

Watertronics Inc. P.O. Box 530 Hartland, WI 53029 PH: 262-367-5000 FX: 262-367-6897

CUSTOM PUMP SYSTEM QUOTATION

Ver 1.27

Project Name: Lake Wood Country Club Date: 8/11/20 Site Location: Westlake, OH Quotation:

Lake Wood Count_2008110728Q002

Inside - Weather Resistant Building Installation: **Quoted By:** Mike Green

Customer Contact Name:

Company: Sales Rep: Mike Green Address: Phone: 262-337-3318

City/State Email: mike.green@watertronics.com

Phone: Email:

Performance: 1925GPM @ 120PSI Wetwell Depth: 12Ft. - 0 in.

Input Power: 460VAC/3Phase/60Hz Panel SCCR: 35KA FCC Type: None

Model Number: VTV-1-60X3/15V/5ST-460-3-1800-120

CATEGORY	DESCRIPTION	QTY
Station Configuration	 Vertical Turbine - Station Spec 	1
Approvals and Certifications	 UL Listed - Industrial Control Panel 	1
Paint Colors	 Paint Color - Watertronics - Green 	1
Pump Motors - Submersible	 5HP Submersible Motor - 380-460V/3ph 	1
Pump Motors - VHS	 15HP VHS Premium Efficiency Motor - 460V/3Ph 	1
	 60HP VHS Premium Efficiency Motor - 460V/3Ph 	3
Pumps - Submersible Turbine	 Pump, Submersible Turbine, 5HP 	1
Pumps - Vertical Turbine	 Pump, Vertical Turbine, Hydroflo, 15HP, 1800RPM 	1
	 Pump, Vertical Turbine, Hydroflo, 60HP, 1800RPM 	3
Pump Discharge Heads	 Discharge Head - 4" Ductile Iron 	1
	 Discharge Head - 6" Ductile Iron 	3
Pump Columns	 Pressure Maint Pump Column - 2" Dia - Carbon Steel 	1
	 VT Pump Column - 4" Dia, 12Ft Max Depth, Carbon STL 	1
	 VT Pump Column - 6" Dia, 12Ft Max Depth, Carbon STL 	3
Pump Seals	Mechanical Shaft Seal	4
Discharge Manifolds	 Discharge Manifold - Quadplex Pump 	1
Pressure Relief Valves	• 4" Pressure Relief Valve	1
Discharge Strainers	 10" WYE Strainer with Autoflush - 2424 GPM 	1
Discharge Drop Pipes	 Drop Pipe, Steel - 3" FL x 3" FL, 36" Bury Depth 	1
Regulation EBVs	• Electronic Butterfly Valve - 2-6"	4
Flow Meter	 Growsmart IM3000 Series Magnetic Flowmeter - 6" 	1
Level Controls	 Wetwell Level Control w/2 Pond Fills 	1
Inlet Screens	 Stainless Box Screen SBS-36 - 3200 GPM 	1
Pump Station Base	 Pump Station Base - Formed Steel 	1
Pump Station Base Accessories	Skid Shim Kit, Stainless Steel	1
Disconnects	 Station Disconnect Switch - 400A Fused 	1
VFDs	 Variable Frequency Drive, 15HP,380-480V/3ph 	1
	 Variable Frequency Drive, 60HP,380-480V/3ph 	1
XL Contactors	 VFD (XL) Contactor - 460-575V/3Ph - 15HP 	1
	 VFD (XL) Contactor - 460-575V/3Ph - 60HP 	3
	Motor Starter - 460-575V/3Ph - 5HP	1
Control Systems	Type 1 - Sigma PLC Logic Controller	1
•	Power - Phase Monitor Protection	1
Touchscreen Displays	VirtualVision III - 7.0" Color LCD Touchscreen	1
Control Switches	Lighted HOA Switch	5
Surge Protection	Standard Surge/Lightning Protection	1

Optical Isolators	 Flow Signal Opto Coupler - For Sharing Signal 	1
Remote Start Options	 Remote Disable Relay - 24VAC/DC 	1
Communication and RTUs	 WaterVision Cloud - Verizon 4G - w/5YR Subscription 	1
Fertigation Accessories	Fertigation Run Relay	1
Electrical Enclosures	 Electrical Enclosure - 75x72x18 STL/WHT 	1
Electrical Enclosure Accessories	Inspection Window Kit - 5" x 3" WHT	2
Electrical Enclosure Cooling	 Heat Exchanger - Large (5-12K Btu) 	1
Documentation	 Operation & Maint Manual (English) - Electronic Copy 	3
Custom Option	 8" x 8 ft Stainless Steel Discharge Spool w/ Qty. 5, 3/4" TOL's 	1
	• 8" x 5 Ft. Discharge Spool Piece	1

PTION NO.	QUIPMENT FEATURES: (Included in Total Station Price) DESCRIPTION	QT
01-000008	Vertical Turbine - Station Spec	1
 A variable s speed cont specified b the owner control par power con shall be con 	speed Vertical Turbine – Station Specified Provided. The pump station shall include variable frequency drive prol, vertical turbine pumps, piping, valves, electrical panel, base and all other features (where applicable as elow). Station shall be designed to be installed either outside or inside a weather resistant building furnished by as specified above. A formed and reinforced base platform will support all manifolding, pumps, motors, and hels to provide an integral unit ready to quickly install at the job site. Configuration of station inlet, discharge, nections and layout/orientation of basic system components shall be indicated on the sales drawing. The station impletely assembled (where applicable), calibrated, and subjected to a dynamic run test including safety check prior with and shipment to customer.	
	UL Listed - Industrial Control Panel ELECTRICAL CONTROL PANEL shall be UL listed and meet or exceed UL508A specifications for safety of industrial sels. Panel shall be assembled and tested in a UL508A certified panel shop.	1
The paint s coat follow less than 5 base, pipev	Paint Color - Watertronics - Green on pumping components shall be painted Watertronics GREEN for maximum durability and resistance to corrosion. system shall consist of a multi-step system including media blasting, application of a rust prohibitive epoxy prime ed by a two part industrial grade ultraviolet resistant polyurethane finish having a total dry film thickness of not mils. Each coat will be applied and baked for one half hour at 165 degrees F. Pump station components including work, discharge heads, manifolds, isolation and relief valves, grooved clamps and supports shall be painted unless specified on sales drawing.	1
_	5HP Submersible Motor - 380-460V/3ph efficiency submersible motor shall be provided. The motor shall be inverter duty rated, class F windings, and shall led with stainless steel splined output shaft.	1
01-0000009	15HP VHS Premium Efficiency Motor - 460V/3Ph	1
windings a at any poin	mium efficient (VHS) vertical hollow shaft motor shall be provided. The motor shall be inverter duty rated, class F and include internal 120V winding heaters. The motor shall be sized properly for continuous operation of the pump t along the designed pump performance curve without exceeding the motors specified horsepower rating. The be equipped with a "Self Release Coupling" factory configured, (bolted to upper bearing) for momentary up thrust	
01-0000015	60HP VHS Premium Efficiency Motor - 460V/3Ph	3
windings a at any poin	mium efficient (VHS) vertical hollow shaft motor shall be provided. The motor shall be inverter duty rated, class F and include internal 120V winding heaters. The motor shall be sized properly for continuous operation of the pump t along the designed pump performance curve without exceeding the motors specified horsepower rating. The be equipped with a "Self Release Coupling" factory configured, (bolted to upper bearing) for momentary up thrust	
20-0000002	Pump, Submersible Turbine, 5HP	1
	nersible Turbine pump shall be provided. The pump shall consist of one or more stages and be designed for performance and efficiency. Bowls shall be made of cast iron or stainless steel. Impellers shall be investment cast eel.	
21-0000002	Pump, Vertical Turbine, Hydroflo, 15HP, 1800RPM	1
designed b efficiency. statically b	ORPM Vertical Turbine pump assembly shall be provided. The pump assembly shall consist of one or more stages y Hydroflo to Watertronics specifications for each application in order to achieve maximum performance and The bowls shall be of cast iron with internal epoxy coating. Impellers shall be of investment cast STAINLESS STEEL alanced for low vibration. The pump shaft shall be 416 stainless steel, turned, ground and polished and shall be	

supported by bearings above and below each impeller. Each pump assembly shall be equipped with a stainless steel inlet

basket strainer properly sized for the pump.

• A 60HP 1800RPM Vertical Turbine pump assembly shall be provided. The pump assembly shall consist of one or more stages designed by Hydroflo to Watertronics specifications for each application in order to achieve maximum performance and efficiency. The bowls shall be of cast iron with internal epoxy coating. Impellers shall be of investment cast STAINLESS STEEL statically balanced for low vibration. The pump shaft shall be 416 stainless steel, turned, ground and polished and shall be supported by bearings above and below each impeller. Each pump assembly shall be equipped with a stainless steel inlet basket strainer properly sized for the pump.

140-000001 Discharge Head - 4" Ductile Iron

1

A heavy duty ductile iron 4 INCH pump discharge head assembly shall be provided for superior durability. The discharge head
assembly shall include a check valve, butterfly valve and related hardware flow rated for up to 400GPM and 150 PSI per ANSI
B2.1.

140-000002 Discharge Head - 6" Ductile Iron

3

A heavy duty ductile iron 6 INCH pump discharge head assembly shall be provided for superior durability. The discharge head
assembly shall include a check valve, butterfly valve and related hardware flow rated for up to 900GPM and 150 PSI per ANSI
B2.1.

150-0000019 Pressure Maint Pump Column - 2" Dia - Carbon Steel

1

A 2 INCH diameter pressure maintenance pump column pipe shall be provided. The column pipe shall be fabricated from A53,
Grade B schedule 40 CARBON STEEL. A butterfly valve and check valve shall be provided on the outlet of the column pipe
assembly.

150-0000001 VT Pump Column - 4" Dia, 12Ft Max Depth, Carbon STL

1

• A 4 INCH diameter vertical turbine pump column for a MAXIMUM pump depth of 12 FEET shall be provided. The column pipe shall be fabricated from A53, Grade B schedule 40 CARBON STEEL, in inter-changeable sections not more than 10 feet in length. Pump line shaft shall be AISI 416 SST. The size of the shaft shall be no less than determined by ANSI specification B58.1, Section 4.2, Table 4. Bearing retainers shall be bronze with rubber bearings. The pump column shall be cut to length in order to meet ACTUAL WETWELL depth and dimensions as specified on the sales drawing.

150-0000002 VT Pump Column - 6" Dia, 12Ft Max Depth, Carbon STL

3

• A 6 INCH diameter vertical turbine pump column for a MAXIMUM pump depth of 12 FEET shall be provided. The column pipe shall be fabricated from A53, Grade B schedule 40 CARBON STEEL, in inter-changeable sections not more than 10 feet in length. Pump line shaft shall be AISI 416 SST. The size of the shaft shall be no less than determined by ANSI specification B58.1, Section 4.2, Table 4. Bearing retainers shall be bronze with rubber bearings. The pump column shall be cut to length in order to meet ACTUAL WETWELL depth and dimensions as specified on the sales drawing.

180-0000002 Mechanical Shaft Seal

4

• Each turbine pump discharge head shall contain a mechanical seal assembly located where the line shaft protrudes through the discharge head. The mechanical seal assembly shall consist of a main housing, shaft sleeve assembly, locking and drive collars. The shaft sleeve shall be machined from 416 stainless steel. The locking and driving collars shall be machined from 7075 aluminum. Integral to the seal housing, a permanently lubricated ball bearing shall be mounted, located out of the pumping media. The mechanical seal shall be resistant to corrosion and abrasives, totally self lubricating, and rated for no less than 300 PSI. The seal assembly shall require no bypass tubes or related devices to provide cooling or lubrication. One seal required per Vertical Turbine pump.

200-000004 Discharge Manifold - Quadplex Pump

1

• A custom fabricated QUADPLEX PUMP discharge manifold shall be provided. The manifold shall be designed and fabricated by Watertronics to maximize flow and efficiency and to meet specific customer installation requirements. All fabricated piping shall conform to ASTM specifications A53 for Grade B welded or seamless pipe. Discharge piping 12" and larger shall be a minimum "Standard Wall" thickness. Discharge piping 10" and smaller shall be Schedule 40. All welded flanges shall be forged steel slip-on or weld neck type. All welded fittings shall be seamless, conforming to ASTM Specification A234, with pressure rating not less than 150 psi. The manifold assembly shall include a main discharge isolation valve, discharge pressure gauge, three 3/4" fertigation ports and a winterization drain port with 3/4" ball valve.

• A 4" pressure relief valve shall be installed on the discharge piping downstream of the pressure regulating valves. The valve shall be sized to bypass sufficient water back to the water source to avoid the discharge pressure from exceeding the maximum programmed pressure set point by more than 10 PSI.

220-000005 10" WYE Strainer with Autoflush - 2424 GPM

1

• A high efficiency low pressure drop 10 INCH wye strainer shall be provided. The wye strainer housing shall be made entirely from ASTM A126B cast iron rated for 175PSIG at 150 degrees F. The internal screen shall be fabricated from 304 stainless steel with 1/8" perforations and shall flow up to 2424 GPM with a 1PSI or less pressure drop. The strainer shall be automatically flushed after a specific pump station run time. The time between flush events and the flush duration shall be programmable through the station touch screen display.

240-0000015 Drop Pipe, Steel - 3" FL x 3" FL, 36" Bury Depth

1

• A steel 3" Flange X 3" Flange - 36" bury depth DISCHARGE drop pipe shall be provided. The drop pipe shall be custom fabricated for the application and shall be painted the station pipework color unless otherwise specified on the sales drawing. All fabricated piping shall conform to ASTM specifications A53 for Grade B welded or seamless pipe. Discharge piping 8" and above shall be a minimum of Schedule 10. Discharge piping 6" and smaller shall be Schedule 40. All welded flanges shall be forged steel slip-on or weld neck type. All welded fittings shall be seamless, conforming to ASTM Specification A234, with pressure rating not less than 150 psi. A grove lock swivel shall be provided in drop section and a 1.5" blowout port shall be provided in upper leg of drop pipe.

270-000001 Electronic Butterfly Valve - 2-6"

4

• A patented Watertronics 2-6" EBV "Electronic Butterfly Valve" shall be provided on the pump discharge head. The EBV shall provide for gradual entry of water from the pump into the discharge manifold to allow for complete purging of pump column air and elimination of water hammer, surges, and check valve slam. The EBV shall also facilitate smooth pump sequencing, enhanced flow and pressure regulation. In the event of a VFD failure, the EBV shall function as a by-pass regulation device to maintain constant pressure regulation and flow without disruption of the irrigation process.

280-0000011 Growsmart IM3000 Series Magnetic Flowmeter - 6"

1

A 6" diameter Growsmart electromagnetic flow meter shall be provided to measure water flow rate with an accuracy of +/ 2%. The flowmeter shall include an integrated LCD display and be constructed of epoxy coated ASTM carbon steel suitable for indoor or outdoor installation. Maximum recommended flow rate 1322 GPM.

290-000002 Wetwell Level Control w/2 Pond Fills

1

A robust industrial grade WETWELL level control system shall be provided. The system shall consist of a level transducer and a low level safety shutdown float located in the WETWELL for accurate and reliable level control. The controls shall be fully integrated with the control system with programmable set points accessible through the station touchscreen display. The level control system shall function to shutdown the pump system in the event of a low water condition. An additional isolated 5A relay contact shall be provided to control each of TWO external pond fill or other external fill sources. The level transducer shall be rated for a maximum water depth of 33.5 feet.

310-0000004 Stainless Box Screen SBS-36 - 3200 GPM

1

A 36 INCH - 3200 GPM square inlet box screen shall be provided to prevent large debris from entering pump inlet. The box screen shall be fabricated entirely form STAINLESS STEEL consisting of expanded mesh on three sides with top, bottom and outlet sides fabricated from solid sheet. Stainless steel legs will be attached to the bottom for support. The box screen will have a clamp on style fitting with stainless steel hardware to slide over the inlet pipe with diameter as specified on sales drawing. Inlet flume pipe and adapters not included and are to be ordered separately.

400-0000001 Pump Station Base - Formed Steel

1

• Pump station components shall be mounted on a formed steel base. Formed steel construction is used to minimize weld seams and maximize strength. The base material shall be 3/8" thick ASTM A-26 hot rolled carbon steel plate. Structural steel shall be welded on the underside of the base to maximize structural rigidity. Base shall have a minimum of (eight) Ø3" lifting points (two at each corner). Base shall include a hinged wet well hatch whenever possible. Base shall be supplied with four anchor brackets and concrete wedge anchor bolts if base length is under 12ft. For base lengths over 12ft, six anchors shall be provided. The base size shall be approximately 156 x 72 INCHES.

A skid shim kit shall be provided to take up small gaps between skid and floor and to insure level installation of skid. Each kit shall include the following stainless steel shims; Qty (2) -1/2"x2"x5", Qty(2) - 3/8"x2"x5", Qty(4) - 1/4"x2"x5", Qty(4) - 1/8"x2"x5".

500-0000012 Station Disconnect Switch - 400A Fused

1

A 3-pole 400 amp maximum FUSED UL Listed main disconnect switch shall be provided. The disconnect switch shall include an
operating handle mounted in the main electrical panel door that shall open all ungrounded conductors of the service
entrance to the panel. The disconnect switch shall be mechanically interlocked to prevent access while the operating handle is
in the ON position. The station disconnect switch shall be correctly sized for the maximum station load and shall meet all
applicable NEC and UL508A requirements.

520-0000022 Variable Frequency Drive, 15HP,380-480V/3ph

1

A high efficiency industrial grade 15HP variable frequency drive shall be provided. The VFD shall be specifically designed for
water pumping applications and include a graphical control interface keypad. All internal printed circuit boards shall be
conformal coated for long service life.

520-0000028 Variable Frequency Drive, 60HP,380-480V/3ph

1

A high efficiency industrial grade 60HP variable frequency drive shall be provided. The VFD shall be specifically designed for
water pumping applications and include a graphical control interface keypad. All internal printed circuit boards shall be
conformal coated for long service life.

540-0000032 VFD (XL) Contactor - 460-575V/3Ph - 15HP

1

• A 460-575V/3Ph - 15HP cross line (XL) industrial grade dual interlocking contactor set shall be provided for the pump. The contactor set shall allow the assigned pump to be run manually across the line or from the VFD output. It will also facilitate sequencing of pumps when more than one main pump is present. An HOA, (Hand-Off-Auto) switch will be provided for each pump. When HOA is in Hand position, the contactor set will engage to power pump directly across the line. If Off position, pump will be disabled and when in Auto, pump will run on VFD when assigned as lead pump otherwise the contactor set will sequence the pump on as a lag pump where applicable.

540-000038 VFD (XL) Contactor - 460-575V/3Ph - 60HP

3

• A 460-575V/3Ph - 60HP cross line (XL) industrial grade dual interlocking contactor set shall be provided for the pump. The contactor set shall allow the assigned pump to be run manually across the line or from the VFD output. It will also facilitate sequencing of pumps when more than one main pump is present. An HOA, (Hand-Off-Auto) switch will be provided for each pump. When HOA is in Hand position, the contactor set will engage to power pump directly across the line. If Off position, pump will be disabled and when in Auto, pump will run on VFD when assigned as lead pump otherwise the contactor set will sequence the pump on as a lag pump where applicable.

540-0000070 Motor Starter - 460-575V/3Ph - 5HP

1

• A 460-575VAC/3Ph - 5HP industrial grade Motor Starter shall be provided. The motor starter shall provide integrated switching, thermal and current overload protection per NEC article 430 safety requirements. The switching contacts shall be rated for a minimum of 200,000 cycles under full load conditions.

600-0000002 Type 1 - Sigma PLC Logic Controller

1

• The electrical control system shall be an Industrial grade PLC with a color touch screen operator interface device and custom programming written specifically for this project. Control logic shall be based on redundant design and interlocking of control devices for maximum safety and proper sequence of operation. In addition to diagnostic functionality available through the touchscreen display, the PLC controller shall also have diagnostic LEDs for monitoring status of discrete inputs and outputs. The PLC shall contain RS232 and RS485 communication ports for monitoring and programming purposes and shall contain an EEPROM, battery backed RAM and non-volatile memory for storage of critical configuration data. The PLC will have a high speed counter, clock and calendar function with year, month, day, hour, minute, and day of week.

• An advanced microprocessor based Power Phase Monitoring system shall be provided to protect the pump system from equipment failure due to power faults occurring on the incoming electrical service to the pump station. The monitor shall actively monitor for phase loss, phase reversal, phase unbalance, under voltage and overvoltage conditions. In the event that these one or more of these conditions occur, the Phase Monitor shall signal the PLC logic controller to shut down the pump system preventing damage to pump system components. The phase monitor fault limits and time to trip shall be adjustable. A status LED shall indicate the fault type causing the shutdown event.

610-000003 VirtualVision III - 7.0" Color LCD Touchscreen

1

• An industrial grade 7.0" WVGA (800x480) Wide Color TFT LCD touchscreen user interface display shall be provided featuring: Digital flow (GPM) and pressure (PSI) display, Both cumulative and resettable gallons pumped indicators, Pump ready/running status with elapsed run time display per pump, Flow-based pressure regulation to match discharge pressure with irrigation demand, Individual motor overload reporting, Minute by minute data logging saved to a removable flash RAM card, 32MB card to store approximately 12 months of data, Historic and real time X-Y plotting of pump station operation, Filter controls, Alarm log file, Ability to change system parameters such as setpoint pressure, time delays, Fertigation graphic and control interface when sold with a Watertronics EZ Feed Injection Package. Life of the display shall be 50,000 hours. The display software shall be configured for the pump station features.

620-000001 Lighted HOA Switch

5

• A lighted switch actuator shall be provided which shall be illuminated GREEN whenever the controlled item is active. One required per switch.

630-000001 Standard Surge/Lightning Protection

1

A Standard 40kA max impulse current rated surge protective device shall be provided on the incoming power connections to
the station. The SPD shall utilize high energy solid state suppression circuitry to effectively protect electrical equipment from
severe electrical disturbances. Diagnostic LEDs shall be provided on the device to indicate operational status of the device
when powered.

640-000001 Flow Signal Opto Coupler - For Sharing Signal

1

An optical coupling device shall be provided for sharing of pump station flow signal with external customer control systems.
 The opto-coupler is rated for 3-30VDC (24VDC) nominal supply from customer control system and shall provide a minimum of 2500V isolation between station control system and external systems.

650-000003 Remote Disable Relay - 24VAC/DC

1

A 24VAC/DC remote disable relay input shall be provided. The remote disable relay shall effectively disable the pump station
when the remote start relay coil is supplied 24VAC/DC power from an irrigation controller or other external power source
provided by customer. If the station is running and relay is powered, the station will safely shutdown. When power is
removed from the relay, the station will return to normal operation.

680-0000008 WaterVision Cloud - Verizon 4G - w/5YR Subscription

1

• WaterVision Cloud - Verizon network 4G/LTE CELLULAR remote pump system monitoring package shall be provided. The system includes all hardware, software and 5 YEAR SUBSCRIPTION for connection of a single pump station to the WaterVision Cloud Network via a cellular connection. The system shall allow customer to remotely monitor the pump station and the customer's other WaterVision Cloud enabled pump stations on the same property or multiple properties at any time from a cell phone, tablet, PC or other web based device. The system shall also allow control of the pump station enable/disable and reset of alarms. The communication hardware will accept up to eight additional CHOICE CARD inputs The WaterVision Cloud system is also expandable through connection of additional WaterVision Cloud enabled pump systems. Additional hardware required for system expansion.

720-000001 Fertigation Run Relay

1

• A fertigation run relay shall be provided to activate a customer provided chemical injection pump. The relay output shall turn on when the station reaches a minimum flow set point and turn off when station flow drops below set point. The minimum flow set point shall be adjustable through the touchscreen display where provided.

• A heavy duty industrial grade 75Hx72Wx18D UL Listed, NEMA 4 outdoor rated enclosure shall be provided to protect electrical control system components. The enclosure shall be custom built to Watertronics specifications specifically for water pumping applications and shall be fabricated of no less than 12GA carbon steel finished on all inside and outside surfaces in polyester based WHITE powder coat finish for maximum durability. The enclosure shall be provided with heavy duty integral hinges with lift off doors, INTERIOR LIGHTING PACKAGE, heavy duty key lockable door handles, continuously welded seams, mechanical interlocks, and drip shield. The electrical component back panel shall be galvanized steel for superior EMC performance.

760-000003 Inspection Window Kit - 5" x 3" WHT

2

• A NEMA 4 outdoor rated 5"H x 3"W inspection window kit shall be provided in the electrical enclosure door for viewing electrical component status. The window frame shall be steel painted white with clear polycarbonate window.

770-0000002 Heat Exchanger - Large (5-12K Btu)

1

A premium quality closed loop water to air HEAT EXCHANGER cooling system shall be provided. The heat exchanger shall control temperature levels within the electrical enclosure protecting sensitive electronic components from overheating conditions. The heat exchanger shall be rated NEMA 4 for indoor/outdoor installations and prevent outside air or cooling water from entering electrical enclosure. The heat exchanger shall be properly sized to the application up to a maximum of 5-12K Btu cooling capacity.

975-0000001 Operation & Maint Manual (English) - Electronic Copy

3

A detailed OPERATION and MAINTENANCE manual shall be provided detailing basic system operation, alarms, general
maintenance procedures and use of the operator interface. The manual shall be in English and provided in electronic format.

999-0000001 8" x 8 ft Stainless Steel Discharge Spool w/ Qty. 5, 3/4" TOL's

• 8" x 8 ft Stainless Steel Discharge Spool w/ Qty. 5, 3/4" TOL's

999-0000002 8" x 5 Ft. Discharge Spool Piece

1

• 8" x 5 Ft. Discharge Spool Piece

PUMP STATION PRICE (INCLUDES ALL STANDARD EQUIPMENT FEATURES)	U.S. Dollars Only	\$148,917
Domestic US Freight from Factory to Job Site: FOB Factory		INCLUDED
Overseas Shipment:		NOT INCLUDED
Off Load & Setup Supervision:		INCLUDED
Crane To Off-Load and Set Pump Station:		INCLUDED
Start-Up:		INCLUDED
Inspection Fees:		NOT INCLUDED
Warranty - (Including Parts and Labor)		2 YR STANDARD
Taxes:		NOT INCLUDED
Shipment: Estimated 9 weeks after receipt of signed contract and drawing approval. A	a firm delivery date	
will be established and transmitted within 5 days of receipt of all final details and doc	uments.	

TERMS AND CONDITIONS

DELIVERY AND SETUP:

- 1. All reasonable efforts will be made to meet the requested delivery date after the receipt of a signed contract however; Watertronics will not be liable for delays in delivery.
- 2. Pump station components shipped separately from the station, at the Customer's request, may incur additional freight charges, payable by the Customer.
- 3. Customer will be responsible for having job site readily accessible for station delivery via flatbed truck.
- 4. Customer will provide the equipment and personnel required to unload and/or set the pump station.
- 5. DOMESTIC (USA): Station Set-up charges include one day on site. If more than one day is required, additional charges of \$950.00 per day will be assessed if the customer caused the delay. Travel time not included if separate service call is required. INTERNATIONAL DESTINATIONS: It is the responsibility of the owner's representative (contractor) to offload the station, identify any freight damage, inventory equipment and place the skid in position on the concrete slab. Vertical Turbines may be set in place on the skid for final assembly by an authorized service agent at time of technical startup. Any delays when on site due to events out of our control may incur additional charges. Charges include technician's time (\$950/day), travel fees, airline penalties, hotel, and meals. FREIGHT DAMAGE must be written on shipping documents with copies going to the carrier and Watertronics. Watertronics will require pictures of damage caused by the carrier.
 - MISSING EQUIPMENT from the Bill of Materials (BOM) must be identified within 2 weeks of delivery.
- 6. Customer will be responsible for electrical permit if required.
- 7. Customer will be responsible for primary electrical hookup to pump station.
- 8. Customer will be responsible for making all piping connections.
- 9. Customer will be responsible for building modifications (roof removal & installation) if required.
- 10. Customer will be responsible for wet well, slab, and concrete work.
- 11. Customer will be responsible for piping wye strainer / filter flush line back to supply lake.

START-UP:

- 1. Customer is responsible to guarantee the following before station calibration can be performed: a.) Permanent utility power is available and installed on pump station disconnect, b.) adequate water supply to operate station to full capacity, c.) installed irrigation system to operate station to full capacity.
 - DOMESTIC (USA): Start-up charges include one day on site. If more than one day is required, additional charges of \$950.00 per day will be assessed if the customer caused the delay.
 - INTERNATIONAL DESTINATIONS: Final assembly and startup will be completed under the terms listed above. If the site is ready for startup i.e. power in place, site and infrastructure ready to run water the time allotted is adequate. Any delays due to events out of our control may incur additional charges. Charges include technician's time (\$950/day), travel fees, airline penalties, hotel, and
- 2. Purchaser will notify Watertronics two weeks in advance of the desired start-up date.

POWER SUPPLY:

- The pump station proposed herein is designed for 480 volt, WYE configured or closed delta balanced 3 phase power. The acceptable range of voltage is 455 volts (min) 495 volts (max). Unless specifically stated under Optional Equipment, open delta, phase converter, or other forms of unbalanced three phase power are not acceptable.
- 2. If the supply voltage is not within this acceptable range, the purchaser is responsible for making the necessary corrections. This may include re-tapping or replacing the primary transformer. If the supply voltage is outside the stated range, electrical components such as VFD's, fuses, breakers, overloads, motors, power supplies may intermittently trip or prematurely fail and will not be considered for warranty coverage.
- 3. The use of generator power is not recommended. If a generator is required as a temporary power supply, the pump station will be covered under Watertronics' limited warranty provided that their "Engine Driven Generator Power Warranty Policy and Operation Guidelines" document is strictly adhered to.
- 4. Proper electrical grounding of the pump station is a requirement. Station will not operate properly and could pose a health hazard if not properly grounded. Failures of any magnitude due to improper grounding will not be covered under warranty.

WARRANTY:

- 1. Watertronics warrants its pump station products to be free of defects in materials and workmanship for a period of two (2) years from the date of startup, but not later than 27 (27) months from the date of invoice, unless modified by customer with the selection of the extended warranty option. Stations deemed delivery complete and invoiced accordingly, at Watertronics' factory and stored there, shall have the warranty period commence as of the invoice date. Should the system require storage before startup after leaving the Watertronics' facility, the system must be stored in a secured, climate controlled environment that will not allow for degradation of the system due to moisture, extreme temperature variations, or human negligence.
- This warranty is limited to replacing or repairing any defective component supplied by Watertronics at Watertronics' sole discretion and does not apply to equipment that has been damaged, misapplied or has been modified in any way.
- 3. Any work performed on the pump station must be provided by a Watertronics recognized PSN (Pump Service Network) service provider and documentation of all work performed within the warranty period must be on file at the factory. Any maintenance or repairs done without the pre-authorization of Watertronics, or its recognized service providers shall void this warranty.
- 4. This warranty does not cover damages under the following conditions, unless otherwise specified in writing: (1) Misapplied or inappropriate incoming power, improper grounding, vandalism, or any incidental damage, consequential damage, or act of God, (2) repairs or replacements made without the pre-authorization of Watertronics, or its recognized service providers, (3) exposure to destructive gaseous or chemical solutions, (4) exposure to water pH levels of less than 6.0 which is typically the result of SO2 burner or sulfuric acid injection, (5) water salinity levels greater than 2000 parts per million, (6) water from a reverse osmosis process plant, (7) unusually high dirt load or abrasives in the water, or (8) pumping water not suitable for turf irrigation.
- 5. Watertronics will not accept liability for any costs associated with the removal or replacement of equipment in difficult to access locations. This includes, but is not limited to, the use of cranes larger than 15 tons, scuba divers, barges, helicopters, or other unusual means. These extraordinary costs shall be borne by the owner, regardless of the reason necessitating removal of the product from service.
- 6. THIS WARRANTY IS ABSOLUTELY IN LIEU OF ANY OTHER EXPRESS OR IMPLIED WARRANTIES. THIS INCLUDES ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY OTHER OBLIGATION ON THE PART OF WATERTRONICS.

NO AGENT, EMPLOYEE OR REPRESENTATIVE OF WATERTRONICS HAS ANY AUTHORITY TO BIND WATERTRONICS TO AN AFFIRMATION, REPRESENTATION OR WARRANTY CONCERNING THE PRODUCT SOLD UNDER THIS WARRANTY. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

PAYMENT TERMS: U.S. DOLLARS ONLY

- All purchase orders are subject to acceptance at factory in Hartland, Wisconsin. Receipt of Production deposit, verification of
 acceptable credit and confirmation of order are required before production. On domestic orders of \$100,000 or less, a 25% production
 deposit is required to initiate the order with the balance due net 30 days from date of final invoice. Orders over \$100,000 require a
 50% production deposit. For international orders, either an Irrevocable Letter of Credit (ILC) drawn on a U.S. Bank, with all costs of the
 ILC borne by the purchaser, is required for the full amount of purchase at time of order, or a 50% cash deposit with order and the
 remainder paid in cash when product is stated ready for shipment.
- 2. Late fee of 1.5% per month will be added to any balance due after thirty (30) days from the date of invoice. All payments and/or credits are applied to the outstanding balance before computing a finance charge.
- 3. In the event the customer cannot take delivery on the requested date, delivery shall be deemed completed, and the warranty period shall commence, at Watertronics' factory with storage for future shipment. For the purpose of payment, eighty (80) percent of the contract price will be due, payable net 30 days from invoice. The customer will be responsible for storage and handling charges at the factory. A minimum charge of \$200 per week will apply, with total storage charges added to the final invoice.

OTHER INFORMATON:

- 1. Prices valid for sixty (60) days from the date of this proposal.
- State and local sales taxes are not included in these prices.
- 3. Seller retains a security interest in the above mentioned equipment as provided by the UNIFORM COMMERCIAL CODE, until payment is received in full.
- 4. All claims for incorrect deliveries must be submitted in writing to Watertronics Customer Service within 15 days after receipt of goods.
- 5. All claims for price discrepancy must be submitted in writing to Watertronics Customer Service within 60 days after receipt of goods.
- 6. A completed pump station may not be returned to Watertronics for credit.

CHANGE ORDERS:

- 1. Change Orders initiated by parties outside of Watertronics, after an order has been entered, may require additional charges to the purchaser regardless of the reason or initiating party. A minimum administrative fee of \$ 150.00 will be charged.
 - a. Lost engineering and order administration time will be charged to the purchaser at \$150.00 per hour.
 - b. Purchase orders to vendors perfected by Watertronics made invalid by the Change Order will incur charges against the purchaser equal to any penalties levied against Watertronics. To include, re-stocking charges, lost freight charges or return goods freight charges and any vendor administrative costs.
 - c. Watertronics lost manufacturing time will be charged to the purchaser at \$100.00 per hour. Additional labor to satisfy the Change Order will be estimated at \$100.00 per hour and added to the total Change Order amount.
 - d. Materials made unusable or scrapped because of the Change Order will be changed to the purchaser at actual sale value as originally assigned to the job.
 - Replacement materials or goods will be valued as required by the Change Order and be shown in its total.

ACCEPTANCE:

Purchaser hereby agrees that in the event of default in the payment of any amount due, that if this account is placed in the hands of an attorney, or agency for collection or legal action, to pay any and all related attorney fees, costs of collection including agency, private process servers fees, court costs, etc., incurred and any other costs of collection permitted by the laws governing these transactions.

- 1. Equipment cancelled before completion will incur restocking charges that will be calculated at time of cancellation. Restocking fees may be the full cost of the pump station depending on the nature of the pump station that is cancelled.
- 2. Terms are subject to final credit approval.
- 3. Equipment shipped separately from the station, at Purchaser's request, may incur additional freight charges, payable by Purchaser.
- 4. Delayed deliveries by the customer once equipment is ready to ship, will incur minimum storage charges of \$200 per week, added to the final invoice.

EQUIPMENT PER QUOTATION: Lake W	ood Count_2008110728Q002				
ACCEPTED BY:					
Company Name:	By:				
Print Name:	Title:				
Signature Date:	Requested Delivery Date:				
Is this sale taxable? (circle one) Yes No submitted with this order"	(If the order is non-taxable,	a tax certificate for the "ship	to state must be		
Please Return One Signed Copy of This Quota Watertronics LLC, 525 Industrial Drive, P.O. B	•	• •	nd payable to:		
BILL TO INFORMATION:					
Company Name:	Phone:	Email Address:			
Billing Address:	City:	State:	Zip Code:		
Contact Name (Print):	Title:				
SHIP TO INFORMATION:					
Company Name:	Phone:	Email Address:			
Shipping Address:	City:	State:	Zip Code:		
Contact Name (Print):	Title:				
Thank you for the opportunity to quote on yo	our numn station needs. If you have	any questions or require furt	ther information		

Lake Wood Count_2008110728Q002

please call us at 262-367-5000.