



NESPA
TILED SPAS

Production Booklet

for

LYALL SPA

2800 Richter Ave. Suite C, Oroville, CA 95965 • **voice:** (530)534-9910
fax: (530)534-9915 • **email:** sales@tiledspas.com • **website:** www.tiledspas.com



RECOMMENDED MAINTENANCE

Please Note:

These are only recommended guidelines to care for a Nespa all tiled spa. Local codes may require additional procedures, therefore consult with a pool professional that is LA county Health Department certified for more information on local codes and requirements.

SPA SURFACE

Your spa tile is acid resistant and frost-proof. The Tile does not absorb germs or algae. Tile does not stain and is very easy to clean. Color does not fade or lose its luster. All grouts are epoxy based and are extremely durable. To remove scum line use soft nylon brush and small amounts of biodegradable soaps. Do not use abrasive brushes or chemicals.

MAINTENANCE

A. CHEMICALS:

- 1) It is important to maintain a chlorine residual of 2 PPM in the spa. That residual can be provided by chlorine or bromine.
- 2) It is recommended to use Bromine or dichlor (granular) forms of chlorine. If bromine Tabs are used we suggest floating or inline dispenser.
- 3) Never use acid to lower Ph in the tile spa.
- 4) Never use trichlor chlorine (1" or 3") tablets in the Nespa spas.
- 5) Never place tablets in skimmer basket.

B. DRAINING THE SPA:

- 1) It is recommended to drain the spa at least once every 2 months depending on bath load and water clarity.
- 2) The spa should be drained through valve exiting re-circulation pump in the spa equipment room or sump pump.
- 3) Note: Use caution to drain spa in the winter months or rainy season when water table is at its highest. It is possible for the spa to float due to hydraulic pressure from surrounding water table. We advise that you consult with your local spa specialist prior to draining the spa.

C. SPA EQUIPMENT:

- 1) Clean filter cartridge at least once every month, or when needed; i.e., if water clarity does not improve after several days.
- 2) Keep area free and clear from leaves and debris build-up.
- 3) Keep area free and clear from flooding.

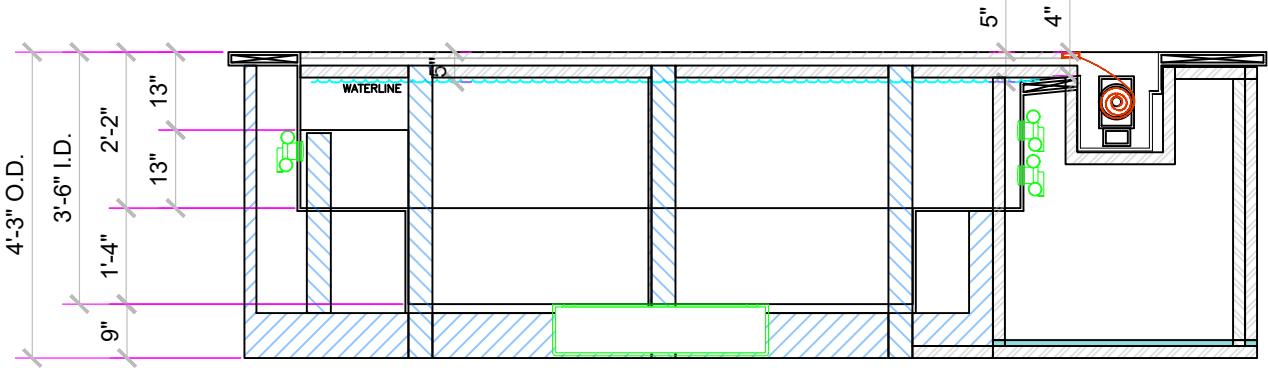
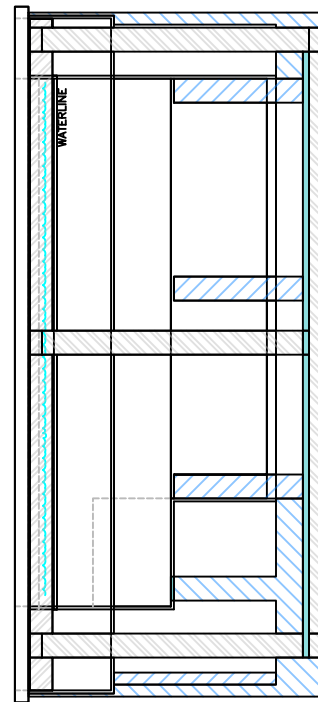
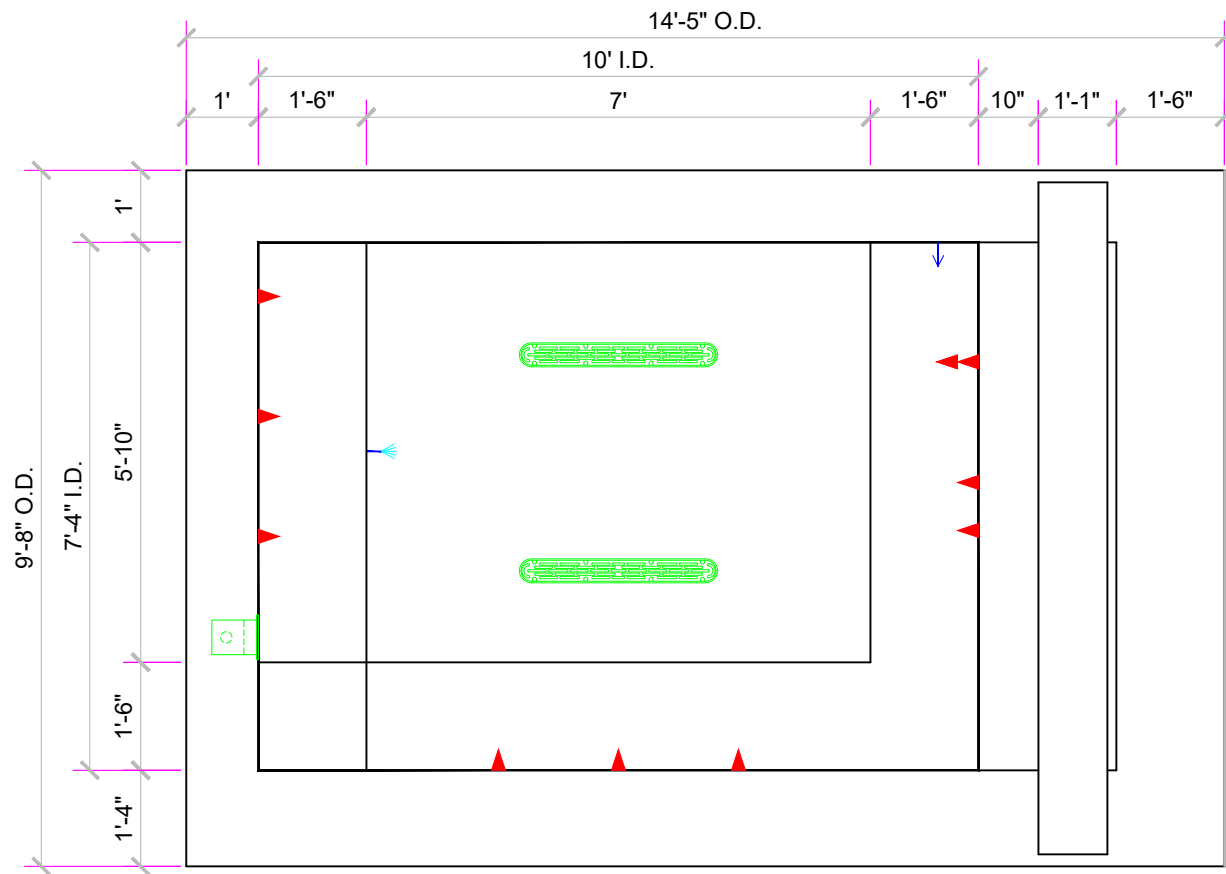
D. SPA LIGHT:

- 1) Spa light has to be on GFCI circuit. It is controlled at spa side with ON/OFF.

E. TILE SERVICING:

- 1) Contact manufacture when servicing tile or grout. @ (530) 534-9910

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



SPECIFICATIONS	
SHELL WEIGHT:	2800 LBS.
WATER WEIGHT:	12098 LBS.
TOTAL SHELL & WATER WEIGHT:	14898 LBS.
WATER VOLUME:	194 Cu.Ft.
WATER GALLONS:	1451 GAL.
SURFACE AREA:	73.3 SQ. FT.
ICC ES LISTED #:	PMG-1161

APPROVED

NESPA ENTERPRISES INC.
 2800 Richter Ave. Ste. C Oroville, CA 95966
 Office: (530) 534-9910 Fax: (530) 534-9915
 E-Mail: jim@tiledspas.com Web Site: www.tiledspas.com



SIZE	LAYOUT	DWG	JOB#	REV
A	SD	LYALL	0	0
SCALE: 3/8" = 1'		DATE: 5/10/2019	SHEET 1 OF 6	

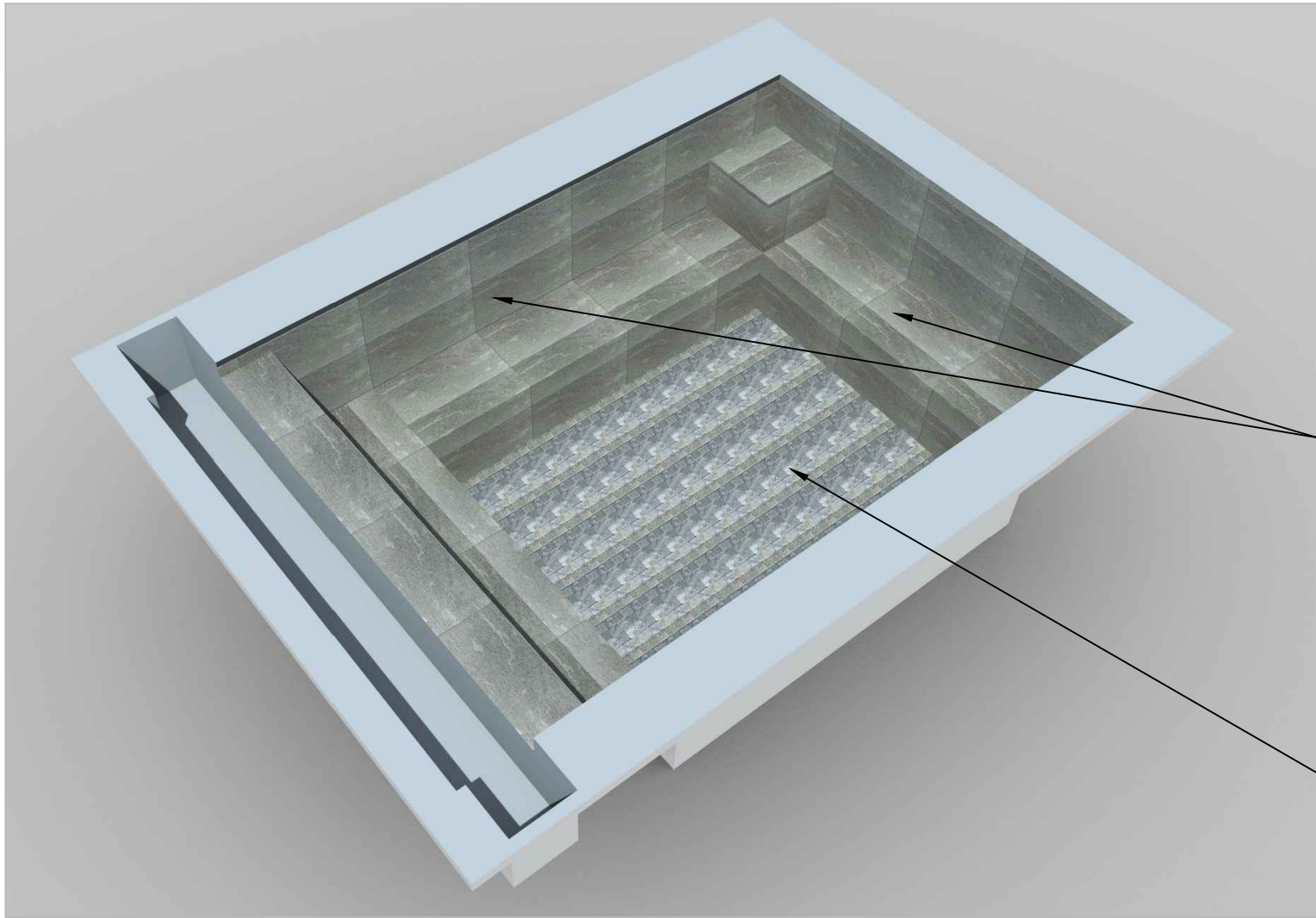
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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



AM33 Voyager
12 X 24

Tumbled Gun Metal
Silver Quartz 2x2

D
C
B
A

D
C
B
A

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SIZE	LAYOUT	DWG	JOB#	REV
A	Tile	LYALL	0	0
SCALE: 1/2" = 1'		DATE: 9/6/2018	SHEET 2 OF 6	

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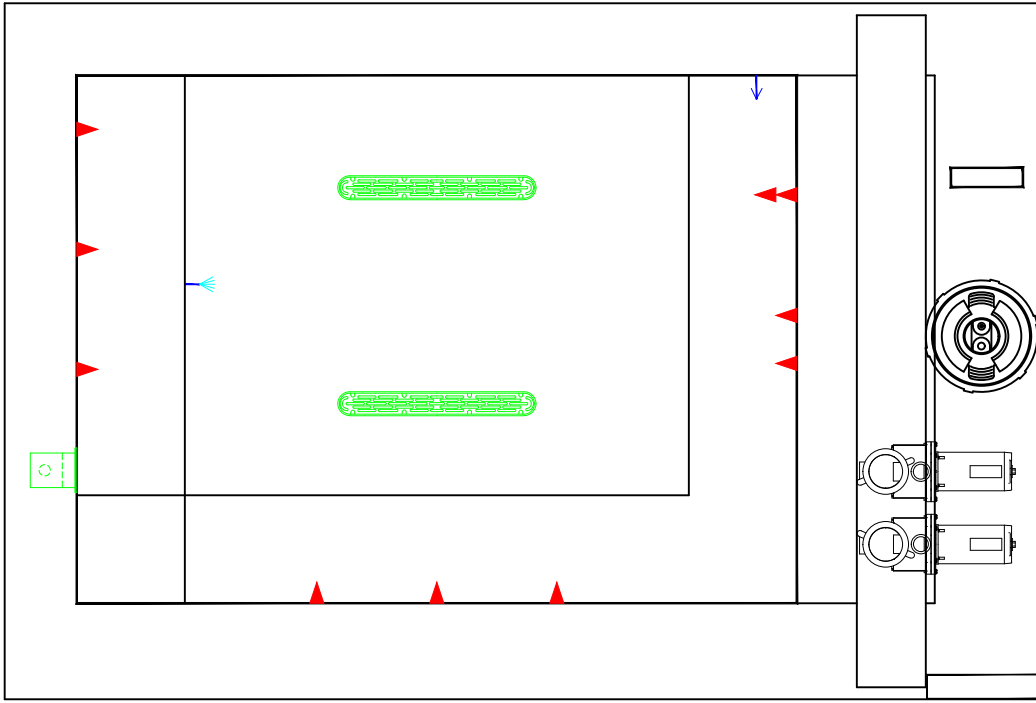
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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

D
C
B
A



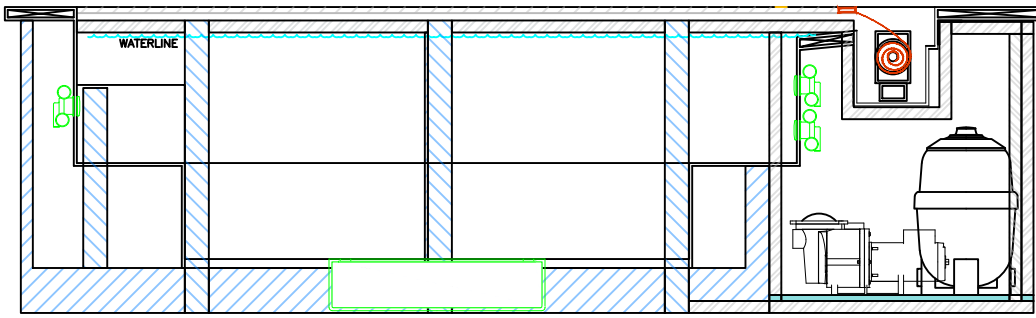
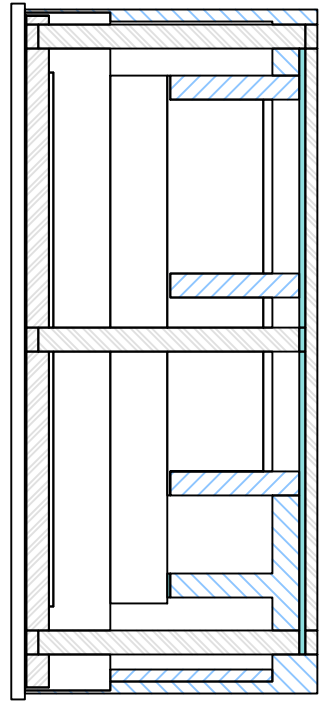
DEL Zone UV
Ozone
AOP 25

Filter

Circ. Pump

Jet Pump

Pentair i9 + 3
Spa Controller



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SIZE	LAYOUT	DWG	JOB#	REV
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SCALE: 3/8" = 1'		DATE: 2/27/2019	SHEET 3 OF 6	

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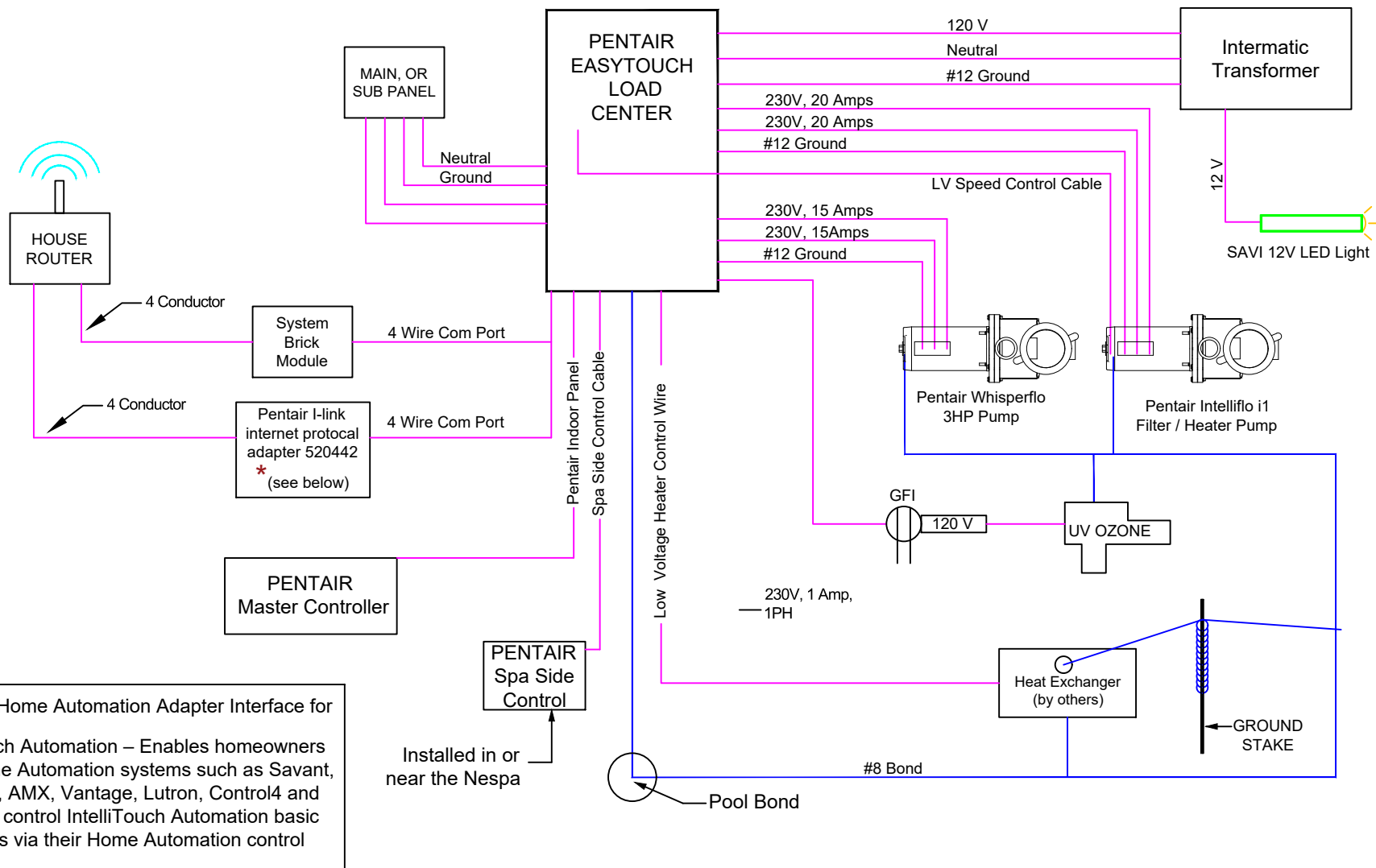
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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

Pentair Intellitouch i9 + 3s w/screenlogic and internet protocol adapter 2 Pump - Heat Exchanger - Low Voltage Light

NOTE:
THIS SCHEMATIC IS FOR CONCEPTUAL PURPOSES ONLY.
ALL WORK SHALL BE PERFORMED BY A LICENSED
ELECTRICIAN AND COMPLY WITH THE NATIONAL
ELECTRICAL CODE.



i-Link Home Automation Adapter Interface for IntelliTouch Automation – Enables homeowners using Home Automation systems such as Savant, Crestron, AMX, Vantage, Lutron, Control4 and others to control IntelliTouch Automation basic features via their Home Automation control

PENTAIR Spa Side Control
Installed in or near the Nespa

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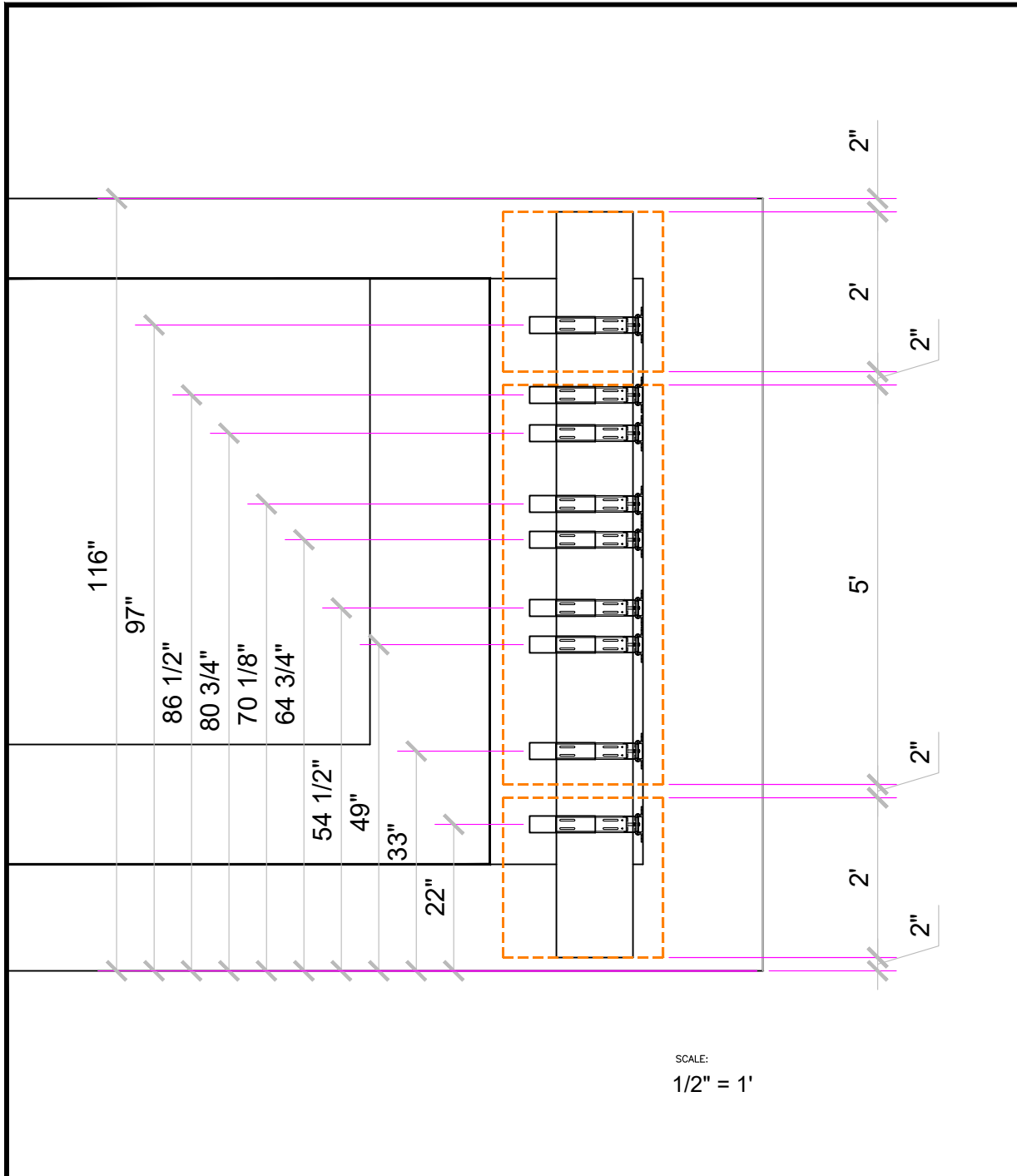
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A	Electrical	LYALL	0	0
SCALE:	N/A	DATE:	5/10/2019	SHEET
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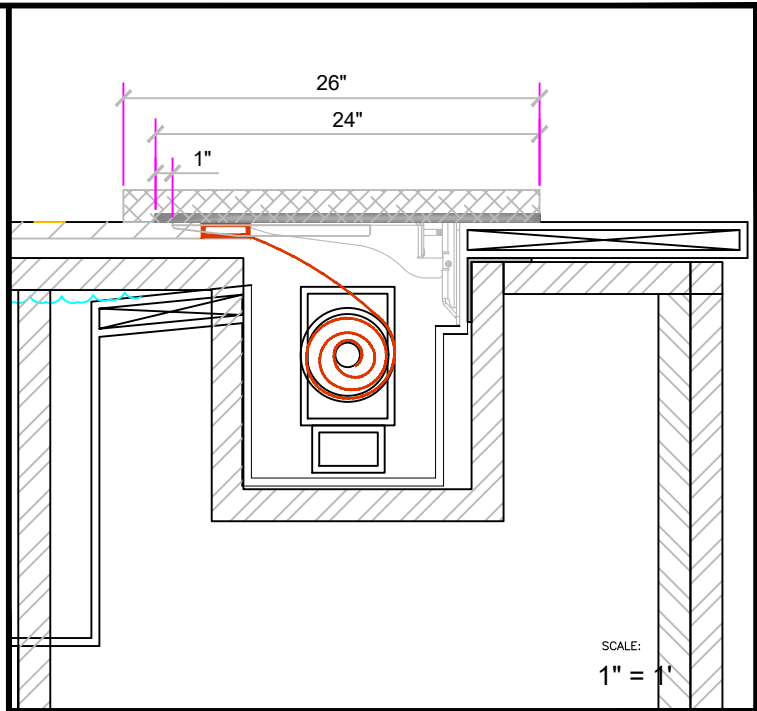
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SCALE:
1/2" = 1'



CoverStar Auto-Cover
Color = Charcoal

APPROVED

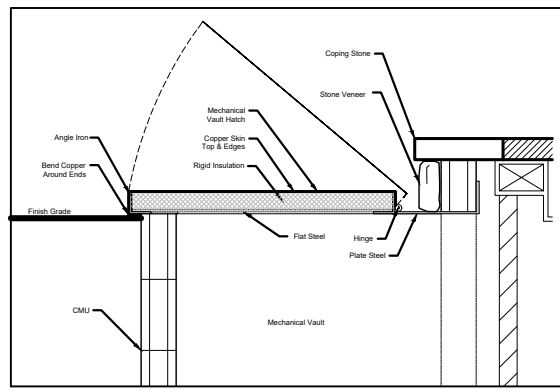
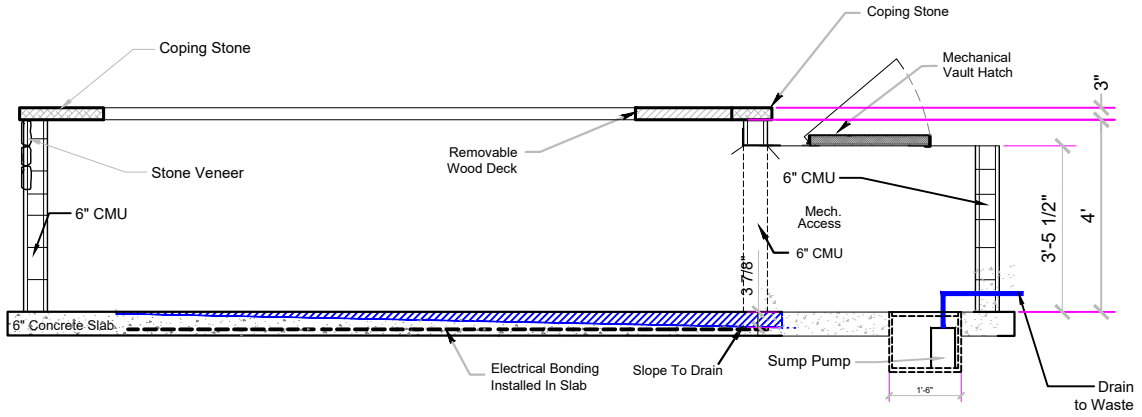
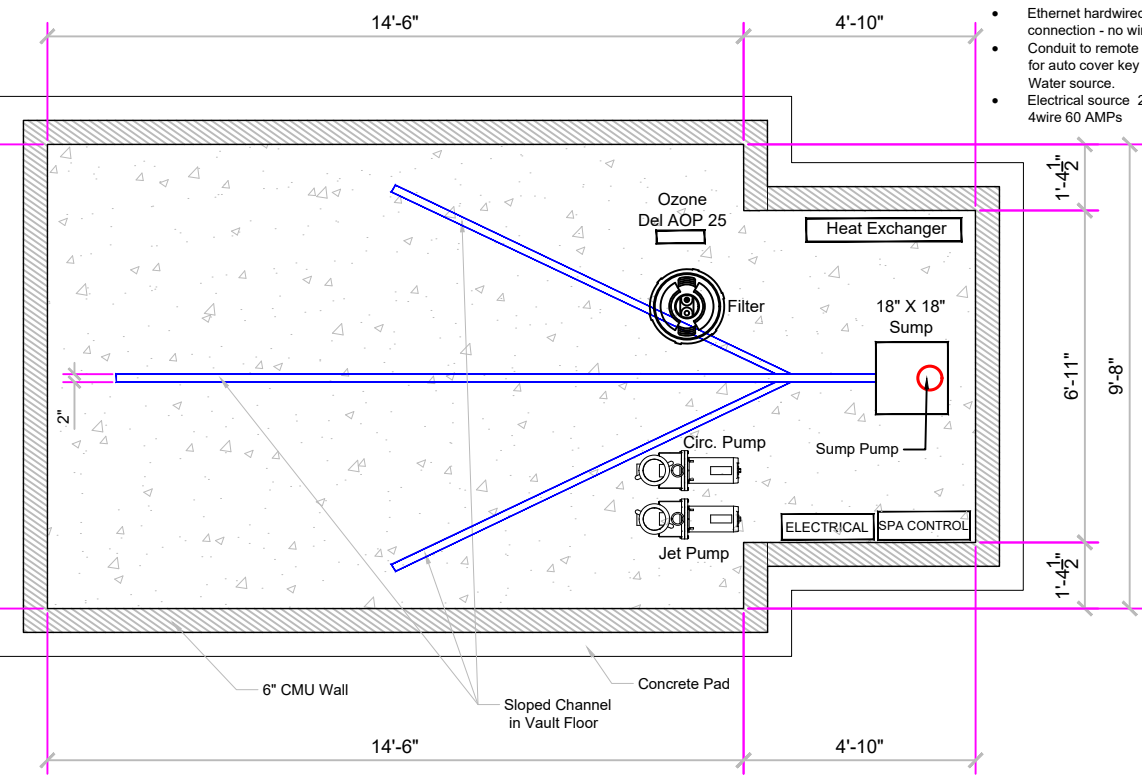
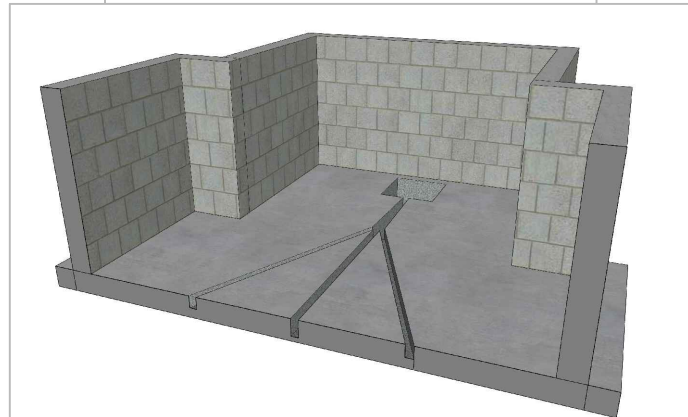
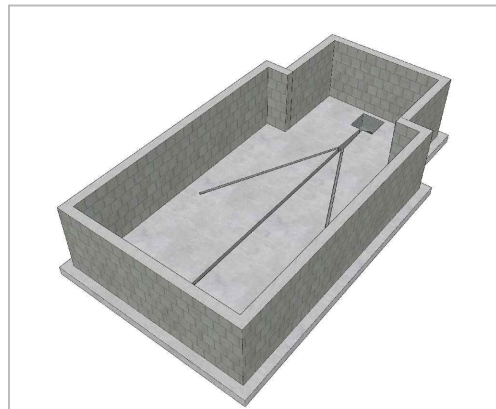
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SIZE A	LAYOUT AUTO-COVER	DWG LYALL	JOB# 0	REV 0
SCALE: AS NOTED		DATE: 5/1/2019	SHEET 5 OF 6	

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

- NOTE:**
- Ethernet hardwired connection - no wireless.
 - Conduit to remote location for auto cover key switch. Water source.
 - Electrical source 230V, 4wire 60 AMPs



Vault Cover - Section - CONCEPTUAL DRAWING ONLY - Construction Plans to be created by others

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SIZE	LAYOUT	DWG	JOB#	REV
A	Vault	LYALL	0	0
SCALE: 1/4" = 1'		DATE: 10/5/2018	SHEET 6 OF 6	

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1

NEI Scope- Provide and install on spa :

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

Spa Filter Pump 1/2HP 230V/1ph, running load 7A, 15A fused

Booster Pump 3HP 230V/1ph running load 13A, 20A fused

Spa LED 12v light 12v PX100 120v Transformer

Heat Exchanger and Control Circuit connections by others and tied to by others.

1.) Mounting and connecting the load center and personality kit.

The spa is equipped with an indoor control panel that will need a single 4 strand un-spliced wire pulled to its eventual location to be determined by the customer prior to closing in the walls. This indoor panel plugs directly into one of two com ports available on the P-kit and provides the customer with full wired control of the Spa.

2.) The spa will also have a 4 button spa side remote that will be provided. The spa side controller comes with a 100 foot wire and will be placed on the perimeter of the spa. The wire will enter the vault via conduit and has a specific com port on the P-kit labeled iS4.

3.) In the event that we are hooking up to a home automation control system, an i-link communicator with a 485 connection will be provided. It simply plugs into the com port on the P-kit but will need a wire pulled to the home automation system in the house in order to connect. **OPTIONAL**

4.) Alternatively, If wireless controls are to be achieved using a Pentair Screenlogic brick and the Pentair App, we will need an Ethernet cable pulled to connect from the homes router into the "brick" that we will provide to be placed at the P-kit. (see screenlogic installation manual Appendix D).

5.) Wiring and installing the motor and controller for the auto cover: In the event that the spa is equipped with an auto cover, a control box which will be provided will need to be mounted and wired to a location of the customers choosing. Usually near the indoor panel. This will require proper conduit, wiring and mounting. The auto cover motor will also need to be wired.

GC to Provide :

1.) Electrical source and connection to to Pentair Control center. 230V 1PH 4 wire 60 amps. Provide and install the proper amperage Main disconnect, ground ring and bonding, this includes pulling power from source, trenching, link seals, conduit and everything associated according to current NEC standards.

2.) Ethernet wire for remote app control.

3.) Conduit and wire for remote auto cover switch location.

4.) Pull enough power for and install a 120v strip of outlets and a light to be placed in the vault in order to accommodate a sump pump and a ventilation fan. Power supply to vault for sump pump, lighting and any ventilation needs.

5.) Supply power and wire the Electric Heater 18kW 75A draw, fuse TBD FYI- When an electric heater is present, the heater is connected directly to the breaker for constant power and one of the 240V relays from the personality kit will engage and disengage power to the element of the heater by way of the 18V control switches.

6.) The spa is equipped with an indoor control panel that will need a single 4 strand un-spliced wire pulled to its eventual location to be determined by the customer prior to closing in the walls. This indoor panel plugs directly into one of two com ports available on the P-kit, and provides the customer with full wired control of the spa. The spa will also have a 4 button spa side remote that will be provided. The spa side controller will be placed on the perimeter of the spa. The wire will enter the vault via conduit and has a specific com port on the P-kit labeled IS4.

7) In the event that we are hooking up to a home automation control system, an i-link communicator with a 485 connection will be provided. It simply plugs into the com port on the P-kit but will need a wire pulled to the home automation system in the house in order to connect.

Alternatively, If wireless controls are to be achieved using a Pentair Screenlogic brick and the Pentair App, we will need an Ethernet cable pulled to connect from the homes router into the "brick" that we will provide in the vault.

ITEM #2 approved.

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SIZE	LAYOUT	DWG	JOB#	REV
A	Scope Of Work	LYALL	0	0
SCALE:	N/A	DATE:	10/5/2018	SHEET 6 OF 6

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1

PLAN APPROVAL DOCUMENTATION

Nespa's engineering and structural manufacturing departments may find it necessary to make slight adjustments (= 1") to your spa.

This may include the size of the spa (OD/ID), tile cuts, depths, jet location, bench steps etc. These adjustments must be made in the primary stages of building the spa. The adjustments are generally made to ad structural and aesthetic integrity to the vessel. IE: balance of supporting gussets (exterior) and less tile cuts/ symmetrical cuts, grout lines, etc. (interior)

Please initial next to the following number that describes your project needs.

_____1. YES, I understand adjustments need to be made. Nespa will use their expertise to make these adjustments as _____ needed. I give them the authority to make changes. I will receive final accurate drawings prior to receipt of spa _____ or spa hole construction (if changes were made to the size)

_____2. NO, No changes can be made even under 1". Dimensions are fixed. More tile cuts may be needed, Structural _____ supports may be altered to accommodate.

_____3. _____ Nespa will need to contact us for any changes to spa dimensions prior to continued spa fabrication.

4. I have reviewed and approved the Spa dimensions, width, length and height.(Pg 1)

Yes _____ No _____ Other _____

5. I have reviewed and approved the Spa Tile Type and Grout (Pg 2)

Yes _____ No _____ Other _____

6. I have reviewed and approved the Spa Equipment Layout. (Pg 3)

Yes _____ No _____ Other _____

7. I have reviewed and approved the Vault Details. (Pg 4)

Yes _____ No _____ Other _____

Purchaser acknowledges that all previous drawings to this one submitted or discussed no longer apply. Purchaser accepts that all dimensions external to the Nespa product are purchaser's responsibility and that purchaser is responsible for the merging of Nespa product to job site conditions, all required dimensions and elevations and mechanical access. Purchaser also acknowledges they are responsible for all flatbed truck curbside to make other

arrangements for offloading the spa. Purchaser agrees to provide properly sized crane, graderall Or any other safe means to offload spa from truck. Purchaser will provide a level concrete platform surface for spa to sit upon. If shimming material is used purchaser will provide rigid non-compressible material.

10. Purchaser is to provide protection to spa finish as well as plumbing during the installation phase.

This includes rain, freeze and sun exposure.

I approve the above drawings : X _____ Date: _____

Any changes to these plans from here forward shall be directed in writing to Nespa.

All drawing dimensions supplied by [NESPA ENTERPRISES INC.](#) are for reference only. All CAD files were created using AutoCAD file (*.dwg.) and were provided as a service to our customers using AutoCAD. Errors sometimes occur during this process and with software incompatibility upon opening a file. [NESPA ENTERPRISES INC.](#) and/or any authorized distributor of our products will not be held responsible for problems arising from files which have been converted and does not warranty the documents against deficiencies or typographical errors of any kind. We recommend that all measurements are verified with actual physical product before any custom fabrication in the field occurs.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

Installed in more pools worldwide than any other variable speed pump.

RELIABILITY AND SAVINGS. THAT'S WHY POOL BUILDERS, RETAILERS AND SERVICE PROFESSIONALS COUNT ON PENTAIR.



The new keypad is rotatable for easy access and has an optional wall mount kit that's sold separately.

i1 THE WORLD'S MOST POPULAR VARIABLE SPEED PUMP IS ALSO MORE VERSATILE.

If your pool is in an area that restricts the rate of flow on replacement pumps, the IntelliFlo® i1 Pump may be your ideal choice. Its hydraulic design reduces flow rates while providing the significant energy savings you'd expect from a Pentair variable speed pump. The i1 pump also has a maximum rating of 7 amps, which helps make retrofits easier in applications that are limited by existing wire gauge size. Plus, it's just as quiet and reliable as ever.

i2 THE PUMP GIVES YOU ALL THE FEATURES YOU WANT AND THE SMARTER CHOICES YOU NEED.

The IntelliFlo i2 pump provides all the great features that have made our flagship IntelliFlo pumps the best-selling industry standard. But, the IntelliFlo i2 pump is hydraulically engineered to provide maximum performance on a 15-amp breaker. It has a maximum rating of 11.8 amps, which makes retrofits easier in applications that are limited by existing wire gauge size. Energy efficient, automation ready and technologically advanced—now that's a smart choice.

Super efficient—and so quiet you can hear the savings pile up.

ADVANCED ENGINEERING DELIVERS WHISPER-QUIET OPERATION.

Quiet means you enjoy a more relaxing, satisfying pool and spa experience. That's why we worked so hard to make the IntelliFlo® i1 and i2 Pumps the quietest pumps on the planet. Each model has a totally enclosed, fan-cooled (TEFC) design and a permanent magnet motor that virtually eliminates unpleasant, high-pitched noise. At low speeds, you might not even know it's operating.



AN ECO SELECT® BRAND PRODUCT
The IntelliFlo® i1 and i2 pumps are part of the Eco Select® brand, distinguished as one of the "greenest" and "most efficient" choices from Pentair. Eco Select products are designed to help you save energy, conserve water, eliminate or reduce noise, or otherwise contribute to a more sustainable, responsible equipment system.



The ENERGY STAR® Certified IntelliFlo® i1 and i2 pumps are the most efficient energy efficiency criteria set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. These pumps save money, reduce energy use and protect the environment.



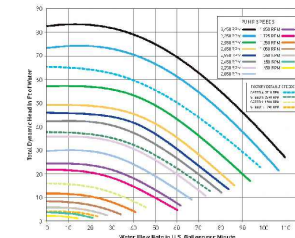
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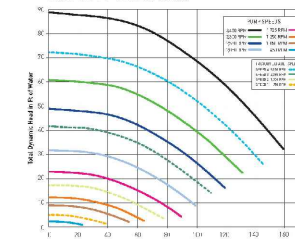
pumps • filters • heaters • heat pumps • automation • lighting • cleaners • sanitizers • water features • maintenance products

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IntelliFlo i1 Performance Curves



IntelliFlo i2 Performance Curves



*N/C: This chart shows approximate performance rates at factory travel speeds of 500 RPM, 520 RPM, 550 RPM and 570 RPM. However, flow rates can also be custom programmed between the ranges of 400 RPM and 540 RPM.

Progress Print
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SIZE LAYOUT DWG
A Filter Pump LYALL
SCALE: N/A DATE: 9/6/2018

JOB# REV
0 0
SHEET 1 OF 1

4

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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



WHISPERFLO®

WHISPERFLO® HIGH PERFORMANCE PUMP



THE INDUSTRY STANDARD BY EVERY MEASURE

We call it the WhisperFlo pump for good reason. This innovative hydraulic design moves water more efficiently and more quietly than competitive pumps. Under typical operating conditions, the WhisperFlo pump offers the highest water flow of any high performance pump—yet with the lowest electricity consumption. And, the WhisperFlo pump is designed to be a tireless workhorse. Its engineered thermoplastic housing withstands extreme heat and resists corrosion. The commercial grade motor frame has a rustproof, stainless steel motor shaft and sealed bearings that never need lubrication. Engineered to provide optimum performance in any size pool or pool and spa combination, the WhisperFlo pump is built to last a lifetime, and as a result, has become the industry's top seller for years.

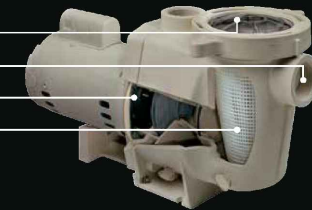
The WhisperFlo pump costs less to operate, because it uses less horsepower to produce required water flow.

- Specially-engineered design assures whisper-quiet operation.
- Oversized strainer basket extends time between cleanings.
- See-through lid makes inspection fast and easy—engineered polymer remains clear and strong for years.
- The user-friendly Cam and Ramp™ Lid is easy to remove and quickly locks in place with a quarter-turn.

pentairpool.com

WHISPERFLO® HIGH PERFORMANCE PUMP

- Cam and Ramp™ Lid makes inspection and cleaning easy and quick
- Heavy-duty threading for dependable worry-free connections
- Durable, commercial-grade motor never needs lubrication
- Oversized strainer basket extends time between cleanings

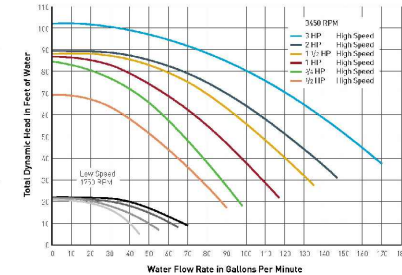


QUIET. EFFICIENT. DURABLE.

The WhisperFlo pump delivers maximum circulation efficiency at the lowest operating cost, and long, trouble-free life with minimal maintenance. Our legendary hydraulic design has been refined over 40 years for superior performance. No wonder more than 2 million Pentair pumps have been selected by pool professionals.

- Advanced FunnelFlo™ Diffuser and high-efficiency impeller maximize water flow and energy efficiency while minimizing turbulence and noise.
- Energy-efficient motor with commercial-grade frame, rustproof stainless steel shaft and permanently lubricated, sealed bearings for long life.
- Available in single-speed and two-speed models.
- Ideal for pool and spa combinations and for operating in-floor cleaning systems.

PERFORMANCE CURVES



AVAILABLE FROM:



1620 HAWKINS AVE. SANFORD, NC 27330 800.831.7133 WWW.PENTAIRPOOL.COM

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pumps • filters • heaters • heat pumps • automation • lighting • cleaners • sanitizers • water features • maintenance products

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SIZE	LAYOUT	DWG	JOB#	REV
A	Booster Pump	LYALL	0	0
SCALE:	N/A	DATE:	9/6/2018	SHEET
			1 OF 1	

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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



System:2 Mod Media™
PLM Series Aboveground Systems
by Sta-Rite



Greatest capacity for least maintenance

The System:2 Mod Media system from Sta-Rite is the ultra-capacity filter ideally suited for aboveground pools. The Mod Media system handles dirt loads up to 15 times greater than sand filters of equivalent size. Balanced flow tank hydraulics direct water through each side of the filter module for uniform dirt loading. This prevents clogging and captures more dirt between cleanings to minimize maintenance time.

- You won't clean often, but it's easy when you do—just rinse in place with a garden hose.
- Quiet, highly efficient pump options keep operating costs low.
- Compact design fits easily in tight installations.

You may go an entire season before you need to clean your PLM aboveground filter.



The Mod Media system strips away particles as small as 70 microns, (an average grain of beach sand is 100 to 2000 microns in diameter).



System:2 Mod Media™
PLM Series Aboveground Systems



- Top-mounted pressure gauge and information panels are positioned for easy reading
- Split tank design permits rinse-in-place cleaning—super simple to achieve thorough cleaning fast
- Post-Ring® Closure is easy to secure every time and lasts for years
- System available with Sta-Rite® OptiFlo® Series aboveground pumps

Spray-and-go simplicity



The System:2 Mod Media system features a one-piece filter module that simply drops into the easily accessible tank. It's foolproof! When cleaning is necessary, just remove the lid (no tools are needed) and spray-rinse the module while it is still in place.* It only takes minutes to clean thoroughly and get back into service fast.

Convenience and versatility

The Mod Media systems small diameter footprint is the perfect fit for new and retrofit installations. Interchangeable ports provide multiple plumbing options and the modular filter tank permits quick change of filter media. Contemporary styling and matte black finish appear attractive in any pool setting.

*Modules used in conjunction with certain pool/spa sanitizers may require soaking in special cleaning solutions.

Filter Performance

Model	Pump (HP)	Filter Area (Sq. Ft.)	For Pools up to (Gal.) 8 Hr. Turnover
SFPLM100CE	1	100	48,000
SFPLM100CF	1.5	100	48,000
SFPLM150CE	1	150	72,000
SFPLM150CF	1.5	150	72,000

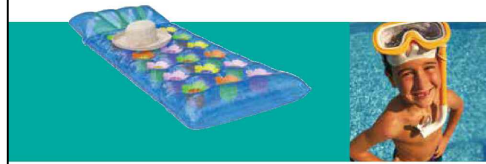
Operating Limits – Maximum continual operating pressure is 50 PSI. For PoolSpa (balter) applications, the maximum operating water temperature within the filter is 104°F (40°C).

Note: Turnover capacity based on filter

Available from:



www.staritepool.com
Phone: 800-831-7133



pumps / filters / heaters / heat pumps / automation / lighting / cleaners / sanitizers / water features / maintenance products

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414 Part # P1-72/

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Progress Print
Not for Construction

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SIZE	LAYOUT	DWG	JOB#	REV
A	Filter	LYALL	0	0
SCALE:	N/A	DATE:	9/6/2018	SHEET
			1 OF 1	

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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

SPECIFICATIONS

	DEL AOP 25	DEL AOP 50
VOLTAGE	110/240VAC 50/60 HZ, 1Ø, 0.3 Amps	240 VAC, 60 HZ, 1Ø, 0.6 Amps
PLUMBING	Inlet and Outlet 3/4 inch PVC Socket	Inlet and Outlet 2" PVC Unions
MAX FLOW RATE	20 GPM	50 GPM
MOUNTING	Wall Mount	Floor or Wall Mount
ENCLOSURE	CSA/NEMA 3 Indoor/Outdoor Installation	CSA/NEMA 3 Indoor/Outdoor Installation
DIMENSIONS	16.7" H x 11.9" W x 3.2" D	17" H x 9.5" W x 13.5" D
WEIGHT	9.2lbs	45lbs
UV-C LAMP	Low Pressure/High Output UV-C Germicidal	Low Pressure/High Output UV-C Germicidal
OZONE CELLS	APG Cells; 5 Year Life Expectancy	APG Cells; 5 Year Life Expectancy
MDV UNIT	MDV	MDV XL



DEL AOP uses patented Advanced Plasma Gap™ (APG) ozone cells that last longer and outperform UV and traditional CD style ozone generation.



All DEL products are quality certified through a multi-step process to ensure seamless operation and complete customer satisfaction.



DEL products are environmentally friendly, reduce dependence on chemicals and are safe for every pool.



COMPLETE YOUR AOP INSTALLATION

By eliminating any possible off-gas, an MDV unit reduces the potential for corrosion or deterioration of pool accessories like a pool cover. It also allows the use of an "oversized" ozone generator to ensure a greater disinfection margin and larger reduction in chemical use. In each MDV a Granulated Activated Carbon (GAC) destruct cartridge destroys excess gas removed by the MDV.

MDV

When used with the AOP 25 the MDV prevents virtually all ozone bubbles from returning to the pool. It can prevent bubbles from gathering under the cover or inside plumbing.



MDV



MDV XL

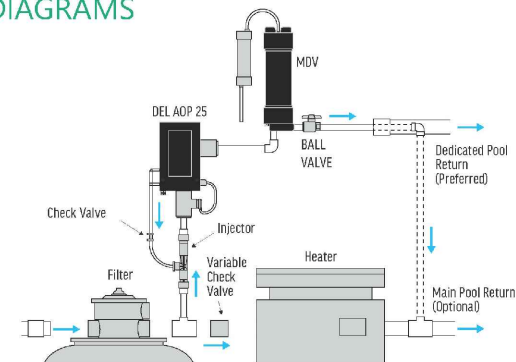
MDV XL

The MDV XL should be used in all indoor, covered, and vinyl lined pools where there is an AOP 50 installed. It can also be used in outdoor applications to eliminate bubbles in your return flow.

INSTALLATION DIAGRAMS

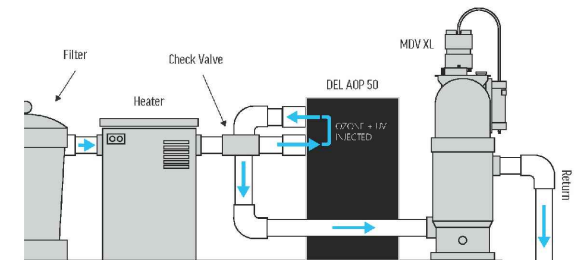
DEL:AOP25

- Wall Mount Only
- Outlet Installs After Heater
- Injector Included
- 3/4 inch PVC Socket
- MDV Recommended



DEL:AOP50

- Ground or Wall Mount
- Install after Pump, Filter and Heater
- Variable Speed Check Valve and Injector Manifold are Built into the Unit
- 2" PVC Unions
- MDV XL Recommended



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SIZE	LAYOUT	DWG	JOB#	REV
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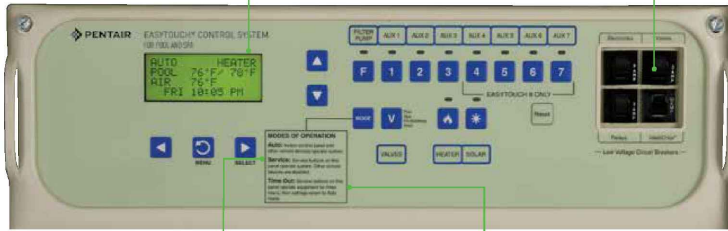
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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

The EasyTouch system control panel makes programming easy, while the LCD informs and instructs you every step of the way.

The EasyTouch system integrates resettable circuit breakers into the Load Center—everything is readily accessible by you or your service professional from outside your home.



Put your EasyTouch system into Service mode to aid in system testing and troubleshooting from the Load Center—no need for service personnel to enter your home.

Time Out mode allows programs to be temporarily interrupted before automatically resuming several hours later—no need to reprogram.

IT'S LIKE PUTTING POOL AND SPA OPERATIONS ON CRUISE CONTROL...

EasyTouch systems are available for separate pools and spas, as well as pool/spa combinations with shared equipment. You select from systems that control four or eight accessory functions. Four-function systems are typically used to control pool and/or spa operation plus pool or spa lights and heaters. Eight-function systems allow separate scheduling for additional features, such as landscape lighting, waterfalls, fountains, additional heaters, pumps and more.

...AND AUTOMATING WATER SANITIZATION, TOO.

Today, you can also choose from systems that incorporate the revolutionary IntelliChlor® Salt Chlorine Generator. IntelliChlor generators use table salt to create pure chlorine for pool sanitization the convenient and automatic way. Electrolytic chlorine generation is the easiest, most effective and convenient way to keep pool water sparkling clean.

Your EasyTouch system includes all circuitry and fully programmable controls in a single Load Center unit installed near your pool or spa equipment.

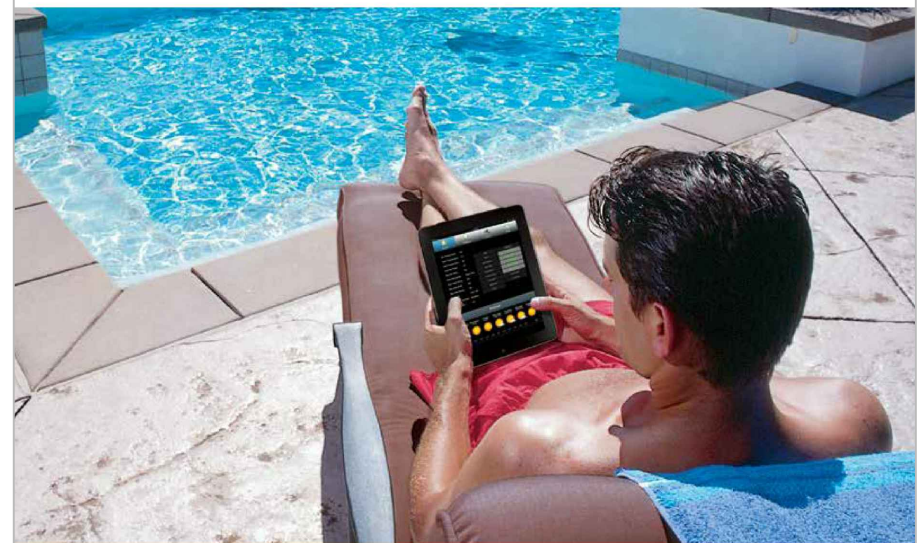
For pool/spa combinations with a shared body of water, you also receive two valve actuators for automatic switching between pool and spa operating modes.

For added flexibility and convenience, indoor, spa-side and wireless remote control devices can be added to any EasyTouch system (see next page).

As you can see, with EasyTouch systems, pool, spa and poolscape accessory operation—including sanitization—becomes as simple as operating your automatic lawn sprinkling system.

SO SIMPLE. SO CAPABLE. SO RELIABLE.

- All functions are controlled with easy one-button access from the totally self-contained Load Center or optional controllers. No need for added control panels or devices but plenty of options if you desire remote access. That's flexibility and a main reason why EasyTouch systems are so affordable.
- The EasyTouch system allows full programmability of everyday pool and spa equipment operation for optimum efficiency and variable pool/spa usage patterns.
- Onboard diagnostics make service simple. Built-in, self-test diagnostics give you the ability to verify correct operation of specific functions.
- The electronic self-test includes automatic verification of the display, microprocessor, switches, indicators, relay outputs, valve outputs, sensor inputs and communications ports. A diagnostic screen reports failures for troubleshooting and repair purposes.



OPTIONAL CONTROLLERS FOR ADDED CONVENIENCE

EasyTouch System



Indoor Control Panel for 4- or 8-Function Control

EasyTouch System



Wireless Controller

QuickTouch® II Wireless Remote



Wireless Remote

iS4



4-Function Spa-Side Remotes in Choice of Colors With Varying Cable Lengths

SpaCommand® Spa-Side Remote



10-Function Spa-Side Remote Also Available in Black

NO OTHER POOL OR SPA CONTROL DEVICE OFFERS SUCH CONVENIENCE.

- Easily turn on your spa and set it to the perfect temperature on your way home from work.
- Control all circuits when you are away—including waterfalls, pool lights, fountains and more.
- Use the History page to monitor temperature, pool/spa, heater and lights from afar.
- With an optional ScreenLogic interface kit, you can remotely manage your pool settings from a PC, Mac computer or other Apple or Android device when you download our software app from the Apple App Store™ or Google Play™.



**STANDARD NESPA
IN-GROUND INSTALLATION
INSTRUCTIONS
SET-UP AND EXCAVATION**

Prerequisites: Before installing your Nespa spa. You may be required to acquire a permit from your local State, County, and City building dept and or Health department. (Commercial jobs need Health Dept. Approval). Your spa installation must comply with the most current codes. (**Uniform Swimming Pool, Spas & Hot Tub Code 2006 (USPC 2006)**).

Spa drawings: Request from Nespa a current spa specific construction detail, plan and section, spa plumbing detail.

Delivery Access: Clearly determine the method of getting the spa to jobsite and into the hole. This may require the use of a crane, forklift, hoist, backhoe and/or manpower etc.

- 1) The following instructions are general guidelines and may not apply to your specific jobsite conditions. When excavating for your spa remember to provide for plumbing and light connection clearances. In order to determine how to excavate for your spa or swim spa, measure spas outside dimension (O.D.) and add minimum 3” to all sides. This 3” clearance is to accommodate jet and suction plumbing. This 3” clearance can change or be reduced upon request. Note: skimmer location, this area may have to be larger than 3”, if commercial 22”.
- 2) **Freeze Climates-** If the spa is place into a vault (typical of freeze climates) a standard 18” or more of clearance minimum from spa perimeter should be provided. This dead air space is for possible future access to spa plumbing in case of a freeze. Area drain is mandatory. **Ask your local installer** for his experienced opinion. Do not hesitate to call us because we want to be sure that your installation progresses as smoothly as possible. If you have questions call us. (888) 479-4677.
- 2) **Hole depth** is determined by spa’s outside height dimension. This height may vary depending if spa has skids or no skids. The spa lip may be finished or non- finished. How is the perimeter deck elevation transitioning to the spa? Focus on the finish surrounding deck elevations, thickness of the finish material on spa upper horizontal lip, equal to lip or under the spa lip. This material can be tile, stone, concrete or brick.
- 3) **Preplumb** the spa before it goes into the hole. If there are needs for electrical , bonding or control conduits run them as well before dropping in hole. Connect bond wire to niche would be best.
- 4) **Spa should sit on level 3 ½” thick reinforced concrete pad. Sweep debris off pad prior to dropping in hole.**
- 5) **Install spa** into the hole on top of concrete pad. Use the Eye bolts provided for crane, forklift etc. rigging. Do not hold onto pipes. Use caution with suction and jet plumbing when lowering into hole. **DO NOT STRESS FITTINGS!** Fill Spa with water and check for leaks prior to backfill.

- 6) **Check site reference** points for proper spa positioning (i.e., squaring to house, garage, etc.).
- 7) **Shim to level spa.** Shim with non-compression able material. Re square to house, or ref. point.
- 8) **Dry pack** with cement the gaps that have been created when shimming spa level.
- 9) **Connect pipes to tees** if spa is preplumb. Installers properly support your new plumbing from stressing spas preplumb fittings. After electrical conduit and bond wire is connected to light niche, water test spa before back filling with sand.
NOTE: All Nespa products are water tested prior to leaving factory.

ELECTRICAL:

- 1) All electrical connections to spa or equipment should comply with the most recent national electrical code (NEC), state and local codes.
- 2) Connect electrical conduit to light niche. This work should be done or reviewed by a licensed electrician.
- 3) To install spa light you will need to include inside the PVC conduit to the light niche a solid #8 coated copper wire. (If you are use brass conduit, internal bond wire is not required.) This bond wire should be pulled with the light cord at the same time. This bond wire needs to be attached to the internal bonding lug of the light niche. An approved encapsulate should be applied to bond wire connection in niche.
- 4) An external #8 copper wire shall be connected to the external bonding lug on the rear of the light niche. This copper wire can then be used for additional bonding requirements (i.e., handrails or any other metallic object within 5' of the spa.

PLUMBING:

- 1) **When plumbing a Nespa it is important to properly size the plumbing. We highly recommend that you follow the pump manufacturer's pipe sizing requirements and Uniform Swimming Pool, Spas & Hot Tub Code 2006 (USPC 2006). This code book is available at www.IAPMO.org or (909) 472 4100.**
- 2) The jet air venturi should be a Hartford loop design adjacent to spa shell and air entry point can be located next to spa or remotely at equipment.
- 3) Fill spa with water and test the system for leaks PRIOR to backfilling with sand.

SAND BACK FILL:

- 1) **With water in spa, back-fill around spa perimeter with dry plaster sand and wet wash with hydraulic attachment to hose. Let set for one hour and hydraulic dry again. Be sure water level in spa is at the highest level. Any questions please call us. (888) 479-4677.**
- 2) **If spa is free standing on elevated deck or a structure, it is important to fill spa with water and load area prior to installing coping or perimeter decking. If spa is installed in a vault situation a area drain is needed.**

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IN-GROUND

INSTALLATION

ALL DIMENSIONS SUBJECT TO 1/4" TOLERANCES

SCALE: 1/2" = 1'-0"

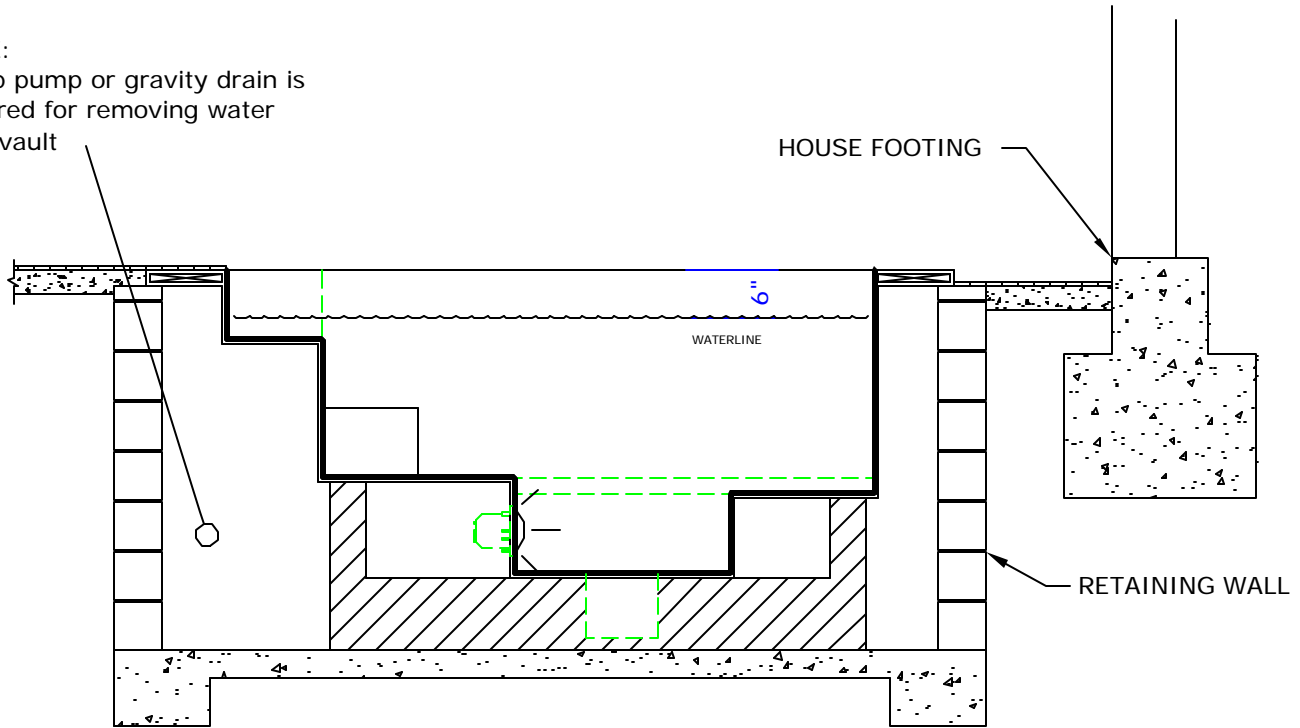
DATE: 3/27/02

JOB : STANDARD INSTALL

DW #: SI-1, SI-2

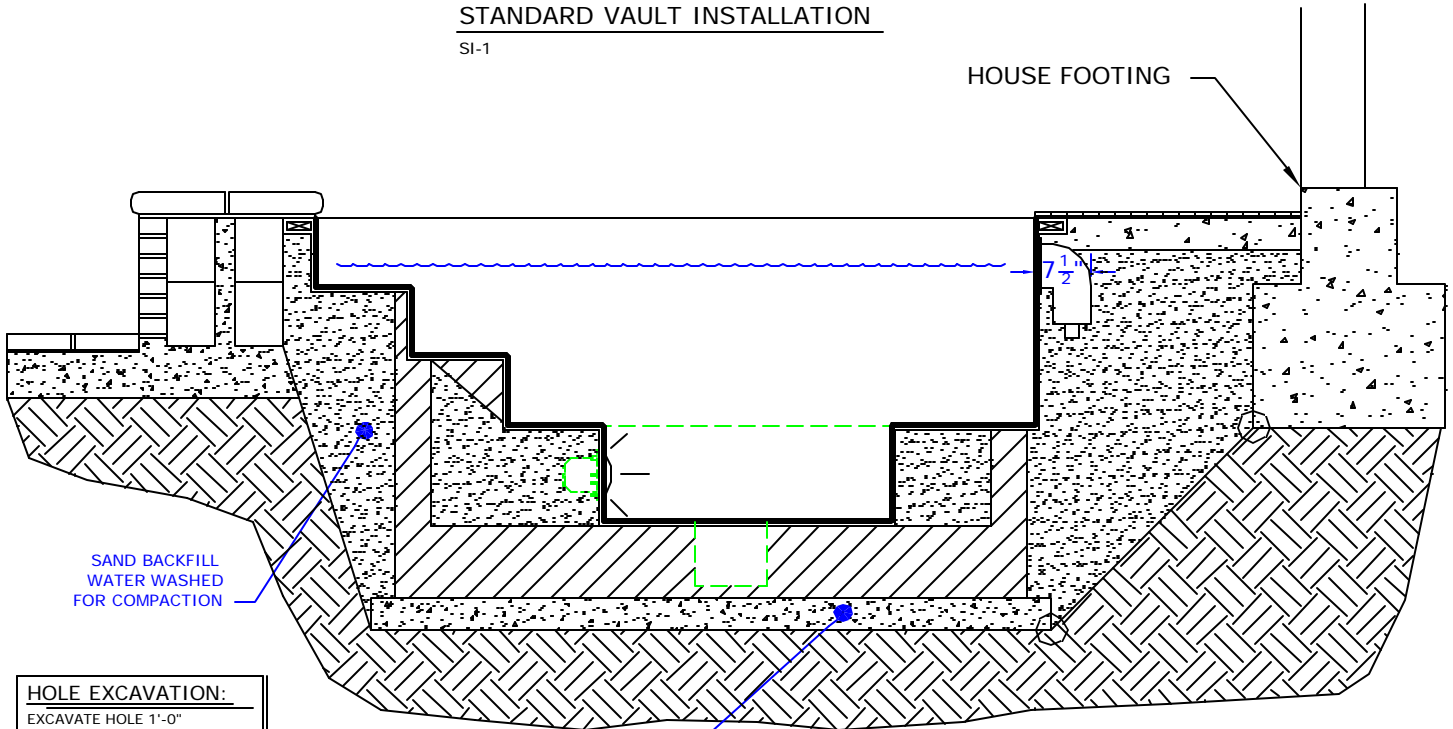
NOTE:

Sump pump or gravity drain is required for removing water from vault



STANDARD VAULT INSTALLATION

SI-1



HOLE EXCAVATION:

EXCAVATE HOLE 1'-0" LARGER THAN THE OUTSIDE DIAMETER (OD) OF SPA

4" CONCRETE SLAB REINFORCED WITH #10 MESH

STANDARD INGROUND INSTALLATION

SI-2

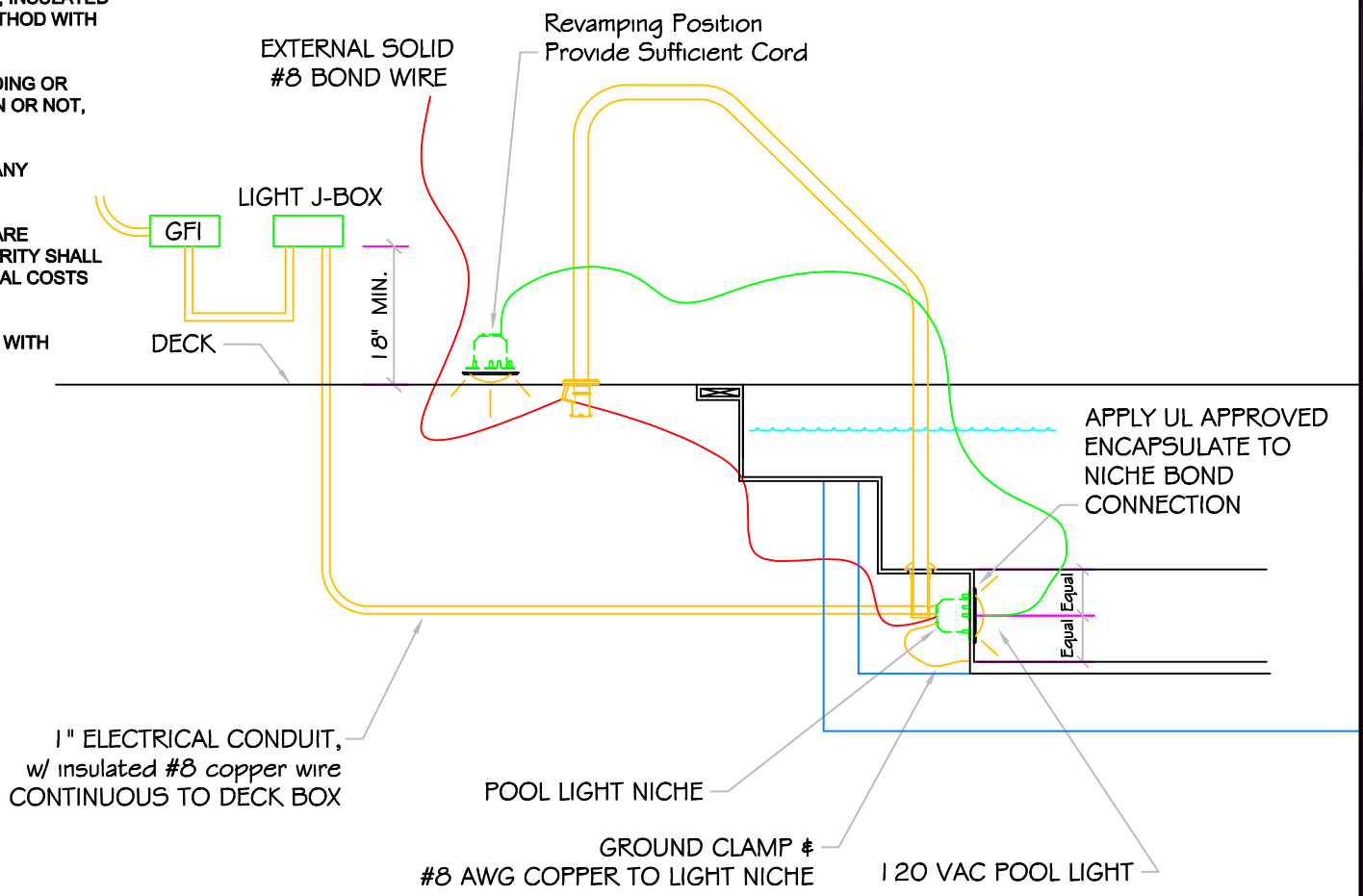
NOTE:

Footing can not surcharge spa. Slope from bottom of slab to nearest corner of house footing must not exceed 1" = 1".

POOL BONDING REQUIREMENTS:

1. THE FOLLOWING PARTS SHALL BE BONDED TOGETHER AND CONNECTED TO THE COMMON BONDING GRID.
 - A. ALL THE METALLIC PARTS OF THE POOL STRUCTURE INCLUDING COPING STONES, DECK, PERMANENT PLAY STRUCTURES, PERMANENT EXERCISE STRUCTURES.
 - B. ALL METAL FITTINGS WITHIN OR ATTACHED TO THE POOL STRUCTURE
 - C. METAL PARTS ASSOCIATED WITH THE POOL WATER CIRCULATING SYSTEM, INCLUDING PUMPS, FILTERS, AND HEATERS.
 - D. METAL PARTS ASSOCIATED WITH POOL COVERS
 - E. METAL SHEATHED CABLES AND RACEWAYS, METAL PIPING AND ALL FIXED METAL PARTS WITHIN 5 FEET HORIZONTALLY OF INSIDE WALLS OF POOL AND WITHIN 12 FEET ABOVE MAXIMUM WATER LEVEL OF POOL.
 - F. METAL PARTS ASSOCIATED WITH OBSERVATION STANDS, TOWERS, PLATFORMS, AND DIVING STRUCTURES.
2. BONDING CONDUCTORS SHALL BE MINIMUM #8 SOLID COPPER, INSULATED E.C. SHALL COORDINATE APPROVED CONNECTOR TYPE AND METHOD WITH LOCAL ELECTRICAL AND/ OR POOL INSPECTOR.
3. SPECIFIC MANUFACTURER'S INSTRUCTIONS REGARDING BONDING OR GROUNDING OF POOL EQUIPMENT, WHETHER INDICATED HEREIN OR NOT, SHALL BE STRICTLY FOLLOWED.
4. THE COMMON BONDING GRID SHALL NOT BE CONNECTED TO ANY ELECTRICAL DISTRIBUTION EQUIPMENT.
5. ANY PARTS IN ADDITION TO THOSE DESCRIBED HEREIN THAT ARE INDICATED BY POOL CONTRACTOR OR LOCAL INSPECTION AUTHORITY SHALL BE BONDED TO THE COMMON BONDING GRID WITH NO ADDITIONAL COSTS INCURRED BY THE OWNER.
6. THE ELECTRICAL CONTRACTOR SHALL COORDINATE BONDING WITH GENERAL CONTRACTOR.

LIGHT DETAIL



ALL DIMENSIONS SUBJECT TO 1/4" TOLERANCES

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SIZE A	DWG NAME DETAILS	DWG TYPE Detail
SCALE 1/2" = 1'	DATE 7/24/2008	SHEET PAGE 1 OF 1

NESPA ENTERPRISES, Inc. LIMITED WARRANTY

This LIMITED WARRANTY covering NESPA products is extended to the ORIGINAL PURCHASER-USER BY NESPA ENTERPRISES Inc.(NESPA), 2800 Richter Ave. Unit C California 95966.

NESPA products are thoroughly inspected and tested prior to factory shipment. NESPA warrants to the ORIGINAL PURCHASER-USER that NESPA Spas and Swim Spas will be free of defect in workmanship, accessories and parts, provided said accessories and parts were manufactured by NESPA. NESPA, under this LIMITED WARRANTY, warrants only that its Spas and Swim Spas shall be structurally sound, shall retain their shape, and shall retain water for the warranty period. NESPA warrants the adhesion of tile to fiberglass for a period of three (3) years and structural soundness for ten (10) years. NESPA warrants epoxy grout adhesion for a period of three years. If any such defects appear and are reported within the warranty period, NESPA shall repair or replace such defective parts without charge if an inspection proves the claim.

The provisions of the LIMITED WARRANTY shall not apply to tile cracked, split, chipped or damaged after the product has left the factory, nor damage to tile caused by freezing nor to damage, defect, malfunction or failure to conform with the above warranty provisions where the damage, defect, malfunction or failure to conform was caused during shipment or by distributor or by unreasonable use by ORIGINAL PURCHASER-USER including improper water balance and improper sand pack or support.

This LIMITED WARRANTY shall not apply to any plumbing, equipment, or installation of spas and Swim Spas and shall not apply to any alterations made to or upon NESPA products except alterations made by NESPA employees or NESPA authorized representatives.

This LIMITED WARRANTY is expressly in lieu of all other warranties expressed or implied including the warranties of merchantability and fitness for use and all other obligations or liabilities on NESPA'S part, and NESPA neither assumes nor authorizes any other person to assume for NESPA any other liability in connection with the sale of this NESPA product. This LIMITED WARRANTY shall not apply to this NESPA product or any part thereof which has been subject to accident, negligence, alteration, abuse or misuse. NESPA makes no warranty whatsoever with respect to accessories or parts not manufactured by NESPA.

The term "ORIGINAL PURCHASER-USER" as used in this LIMITED WARRANTY shall be deemed to mean that person for whom the NESPA product is originally installed.

The LIMITED WARRANTY provided herein and the obligations and liabilities of NESPA hereunder are exclusive and are in lieu of, and buyer and original PURCHASE-USER hereby waive all other remedies, warranties, guarantees or liabilities, expressed or implied, arising by law or otherwise (including without limitation and obligations of NESPA with respect to fitness, merchantability, and consequential damages) or whether or not occasioned by NESPA'S negligence.

This LIMITED WARRANTY shall not be extended, altered or varied except by a written instrument signed by NESPA and original PURCHASER-USER.