

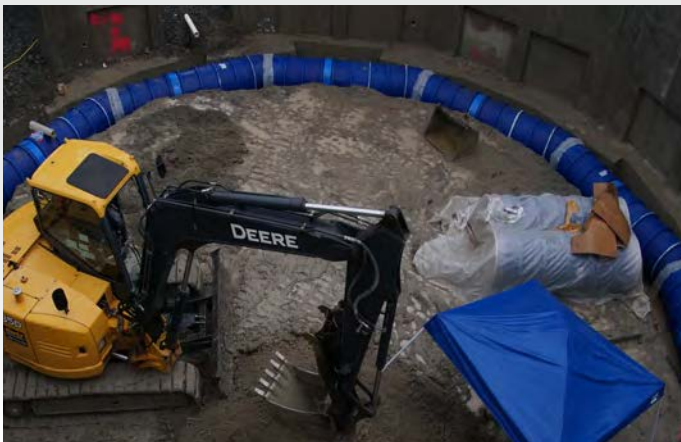


LOCATION
 BELLEVUE, WA

GENERAL CONTRACTOR
 PEASE CONSTRUCTION

ARCHITECT FIRM
 BECKER ARCHITECTS

INSTALLING CONTRACTOR
 DESIGN AIR



Installed below grade around the inside perimeter of the Bellevue Youth Theatre, The BlueDuct® direct-burial duct system does not require drain tile or cement trench structures

The Bellevue Youth Theatre’s new facility was developed to support a high-performance, sustainable environment aligned with LEED certification goals. The project aimed to create a space that not only serves the community but also minimizes environmental impact through energy efficiency, improved indoor air quality, and responsible resource use.

The Challenge

Achieving these sustainability goals required an HVAC system capable of delivering consistent performance while operating

efficiently in underground conditions. The design needed to minimize energy loss, prevent air and water infiltration, and maintain long-term durability—all while meeting strict inspection standards.



Diffuser boxes were mounted and ducted into the main trunk line after air testing was completed

Additionally, proper installation was critical. The system required trained personnel and precise execution to ensure performance, particularly given the region's cool, wet conditions that can complicate underground ductwork installation.

~ The Solution

The project team implemented a geothermal heating and cooling system paired with **The BlueDuct®** underground pre-insulated duct system, providing an efficient and durable solution for below-grade air distribution. Installation crews underwent specialized training and certification from AQC Industries to ensure proper handling and installation of the system. **The BlueDuct®** system was then installed along the interior perimeter of the facility and subjected to a pressure test at 2-inch water column static pressure.

~ The Result

The system passed with zero leakage, confirming a fully air- and water-tight seal. This performance validated the system's reliability and contributed to the project's sustainability objectives. The success of the installation has led the mechanical contractor to adopt **The BlueDuct®** for future applications.



Even in 40 degree temperatures with 90% rain BlueDuct® installs fast and easy

