

Bringing Geothermal Energy to Ann Arbor Public Schools

Ann Arbor Public Schools is continuing with construction work for the new Logan Elementary School @ Clague Campus and will be installing Geothermal Heating, Cooling & Ventilation Systems, starting as early as the first week of September.

AAPS has an emerging opportunity, because of contractor and equipment availability, at the Logan/Clague site to significantly move up timing on the geothermal drilling operation from Winter 2026 to September 2025. Geothermal is critical to the mechanical system start up as the system relies heavily on the geothermal bore field, this will allow more time to commission the HVAC system before school opens. Additionally, it may help AAPS turnover some play fields, outdoor areas, etc. to Clague MS sooner than anticipated. This work can be done without creating significant disruption to school operations, similar to the bore field that was recently completed at Mitchell ES while summer school was in session.

This high performance geothermal system upgrade requires the development of a bore field outside of the school building, consisting of over 150 bore holes that are nearly 650 ft deep. The geothermal well-digging process utilizes hydrant (city) water and clay, which creates a "slurry" mix on the site - water, mud and clay, which will be visible during the effort but cleaned and restored after completion of the bore field. AAPS will work with contractors responsible for the project to comply with the hours of operation and dB(A) levels outlined in the City of Ann Arbor municipal ordinance, typically operating Monday through Saturday from 7am up to 7pm. The drilling portion of the project may take 5-6 months to complete.

What is Geothermal Heating and Cooling?

A <u>Geothermal Heat Pump (GHP)</u> circulates water or glycol through pipes buried in the ground, to heat and cool a building's HVAC system. A geothermal heating and cooling system takes advantage of constant underground temperatures to efficiently exchange temperatures, heating buildings in the winter and cooling buildings in the summer, all with the use of electricity. When paired with electricity generated from solar or other clean renewable energy equipment, this system can operate free from fossil fuels.

To see previous questions regarding geothermal, please visit the FAO page.