

PROJECT DESCRIPTION

PROJECT: Cornell West Office Building
LOCATION: Beaverton, Oregon
DESIGN TEAM: *Structural Engineer:* VLMK Consulting Engineers: Portland, OR
Geotechnical Engineer: Terra Associates, Inc.: Kirkland, WA
CONTRACTOR: Opus Northwest Construction Company



DESCRIPTION:

- Three-story office building
- 325 kip column loads
- Continuous footings @ 9 kips per lineal foot
- Undocumented fill to 7' to 12'

The geotechnical investigation revealed that the site subsurface conditions consist of 7' to 12' of undocumented fill overlaying soft to medium stiff silts to 22'. Groundwater occurs 10' to 15' below grade.

Analyses by the geotechnical engineer indicated two options for foundation support:

- (1) 25' long auger cast piles
- (2) Geopier® System

The Geopier system was selected on the basis of cost and on-site construction time. The Geopier portion of the project was performed during April 2000 during inclement weather. On a portion of the site, Rammed Aggregate Piers® (RAP) were installed through an existing parking lot that was later excavated for the footings.

There were 265 RAP elements installed with a designed length of 12'. The installation was completed in only 8 working days.

REFERENCES:

John Gordon
Opus Northwest Construction Corporation
(503) 916-8963

Brian Mikulak, Project Manager
Opus Northwest Construction Corporation
(503) 916-8963

Jim Knauff, S.E.
VLMK Consulting Engineers
(503) 222-4453

Ted Schepper
Terra Associates
(425) 821-7777