REVISIONS:

REV #	DATE	DESCRIPTION
1	2/11	ELEC SCHED UPDATED

TITLE:	EQUIPMENT ROOM REVISION 1	DRAWING #	3 OF 3
DRAWN BY/DATE:	AK 2/11/19	SCALE:	NTS
PROJECT NAME:	FOUNTAIN PARK RENOVATION		
ADDRESS:	2121 N EVELYN PL TUCSON, AZ 85715		

POOL:	SPA:		
PERIMETER:	180'	PERIMETER:	N/A
AREA:	1365 FT ²	AREA:	N/A
INT SURFACE:	1974 FT ²	INT SURFACE:	N/A
VOLUME:	36,000 GAL	VOLUME:	N/A



3805 W RIVER RD. SUITE 105 TUCSON, AZ 85741
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PROJECT: FOUNTAIN PARK RENOVATION