



DC to Dulles and Beyond: Metrorail on Track

Spring 2015

Phase 2 Construction Rolls On at Dulles

If you work or drive at Dulles Airport these days, you can see much evidence that Phase 2 Silver Line construction is taking place.

In mid-April, the operation to hoist huge girders, which will support the tracks for the aerial guideway through Dulles, began. Massive cranes place the girders atop piers that were constructed in the airport's cargo area and along Autopilot Drive.

To minimize impacts to traffic at the airport, the majority of the work will take place at night between 9 p.m. and 5 a.m.

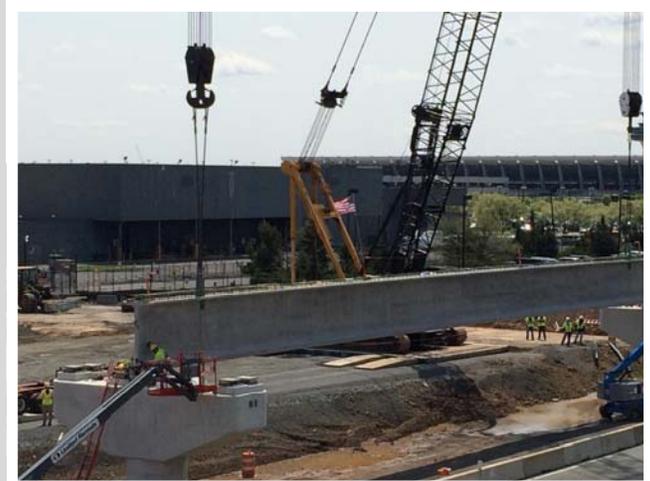
Airport users may experience delays of 10 to 15 minutes while the girders are put into place and secured.

According to Capital Rail Constructors, the design-build contractor for Phase 2, each of the girders that will be used in this section of the guideway weighs approximately 200,000 pounds. They are manufactured in Chesapeake, Va., and will be escorted and delivered to the airport on heavy trucks during non-rush hours.

This work began the week of April 20. It is expected to continue through early June.

In anticipation of the arrival of the girders, project communications team members met with cargo operators, airport personnel and each of the rental car agencies to ensure minimal disruptions to access to their operations as well as airport police and fire.

While this work is underway, the cell phone lot will be relocated. Signs are in place to direct airport drivers. Specific road closings will be announced as the need arises.



Other ongoing work at the airport also includes jack and bore work under Saarinen Circle from the parking bowl to the site of the Dulles Airport Station for future storm water management and duct bank construction for the main power line to serve the trains.

Meanwhile, crews are also working along the Dulles Airport Access Highway/Dulles Toll Road corridor. Preliminary work is taking place near the future Herndon and Innovation Station sites.

Photos courtesy of Capital Rail Constructors

Want to know more? Please visit www.dullesmetro.com, follow us on twitter @DullesMetrorail or call (703) 572-0506.

To set up a briefing for your HOA, civic group or business email outreach@dullesmetro.com

To report construction concerns, please call our hotline: 1-844-385-7245

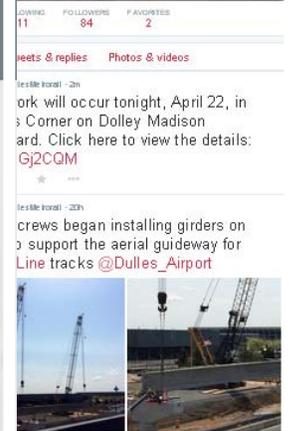
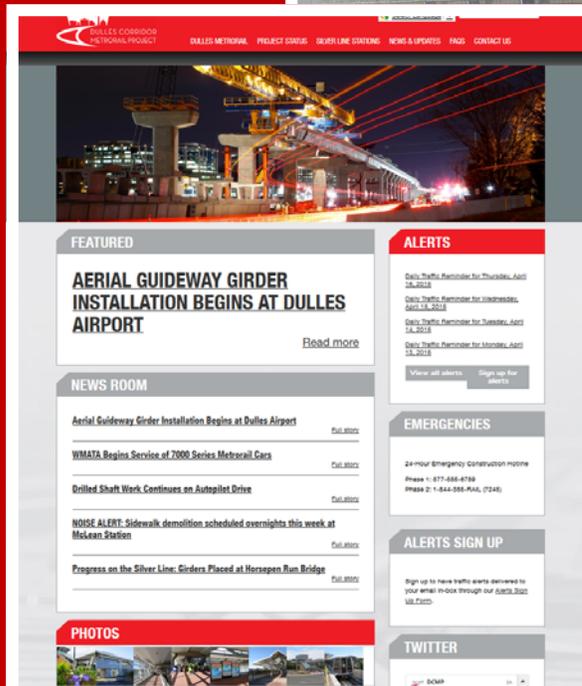
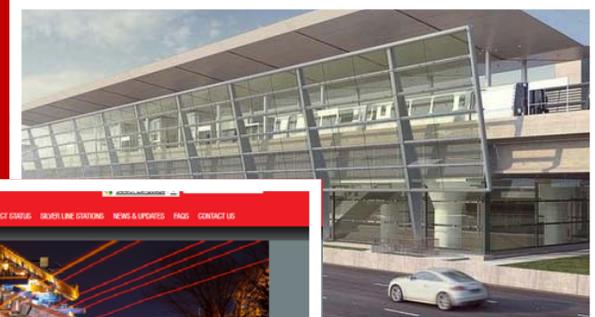
Dulles Metrorail Online

The Dulles Corridor Metrorail Project has updated online resources to better inform the public of project news.

The www.dullesmetro.com website has been redesigned to include features that give an in-depth look at each construction area along the alignment, construction news on the homepage, photos and a live Twitter feed.

The site will continue to provide background on the project, its route, stations, maps, environmental studies and other reports.

In addition, the Dulles Corridor Metrorail Project has launched a Twitter account, @DullesMetrorail to share construction information, project highlights and to be a resource for public inquiries.



Powering the Silver Line

Providing power to Phase 2 of the Dulles Corridor Metrorail Project has started with the installation of underground, concrete-encased conduits that will house and protect the 34.5 kV (kilovolt) cables that, in turn, will distribute electricity to the entire 11.4 mile length of the project. Installing the conduits underground (as opposed to overhead poles) is not only more aesthetic, it provides increased service reliability and requires less maintenance. Work on the duct bank began at the site of the future Dulles Airport Station in April and will continue through late 2017.

Traction Power Network

The energy to move the rail cars on the Washington region's Metrorail system is provided by a traction power network, an electricity grid that supplies power to the rail cars. The 34.5 kV is the dedicated power line that will carry electrical current from the supply source to nine (9) Silver Line Traction Power Substations (TPSS) that will be constructed approximately one (1) mile apart, all the way down the alignment. To increase energy efficiency and utilize less electric conductor material, the electricity is transmitted at a higher voltage than the utilization voltage.

Transformation and Power Conversion

Once the electricity reaches each TPSS, it passes through a transformer and power electronics, which step down the voltage and then convert the electricity for alternating current to direct current. It is direct current that will then power the future passenger trains via a Third Rail. Each rail car has four collector shoes that make contact with the Silver Line track's Third Rail and transfer the electricity to the cars.

Construction of the TPSS stations will begin this summer with TPSS #12 near the Reston Town Center Station site.