VILLAGE OF SPRINGVILLE
2021 MINUTES

July 12, 2021 7:00 P. M.

The Regular Meeting of the Trustees of the Village of Springville was held at the Village Municipal Building, 65 Franklin Street, Springville, New York at the above date and time. Present were:

Mayor	William Krebs
Trustees	Reed Braman Kim Pazzuti Terry Skelton Nils Wikman
Village Administrator	Liz C. Melock
Village Attorney	Paul Weiss
Superintendent of Public Works	Duane Boberg
Building Inspector/ Code Enforcement Officer	Mike Kaleta
Police Officer in Charge	Nicholas Budney
Deputy Clerk	Holly Murtiff
Also Attending	Max Borsuk, Springville Journal Cori Kowalski Seth Wochensky, SCA(arrived late) Jens Ponikau (Buffalo Geothermal) Johannes Rosemann (Buffalo Geothermal)
Absent	Marc Gentner, Fire Chief

Mayor Krebs called the meeting to order at 7:00 PM.

1. Minutes Minutes of the Regular Meeting of June 21, 2021 were approved as written by Trustee Wikman, seconded by Trustee Skelton; carried, Mayor Krebs, Trustees Wikman, Skelton and Braman voting yes, Trustee Pazzuti abstaining, none opposed.

PUBLIC COMMENT
There was no Public Comment this evening.

DEPARTMENT REPORTS
ADMINISTRATOR REPORT

2. Change Order Motion was made by Trustee Pazzuti, seconded by Trustee Wikman; carried, Mayor Krebs, Trustees Pazzuti, Wikman and Skelton voting yes, Trustee Braman abstaining, none opposed to approve the change order #1 to Grindline for additional funding for Heritage Park skatepark concrete improvements in the amount of $48,200 which if comprised of $9,000 from Green Springville Skate Park Committee donations plus the BTP (Tony Hawk) match of $9,000 and the remainder from Village General Fund budget plus the match portion minus direct payments to village vendors.

3. Budget Modifications — Motion was made by Trustee Braman, seconded by Trustee Wikman; carried, Mayor Krebs, Trustees Braman, Wikman, Skelton and Pazzuti voting yes, none opposed to approve the attached 2020-2021 year end budget adjustments in the amount of $33,103 for the balance of the TAP project for sidewalk improvements. **071221 A.1**

4. SEQR Lead Agency — Motion was made by Trustee Wikman, seconded by Trustee Pazzuti; carried, Mayor Krebs, Trustees Wikman, Pazzuti, Braman and Skelton voting yes, none opposed to naming the Village of Springville Board of Trustees as the lead agency on the WWTP improvements for the SEQR review.

Discussion items:

- Please contact the office for payment arrangements on your utility account if you are unable to pay your bill in full each month. Electric shut offs will be occurring July 21st. Notices have been sent to any account more than two months past due.
- Financial reports (Treasurer's Report) – Balance Sheets, Rev & Exp Summaries have been submitted to the village board for the period May 2021.
- Audit begins week of July 19th - 23rd.
- Court Clerk PT position and Dispatch PR position – still accepting applications.
- Downtown disaster drill scheduled for Saturday Aug. 28th 7-9 am on E. Main St. Between S. Buffalo and Pearl in fron of 25 E. Main St. The scenario is an explosion and fire at 25 E. Main St. Rte. 39 traffic will be detoured from Newman to North to N. Central to W. Main during the event. Notices have been mailed to residents and businesses on E. Main to let them know of the event and power interruption. Village department and mutual aid companies will be participating.

SUPERINTENDENT REPORT

5. MEUA Voting Delegate — Motion was made by Trustee Braman, seconded by Trustee Wikman; carried, Mayor Krebs, Trustees Braman, Wikman, Pazzuti and Skelton voting yes, none opposed to approve the below resolution.

DELEGATE RESOLUTION

At a regular meeting of the Village Board of the Village of Springville, New York, held on July 12, 2021, the following resolution was adopted:

Moved by Trustee Braman, seconded by Trustee Wikman.

WHEREAS, the Village Board of the Village of Springville, New York, is a municipal member of the Municipal Electric Utilities Association of New York State, and

WHEREAS, the Annual Conference of the Municipal Electric Utilities Association of New York State has been called on August 31-September 3, 2021, to be held at the Chautauqua Harbor Hotel, Celoron, NY, and,

WHEREAS, in accordance with the bylaws of the Municipal Electric Utilities Association of New York State, each municipal member may cast one vote on each transaction properly brought before this meeting.

NOW THEREFORE BE IT RESOLVED, that Superintendent of Public Works Duane Boberg be and is hereby designated as the accredited delegate of the Village of Springville, New York.

Superintendent Boberg mentioned that milling work on Pearl, Mill, Spring and Elm Streets was completed on the 7th and 8th. Paving is scheduled for July 21st and 22nd.

POLICE DEPARTMENT

Officer in Charge Nick Budney reported on the following;

- SPD report for June 2021
- ECSO report for June 2021

6. Officer Hiring — Motion was made by Mayor Krebs, seconded by Trustee Wikman; carried, Mayor Krebs, Trustees Wikman, Braman, Pazzuti and Skelton voting yes, none opposed to hire Cori Kowalski to the vacant position of police officer part-time effective July 13th. Cori is a certified level 1 truck inspector and a certified drug recognition expert, which will further enhance the Village's police capabilities.

7. Surplus/ Auction — Motion was made by Trustee Wikman, seconded by Trustee Skelton; carried, Mayor Krebs, Trustees Wikman, Skelton, Pazzuti and Braman voting yes, none opposed to declaring two used Panasonic CF-31 Toughbook computers surplus and allow the police department to sell/trade to other local police agencies first and then otherwise list on Auctions International if no local sale/trade is secured. Any sale/trade to local departments would be approved by the Village Administrator.

Officer Budney also announced that he has received a notice that the department will receive a $5,670 traffic safety grant this year.

FIRE DEPARTMENT

The fire report read by Trustee Wikman this evening as follows;

- Calls
- Training
- General information

8. Surplus/ Auction — Motion was made by Administrator Melock, seconded by Trustee Braman; carried, Mayor Krebs, Trustees Wikman, Braman, Skelton and Pazzuti voting yes, none opposed to declare surplus and authorize Fire Chief Gentner to auction the following items;

- 10 SCBA air packs – obsolete
- 19 SCBA air bottles – obsolete
- Basket stretcher – obsolete

BUILDING INSPECTOR/CEO

BI/CEO Mike Kaleta had no report this evening.

CONTROL CENTER

The Control Center report was read by Trustee Wikman this evening as follows;

- Personnel
- Equipment
- Monthly calls for June 2021

NEW BUSINESS

9. Springville Center for the Arts Geothermal Project — At this time representatives from Buffalo Geothermal of West Seneca, Jens Ponikau and Johannes Rosemann, addressed the Mayor and Board. The project for the Springville Center for the Arts at 37 N. Buffalo street was explained in detail and those attending were welcomed to ask questions regarding the geothermal installation and heating processes.

10. Lead Agency — Motion was made by Trustee Skelton, seconded by Trustee Wikman; carried, Mayor Krebs, Trustees Skelton, Wikman, Braman and Pazzuti voting yes, none opposed to name the Village of Springville Board of Trustees as the Lead Agency for the Springville Center of the Arts geothermal project. **071221 A.2**

11. Unlisted Action — Motion was made by Mayor Krebs, seconded by Trustee Skelton; carried, Mayor Krebs, Trustees Skelton, Braman, Pazzuti and Wikman voting yes, none opposed to name the Springville Center of the Arts geothermal project as an unlisted action requiring a short EAF form. **071221 A.2**

12. Negative Impact — Motion was made by Trustee Wikman, seconded by Trustee Skelton; carried, Mayor Krebs, Trustees Wikman, Skelton, Braman and Pazzuti voting yes, none opposed to declare the Springville Center for the Arts geothermal project as an unlisted action determined to have no significant adverse environmental impacts. **071221 A.2**

13. Marijuana Regulation and Taxation Act (MRTA) — At this time the Mayor discussed with the Board the Marijuana Regulation and Taxation Act (MRTA) and how it can affect the Village of Springville. No action was taken on the matter.

OLD BUSINESS
There was no Old Business to discuss this evening.

BILLS
Bills, as examined by members of the Board of Trustees were approved for payment in accordance with Abstracts #26 through #45 of 2021/2022 total of $280,140.64 for the General, Water/Sewer, Electric, Trust and Agency Funds by motion of Trustee Wikman, seconded by Trustee Skelton; carried, Mayor Krebs, Trustees Wikman, Skelton, Pazzuti and Braman voting yes, none opposed.

PERMITS AND APPLICATIONS
Motion was made by Trustee Wikman, seconded by Trustee Skelton; carried, Mayor Krebs, Trustees Wikman, Skelton, Pazzuti and Braman voting yes, none opposed to accepting the permits and applications attached.

PROJECT: 0000009554 - SIGNS — TYPE: SIGNS
PROPERTY: 455 S CASCADE DR
ISSUED DATE: 6/17/2021
ISSUED TO: STEDMAN, BRIAN & TAMERA
236 NORTH BUFFALO ST.
SPRINGVILLE, NY 14141

PROJECT: 0000009555 - SWIMMING POOLS W/FENCE — TYPE: SWIMMING POOLS
PROPERTY: 44 EAST AVE
ISSUED DATE: 6/18/2021
ISSUED TO: CIRBUS, DENISE
44 EAST AVE.
SPRINGVILLE, NY 14141

PROJECT: 0000009556 - VIOLATION-VARIOUS — TYPE: VIOLATION
PROPERTY: 447 FRANKLIN ST
ISSUED DATE: 6/18/2021
ISSUED TO: DOLLAS, ELIZABETH
447 FRANKLIN ST
SPRINGVILLE, NY 14141

PROJECT: 0000009557 - ACCESSORY BUILDING
PROPERTY: 643 FRANKLIN ST
ISSUED DATE: 6/21/2021
ISSUED TO: SAGE, MICHAEL
634 FRANKLIN ST
SPRINGVILLE, NY 14141
TYPE: ACCESSORY BUILDINGS

PROJECT: 0000009558 - ACCESSORY BUILDING
PROPERTY: 66 S EDGEWOOD DR
ISSUED DATE: 6/21/2021
ISSUED TO: DIEHL, MAUREEN
66 S EDGEWOOD DR
SPRINGVILLE, NY 14141
TYPE: ACCESSORY BUILDINGS

PROJECT: 0000009559 - SWIMMING POOLS
PROPERTY: 44 NEWMAN ST
ISSUED DATE: 6/21/2021
ISSUED TO: MUHISIN, DANIELLE
44 NEWMAN ST
SPRINGVILLE, NY 14141
TYPE: SWIMMING POOLS

PROJECT: 0000009560 - UTILITY CHANGES-ELECTRIC
PROPERTY: 455 S CASCADE DR
ISSUED DATE: 6/21/2021
ISSUED TO: S & S TAXIDERMY
455 S CASCADE DR
SPRINGVILLE, NY 14141
TYPE: ELECTRIC

PROJECT: 0000009561 - VIOLATION-GRASS
PROPERTY: 134 WAVERLY ST
ISSUED DATE: 6/21/2021
ISSUED TO: SPS 76 COMPANY INC
382 MAIN ST
EAST AURORA, NY 14052
TYPE: VIOLATION

PROJECT: 0000009562 - NONRESIDENTIAL DEMO
PROPERTY: 118 PEARL ST
ISSUED DATE: 6/22/2021
ISSUED TO: GWISE, JAMES
4109 WOODARD ROAD
DELEVAN, NY 14042
TYPE: NONRESIDENTIAL DEMO

PROJECT: 0000009563 - PLANNING BOARD REVIEW-SITE PLAN
PROPERTY: 224 E MAIN ST
ISSUED DATE: 6/22/2021
ISSUED TO: BERTRAND CHAFFEE HOSPITAL
224 E. MAIN ST.
SPRINGVILLE, NY 14141
TYPE: PLANNING BOARD REVIEW

PROJECT: 0000009564 - GARAGE SALE
PROPERTY: 265 FRANKLIN ST
ISSUED DATE: 6/24/2021
ISSUED TO: HOSIE, COLLEEN
265 FRANKLIN ST
SPRINGVILLE, NY 14141
TYPE: GARAGE SALES

PROJECT: 0000009565 - VIOLATION-GRASS
PROPERTY: 205 NEWMAN ST
ISSUED DATE: 6/25/2021
ISSUED TO: TOWSLEY, PATRICK
71 EAST RD.
WURTSBORO, NY 12790
TYPE: VIOLATION

PROJECT: 0000009566 - UTILITY CHANGES-ELECTRIC
PROPERTY: 48 CAROLINA ST CELL
ISSUED DATE: 6/25/2021
ISSUED TO: SCHMAKER CONSTRUCTION
1380 ST. ROUTE 104
ONTARIO, NY 14519
TYPE: ELECTRIC

PROJECT: 0000009567 - NONRES NONSTRUCTURAL
PROPERTY: 37 N BUFFALO ST
ISSUED DATE: 6/25/2021
ISSUED TO: BUFFALO GEOTHERMAL, LLC
2708 CLINTON STREET
WEST SENECA, NY 14224
TYPE: NONRES NONSTRUCTURAL

PROJECT: 0000009568 - ACCESSORY BUILDING
PROPERTY: 256 ELM ST
ISSUED DATE: 6/30/2021
ISSUED TO: GULSTROM, SONYA
256 ELM ST
SPRINGVILLE, NY 14141
TYPE: ACCESSORY BUILDINGS

PROJECT: 0000009569 - VIOLATION-TRASH
PROPERTY: 38 PARK ST
ISSUED DATE: 7/06/2021
ISSUED TO: LAM, LAI CHU
7104 BRANDYWINE DR
DERBY, NY 14047
TYPE: VIOLATION

PROJECT: 0000009570 - FENCES
PROPERTY: 155 E MAIN ST
ISSUED DATE: 7/06/2021
ISSUED TO: DOMES, JUSTIN
155 E MAIN ST
SPRINGVILLE, NY 14141
TYPE: FENCES

PROJECT: 0000009571 - RESIDENTIAL ALTERATION
PROPERTY: 426 MILL ST
ISSUED DATE: 7/06/2021
ISSUED TO: MAJESTIC CUSTOM CARPENTRY
198 MAIN STREET
EAST AURORA, NY 14052

TYPE: RESIDENTIAL ALTERATION

PROJECT: 0000009572 - ACCESSORY BUILDING
PROPERTY: 182 E MAIN ST
ISSUED DATE: 7/07/2021
ISSUED TO: TYLER, ROBYN
182 E MAIN ST
SPRINGVILLE, NY 14141

TYPE: ACCESSORY BUILDINGS

VILLAGE ATTORNEY REPORT

Village Attorney Paul Weiss had nothing to report this evening.

TRUSTEE NOTES & PROJECT REPORTS

Trustee Wikman reminded everyone of the Firemen's car show this Sunday 7/18/21 10 – 3 at Firemen's Park.

Trustee Skelton had nothing to report this evening.

Trustee Pazzuti commented on how nice it is to have the Thursday concerts in the park back this year.

Trustee Braman mentioned that SHPO has approved the Skatepark project.

Mayor Krebs reminded everyone that the Fiddlefest is on 7/31/21.

14. Adjourn — Motion was made by Trustee Wikman, seconded by Trustee Skelton; carried, Mayor Krebs, Trustees Wikman, Skelton, Pazzuti and Braman voting yes, none opposed to adjourn the Regular Session at 8:13 pm.

Respectfully submitted,

Holly Murtiff
Deputy Clerk

§ 617.5 TYPE II ACTIONS

(a) Actions or classes of actions identified in subdivision (c) of this section are not subject to review under this Part, except as otherwise provided in this section. These actions have been determined not to have a significant impact on the environment or are otherwise precluded from environmental review under Environmental Conservation Law, article 8. The actions identified in subdivision (c) of this section apply to all agencies.

(b) Each agency may adopt its own list of Type II actions to supplement the actions in subdivision (c) of this section. No agency is bound by an action on another agency's Type II list. The fact that an action is identified as a Type II action in an agency's procedures does not mean that it must be treated as a Type II action by any other involved agency not identifying it as a Type II action in its procedures. An agency that identifies an action as not requiring any determination or procedure under this Part is not an involved agency. Each of the actions on an agency Type II list must:

(1) in no case, have a significant adverse impact on the environment based on the criteria contained in section 617.7(c) of this Part; and

(2) not be a Type I action as defined in section 617.4 of this Part.

(c) The following actions are not subject to review under this Part:

(1) maintenance or repair involving no substantial changes in an existing structure or facility;

(2) replacement, rehabilitation or reconstruction of a structure or facility, in kind, on the same site, including upgrading buildings to meet building, energy, or fire codes unless such action meets or exceeds any of the thresholds in section 617.4 of this Part;

(3) retrofit of an existing structure and its appurtenant areas to incorporate green infrastructure;

(4) agricultural farm management practices, including construction, maintenance and repair of farm buildings and structures, and land use changes consistent with generally accepted principles of farming;

(5) repaving of existing highways not involving the addition of new travel lanes;

(6) street openings and right-of-way openings for the purpose of repair or maintenance of existing utility facilities;

(7) installation of telecommunication cables in existing highway or utility rights of way utilizing trenchless burial or aerial placement on existing poles;

(8) maintenance of existing landscaping or natural growth;

(9) construction or expansion of a primary or accessory/appurtenant, non-residential structure or facility involving less than 4,000 square feet of gross floor area and not involving a change in zoning or a use variance and consistent with local land use controls, but not radio communication or microwave transmission facilities;

(10) routine activities of educational institutions, including expansion of existing facilities by less than 10,000 square feet of gross floor area and school closings, but not changes in use related to such closings;

(11) construction or expansion of a single-family, a two-family or a three-family residence on an approved lot including provision of necessary utility connections as provided in paragraph (13) of this subdivision and the installation, maintenance or upgrade of a drinking water well or a septic system, or both, and conveyances of land in connection therewith;

(12) construction, expansion or placement of minor accessory/appurtenant residential structures, including garages, carports, patios, decks, swimming pools, tennis courts, satellite dishes, fences, barns, storage sheds or other buildings not changing land use or density;

(13) extension of utility distribution facilities, including gas, electric, telephone, cable, water and sewer connections to render service in approved subdivisions or in connection with any action on this list;

(14) installation of solar energy arrays where such installation involves 25 acres or less of physical alteration on the following sites:

(i) closed landfills;

(ii) brownfield sites that have received a Brownfield Cleanup Program certificate of completion ("COC") pursuant to ECL § 27-1419 and 6 NYCRR § 375-3.9 or Environmental Restoration Project sites that have received a COC pursuant to 6 NYCRR § 375-4.9, where the COC under either program for a particular site has an allowable use of commercial or industrial, provided that the change of use requirements in 6 NYCRR § 375-1.11(d) are complied with;

(iii) sites that have received an inactive hazardous waste disposal site full liability release or a COC pursuant to 6 NYCRR § 375-2.9, where the Department has determined an allowable use for a particular site is commercial or industrial, provided that the change of use requirements in 6 NYCRR § 375-1.11(d) are complied with;

(iv) currently disturbed areas at publicly-owned wastewater treatment facilities;

(v) currently disturbed areas at sites zoned for industrial use; and

(vi) parking lots or parking garages;

(15) installation of solar energy arrays on an existing structure provided the structure is not:

(i) listed on the National or State Register of Historic Places;

(ii) located within a district listed in the National or State Register of Historic Places;

(iii) been determined by the Commissioner of the Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places pursuant to sections 14.07 or 14.09 of the Parks, Recreation and Historic Preservation Law; or

(iv) within a district that has been determined by the Commissioner of the Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places pursuant to sections 14.07 or 14.09 of the Parks, Recreation and Historic Preservation Law;

(16) granting of individual setback and lot line variances and adjustments;

(17) granting of an area variance for a single-family, two-family or three-family residence;

(18) reuse of a residential or commercial structure, or of a structure containing mixed residential and commercial uses, where the residential or commercial use is a permitted use under the applicable zoning law or ordinance, including permitted by special use permit, and the action does not meet or exceeds any of the thresholds in section 617.4 of this Part;

(19) the recommendations of a county or regional planning board or agency pursuant to General Municipal Law sections 239-m or 239-n;

(20) public or private best forest management (silviculture) practices on less than 10 acres of land, but not including waste disposal, land clearing not directly related to forest management, clear-cutting or the application of herbicides or pesticides;

(21) minor temporary uses of land having negligible or no permanent impact on the environment;

(22) installation of traffic control devices on existing streets, roads and highways;

(23) mapping of existing roads, streets, highways, natural resources, land uses and ownership patterns;

(24) information collection including basic data collection and research, water quality and pollution studies, traffic counts, engineering studies, surveys, subsurface investigations and soils studies that do not commit the agency to undertake, fund or approve any Type I or Unlisted action;

(25) official acts of a ministerial nature involving no exercise of discretion, including building permits and historic preservation permits where issuance is predicated solely on the applicant's compliance or noncompliance with the relevant local building or preservation code(s);

(26) routine or continuing agency administration and management, not including new programs or major reordering of priorities that may affect the environment;

(27) conducting concurrent environmental, engineering, economic, feasibility and other studies and preliminary planning and budgetary processes necessary to the formulation of a proposal for action, provided those activities do not commit the agency to commence, engage in or approve such action;

(28) collective bargaining activities;

(29) investments by or on behalf of agencies or pension or retirement systems, or refinancing existing debt;

(30) inspections and licensing activities relating to the qualifications of individuals or businesses to engage in their business or profession;

(31) purchase or sale of furnishings, equipment or supplies, including surplus government property, other than the following: land, radioactive material, pesticides, herbicides, or other hazardous materials;

(32) license, lease and permit renewals, or transfers of ownership thereof, where there will be no material change in permit conditions or the scope of permitted activities;

(33) adoption of regulations, policies, procedures and local legislative decisions in connection with any action on this list;

(34) engaging in review of any part of an application to determine compliance with technical requirements, provided that no such determination entitles or permits the project sponsor to commence the action unless and until all requirements of this Part have been fulfilled;

(35) civil or criminal enforcement proceedings, whether administrative or judicial, including a particular course of action specifically required to be undertaken pursuant to a judgment or order, or the exercise of prosecutorial discretion;

(36) adoption of a moratorium on land development or construction;

(37) interpretation of an existing code, rule or regulation;

(38) designation of local landmarks or their inclusion within historic districts;

(39) an agency's acquisition and dedication of 25 acres or less of land for parkland, or dedication of land for parkland that was previously acquired, or acquisition of a conservation easement;

(40) sale and conveyance of real property by public auction pursuant to article 11 of the Real Property Tax Law;

(41) construction and operation of an anaerobic digester, within currently disturbed areas at an operating publicly-owned landfill, provided the digester has a feedstock capacity of less than 150 wet tons per day, and only produces Class A digestate (as defined in 6 NYCRR § 361-3.7) that can be beneficially used or biogas to generate electricity or to make vehicle fuel, or both;

(42) emergency actions that are immediately necessary on a limited and temporary basis for the protection or preservation of life, health, property or natural resources, provided that such actions are directly related to the emergency and are performed to cause the least change or disturbance, practicable under the circumstances, to the environment. Any decision to fund, approve or directly undertake other activities after the emergency has expired is fully subject to the review procedures of this Part;

(43) actions undertaken, funded or approved prior to the effective dates set forth in SEQR (see chapters 228 of the Laws of 1976, 253 of the Laws of 1977 and 460 of the Laws of 1978), except in the case of an action where it is still practicable either to modify the action in such a way as to mitigate potentially adverse environmental impacts, or to choose a feasible or less environmentally damaging alternative, the commissioner may, at the request of any person, or on his own motion, require the preparation of an environmental impact statement; or, in the case of an action where the responsible agency proposed a modification of the action and the modification may result in a significant adverse impact on the environment, an environmental impact statement must be prepared with respect to such modification;

(44) actions requiring a certificate of environmental compatibility and public need under articles VII, VIII, X or 10 of the Public Service Law and the consideration of, granting or denial of any such certificate;

(45) actions subject to the class A or class B regional project jurisdiction of the Adirondack Park Agency or a local government pursuant to sections 807, 808 and 809 of the Executive Law, except class B regional projects subject to review by local government pursuant to section 807 of the Executive Law located within

the Lake George Park as defined by subdivision one of section 43-0103 of the Environmental Conservation Law; and

(46) actions of the Legislature and the Governor of the State of New York or of any court, but not actions of local legislative bodies except those local legislative decisions such as rezoning where the local legislative body determines the action will not be entertained.

§ 617.6 INITIAL REVIEW OF ACTIONS AND ESTABLISHING LEAD AGENCY

(a) Initial review of actions.

(1) As early as possible in an agency's formulation of an action it proposes to undertake, or as soon as an agency receives an application for funding or for approval of an action, it must do the following:

(i) Determine whether the action is subject to SEQR. If the action is a Type II action, the agency has no further responsibilities under this Part;

(ii) Determine whether the action involves a federal agency. If the action involves a federal agency, the provisions of section 617.15 of this Part apply;

(iii) Determine whether the action may involve one or more other agencies; and

(iv) Make a preliminary classification of an action as Type I or Unlisted, using the information available and comparing it with the thresholds set forth in section 617.4 of this Part. Such preliminary classification will assist in determining whether a full EAF and coordinated review is necessary.

(2) For Type I actions, a full EAF (see section 617.20, Appendix A, of this Part) must be used to determine the significance of such actions. The project sponsor must complete Part 1 of the full EAF, including a list of all other involved agencies that the project sponsor has been able to identify, exercising all due diligence. The lead agency is responsible for preparing parts 2 and 3.

(3) For Unlisted actions, the short EAF (see section 617.20, Appendix B, of this Part) must be used to determine the significance of such actions. However, an agency may instead use the full EAF for Unlisted actions if the short EAF would not provide the lead agency with sufficient information on which to base its determination of significance. The lead agency may require other information necessary to determine significance.

(4) For state agencies only, determine whether the action is located in the coastal area. If the action is either Type I or Unlisted and is in the coastal area, the provisions of 19 NYCRR 600 also apply. This provision applies to all state agencies, whether acting as a lead or involved agency.

Geothermal Wells

For wells 500 feet deep or less

DEC's Division of Water (DOW) regulates wells up to 500 feet deep. The drilling, construction, operation, and plugging of geothermal wells over 500 feet is regulated by DEC's Division of Mineral Resources (DMN).

NYS law requires driller and pump installer registration and certification with DOW for open-loop or standing column systems. Driller registration and certification is not required for closed-loop geothermal systems with boreholes drilled up to 500 feet deep.

NYS law requires that preliminary notice and well completion reports be filed with DOW for open-loop or standing column systems with boreholes drilled up to 500 feet deep. NYS law does not require pre-notification or a well completion report for closed-loop geothermal systems with boreholes drilled up to 500 feet deep.

A State Pollutant Discharge Elimination System (SPDES) Permit may be required for certain open-loop systems.

Although not currently required by NYS law, geothermal contractors may take Certified Vertical Closed Loop Driller (CVCLD) Exam offered by the National Ground Water Association (NGWA). Geothermal contractors may also be accredited and/or certified by the International Ground Source Heat Pump Association (IGSHPA). See "Links Leaving DEC's Website" (on the right-hand column) for additional information for geothermal well contracting and ownership.

2

Pipe Placement and Backfilling

2A. (1996) HORIZONTAL PIPING SYSTEMS

2A.1 (2000) Sharp bending of pipe around trench corners must be prevented by using a shovel to round corners, or by installing an appropriate elbow fitting. Manufacturer's procedures must be followed.

2A.2 (1997) Backfilling procedures will include prevention of any sharp-edged rocks from coming into contact with the pipe by removal of the rocks before backfilling. Use the IGSHPA Slinky backfilling procedures found in IGSHPA's Slinky Installation Guide to assure elimination of air pocket around the pipes.

2A.3 (1996) Return bends in narrow trenches must be partially backfilled by hand to properly support the pipes and prevent kinking.

2A.4 (1997) All buried GHP pipes in systems containing an antifreeze and passing parallel within 5 feet (1.524 m) of any wall, structure, or water pipe shall be insulated with R2 minimum closed cell insulation.

2B. (1997) BOREHOLES

(2017) Proper grouting is necessary in borehole construction for environmental reasons and to ensure thermal performance of the ground heat exchanger.

(2017) From an environmental perspective, grouting is necessary to protect the aquifer (or aquifers), including the need to prevent water movement between aquifers, preserve the quality of the groundwater, to prevent potential migration / infiltration of surface water infiltration into aquifer(s) pierced by the borehole and to preserve the hydraulic characteristics of the natural formation.

(2017) From the perspective of thermal performance, grouting is necessary to provide thermal contact between the ground heat exchanger assembly and surrounding formation to facilitate heat transfer between the two.

2B.1 (2017) Borehole Diameter

2B.1.1 (2017) All boreholes shall have a minimum diameter large enough to accommodate the specified ground heat exchanger assembly and tremie pipe, or as dictated by the authority having jurisdiction. The tremie pipe shall have a diameter large enough to accommodate full length grouting of the borehole from bottom to top (or end to end for horizontal boreholes) without excessive pumping difficulties due to factors such as grout working time, viscosity, water quality, water temperature, etc. The tremie pipe shall have a minimum nominal diameter of 1 inch (2.54 cm).

2B.2 (2017) Grouting Procedures

CHAPTER 12

HYDRONIC PIPING

SECTION 1201
GENERAL

1201.1 Scope. The provisions of this chapter shall govern the construction, installation, *alteration* and repair of hydronic piping systems. This chapter shall apply to hydronic piping systems that are part of heating, ventilation and air-conditioning systems. Such piping systems shall include steam, hot water, chilled water, steam condensate and ground source heat pump loop systems. Potable cold and hot water distribution systems shall be installed in accordance with the *Plumbing Code of New York State*.

1201.2 Sizing. Piping and piping system components for hydronic systems shall be sized for the demand of the system.

1201.3 Standards. As an alternative to the provisions of Sections 1202 and 1203, piping shall be designed, installed, inspected and tested in accordance with ASME B31.9.

TABLE 1202.4
HYDRONIC PIPE

MATERIAL	STANDARD (see Chapter 15)
Acrylonitrile butadiene styrene (ABS) plastic pipe	ASTM D1527; ASTM F2806
Chlorinated polyvinyl chloride (CPVC) plastic pipe	ASTM D2846; ASTM F441; ASTM F442
Copper or copper-alloy pipe	ASTM B42; ASTM B43; ASTM B302
Copper or copper-alloy tube (Type K, L or M)	ASTM B75; ASTM B88; ASTM B135; ASTM B251
Cross-linked polyethylene/ aluminum/cross-linked polyethylene (PEX-AL-PEX) pressure pipe	ASTM F1281; CSA CAN/CSA-B-137.10
Cross-linked polyethylene (PEX) tubing	ASTM F876
Ductile iron pipe	AWWA C115/A21.15; AWWA C151/A21.51
Lead pipe	FS WW-P-325B
Polyethylene/aluminum/polyethylene (PE-AL-PE) pressure pipe	ASTM F1282; CSA B137.9
Polypropylene (PP) plastic pipe	ASTM F2389
Polyvinyl chloride (PVC) plastic pipe	ASTM D1785; ASTM D2241
Raised temperature polyethylene (PE-RT)	ASTM F2623; ASTM F2769; CSA B137.18
Steel pipe	ASTM A53; ASTM A106
Steel tubing	ASTM A254

SECTION 1202
MATERIAL

1202.1 Piping. Piping material shall conform to the standards cited in this section.

Exception: Embedded piping regulated by Section 1209.

1202.2 Used materials. Reused pipe, fittings, valves or other materials shall be clean and free of foreign materials and shall be *approved* by the *building official* for reuse.

1202.3 Material rating. Materials shall be rated for the operating temperature and pressure of the hydronic system. Materials shall be suitable for the type of fluid in the hydronic system.

1202.4 Piping materials standards. Hydronic pipe shall conform to the standards listed in Table 1202.4. The exterior of the pipe shall be protected from corrosion and degradation.

1202.5 Pipe fittings. Hydronic pipe fittings shall be *approved* for installation with the piping materials to be installed, and shall conform to the respective pipe standards or to the standards listed in Table 1202.5.

TABLE 1202.5
HYDRONIC PIPE FITTINGS

MATERIAL	STANDARD (see Chapter 15)
Copper and copper alloys	ASME B16.15; ASME B16.18; ASME B16.22; ASME B16.26; ASME B16.24; ASME B16.51; ASSE 1061; ASTM F1974
Ductile iron and gray iron	ANSI/AWWA C110/A21.10; AWWA C153/A21.53; ASTM A395; ASTM A536; ASTM F1476; ASTM F1548
Ductile iron	ANSI/AWWA C153/A21.53
Gray iron	ASTM A126
Malleable iron	ASME B16.3
PE-RT fittings	ASSE 1061; ASTM D3261; ASTM F1807; ASTM F2098; ASTM F2159; ASTM F2735; ASTM F2769; CSA B137.1; CSA B137.18
PEX fittings	ASSE 1061; ASTM F877; ASTM F1807; ASTM F1960; ASTM F2080; ASTM F2159
Plastic	ASTM D2466; ASTM D2467; ASTM F438; ASTM F439; ASTM F877; ASTM F2389; ASTM F2735
Steel	ASME B16.5; ASME B16.9; ASME B16.11; ASME B16.28; ASTM A53; ASTM A106; ASTM A234; ASTM A395; ASTM A420; ASTM A536; ASTM F1476; ASTM F1548

1203.8 Polybutylene plastic pipe and tubing. Joints between polybutylene plastic pipe and tubing or fittings shall be mechanical joints conforming to Section 1203.3 or heat-fusion joints conforming to Section 1203.8.1.

1203.8.1 Heat-fusion joints. Joints shall be of the socket-fusion or butt-fusion type. Joint surfaces shall be clean and free of moisture. Joint surfaces shall be heated to melt temperatures and joined. The joint shall be undisturbed until cool. Joints shall be made in accordance with ASTM D3309.

1203.9 Cross-linked polyethylene (PEX) plastic tubing. Joints between cross-linked polyethylene plastic tubing and fittings shall conform to Sections 1203.9.1 through 1203.9.3. Mechanical joints shall conform to Section 1203.3.

1203.9.1 Compression-type fittings. Where compression-type fittings include inserts and ferrules or O-rings, the fittings shall be installed without omitting the inserts and ferrules or O-rings.

1203.9.2 Plastic-to-metal connections. Soldering on the metal portion of the system shall be performed not less than 18 inches (457 mm) from a plastic-to-metal adapter in the same water line.

1203.9.3 Push-fit joints. Push-fit joints that create a seal on the outside diameter of the tubing shall not be used with tubing that has an ethylene vinyl alcohol copolymer (EVOH) oxygen barrier layer.

1203.10 PVC plastic pipe. Joints between PVC plastic pipe and fittings shall be solvent-cemented or threaded joints conforming to Section 1203.3.

1203.11 Steel pipe. Joints between steel pipe or fittings shall be mechanical joints that are made with an *approved* elastomeric seal, or shall be threaded or welded joints conforming to Section 1203.3.

1203.12 Steel tubing. Joints between steel tubing or fittings shall be mechanical or welded joints conforming to Section 1203.3.

1203.13 Polypropylene (PP) plastic. Joints between PP plastic pipe and fittings shall comply with Sections 1203.13.1 and 1203.13.2.

1203.13.1 Heat-fusion joints. Heat-fusion joints for polypropylene (PP) pipe and tubing joints shall be installed with socket-type heat-fused polypropylene fittings, electro-fusion polypropylene fittings or by butt fusion. Joint surfaces shall be clean and free from moisture. The joint shall be undisturbed until cool. Joints shall be made in accordance with ASTM F2389.

1203.13.2 Mechanical and compression sleeve joints. Mechanical and compression sleeve joints shall be installed in accordance with the manufacturer's instructions.

1203.14 Raised temperature polyethylene (PE-RT) plastic tubing. Joints between raised temperature polyethylene tubing and fittings shall conform to Sections 1203.14.1 through 1203.14.3. Mechanical joints shall conform to Section 1203.3.

1203.14.1 Compression-type fittings. Where compression-type fittings include inserts and ferrules or O-rings, the fittings shall be installed without omitting the inserts and ferrules or O-rings.

1203.14.2 PE-RT-to-metal connections. Solder joints in a metal pipe shall not occur within 18 inches (457 mm) of a transition from such metal pipe to PE-RT pipe.

1203.14.3 Push-fit joints. Push-fit joints that create a seal on the outside diameter of the tubing shall not be used with tubing that has an ethylene vinyl alcohol copolymer (EVOH) oxygen barrier layer.

1203.15 Polyethylene/aluminum/polyethylene (PE-AL-PE) pressure pipe. Joints between polyethylene/aluminum/polyethylene pressure pipe and fittings shall conform to Sections 1203.15.1 and 1203.15.2. Mechanical joints shall comply with Section 1203.3.

1203.15.1 Compression-type fittings. Where compression-type fittings include inserts and ferrules or O-rings, the fittings shall be installed without omitting the inserts and ferrules or O-rings.

1203.15.2 PE-AL-PE-to-metal connections. Solder joints in a metal pipe shall not occur within 18 inches (457 mm) of a transition from such metal pipe to PE-AL-PE pipe.

1203.16 Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pressure pipe. Joints between cross-linked polyethylene/aluminum/cross-linked polyethylene pressure pipe and fittings shall conform to Sections 1203.16.1 and 1203.16.2. Mechanical joints shall comply with Section 1203.3.

1203.16.1 Compression-type fittings. Where compression-type fittings include inserts and ferrules or O-rings, the fittings shall be installed without omitting the inserts and ferrules or O-rings.

1203.16.2 PEX-AL-PEX-to-metal connections. Solder joints in a metal pipe shall not occur within 18 inches (457 mm) of a transition from such metal pipe to PEX-AL-PEX pipe.

SECTION 1204
PIPE INSULATION

1204.1 Insulation characteristics. Pipe insulation installed in buildings shall conform to the requirements of the *Energy Conservation Construction Code of New York State*; shall be tested in accordance with ASTM E84 or UL 723, using the specimen preparation and mounting procedures of ASTM E2231; and shall have a maximum flame spread index of 25 and a smoke-developed index not exceeding 450. Insulation installed in an air *plenum* shall comply with Section 602.2.1.

Exception: The maximum flame spread index and smoke-developed index shall not apply to one- and two-family dwellings.

1204.2 Required thickness. Hydronic piping shall be insulated to the thickness required by the *Energy Conservation Construction Code of New York State.*

SECTION 1209
EMBEDDED PIPING

1209.1 Materials. Piping for heating panels shall be standard-weight steel pipe, Type L copper tubing, polybutylene or other *approved* plastic pipe or tubing rated at 100 psi (689 kPa) at 180°F (82°C).

1209.2 Pressurizing during installation. Piping to be embedded in concrete shall be pressure tested prior to pouring concrete. During pouring, the pipe shall be maintained at the proposed operating pressure.

1209.3 Embedded joints. Joints of pipe or tubing that are embedded in a portion of the building, such as concrete or plaster, shall be in accordance with the requirements of Sections 1209.3.1 through 1209.3.5.

1209.3.1 Steel pipe joints. Steel pipe shall be welded by electrical arc or oxygen/acetylene method.

1209.3.2 Copper tubing joints. Copper tubing shall be joined by brazing complying with Section 1203.3.1.

1209.3.3 Polybutylene joints. Polybutylene pipe and tubing shall be installed in continuous lengths or shall be joined by heat fusion in accordance with Section 1203.8.1.

1209.3.4 Polyethylene of raised temperature (PE-RT) joints. PE-RT tubing shall be installed in continuous lengths or shall be joined by hydronic fittings listed in Table 1202.5.

1209.3.5 Cross-linked polyethylene (PEX) joints. PEX tubing shall be installed in continuous lengths or shall be joined by hydronic fittings listed in Table 1202.5.

1209.4 Not embedded related piping. Joints of other piping in cavities or running exposed shall be joined by *approved* methods in accordance with manufacturer's installation instructions and related sections of this code.

1209.5 Thermal barrier required. Radiant floor heating systems shall be provided with a thermal barrier in accordance with Sections 1209.5.1 and 1209.5.2. Insulation *R*-values for slab-on-grade and suspended floor installation shall be in accordance with the *Energy Conservation Construction Code of New York State*.

Exception: Insulation shall not be required in engineered systems where it can be demonstrated that the insulation will decrease the efficiency or have a negative effect on the installation.

1209.5.1 Thermal break required. A thermal break shall be provided consisting of asphalt expansion joint materials or similar insulating materials at a point where a heated slab meets a foundation wall or other conductive slab.

1209.5.2 Thermal barrier material marking. Insulating materials utilized in thermal barriers shall be installed such that the manufacturer's *R*-value mark is readily observable upon inspection.

SECTION 1210
PLASTIC PIPE GROUND-SOURCE HEAT PUMP LOOP SYSTEMS

1210.1 Ground-source heat pump-loop water piping. Ground-source heat pump ground-loop piping and tubing material for water-based systems shall conform to the standards cited in this section.

1210.2 Used materials. Reused pipe, fittings, valves, and other materials shall not be permitted in ground-source heat pump loop systems.

1210.3 Material rating. Pipe and tubing shall be rated for the operating temperature and pressure of the ground-source heat pump loop system. Fittings shall be suitable for the pressure applications and recommended by the manufacturer for installation with the pipe and tubing material installed. Where used underground, materials shall be suitable for burial.

1210.4 Piping and tubing materials standards. Ground-source heat pump ground-loop pipe and tubing shall conform to the standards listed in Table 1210.4.

1210.5 Fittings. Ground-source heat pump pipe fittings shall be approved for installation with the piping materials to be installed, shall conform to the standards listed in Table 1210.5 and, if installed underground, shall be suitable for burial.

1210.6 Joints. Joints and connections shall be of an approved type. Joints and connections shall be tight for the pressure of the ground-source loop system. Joints used underground shall be approved for buried applications.

1210.6.1 Joints between different piping materials. Joints between different piping materials shall be made with approved transition fittings.

1210.6.2 Preparation of pipe ends. Pipe shall be cut square, be reamed, and be free of burrs and obstructions. CPVC, PE, and PVC pipe shall be chamfered. Pipe ends shall have full-bore openings and shall not be undercut.

1210.6.3 Joint preparation and installation. Where required by Sections 1210.6.4 through 1210.6.8, the preparation and installation of mechanical and thermoplastic-welded joints shall comply with Sections 1210.6.3.1 and 1210.6.3.2.

1210.6.3.1 Mechanical joints. Mechanical joints shall be installed in accordance with the manufacturer's instructions.

1210.6.3.2 Thermoplastic-welded joints. Joint surfaces for thermoplastic-welded joints shall be cleaned by an approved procedure. Joints shall be welded in accordance with the manufacturer's instructions.

1210.6.4 CPVC plastic pipe. Joints between CPVC plastic pipe or fittings shall be solvent-cemented or threaded joints complying with Section 1203.3.

1210.6.5 Cross-linked polyethylene (PEX) plastic tubing. Joints between cross-linked polyethylene plastic tubing and fittings shall comply with Sections 1210.6.5.1 and 1210.6.5.2. Mechanical joints shall comply with Section 1210.6.3.

1210.6.5.1 Compression-type fittings. Where compression-type fittings include inserts and ferrules or O-

1210.6.8.2 PE-RT-to-metal connections. Solder joints in a metal pipe shall not occur within 18 inches (457 mm) of a transition from such metal pipe to PE-RT pipe.

1210.6.9 PVC plastic pipe. Joints between PVC plastic pipe and fittings shall be solvent-cemented or threaded joints comply with Section 1203.3.

1210.7 Shutoff valves. Shutoff valves shall be installed in ground-source loop piping systems in the locations indicated in Sections 1210.7.1 through 1210.7.7.

1210.7.1 Heat exchangers. Shutoff valves shall be installed on the supply and return side of a heat exchanger.

Exception: Shutoff valves shall not be required where heat exchangers are integral with a boiler or are a component of a manufacturer's boiler and heat exchanger packaged unit and are capable of being isolated from the hydronic system by the supply and return valves required by Section 1005.1.

1210.7.2 Central systems. Shutoff valves shall be installed on the building supply and return of a central utility system.

1210.7.3 Pressure vessels. Shutoff valves shall be installed on the connection to any pressure vessel.

1210.7.4 Pressure-reducing valves. Shutoff valves shall be installed on both sides of a pressure-reducing valve.

1210.7.5 Equipment and appliances. Shutoff valves shall be installed on connections to mechanical *equipment* and appliances. This requirement does not apply to components of a ground-source loop system such as pumps, air separators, metering devices, and similar *equipment*.

1210.7.6 Expansion tanks. Shutoff valves shall be installed at connections to nondiaphragm-type expansion tanks.

1210.7.7 Reduced pressure. A pressure relief valve shall be installed on the low-pressure side of a hydronic piping system that has been reduced in pressure. The relief valve shall be set at the maximum pressure of the system design. The valve shall be installed in accordance with Section 1006.

1210.8 Installation. Piping, valves, fittings, and connections shall be installed in accordance with the conditions of approval.

1210.8.1 Protection of potable water. Where ground-source heat pump ground-loop systems have a connection to a potable water supply, the potable water system shall be protected from backflow in accordance with the *Plumbing Code of New York State*.

1210.8.2 Pipe penetrations. Openings for pipe penetrations in walls, floors and ceilings shall be larger than the penetrating pipe. Openings through concrete or masonry building elements shall be sleeved. The annular space surrounding pipe penetrations shall be protected in accordance with the *Building Code of New York State*.

1210.8.3 Clearance from combustibles. A pipe in a ground-source heat pump piping system having an exterior surface temperature exceeding 250°F (121°C) shall have a minimum *clearance* of 1 inch (25 mm) from combustible materials.

1210.8.4 Contact with building material. A ground-source heat pump ground-loop piping system shall not be in direct contact with building materials that cause the piping or fitting material to degrade or corrode, or that interfere with the operation of the system.

1210.8.5 Strains and stresses. Piping shall be installed so as to prevent detrimental strains and stresses in the pipe. Provisions shall be made to protect piping from damage resulting from expansion, contraction and structural settlement. Piping shall be installed so as to avoid structural stresses or strains within building components.

1210.8.6 Flood hazard. Piping located in a flood hazard area shall be capable of resisting hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the *design flood elevation*.

1210.8.7 Pipe support. Pipe shall be supported in accordance with Section 305.

1210.8.8 Velocities. Ground-source heat pump ground-loop systems shall be designed so that the flow velocities do not exceed the maximum flow velocity recommended by the pipe and fittings manufacturer and shall be controlled to reduce the possibility of water hammer.

1210.8.9 Labeling and marking. Ground-source heat pump ground-loop system piping shall be marked with tape, metal tags or other method where it enters a building indicating "GROUND-SOURCE HEAT PUMP LOOP SYSTEM." The marking shall indicate any antifreeze used in the system by name and concentration.

1210.8.10 Chemical compatibility. Antifreeze and other materials used in the system shall be chemically compatible with the pipe, tubing, fittings, and mechanical systems.

1210.9 Makeup water. The transfer fluid shall be compatible with the makeup water supplied to the system.

1210.10 Tests. Before connection header trenches are backfilled, the assembled loop system shall be pressure tested with water at 100 psi (689 kPa) for 15 minutes, in which time there shall not be observed leaks. Flow and pressure loss testing shall be performed and the actual flow rates and pressure drops shall be compared to the calculated design values. If actual flow rate or pressure drop values differ from calculated design values by more than 10 percent, the cause shall be identified and corrective action taken.

1210.11 Embedded piping. Ground-source heat pump ground-loop piping to be embedded in concrete shall be pressure tested prior to pouring concrete. During pouring, the pipe shall be maintained at the proposed operating pressure.

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information

Name of Action or Project:

Geothermal Borehole installation at Springville Center for the Arts

Project Location (describe, and attach a location map):

37 N Buffalo St, Springville, NY 14141

Brief Description of Proposed Action:

Installation of a vertical ground heat exchanger consisting of four (4) 499ft deep, 6" in diameter Boreholes. We will install a HDPE Piping Closed Loop in each Borehole and seal all voids with a thermally enhanced graphite/bentonite grout. Sealing the boreholes prevents any cross contaminations of different aquifers and significantly enhances the heat transfer between the HDPE piping and the ground.

Name of Applicant or Sponsor:	Telephone: 716-479-8307
Buffalo Geothermal, LLC	E-Mail: jrosemann@buffalogeothermal.com

Address:

2708 Clinton St

City/PO:	State:	Zip Code:
West Seneca	NY	14224

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: Building Department Village of Springville	☐	☑

3. a. Total acreage of the site of the proposed action? 0.5 acres
   b. Total acreage to be physically disturbed? 0.004 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.6 acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☑ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☐ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☑	☐

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☑

	NO	YES
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?		
If Yes, identify: _____	☑	☐

	NO	YES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☑	☐
b. Are public transportation services available at or near the site of the proposed action?	☑	☐
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	☐	☑

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements?		
If the proposed action will exceed requirements, describe design features and technologies:		
The renewable energy Geothermal Heating and Cooling system is offering a zero on-site emission solution and has substantially higher efficiency ratings than conventional or airsource equipment.	☐	☑

	NO	YES
10. Will the proposed action connect to an existing public/private water supply?		
If No, describe method for providing potable water: _____		
The vertical ground heat exchanger is a closed loop system which is isolated from the public water supply. The building itself however is connected to the public water supply.	☑	☐

	NO	YES
11. Will the proposed action connect to existing wastewater utilities?		
If No, describe method for providing wastewater treatment: _____		
The vertical ground heat exchanger is a closed loop system which is isolated from the wastewater treatment utilities. The building itself however is connected to the wastewater treatment utilities.	☑	☐

	NO	YES
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	☐	☑
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	☑	☐

	NO	YES
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☐	☑
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☑	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____		

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional

☐ Wetland ☑ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	☑	☐
16. Is the project site located in the 100-year flood plan?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☐	☑
If Yes,		
a. Will storm water discharges flow to adjacent properties?	☑	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☐	☑
If Yes, briefly describe:		
There is a possibility that during the drilling of the vertical ground loop heat exchanger ground water will have to be temporarily discharged to the storm drains. This ground water will be directed through siltfences and straw bales to reduces the silt to a non-harmful level.		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?	NO	YES
If Yes, explain the purpose and size of the impoundment:		
To further reduce the silt level in the discharged ground water, we will dig temporary containment pits that will be closed up after the construction of the vertical ground loop heat exchanger is completed	☐	☑
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?	NO	YES
If Yes, describe:	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?	NO	YES
If Yes, describe:	☑	☐

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

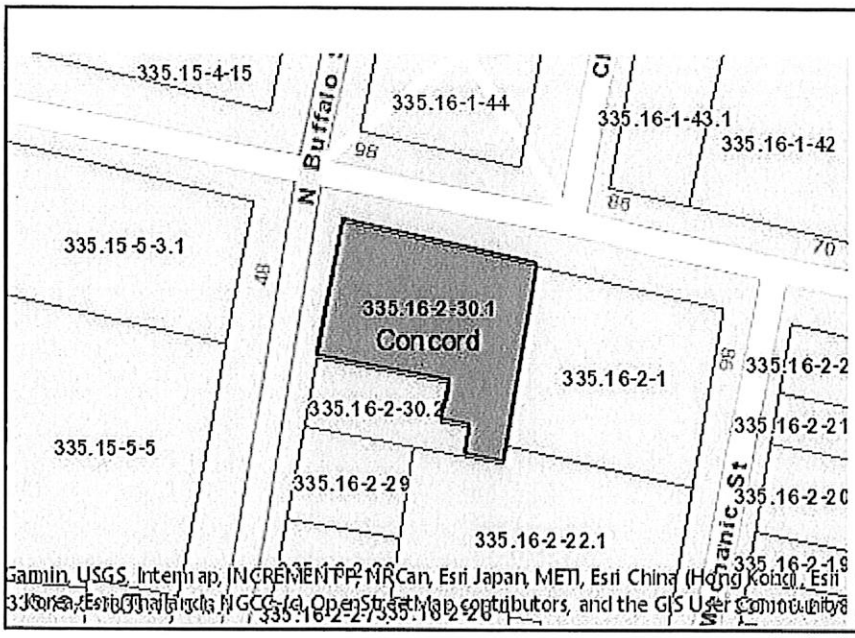
Applicant/sponsor/name: Johannes Rosemann Date: 07/08/2021

Signature: J. Rosemann Title: Operations Manager

PRINT FORM

EAF Mapper Summary Report

Thursday, July 8, 2021 9:35 AM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	Yes
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	No

Agency Use Only [If applicable]

Project:

Date:

Short Environmental Assessment Form
Part 2 - Impact Assessment

Part 2 is to be completed by the Lead Agency.
Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	☐	☐
2. Will the proposed action result in a change in the use or intensity of use of land?	☐	☐
3. Will the proposed action impair the character or quality of the existing community?	☐	☐
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	☐	☐
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	☐	☐
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	☐	☐
7. Will the proposed action impact existing: a. public / private water supplies?	☐	☐
b. public / private wastewater treatment utilities?	☐	☐
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	☐	☐
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	☐	☐
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	☐	☐
11. Will the proposed action create a hazard to environmental resources or human health?	☐	☐

PRINT FORM

Agency Use Only [If applicable]

Project:

Date:

Short Environmental Assessment Form
Part 3 Determination of Significance

For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Name of Lead Agency	Date
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

PRINT FORM

VILLAGE OF SPRINGVILLE

Permit Application
PLEASE PRINT CLEARLY

Property Address: 37 North Buffalo St, Springville, NY 14141
Springville, NY 14141

Property Owner
Name: Springville Center for the Arts Attn: Seth Wochensky
Address: 37 N Buffalo St P.O. Box 62
Springville, NY 14141
Phone # 716-592-9038 Day Phone # N/A
Signature: [signature] Date: 6/18/21

Applicant
Name: Buffalo Geothermal, LLC
Address: 2708 Clinton St, West Seneca, NY 14224
Phone # 716-684-8848 Day Phone # N/A
Signature: _____ Date: _____

Architect/ Engineer
Name: N/A
Address: _____
Phone # _____ Day Phone # _____

Contractors

Name:	Address:	Phone #
1. Buffalo Geothermal, LLC		
2.		
3.		

Description of Work: _____

Intended use of Property: Non-For-Profit
Estimated Value of Work $ 149,800.00
Estimated Completion Date 4/2022
Additional New Square Feet N/A

VILLAGE OF SPRINGVILLE

Permit Application Office Information

Property Address: 37 N. BUFFALO ST
Springville, NY 14141

SBL#: 335.16-2-30.1 Permit #: 9567
Zoning District: B1
SEQR Action Type: II
Erie County Planning: No

Fees

Date: 6-25-21 Amount: 50.00 Initials: _____
Date: _____ Amount: _____ Initials: _____
Date: _____ Amount: _____ Initials: _____

Building Inspector Accepted / Denied

_____
Signature Date

Comments: _____

Planning Board Approved / Denied / Approved with Stipulations

_____
Signature Date

Comments: _____

Zoning Board of Appeals Approved / Denied / Approved with Stipulations

_____
Signature Date

Comments: _____

PO 21-19

Contact:
Seth Wochensky: 716-592-9038
- Springville Center for the Arts

Project Type:
Existing Building

Project Location:
37 N Buffalo Street
Springville, NY 14141

Decommissioning and removal:

The existing conventional furnaces (4) will be decommissioned and removed.

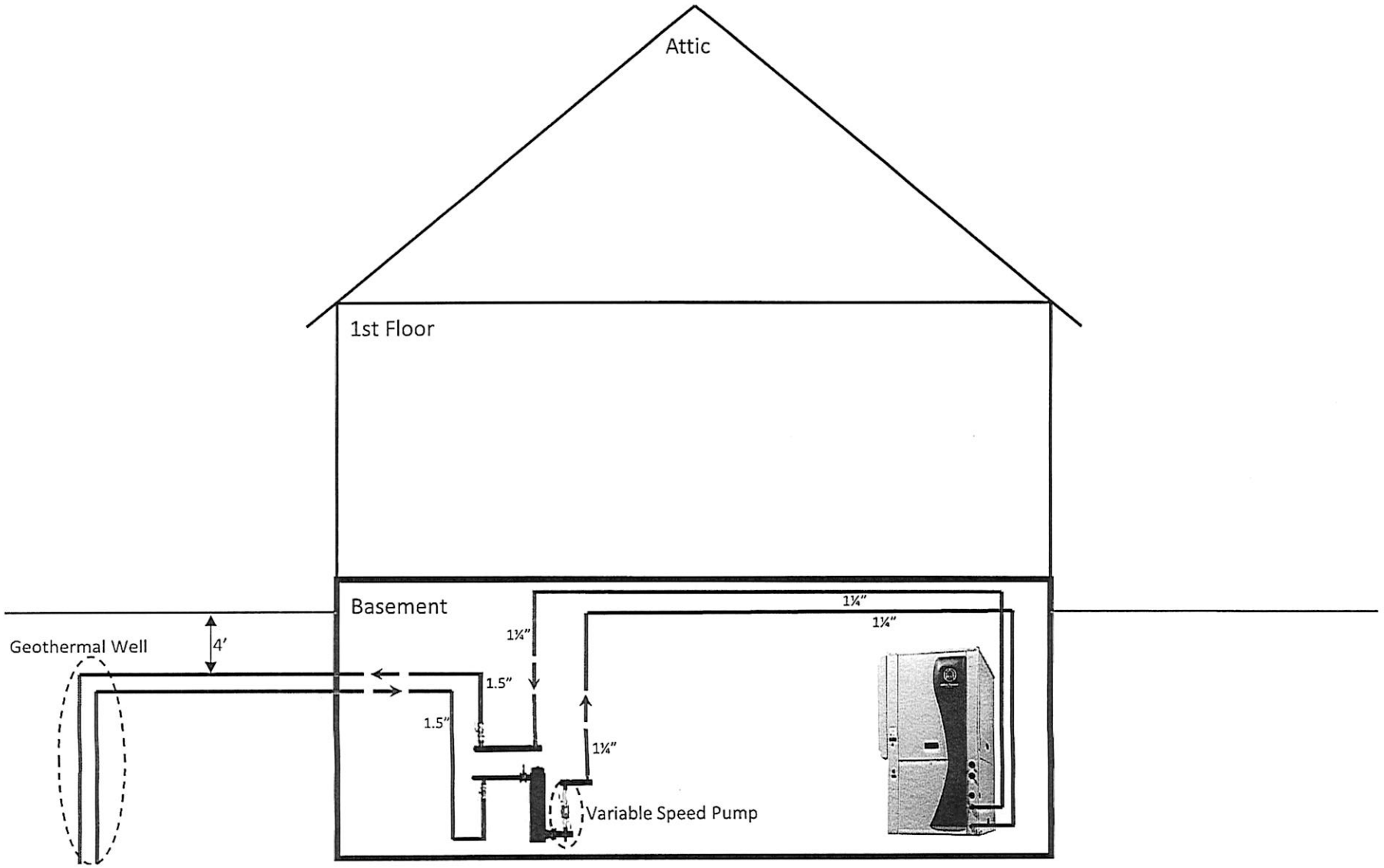
Loopfield Details:

The Loopfield consists of (4) 499' Deep 6" Diameter Boreholes. A 500' long U-Bend (1000' Total) 1-1/2" HDPE Pipe will be placed in each Geothermal-Well and each Well will be sealed with 1.6K Bentonite & Graphite Grout.
The piping from the Geothermal-Wells will be placed in a trench with a minimum depth of 4ft leading to the house, where each will be brought in individually (total of 8 pipes) in to the Basement of the Buidling. Each Wall-Penetration will be sealed and Waterproofed.

Project Scope:

In place of the (4) conventional furnaces we will install (4) Variable Speed Geothermal Heatpumps (NVV060) which will get connected to the ductwork. Each Heatpump will have its own variable speed pump station to increase redundancy. All interior Source-Piping is to be HDPE Piping insulated to a minimum of R3.0.

Geothermal Source-Side
Piping Schematics

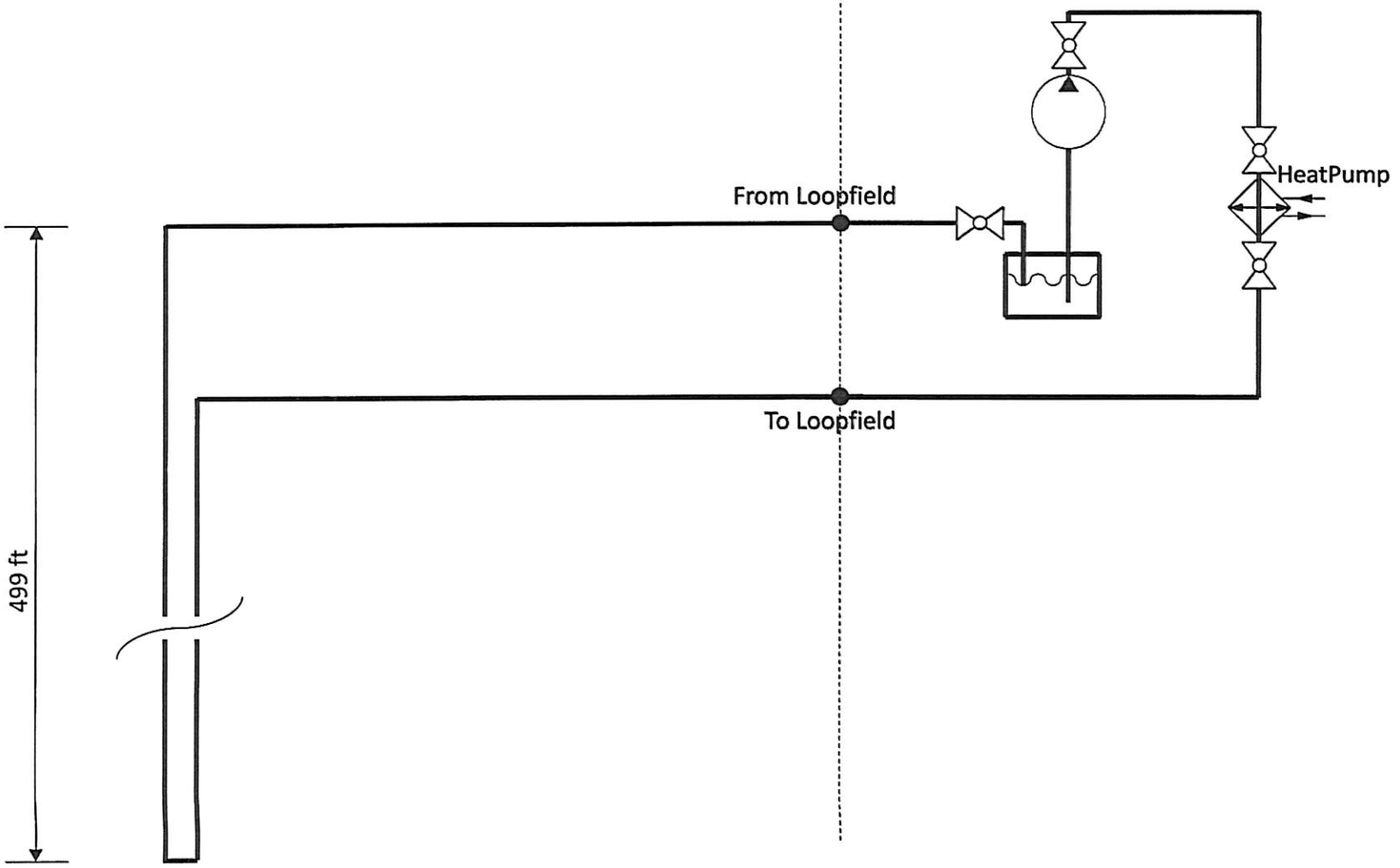


Outside

All Piping Buried at least 4' under ground

Inside

All Piping to be insulated with a minimum of R3.0



wrightsoft

Building Analysis
Entire House
Buffalo Geothermal

Job:
Date: Dec 21, 2020
By:

2708 Clinton St, West Senca, NY 14224

Project Information

For: Seth Wochensky, Springville Center for the Arts
37 N Buffalo St, Springville, NY 14141

Design Conditions

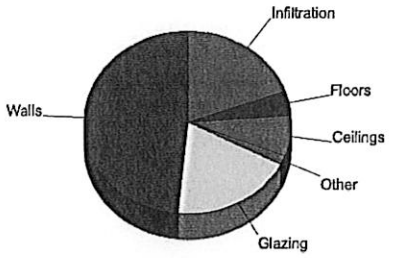
Location:
Buffalo Niagara Intl AP, NY, US
Elevation: 705 ft
Latitude: 43°N

Outdoor:	**Heating**	**Cooling**
Dry bulb (°F)	7	84
Daily range (°F)	-	17 (M)
Wet bulb (°F)	-	70
Wind speed (mph)	15.0	7.5

Indoor:	**Heating**	**Cooling**
Indoor temperature (°F)	68	78
Design TD (°F)	61	6
Relative humidity (%)	50	50
Moisture difference (gr/lb)	45.8	17.2
Infiltration:		
Method	Simplified	
Construction quality	Semi-tight	
Fireplaces	0	

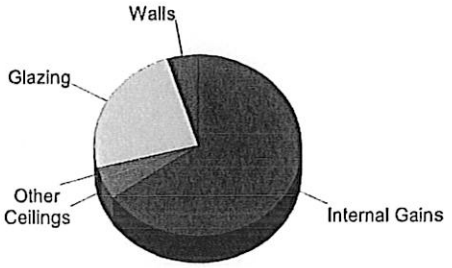
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	6.8	96398	48.5
Glazing	35.7	37419	18.8
Doors	23.8	3178	1.6
Ceilings	2.8	14322	7.2
Floors	1.7	8938	4.5
Infiltration	3.4	38473	19.4
Ducts		0	0
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	
Total		**198728**	**100.0**



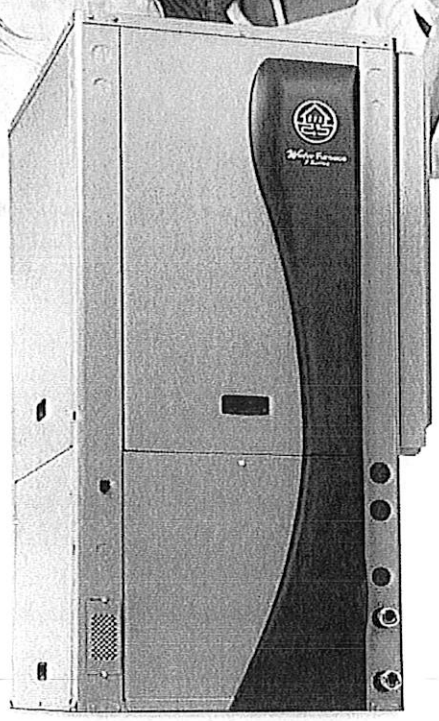
Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	0.5	7675	4.8
Glazing	36.8	38582	24.2
Doors	7.4	995	0.6
Ceilings	1.2	6082	3.8
Floors	0.1	331	0.2
Infiltration	0.2	1968	1.2
Ducts		0	0
Ventilation		0	0
Internal gains		104030	65.2
Blower		0	0
Adjustments		0	
Total		**159663**	**100.0**



Latent Cooling Load = 38404 Btuh
Overall U-value = 0.106 Btuh/ft²-°F

Data entries checked.



WaterFurnace®

Smarter from the Ground Up™

Specification Catalog

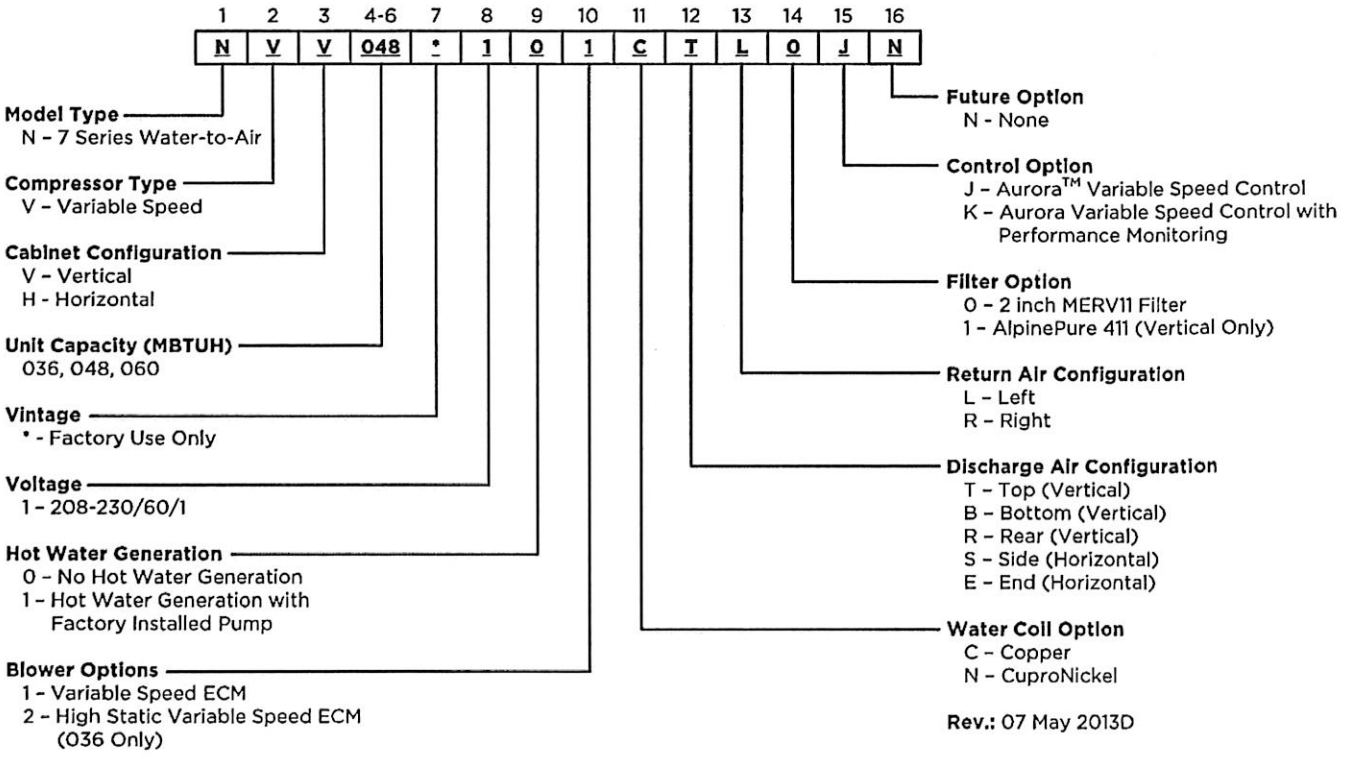
7 Series

700A11

Geothermal Heat Pump

3-5 ton (variable speed)

Model Nomenclature



Rev.: 07 May 2013D

AHRI/ISO 13256-1 Performance Ratings

Variable Speed ECM Motor

AHRI/ASHRAE/ISO 13256-1
English (IP) Units

Model	Capacity Modulation	Airflow Clg/Htg	Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
			Cooling EWT 86°F		Heating EWT 68°F		Cooling EWT 59°F		Heating EWT 50°F		Cooling Full Load 77°F Part Load 68°F		Heating Full Load 32°F Part Load 41°F	
		cfm	Capacity Btu/h	EER Btu/h per W	Capacity Btu/h	COP	Capacity Btu/h	EER Btu/h per W	Capacity Btu/h	COP	Capacity Btu/h	EER Btu/h per W	Capacity Btu/h	COP
036	Full	1300/1500	32,000	18.0	50,000	5.3	38,000	31.5	41,000	4.6	36,000	22.0	32,000	3.5
	Part		11,000	21.0	17,000	7.5	13,000	47.2	14,000	5.9	14,000	37.0	13,000	5.3
048	Full	1500/1800	41,000	17.6	67,000	5.0	49,000	31.7	55,000	4.3	46,000	21.7	43,000	3.6
	Part		16,000	22.5	24,000	7.6	19,200	53.2	19,000	5.9	19,000	41.0	16,000	5.3
060	Full	1800/2200	50,000	16.3	78,000	4.8	60,000	28.6	65,000	4.3	56,000	19.4	51,000	3.5
	Part		20,000	21.7	29,000	7.5	23,200	45.8	23,000	6.0	23,000	36.0	20,000	5.1

Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature
Heating capacities based upon 68°F DB, 59°F WB entering air temperature
All ratings based upon 208V operation

6/15/12

Energy Star Compliance Table

Model	Tier 3	
	Ground Water	Ground Loop
036	Yes	Yes
048	Yes	Yes
060	Yes	Yes

6/1/12

Energy Star Rating Criteria
In order for water-source heat pumps to be Energy Star rated they must meet or exceed the minimum efficiency requirements listed below. Tier 3 represents the current minimum efficiency water source heat pumps must have in order to be Energy Start rated.

Tier 3: 1/1/2012 - No Effective End Date Published

Water-to-Air	EER	COP
Ground Loop	17.1	3.6
Ground Water	21.1	4.1
Water-to-Water		
Ground Loop	16.1	3.1
Ground Water	20.1	3.5

AHRI/ISO 13256-1 Performance Ratings cont.

The performance standard AHRI/ASHRAE/ISO 13256-1 became effective January 1, 2000 and replaces ARI Standards 320, 325, and 330. This new standard has three major categories: Water Loop (comparable to ARI 320), Ground Water (ARI 325), and Ground Loop (ARI 330). Although these standards are similar there are some differences:

Unit of Measure: The Cooling COP

The cooling efficiency is measured in EER (US version measured in Btu/h per Watt. The Metric version is measured in a cooling COP (Watt per Watt) similar to the traditional COP measurement.

Water Conditions Differences

Entering water temperatures have changed to reflect the centigrade temperature scale. For instance the water loop heating test is performed with 68°F (20°C) water rounded down from the old 70°F (21.1°C).

Air Conditions Differences

Entering air temperatures have also changed (rounded down) to reflect the centigrade temperature scale. For instance the cooling tests are performed with 80.6°F (27°C) dry bulb and 66.2°F (19°C) wet bulb entering air instead of the traditional 80°F (26.7°C) DB and 67°F (19.4°C) WB entering air temperatures. 80.6/66.2 data may be converted to 80/67 using the entering air correction table. This represents a significantly lower relative humidity than the old 80/67 of 50% and will result in lower latent capacities.

Pump Power Correction Calculation

Within each model, only one water flow rate is specified for all three groups and pumping Watts are calculated using the following formula. This additional power is added onto the existing power consumption.

- Pump power correction = (gpm x 0.0631) x (Press Drop x 2990) / 300
  Where 'gpm' is waterflow in gpm and 'Press Drop' is the pressure drop through the unit heat exchanger at rated water flow in feet of head.

Blower Power Correction Calculation

Blower power is corrected to zero external static pressure using the following equation. The nominal airflow is rated at a specific external static pressure. This effectively reduces the power consumption of the unit and increases cooling capacity but decreases heating capacity. These Watts are significant enough in most cases to increase EER and COPs fairly dramatically over ARI 320, 325, and 330 ratings.

- Blower Power Correction = (cfm x 0.472) x (esp x 249) / 300
  Where 'cfm' is airflow in cfm and 'esp' is the external static pressure at rated airflow in inches of water gauge.

ISO Capacity and Efficiency Calculations

The following equations illustrate cooling calculations:

- ISO Cooling Capacity = Cooling Capacity (Btu/h) + (Blower Power Correction (Watts) x 3.412)
- ISO EER Efficiency (W/W) = ISO Cooling Capacity (Btu/h) x 3.412 / [Power Input (Watts) - Blower Power Correction (Watts) + Pump Power Correction (Watt)]

The following equations illustrate heating calculations:

- ISO Heating Capacity = Heating Capacity (Btu/h) - (Blower Power Correction (Watts) x 3.412)
- ISO COP Efficiency (W/W) = ISO Heating Capacity (Btu/h) x 3.412 / [Power Input (Watts) - Blower Power Correction (Watts) + Pump Power Correction (Watt)]

Comparison of Test Conditions

	ARI 320	ISO/AHRI 13256-1 WLHP	ARI 325	ISO/AHRI 13256-1 GWHP	ARI 330	ISO/AHRI 13256-1 GLHP
Cooling						
Entering Air - DB/WB °F	80/67	80.6/66.2	80/67	80.6/66.2	80/67	80.6/66.2
Entering Water - °F	85	86	50/70	59	77	77
Fluid Flow Rate	*	**	**	**	**	**
Heating						
Entering Air - DB/WB °F	70	68	70	68	70	68
Entering Water - °F	70	68	50/70	50	32	32
Fluid Flow Rate	*	**	**	**	**	**

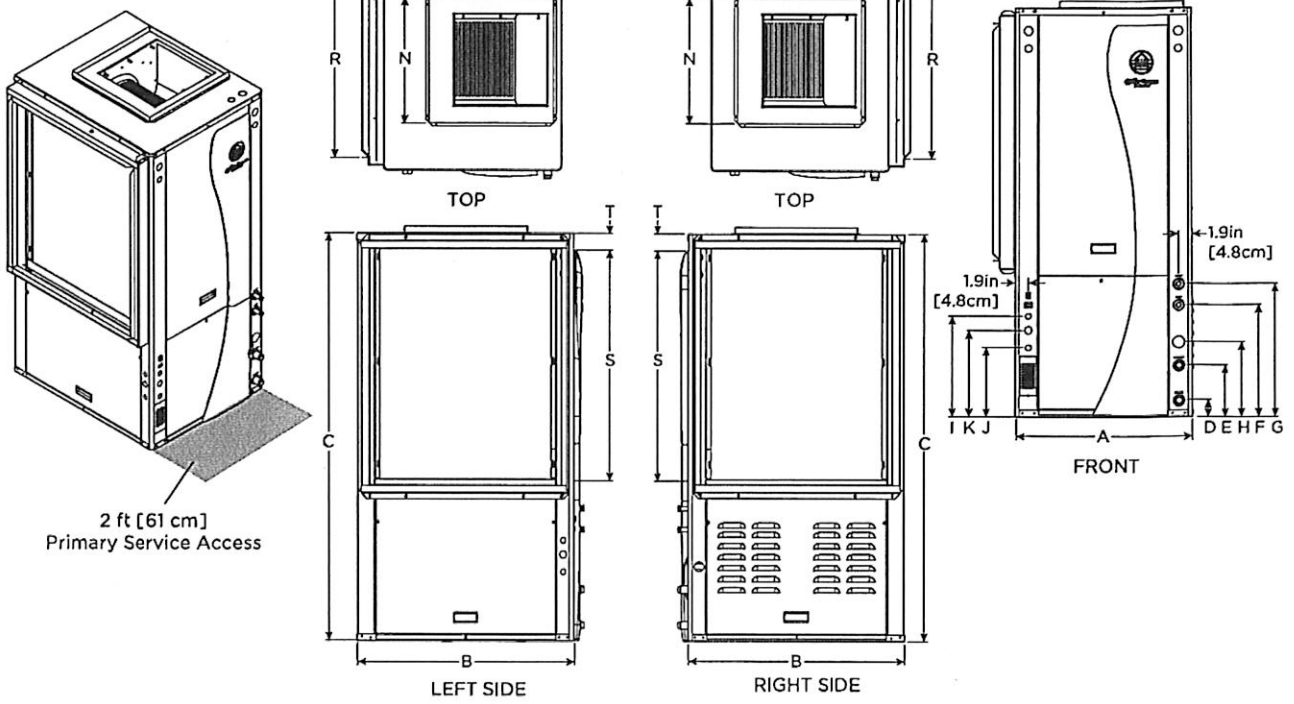
NOTES: * Flow rate is set by 10°F rise in standard cooling test
** Flow rate is specified by the manufacturer
Part load entering water conditions not shown
WLHP = Water Loop Heat Pump; GWHP = Ground Water Heat Pump; GLHP = Ground Loop Heat Pump

Conversions:

Airflow (lps) = cfm x 0.472;
ESP (Pascals) = ESP (in wg) x 249;
WaterFlow (lps) = gpm x 0.0631;
Press Drop (Pascals) = Press Drop (ft hd) x 2990

Vertical Dimensional Data

Top Air Discharge



Vertical Top Flow Model		Overall Cabinet			Water Connections							Electrical Connections			Discharge Connection duct flange installed (30.10 in)					Return Connection using std deluxe filter rack (30.10 in)			
		A Width	B Depth	C Height	D Loop In	E Loop Out	F HWG In	G HWG Out	H Cond-ensate	Loop Water FPT	HWG Sweat (I.D.)	I 1/2 in. cond Low Voltage	J 1/2 in. cond Ext Pump	K 3/4 in. cond Power Supply	L	M	N Supply Width	O Supply Depth	P	Q	R Return Depth	S Return Height	T
036	in.	25.6	31.6	54.4	2.3	7.3	15.9	18.9	10.6	1 in. Swivel	1/2 in. Female	14.3	9.8	12.3	6.9	1.1	18.0	18.0	3.8	1.7	28.1	30.0	1.7
	cm.	65.0	80.3	138.2	5.8	18.5	40.4	48.0	26.9			36.3	24.9	31.2	17.5	2.8	45.7	45.7	9.7	4.3	71.4	76.2	4.3
048	in.	25.6	31.6	54.4	2.3	7.3	15.9	18.9	10.6	1 in. Swivel	1/2 in. Female	14.3	9.8	12.3	6.9	1.1	18.0	18.0	3.8	1.7	28.1	30.0	1.7
	cm.	65.0	80.3	138.2	5.8	18.5	40.4	48.0	26.9			36.3	24.9	31.2	17.5	2.8	45.7	45.7	9.7	4.3	71.4	76.2	4.3
060	in.	25.6	31.6	58.4	2.3	7.3	15.9	18.9	10.6	1 in. Swivel	1/2 in. Female	14.3	9.8	12.3	6.9	1.1	18.0	18.0	3.8	1.7	28.1	34.0	1.7
	cm.	65.0	80.3	148.3	5.8	18.5	40.4	48.0	26.9			36.3	24.9	31.2	17.5	2.8	45.7	45.7	9.7	4.3	71.4	86.4	4.3

Condensate is 3/4 in. PVC female glue socket and is switchable from side to front 6/29/12
Unit shipped with deluxe 2 in. (field adjustable to 1 in.) duct collar/filter rack extending from unit 3.25 in. and is suitable for duct connection.
Discharge flange is field installed and extends 1 in. [25.4mm] from cabinet
Decorative molding and/or water connections extend 1.2 in. [30.5mm] beyond front of cabinet.
Louvered vents in the compressor section right side access panel extend 1/2 in. [12.7 mm] from side of cabinet. Allow clearance for venting.

Auxiliary Heat Ratings

Model	kW		Stages	Btu/h		Min CFM	Model Compatibility		
	208V	230V		208V	230V		036	048	060
EAL(H)10A	7.2	9.6	2	24,600	32,700	1100	•	•	•
EAL(H)15A	10.8	14.4	3	36,900	49,100	1250	•	•	•
EAL(H)20A	14.4	19.2	4	49,200	65,500	1500		•	•

Air flow level for auxiliary heat (Aux) must be above the minimum cfm in this table
Order the "H" part number when installed on horizontal and vertical rear discharge units

6/1/12

Auxiliary Heat Electrical Data

Model	Supply Circuit	Heater Amps		Min Circuit Amp		Max Fuse (USA)		Max Fuse (CAN)		Max CKT BRK	
		208 V	240 V	208 V	240 V	208 V	240 V	208 V	240 V	208 V	240 V
EAL(H)10A	Single	34.7	40	53.3	60	60	60	60	60	60	60
EAL(H)15A	Single	52.0	60	75	85	80	90	80	90	70	100
	L1/L2	34.7	40	53.3	60	60	60	60	60	60	60
	L3/L4	17.3	20	21.7	25	25	25	25	25	20	30
EAL(H)20A	Single	69.3	80	96.7	110	100	110	100	110	100	100
	L1/L2	34.7	40	53.3	60	60	60	60	60	60	60
	L3/L4	34.7	40	43.3	50	45	50	45	50	40	50

All heaters rated single phase 60 cycle and include unit fan load
All fuses type "D" time delay (or HACR circuit breaker in USA)

6/1/12

Electrical Data

Model	Rated Voltage	Voltage Min/Max	Compressor		Drive		HWG Pump FLA	Ext Loop FLA	Blower Motor FLA	Total Unit FLA	Minimum Circuit Amp	Max Fuse HACR Breaker
			LRA	CMCC	LRA	Internal Breaker						
036	208-230/60/1	187/253	10.2	18.0	22.0	30.0	0.4	5.4	4.0	31.8	37.3	40
*036	208-230/60/1	187/253	10.2	18.0	22.0	30.0	0.4	5.4	7.0	34.8	40.3	45
048	208-230/60/1	187/253	12.0	23.5	28.0	35.0	0.4	5.4	7.0	40.8	47.8	50
060	208-230/60/1	187/253	12.0	30.0	33.0	40.0	0.4	5.4	7.0	45.8	54.1	60

*With optional 1 hp Variable Speed ECM Motor
Rated Voltage of 208/230/60/1
HACR circuit breaker in USA only
All fuses Class RK-5

3/26/12

Blower Performance Data

Variable Speed ECM Blower Motor

Model	Air Flow												
	Max ESP	Speed 1	Speed 2	Speed 3	Speed 4	Speed 5	Speed 6	Speed 7	Speed 8	Speed 9	Speed 10	Speed 11	Speed 12
036	0.50	285	380 G	525 L	675	815	980	1100	1220	1330	1440 H	1540 Aux	1575
036 w/1hp*	0.75	480	565 G	665 L	761	870	1000	1100	1200	1300	1410 H	1520 Aux	1630
048	0.75	475	620 G	730 L	850	1020	1140	1270	1400	1520	1650 H	1790 Aux	1925
060	0.75	400	600 G	830 L	1050	1230	1400	1560	1700	1870	2010 H	2140 Aux	2265
**VS Compressor Speed				1-2	3-4		5-6	7-8		9-10	11-12		

** VS Compressor speed is given for the factory default cfm settings. When the cfm default settings are changed it will change the relationship to the compressor speed that is shown in the table. In cooling mode compressor speeds 10-12 are only available when SuperBoost mode is selected at the thermostat. 6/7/12

* Optional 1 hp Variable Speed ECM

Factory settings are at recommended L , H and Aux positions

"G" may be located anywhere within the airflow table

"L" setting should be located within the boldface cfm range

"H" setting MUST be located within the shaded cfm range

"Aux" setting MUST be equal to or greater than "H" setting

"Aux" setting MUST be equal to or greater than the minimum allowable cfm for the auxiliary heater kit (see auxiliary heat ratings table)

Cfm is controlled within 5% up to the maximum ESP

Max ESP includes allowance for wet coil and standard filter

Setting Blower Speed - Variable Speed ECM

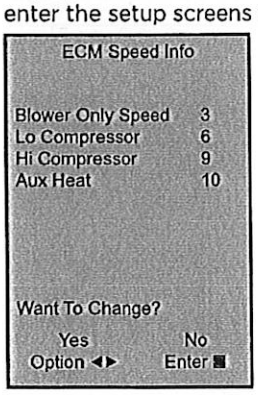
The ABC board's Yellow Config LED will flash the current ECM blower speed selections for G, low, and high continuously with a short pause in between. The speeds can also be confirmed with the AID Tool under the Setup/ ECM Setup screen. The Aux will not be flashed but can be viewed in the AID Tool. The ECM blower motor speeds can be field adjusted with or without using an AID Tool.

Variable speed ECM Setup without an AID Tool

The blower speeds for G only, Low (Y1), and High (Y2/ Aux) can be adjusted directly at the Aurora ABC board which utilizes the push button (SW1) on the ABC board. This procedure is outlined in the ECM Configuration Mode portion of the Aurora 'Base' Control System section. The Aux cannot be set manually without an AID Tool.

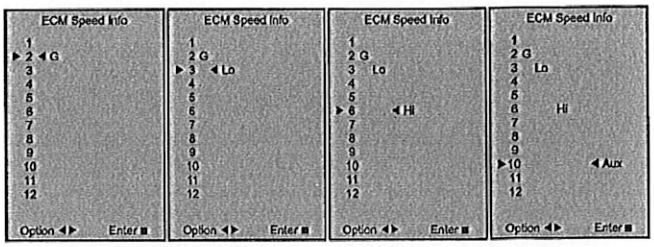
Variable speed ECM Setup with an AID Tool

A much easier method utilizes the AID Tool to change the airflow using the procedure below. First navigate to the Setup screen and then select ECM Setup. This screen displays the current ECM settings. It allows the technician to enter the setup screens to change the ECM settings. Change the highlighted item using the ◄ and ► buttons and then press the ◙ button to select the item.



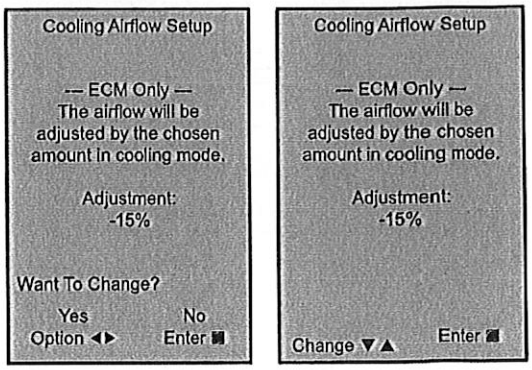
Selecting YES will enter ECM speed setup, while selecting NO will return to the previous screen.

ECM Speed Setup - These screens allow the technician to select the G, low, high, and auxiliary heat blower speed for the ECM blower motor. Change the highlighted item using the ▲ and ▼ buttons. Press the ◙ button to select the speed.



After the auxiliary heat speed setting is selected the AID Tool will automatically transfer back to the ECM Setup screen.

Cooling Airflow Setup - These screens allow the technician to select -15%, -10%, -5%, None or +5% change from the heating airflow. Change the adjustment percentage using the ▲ and ▼ buttons. Press the ◙ button to save the change.



WaterFurnace.
Smarter from the Ground Up™

Manufactured by
WaterFurnace International, Inc.
9000 Conservation Way
Fort Wayne, IN 46809
www.waterfurnace.com

PROUD MEMBER

Intertek

SC2700AN 1/17

PACKET: 00206-TAP GRANT OVERAGE BUD ADJ 20-2
BUDGET CODE: CB-Current Budget

FUND ACCOUNT	DATE	DESCRIPTION	ADJUSTMENT	ORIGINAL BUDGET	PREVIOUS ADJUSTMENTS	NEW BUDGET	BUDGET BALANCE
Budget Adj. # 000255							
001 5-5110-0440-001 STREETS CONTRACTED SERVICE	5/31/2021	TAP OVERAGE BUD ADJ	33,103.00-	70,000.00	0.00	36,897.00	35,107.50
001 5-9901-0900-001 TRANSFERS TO OTHER FUNDS	5/31/2021	TAP OVERAGE BUD ADJ	33,103.00	0.00	0.00	33,103.00	0.57
		TOTAL IN PACKET--				0.00	

*** NO WARNINGS ***

*** NO ERRORS ***

*** END OF REPORT ***

07231 A.1