



Virginia GEC Megaprojects Design-Build, Northern Virginia

Virginia Department of Transportation (VDOT) selected a CH2M HILL joint venture to perform general engineering consultant (GEC) services (program management/professional engineering) for the \$5.4-billion Northern Virginia MegaProjects Program. The Megaprojects Program will enhance Virginia's transportation system by improving and connecting multiple modes of transportation —highway, rail, transit and ridesharing.

As program GEC, CH2M HILL is providing a full range of program management and engineering services for VDOT's major projects in Northern Virginia. These services include construction engineering and management, transportation research and planning, traffic engineering, right-of-way and environmental investigations, QA/QC inspections, permitting, oversight of roadway and structures design, survey and mapping, preliminary design, and public outreach.

The program includes management of several projects, as well as coordination of other ongoing projects being constructed by other firms. The projects include numerous challenges, including roadway, bridge, and intersection construction in heavy traffic conditions, requiring extensive maintenance of traffic planning, and comprehensive constructing phasing and staging to minimize impacts to mobility and access. The Northern Virginia Mega Projects Program is one of the largest transportation improvement projects in Northern Virginia's history, and consists of the following mega projects:

Dulles Rail

The CH2M HILL team is coordinating work with the Dulles Rail project, which is being managed by the Metropolitan Washington Airport Authority and is being constructed by other firms. The project involves the extension of the Washington, DC Metro system to connect with Washington Dulles International Airport. The project is already underway with the development of a Transportation Management Plan and the relocation of utilities along the Route 7 corridor in Tysons Corner. As the owners representative, CH2M HILL provides design review, access control, public outreach, construction oversight and coordination between projects.

I-95 4th Lane Widening

The I-95 4th Lane project involves adding one through lane in each direction on I-95 from Route 7100 at Newington to Route 123 at Occoquan. The project also includes ramps, 10 bridge widenings, retaining walls, and sound walls. This design is complete; the CH2M HILL team will manage construction of this conventional, design-bid-build project, while minimizing lane closures on this heavily-trafficked highway. Daytime construction is conducted behind concrete barriers and lane closures are restricted to nighttime construction efforts, allowing as much capacity as possible during rush hour conditions.

A portion of the new northbound lane between Route 1 and the Fairfax County Parkway opened in December 2009, with the southbound lane to follow in autumn 2010. The project is projected to be fully complete by 2011.

Transportation

Client

Virginia Department of Transportation

Location

Virginia

I-495 HOT Lanes

The I-495 or Capital Beltway High-Occupancy Toll (HOT) Lanes will add 14 miles of two new general purpose lanes to the outside in each direction along the Capital Beltway, from the Springfield Interchange to just north of the Dulles Toll Road. The widening to the outside will enable the existing two inside lanes in each direction, after partial reconstruction and milling, to function as HOT Lanes. This will be completed as a Public-Private partnership.

Use of the HOT lanes will be free to buses, carpools, and vanpools of three or more persons per vehicle, and motorcycles. All other vehicles may pay a toll to use the HOT lanes, or use the regular lanes free of charge. The HOT lanes toll charge will depend on traffic conditions, regulating demand during peak traffic hours.

In addition to the new lane construction and HOT lanes re-appropriation, this project will deliver a much-needed update to the Capital Beltway. More than 50 bridges and overpasses will be replaced, 10 interchanges will be upgraded, and access for pedestrians and cyclists will be enhanced. The estimated date of completion for the project is late 2012 or early 2013.

I-95/495 Telegraph Road Interchange

The I-95/I-495 Telegraph Road Interchange project part of the Woodrow Wilson Bridge Project, which aimed to repair the nearly-fifty-year-old bridge and improve traffic flow. Work on this interchange includes:

- ◆ Widening a 2.5-mile section of the Capital Beltway, which will extend the new THRU and LOCAL lane configuration from the bridge
- ◆ Construction of new elevated ramps connecting the Beltway to Telegraph Road, Eisenhower Avenue, and other related secondary and side streets

Benefits include smoother traffic flow on Telegraph Road, Huntington Avenue, and the entire related corridor; improved bridges, traffic lights, drainage, and noise walls; new landscaping in Cameron Run; better pedestrian paths, and safer access to the Woodrow Wilson Bridge.

I-95 HOT Lanes

This set of HOT lanes serves the outer suburbs of northern Virginia, travelling to and along the Capital Beltway. Similar to the I-495 HOT Lanes, but under even tighter time constraints, the I-95 work will enable VDOT to expedite the project in a much shorter time frame than if the agency had managed the project in-house. The acceleration allows commercial close of the public private partnership agreement months sooner than would otherwise have been possible.

About CH2M HILL

Headquartered near Denver, Colorado, USA, employee-owned CH2M HILL is a global leader in consulting, design, design-build, operations, and program management for government, civil, industrial and energy clients. The firm's work is concentrated in the areas of water, transportation, environmental, energy, facilities and resources. With US\$6.3 billion in revenue and 23,000 employees, CH2M HILL is an industry-leading program management, construction management and design firm, as ranked by Engineering News-Record and named a leader in sustainable engineering by Verdantix. The firm has been named a FORTUNE 100 Best Companies to Work for five times. Visit us at www.ch2mhill.com, twitter.com/ch2mhill and facebook.com/ch2mhill.