

# Foundation Investigation Services

FDH brings knowledge about what’s underground to the surface! When as-built documentation is missing, foundation depth or condition is unknown, or new construction quality needs verification, FDH’s field services team provides the data necessary for enhanced decision making about foundation integrity and the conditions that warrant repair or reinforcement. As a full-service provider, FDH also designs and implements remediation solutions.



## Rebar Investigation

- To identify and map location and condition of embedded rebar
- Includes sizing, spacing, cover, corrosion, and material properties
- GPR, Half-Cell, and DW used in combination with...
- FDH patented method (U.S. Patent 7548192)



## Dispersive Wave (DW) Analysis

- To determine foundation depth and characterize material integrity
- Requires light impacts with handheld devices to create dispersive waves in the foundation medium
- Based on wave propagation and reflection properties of the material along with advanced proprietary filtering techniques



## Concrete Investigation

- To determine:
  - Strength
  - Integrity
  - Cracks
  - Discontinuities
  - Geometry
- Uses Ultrasonic Pulse Velocity (UPV) testing (to identify surface cracks), Ground Penetrating Radar (GPR) (to identify major rebar defects within concrete), and DW (to identify internal cracking) in combination with other NDT methods



## Engineering Services

- To determine:
  - Structural capacity
  - Repair or reinforcement solutions
- Field observation for construction quality control
- Full management of repair construction where needed



## Field Capability

- Experienced field execution since 1994
- Servicing sites nationwide including Hawaii, Alaska, and the Caribbean and expanding globally
- Tens of thousands of foundation investigations performed to date
- Rigorous internal technician training program
- Smart software development for easy 3rd party training and investigation where site conditions dictate

## Markets Served



Telecommunications



Broadcast



Power



Transportation



Water



Industrial



Buildings

## Applicable Structure Types:

Telecom Towers • Broadcast Towers • Bridges • Dams • Levees • Transmission Towers & Substations  
Wind Turbines • Industrial Plants & Facilities • Commercial Buildings • Parking Lots/Decks

AND MORE

Learn more about Foundation Investigation Services at [www.fdh-is.com](http://www.fdh-is.com)