Business of the Village Board
Village of Saranac Lake

Bill #185-2025 Date: 12-22-2025

SUBJECT: Snowmaking Pump System

DEPT OF ORIGIN: Village Manager

DATE SUBMITTED: 12-15-2025

SUMMARY STATEMENT

Resolution approving the approval by Ratnik Industries for snowmaking pump system

MOVED BY: Ryan SECONDED BY: Scollin

VOTE ON ROLL CALL:

MAYOR WILLIAMS	yes
TRUSTEE RYAN	yes
TRUSTEE WHITE	yes
TRUSTEE SCOLLIN	yes
TRUSTEE BRUNETTE	yes

RESOLUTION TO APPROVE PROPOSAL FOR PURCHASING OF NEW SNOWMAKING PUMP SYSTEM AT MOUNT PISGAH

WHEREAS, the Village of Saranac Lake is committed to providing and maintaining quality park and recreational opportunities for residents and visitors, and

WHEREAS, the Village, with the assistance of Friends of Mount Pisgah (FOMP), is undertaking upgrades to the snowmaking pump system at Mount Pisgah, and

WHEREAS, Friends of Mount Pisgah (FOMP) has previously donated $60,000 toward snowmaking water distribution pipe upgrades and continues to support the Village in maintaining full operational capacity of the mountain, and

WHEREAS, the existing snowmaking pump is aged and no longer meets the operational needs of Mount Pisgah, and

WHEREAS, the snowmaking system is critical to the mountain's continued normal operation and seasonal viability, and

WHEREAS, the Village issued a Request for Proposals (RFP) for snowmaking pump system upgrades on August 19, 2025, and

WHEREAS, Ratnik Industries submitted a proposal consisting of one Single Low-Pressure Vertical Pump (40 HP with VFD on skid) and three High-Pressure Booster Pumps (3 × 50 HP pumps with VFDs on skid), which has been determined to be the most feasible option for Mount Pisgah, and

WHEREAS, the total cost of the proposal is $202,000, and

WHEREAS, funding for this purchase will be provided from the following sources:

- $50,000 donation from Friends of Mount Pisgah (FOMP)
- $61,586.80 from adult-use cannabis tax revenue, and
- $96,413.20 from the General Fund unreserved fund balance

NOW, THEREFORE, BE IT RESOLVED, that the Village Board of Trustees hereby authorizes approval of the proposal from Ratnik Industries for the purchase of a snowmaking pump system for Mount Pisgah.

Ratnik Industries
The Snowmaking Experts

670 Phillips Road Victor, NY 14564-9743 USA
Phone: 585.924.9111 Fax: 585.924.4936 www.ratnik.com

QUOTATION

Village of Saranac Lake
39 Main St, Ste 9
Saranac Lake, NY 12983
Attn: John Dixon
(518) 524-0180

Quote No. 7600

Date: December 19, 2025

Email: pisgahmanager@saranaclakeny.gov

Snowmaking Pump System – Mt Pisgah

The current proposal is a summary of the two options that have been selected from our proposal 7537 Dated September 15, 2025. The combination of Options #2A and Option #3 will form the new pumping system:

Option #2A – Vertical Turbine Supply Pump
This option includes a low-pressure vertical turbine supply pump that would draw water from a new wet well, similar to option #1. However, the pump will discharge at a much lower pressure of 86 PSI, while still pumping at 500 GPM. The motor size will be 40HP. The motor controls will still have a VFD, but this will be operated manually at a fixed speed and will provide for a smooth soft start for low inrush and longevity of equipment.

Pros and cons

Pro: The lower pump power will not require expanding the existing electrical service capacity at the pond site.

Pro: The vertical pump will operate at 1800 RPM, which is much slower that high-speed snow pumps and will have excellent longevity.

Pro: A vertical turbine pump in an open wet well is self-priming

Pro: Least cost of the supply pump options

Con: Only a single pump and no redundancy. However, due to the lower pressure a diesel rental pump can provide a backup in the event of the vertical pump failure

Neutral: A new building structure and wet well will be required to be constructed.

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QUOTATION

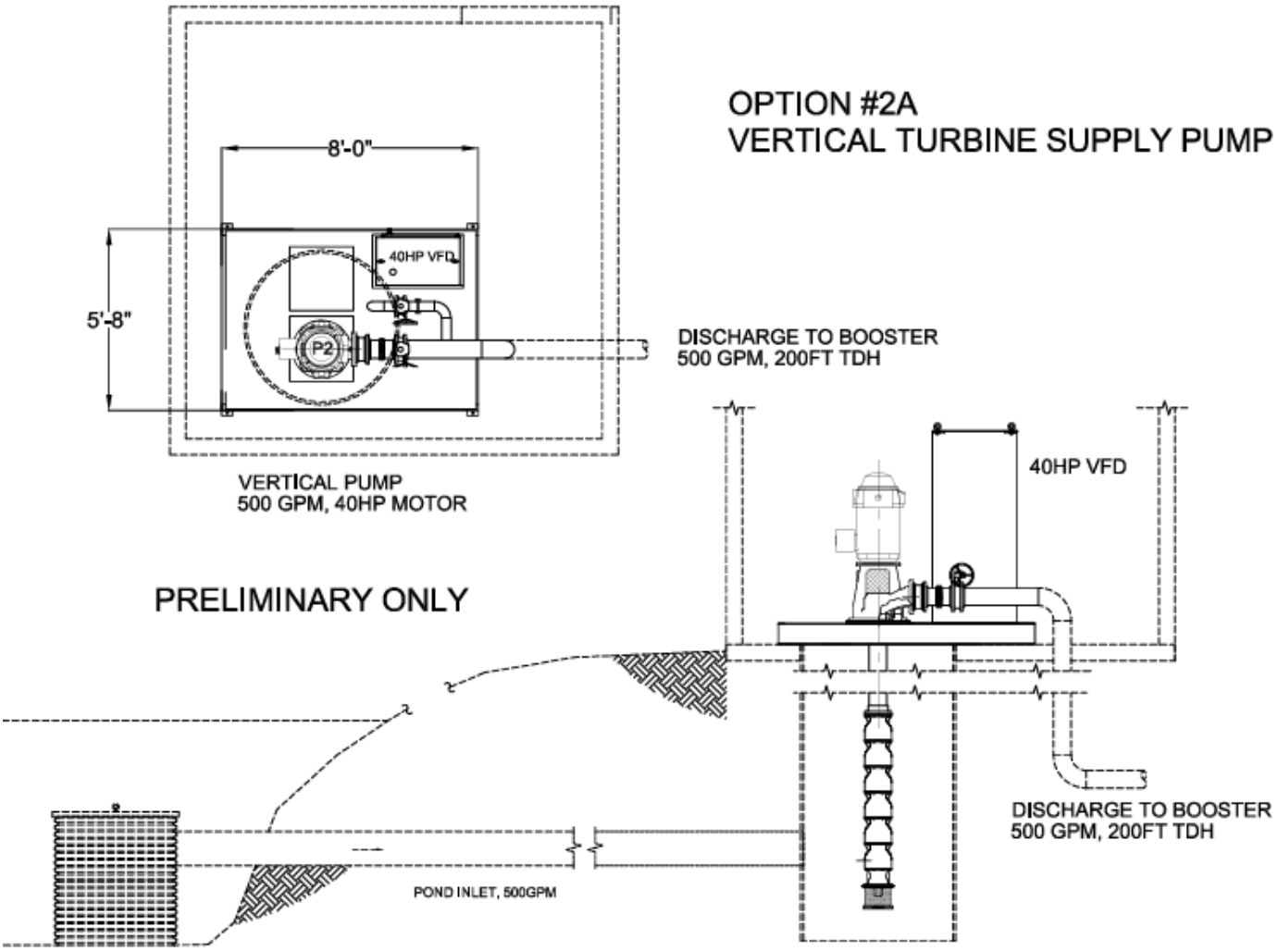
Village of Saranac Lake

Quote No. 7600

Date: December 19, 2025

Option #2A – Vertical Turbine Supply Pump, continued

The following is a sketch of a skid mounted pump offering for option #2A. This has a fabricated structural steel base to be set over a new wet well. The skid will have provision for securing a 40HP water pump and motor and will come with discharge piping, and level sensor, pre-mounted and wired. The VFD panel will have a manual on/off and speed dial control. The operator would set the speed and press start. Due to the length of the pump, the pump and motor will need to be set in the field by others using a crane



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Quote No. 7600
Date: December 19, 2025

Option #2A – Vertical Turbine Supply Pump, continued

Technical Specifications – Key Components

Pump:	Vertical Turbine, 500 GPM @200' TDH Bottom Suction, 10-12ft OAL National Pump 6-Stage K10LC – 1800 RPM Operation Fabricated Discharge Head, Class 150 Flanges Packing Box
Motor:	40HP Vertical Hollow Shaft General Electric, 1800 Nominal RPM 460/3/60,
VFD:	40HP Yaskawa FP605, Circuit Breaker Disconnect 460/3/60, Manual start/stop and speed setting Built in UL508A panel shop
Instruments:	Level Switch
Fabrication:	Fabricated Steel Skid Base, Approx 8ft x 5'-8" 6" diameter piping, class 150 valves and fittings Skid base Hot dip galvanized, other exposed steel powder coated
Assembly by:	Ratnik Industries, Inc Victor, NY USA

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Option #3 – High Pressure Booster – Multi-Pump

This option involves three small booster pumps. These pumps are mounted to a steel base and do not require an in-floor can (sleeve). All three pumps mount to a fabricated steel base and the pumps, motors, and electrical equipment are pre-mounted and wired at the plant prior to shipment. The pumps are modular and can be sourced very quickly. Unlike vertical turbine pumps, there are catalog items and not custom, so replacement parts in the future will be readily available. Since this is a complete skid package, this can set on any flat concrete floor surface. Each pump will be 167 GPM, for a total of 500 GPM. Each pump is supplied with a 50HP motor.

Pros and cons

Pro: Pump skid is fully prefabricated and wired from the factory

Pro: 3-pumps in parallel provide for a high level of redundancy

Pro: "Catalog" pumps are readily available in addition to replacement parts

Pro: By locating in the operations building, it is more centrally located and power may be more readily available.

Con: Not the least expensive but competitive with other possible configurations.

Neutral: Skid is to be located in an existing building or an addition to an existing building.

The following is a sketch of a skid mounted 3-pump booster skid offering for option #3. This has a fabricated structural steel base to be set on a flat concrete pad. The skid has three 50HP pumps, motors and control panel pre-mounted and wired. A flowmeter, pressure and temperature sensors are all included and mounted. A Y-strainer is provided loose for field installation. A PLC control system with operator touchscreen will provide for automatic pressure control and sequencing of the multi-pump system as demand changes. With a cable connection to the pond pumphouse, the pond supply pump can be remotely started and stopped through the booster control panel system.

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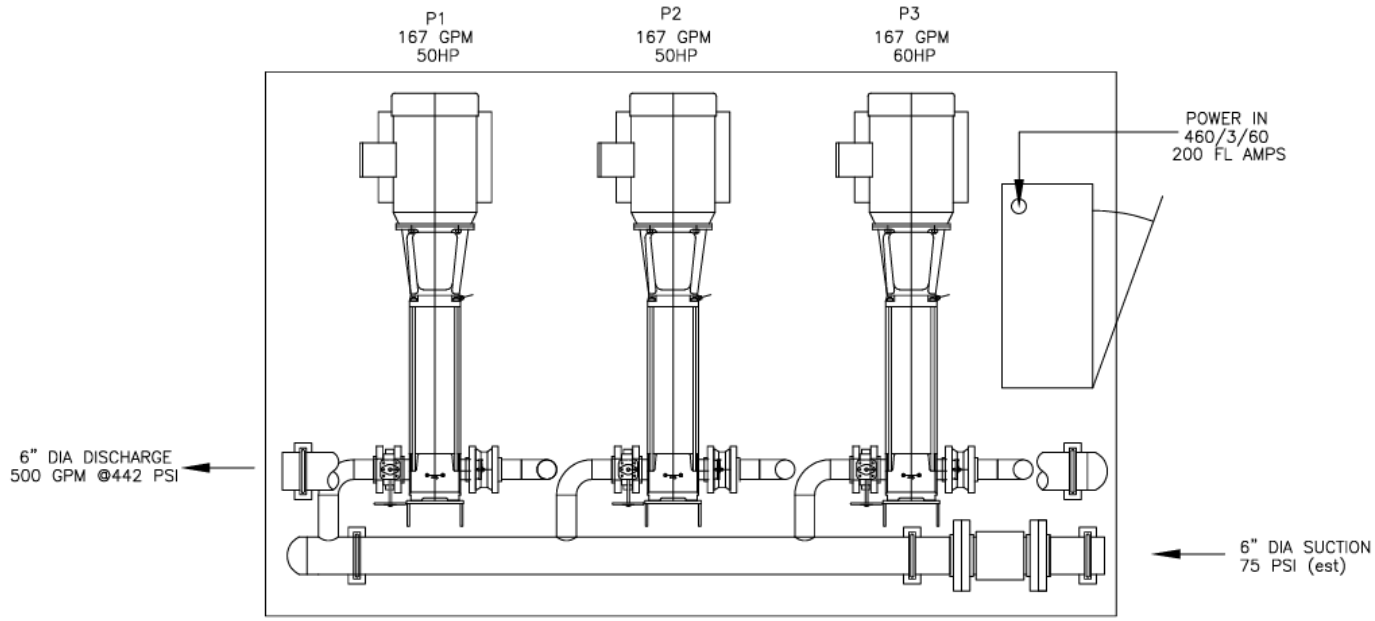
Option #3 – High Pressure Booster – Multi-Pump, continued



ESTIMATED SKID SIZE: 12'–6" LONG X 8'–0" WIDE

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Date: December 19, 2025

Option #3 – High Pressure Booster – Multi-Pump, continued

Technical Specifications – Key Components

Pump:	Qty (3) Gould/Xylem ESV-33 10 Stage 167 GPM @875' TDH Boost Stainless steel construction Cast Iron Base, 2 ½"-250# FlLanges Mechanical Seal
Motor:	Qty (3) 50HP Baldor or equal, 3600 RPM, 460/3/60
VFD:	Qty (3) 50HP Yaskawa FP605, Circuit Breaker Disconnect 460/3/60, PLC Based Automatic Controls with touchscreen Built in UL508A panel shop
Instruments:	6"-150# Magnetic flowmeter, full bore Suction/discharge pressure transmitters Temperature switches
Fabrication:	Fabricated Steel Skid Base, Approx 12'-6" x 8'-0" 6" diameter piping, isolation valves and fittings Skid base Hot dip galvanized, other exposed steel powder coated 6" Y-Strainer shipped loose
Assembly by:	Ratnik Industries, Inc Victor, NY USA

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Pricing and delivery of options

Pricing and delivery is based on current conditions as of date of this proposal. Pricing is valid until December 31, 2025 and is subject to change thereafter.

Two step pumping system

Option #2A – Single Low Pressure Vertical Pump, 40HP w/VFD on Skid: **$59,000.00**
10-12 Week Lead Time

PLUS

Option 3 – High Pressure Booster, 3x50HP pumps w/VFDs on Skid: **$149,000.00**
10-12 Week Lead Time

Warranty: Base manufacturer warranty is 18 months from date of shipment, or 12 months from date of startup, whichever comes first. Ratnik does not extend manufacturer warranty terms or conditions over and above what is stated for each manufacturer. Typical warranty covers repair or replacement of defective parts at manufacturer's service center and does not include Disassembly, transportation or reinstallation costs.

Shipping: Freight cost is included to job site, Saranac Lake, NY

Startup: Included. Based on 1-full day on site with travel expenses. Time beyond 1-day will be invoiced on a per-day basis

Notes

- Freight cost to job site is included
- Site civil work including pump wet well, pumphouse structure, building modifications, excavation and pipe connections are not included.
- Electrical service, Connections to skid electrical panel and transformers are not included.
- Off loading and setting of skid and crane service for vertical turbine pump setting is not included.
- Installation, labor and materials are not included beyond the confines of the Ratnik skid(s).
- Startup is Included

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Date: December 19, 2025

Terms:

F.O.B.:	Shipping cost to jobsite is included
Delivery:	As noted. Based on current availability, subject to prior sale.
Quote:	Firm for acceptance within 30 days.
Ship Via:	Best Way, common Carrier, flatbed, Ratnik vehicle
Validity:	Based on order by December 31, 2025

Payment Terms:

Typical payment terms apply to custom equipment
1/3rd Down Payment upon proposal acceptance
1/3rd Progress Payment due prior to Shipping
Balance Net 30 days from date of shipment.

CONDITIONS OF SALE

1. All equipment supplied is to remain the property of Ratnik Industries, Inc. until paid for in full.
2. Price does not include start-up supervision, if desired. (Usually one day site visit plus travel time and travel costs.)
3. Conditions not specifically stated herein shall be governed by established trade customs. Terms inconsistent with those stated herein, which may appear on the Purchaser's formal order, will not be binding on the Seller.
4. Interest will be charged on all unpaid invoices at the rate of 1% per month or 12% per year annual percentage rate.

QUOTED BY:	*Tim Wang, PE*	*Sr Project Engineer*	*December 19, 2025*
	Ratnik Industries, Inc.	**Title**	**Date**
ACCEPTED BY:			
	Village of Saranac Lake	**Title**	**Date**