

**Halco M.E.P.S.**  
Division of Halcyon Inc.  
**865 County Road 6 / Phelps, NY 14532**  
**800-533-3367 • Fax 315-946-6676**

May 6, 2019

Town of Caroline – Town Hall  
2670 Slaterville Road  
Slaterville Springs, NY 14881  
Attention: **Mark Witmer**

## Exhibit - A



Reference: **Town Hall - Geothermal System**

# DESIGN BUILD PROPOSAL

## HVAC:

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### **PROPOSAL DESCRIPTION:**

*The scope below details the systems and components we have chosen to provide a geothermal system set up for future addition of electric back up heating. The capacity has been based on the specified 55,500btu/H @ second stage @ 32°F EWT. We have looked at the available space for the GHEX and find it a tight site. We are making the assumption we can achieve the (6) 125' trenches in the two designated areas in the RFP, but field verification when implementing the project will dictate any unforeseen limitations. We have included bringing the grade back to a backfill trench situation, with no inclusion of final grading and seeding for grass and preparations for lawn restoration. It is assumed the Town will be responsible for lawn restoration.*

### **SCOPE: High Efficiency Water to Air Geothermal Heat Pump System Installation**

- Provide (1) 5-ton GeoStar Sycamore Variable Capacity Water-to-Air Vertical Heat Pump with VS ECM Blower, Variable Speed Compressor, Copper Coax, Intellistart Controls and all controls to operate the system along with the existing boiler system as a lead lag back up heating system.
- Provide (1) Geo-Flo Non-pressurized variable speed Grundfos magna pumping station.
- Provide (1) Horizontal Field consisting of (6) 125' trenches with "Slinky" loop piping brought back to the building to the pump manifold.
- Provide all ductwork with all insulation per code routed as per the proposed layout and bid walk direction.
- Provide all registers, grilles and diffusers for proper distribution of air.
- Provide all preparations in equipment for future electric strip back-up heater to be installed.
- Systems will consist of the following:
  - All hydronic loop piping
  - All field manifold piping
  - All pipe insulation
  - All glycol solution
  - All controls and control wiring
  - All Condensate piping per code and manufacturer's specifications
  - All flow control valves and balance valves

Continued:

- All permits and permit fees.
- All power wiring and circuitry for the new heat pump and flow center.
- Provide all penetrations for piping.
- Provide all rigging of equipment.
- Complete balance and start-up.
- **Provide a complete set of engineered plans for review, construction and as-built conditions.**
- All necessary materials and labor to perform scope of work listed above.
- Provide 10-year parts and labor warranty\*.

SCOPE LISTED ABOVE COMPLETE FOR THE SUM OF: \$59,275.00  
ESTIMATED NYSEERDA INCENTIVES: (\$7,005.00)  
**NET INVESTMENT: \$52,270.00**

**NOTES:**

- Tax on materials is excluded.
- All wages are figured as NYS prevailing wages.
- \*Includes 10-year parts and labor warranty, so long as the Town contracts with Halco for annual maintenance agreement at an annual fee for the maintenance of \$422.00/year. This includes the routine annual maintenance of the system to ensure proper reliable operation for the life of the investment.

**QUALIFICATIONS:**

*Halco has successfully installed both water/glycol based and direct exchange geothermal heat pump systems in residential and light commercial applications for over the past 20 years, with a main focus in this area in the past 10 years. We have installed over (250) geothermal systems in the central New York area. We have a live person in the office answering the phones 24 hours a day for every day of the year. We have well over a dozen service technicians working each day of the week, including the weekends. We continue to invest in our technical staff by taking part in regular training opportunities given by the manufacturers and organizations with in the industry. Halco Energy has devoted its focus to reducing energy usage and producing onsite energy for over ten years, this give us a unique ability to present a wholistic approach to any structure, offering the sensible services that will yield the best return, never going into a project with a preconceived notion that one measure will effect change in the structure over another. We do all scopes, so our approach is completely non-bias and results in the best value for our customers.*

Thank you for the opportunity to provide this proposal, please call my cell at (585) 509-3384 with any questions.

Respectfully,

**Shad Cook, LEED AP**  
**President**  
**Halco Energy**