

GEOTECHNICAL ENGINEERING

Not your average geotechnical firm.

NV5's experts provide specialized services in addition to the standard range of geotechnical offerings.

OUR SPECIALIZED SERVICES INCLUDE:

- Performance-based Design (PBD): PBD is the seismic design methodology of the future. It allows the design team to work together to determine the appropriate levels of ground motion and performance objectives for the building and the nonstructural components in order to meet the owner's expectations.
- Crosshole Sonic Logging (CSL) testing: CSL testing is completed after shaft construction and evaluates the integrity of the concrete in drilled shafts.
- Pile Driving Analyzer® (PDA) testing: With the PDA, the capacity of several piles can be tested in one day for typically one-tenth the cost of a single conventional static test.

WE ALSO PROVIDE:

- Geotechnical investigations
- Deep foundation design for bridges, high-rises, and other structures
- Utility alignment studies
- Slope stability analyses
- Seismic evaluations and upgrades
- Geotechnical instrumentation
- Geotechnical construction observation
- Peer reviews

OUR PROJECTS INVOLVE VARIED SITES, SUCH AS:

- Essential facilities, such as hospitals and fire stations
- Commercial, residential, educational, and industrial developments
- Utility infrastructure, including wastewater facilities, pipelines, and outfalls
- Transportation, such as commuter rail, roadway and bridge projects, and park and ride facilities

OUR CONSTRUCTION OBSERVATION AND TESTING SERVICES INCLUDE:

- Observation and testing of compacted fills and (site) earthworks
- Observation and logging of drilled shaft excavations and construction
- Coordination and implementation of full-scale shaft load testing
- Observation of pile foundation systems
- Vibration monitoring
- In-house geotechnical testing laboratories

FEATURED PROJECTS

[Richmond Beach Saltwater Park, Shoreline, WA](#)

[Los Angeles Department of Water and Power, Sylmar and San Fernando Groundwater Basins, Los Angeles, CA](#)

[Temecula Valley Hospital, Temecula, CA](#)

[Stadium Way, Tacoma, WA](#)

[Midfield Satellite Concourse \(MSC\) Los Angeles International Airport \(LAX\), Los Angeles, CA](#)

[Portland South Waterfront Development, Portland, OR](#)

[Portland Aerial Tram, Portland, OR](#)

[North Fork Road "Bear Trap" Landslide, Marion County, OR](#)

[OHsu Collaborative Life Sciences Building, Portland, OR](#)