Crossovers Installed for Tie-in to Existing Orange Line

Metro Service Shutdowns
Between East and West Falls Church Stations Key to Construction Progress

One of the most challenging tasks in building the Dulles Corridor Metrorail Project is connecting the new line with Metro’s existing Orange Line near the junction of two of Northern Virginia’s most heavily traveled roads—Interstate 66 and the Dulles Connector Road (Route 267).

For many months, crews have been installing track and performing other operations necessary to make this connection possible. Crews have been working adjacent to existing tracks and moving trains, performing intricate tasks and sometimes causing Metro to shut down train service between the West Falls Church and East Falls Church Metro stations to make sure that workers can do their jobs safely. The service disruptions must be coordinated with Metro and take place during low traffic times—weekends and holidays. The next outage will take place over the Columbus Day weekend.

Crews use each closing to perform a different task in tying the new line to the operating Orange Line.

Cables, Crossovers:
In order to connect the new and the existing rail line, the retaining walls around the existing track had to be widened. Inside these walls are cable troughs that hold multiple cables for communications and automatic train control for the Metrorail system.

When Metro was not operational in March cables were removed and placed in temporary bypass ductbanks. Temporary bypass ductbanks are a piping system placed underground that secures and protects cables from the surrounding construction. These ductbanks are installed on one side of the track to relocate cables while the new retaining walls are being built. When this process was completed, the existing retaining walls were demolished.

Two switches were installed over the course of the Independence Day weekend. These switches will be signaled by Metro’s complex train control system to direct trains to the new line or to the existing Orange Line.

During Labor Day weekend, double crossover tracks were placed within the existing tracks between Haycock Road and Great Falls Street. Crossovers allow the trains to switch from one set of tracks to another. (See photos.)

During the Columbus Day weekend, crews will install the new train control cables that will direct and manage the new line. In 2012, the final step in making the connections between the two lines will be installation of traction power cables to carry power...
from an existing Metro traction power substation on Fisher Avenue to the tracks. The project is building a train control room near the existing traction power facility as part of the infrastructure needed to support the tie-in.

The project is building 11 new traction power substations along the Phase 1 alignment.

Construction for Phase 1 is expected to be complete during the Summer of 2013. Once Metro testing is complete, riders will then be able to catch trains from downtown Washington D.C. to Wiehle Avenue in Reston.

**Bridges for Rail Nearing Completion Near Cap One Complex**

Construction of the aerial bridges for the future Dulles Corridor Metrorail Project tracks along the northwest side of Route 123 in Tysons Corner continues at a rapid pace, using a large, yellow horizontal crane. That crane continues to construct the guideway (bridges) near

**QUICK FACTS**

- The Dulles Corridor Metrorail Project is being built by the Metropolitan Washington Airports Authority.
- When it is completed, it will be turned over to the Washington Metropolitan Area Transit Authority (WMATA) to operate as part of the existing Metro system.
- A 23-mile expansion of Metro’s existing service.
- Extends service from East Falls Church to eastern Loudoun County.
- Four stops in Tysons Corner.
- Being built in two phases.
- Phase 1 is 11.7 miles and is under construction from I-66/the Dulles Connector Road to Wiehle Avenue on the eastern edge of Reston.
- Dulles Transit Partners is the design-build contractor for Phase 1.
- Preliminary engineering nearing completion for Phase 2 from Wiehle Avenue west to Ashburn. The Phase 2 contractor has not been selected.

When those spans are complete, the truss will continue to progress westward, from pier to pier, toward Interstate 495, the Capital Beltway. When the truss completes those segments, it will be disassembled, likely near the end of 2011. That process will take about four to six weeks.

It will then be moved and reassembled in the median of the Dulles International Airport Access Highway/Dulles Toll Road near the Route 7 interchange where it will be used to build the flyover from the Airport/Toll Road median to Route 7 and bridges into the Tysons West Metrorail Station at Spring Hill Road.

**ALONG ROUTE 7:** This horizontal crane is building bridges in the median of Route 7 working near the Gosnell/Westpark intersection. Photo by Chuck Samuelson, Dulles Corridor Metrorail Project

**CROSSING GOSNELL/WESTPARK:** The cantilevered segmental construction span at the intersection of Route 7 and Gosnell Road continues. Photo by Stephen Barna, Dulles Corridor Metrorail Project