Phase 1 Excavation & Geo-Exchange Installation

A temporary sound wall will be installed around the perimeter of the drilling area prior to the start of geo-exchange drilling.

A temporary Support of Excavation (SOE) Wall will be installed on the perimeter of the excavation area.

Excavation will precede the geo-exchange drilling. As areas for drilling become available, drilling will commence while additional excavation continues.

There will be a total of between 230 and 260 geo-exchange bore holes installed under the future Quantum Institute site (Phase 1).

For reference, there were 423 bore holes placed under the Roberts Soccer Stadium and 173 bore holes placed under the Stadium Drive Garage.

Excavation will move from East to West.

Phase Two blasting will follow after the Baseball Field is relocated to West Windsor in early 2027. Timing for excavation and geo-exchange installation for the School of Engineering and Applied Science facilities has not been determined.

KEY ACTIVITIES

- Oversize Load/Secondary Construction Route (As needed)
- Pedestrian Route
- Construction Route
- Excavators
- Guard Booth
- New Batter’s Eye
- Construction Trailer
- Geo-exchange Drill Rigs
Construction Routes

Quantum Institute for Quantum Science & Engineering and School of Engineering and Applied Science
Sound Mitigation

Modeling software was used to predict sound levels during geo-exchange drilling at the Quantum Institute site. The model calculated that, with the installation of a 24-foot high sound wall and drilling occurring at an excavated level of approximately 23 feet below grade, sound levels at nearby properties would be less than 55 dBA.

Sound Wall Details
- The sound wall will be installed prior to the start of geo-exchange drilling along FitzRandolph Road, sections of Western Way to the west of FitzRandolph, and along the southern site boundary bordering the Roberts Soccer Stadium.
- Multiple drill rigs can operate concurrently on the Quantum Institute site in any location, orientation or spacing and not exceed the predicted sound levels.
Phase 1 - Quantum Institute

- GeoExchange
- Blasting & Excavation

Phase 2 – School of Engineering & Applied Science

- Timing for excavation and geo-exchange installation for School of Engineering and Applied Science Facilities has not been determined
- Construction of Quantum Institute

Project Schedule