



## Moran Asian Garden

Westminster, California

**The Geopier Impact® system was chosen for mitigation of soil liquefaction potential, settlement control, and foundation support to resist strong earthquake shaking**

**Description:** This project involved the construction of a six-story building with a two-story parking garage measuring 158,000 square feet and a four-story senior condo above. The design involved a maximum column load of 500 kips and several heavy shear walls.

**Subsurface Conditions:** Subsurface soils generally consisted of two feet of fill over very loose to medium dense clean sand, silty sands, and silt, with shallow groundwater at approximately five feet below ground surface.

**Geopier Solution:** Liquefiable sandy materials were reported to a depth of approximately 30 feet. The project team utilized the Impact® technology for a number of reasons. One reason being the Impact system's successful previous project implementation. Others reasons included the ability to provide superior foundation support, liquefaction mitigation, sound engineering design and construction approach and considerable cost savings compared to other techniques.



### PROJECT TEAM

**Owner:**

Moran Property Partnership  
& Asian Garden, Ltd.

**Geotechnical Engineer:**

MTG<sub>L</sub>

**Structural Engineer:**

Seneca Structural Engineering, Inc.

**General Contractor:**

ALY Construction, Inc.

**Geopier Installer:**

Farrell Design-Build Companies, Inc.

**Geopier Designer:**

GFC-Southern California