



Dayton Riverscape Metro Park Dayton, Ohio

The Geopier Impact® system was recommended by the geotechnical engineer over traditional foundation support methods.

Description: This project included a 80 foot by 160 foot pavilion/ice rink with a tent roof and a separate bicycle hub building with associated paths and water features for the city of Dayton Metro Parks. Column loads were 100 kips, floor loads were 300 psf, wall loads ranged from three to five klf, and uplift loads ranged from 120 to 240 kips.

Subsurface Conditions: Soil conditions were 12 to 23 feet of very loose to medium dense clayey sand with various amounts of brick, cinders and construction debris over medium dense sand and gravel. Fill materials were contaminated.

Geopier Solution: The Impact® system was recommended by the geotechnical engineer over traditional foundation support methods. A total 290 Rammed Aggregate Pier® elements with a diameter of 20 inches were installed to 17 to 20 feet below grade. Anticipated total settlement is one inch and differential settlement is one-half inch, possibly offsite disposal.



PROJECT TEAM

Owner:

Bowser Morner

Geotechnical Engineer:

Wagner Komurka Geotechnical Group, Inc.

Structural Engineer:

LJB, Inc.

General Contractor:

Bilbrey Construction

Geopier Installer:

Peterson Contractors, Inc.

Geopier Designer:

GFC-Great Lakes