



Jumer's Casino

Rock Island, Illinois

Geopier Impact® elements were constructed with a 20 inch diameter and installed to penetration depths of 17 feet below existing ground surface

Description: The project consisted of providing support for a hotel and a casino. Column loads for the hotel building ranged from 210 to 525 kips, and wall loads of 20 kips per linear foot. Column loads for the casino ranged from 30 to 375 kips, and mat pressures for the vessel area ranged from 100 to 500 psf.

Subsurface Conditions: The soil conditions consisted of medium dense clayey sand to sand fill to depths of approximately six to 15 feet approximately (El. 545 ft), underlain by medium dense sand and gravel to about 22 feet (El. 534.4 ft), underlain by clay to silty clay to about 42 feet depth (El. 513 ft) overlying clay shale to the maximum explored depth of 69 feet (El. 492 ft). Groundwater was encountered at depths of approximately five to 12 feet below existing ground surface.

Geopier Solution: 20 inch diameter Impact® elements were constructed and installed to penetration depths of up to 17 feet below existing ground surface.



PROJECT TEAM

Geotechnical Engineer:

Terracon

Structural Engineer:

Clark Engineering, Corp.

Geopier Installer:

Peterson Contractors, Inc.

Geopier Designer:

GFC-Midwest