

Woodrow Wilson Bridge

Client:

URS Grenier

Woodward Clyde
Consultants

Location:

Washington, DC

Services Provided:

Consolidation and strength
testing of soft soils

Value Provided:

- Data generated allowed for successful determination of the most effective construction methods on the extremely soft soils
- Adapted standard test methods to evaluate unique and complex materials

Background & Project Challenges

The \$3-billion Woodrow Wilson Bridge Replacement project is located in one of the most heavily trafficked areas of the U.S., at approximately the mid-point of I-95, on the south side of the Washington, D.C. metropolitan area.

The original bridge, constructed in 1961, was carrying close to 200,000 vehicles each day – well over the original design capacity of 75,000 vehicles per day. This capacity problem was exacerbated by the need to raise the bascules 260 times a year to allow river traffic to pass, and by the narrowing of I-95 from 8 lanes to 6 just prior to entering the bridge.

The new box girder drawbridge consists of 12 lanes and will only be raised 60 times a year. Four major interchanges surrounding the bridge area are also being improved to increase traffic flow. One of the major challenges facing construction has been the extremely soft soils upon which the roadway and interchanges are to sit on.



GeoTesting Role & Accomplishments

In order to evaluate alternative methods of construction, such as surcharging with wick drains, GeoTesting Express (GTX) conducted consolidation and strength testing of the extremely soft soils. GTX was selected because of its:

- Fast turnaround times
- Quality
- Technical support capabilities

For More Information Contact:

Gary T. Torosian Director of Testing Services
125 Nagog Park t 978.635.0424
Acton, MA 01720 f 978.635.0266
gtt@geotesting.com

PD11058