

# Bridge & Structural Engineering

## Exceptional Skills & High-Level Expertise

For more than 40 years, **Florence & Hutcheson** has provided leading-edge services in Bridge & Structural Engineering to both public entities and private industry. The **F&H** Design Staff has experience in transportation, building, public works, commercial and industrial structural engineering projects. Recent projects include interstate highway bridges and ramps, long coastal structures with deep foundations, pedestrian and utility bridges, and all types of appurtenant site structures such as culverts, retaining walls and drainage structures.

**F&H** staff is trained in the latest design technologies such as pile/soil interaction procedures based on FHWA guidelines, multi-phase seismic analysis and design, and LRFD code procedures. We have also assisted many state governments in the development of guidelines for the use of structural materials such as high-strength concrete for pre-stressed beams and high performance structural steel (HPS).

**F&H** has exceptional capabilities that include:

- Bridges Over Water Bodies, Railroads & Highways
- Taxiway, Pedestrian, Railroad & Utility Bridge Design
- Single Point Urban Interchange (SPUI) Bridge Design
- Curved Steel Girder Bridge Design
- Seismic Design & Retrofitting
- Innovative Design Techniques - HPS, High-Strength Concrete
- Building Frames
- Retaining Walls & Site Structures
- Machine Foundations - Cranes
- Concrete Tanks
- Design-Phase Load Tests For Deep Foundations
- Design Codes: AASHTO, ASD, LFD & LRFD



**Related structural services include:**

- Inspection & Evaluation
- Feasibility Studies for Upgrades & Replacement
- Hydraulic & SCOUR Analysis
- Preliminary Cost Estimates For Funding
- Coordination With Government Agencies
- Production of Construction Documents
- Assistance With Bidding & Contracting
- Construction Engineering & Inspection
- Contractor Payment Reviews



You can trust **F&H** to provide innovative, on-time and cost effective solutions. Let us introduce you to our professionals and learn more about your project needs.