



# BRITISH TUNNELLING SOCIETY

Thursday 17<sup>th</sup> November 2011 at 6.00pm

At The

INSTITUTION OF CIVIL ENGINEERS  
ONE GREAT GEORGE STREET, WESTMINSTER, LONDON SW1P 3AA

## DULLES AIRPORT RAIL TUNNEL WASHINGTON DC

**DOMINIC CERULLI – Tunnel Manager, Bechtel**  
**FRANK JENKINS – Senior Field Engineer, Bechtel**  
**VOJTECH GALL – Engineer of Record, Gall Zeidler Consultants**

The Metropolitan Washington Airports Authority (owner) and Dulles Transit Partners, LLC (Bechtel Infrastructure, Inc., the contractor) along with Gall Zeidler (the Engineer) are constructing 520m long twin tunnels in Tysons Corner, Virginia. An integral part of the Washington Metropolitan Transit Authority's new \$3.1-billion Phase I Silver Line passenger rail service to Dulles International Airport. The twin tunnels are being constructed beneath the major traffic arteries of Routes 7 and 123 at very shallow depths. Tysons Corner is one of the most congested retail, commercial and residential centres in the Washington D.C. region. This presentation describes the Sequential Excavation method or SCL, used to construct the tunnels in soft ground conditions with shallow heading cover. Employing this method the tunnel drive was pre-supported with a continuous overlapping pipe arch canopy and excavated in 13m "saw tooth" increments. The initial ground support consisted of a 25cm thick layer of steel fibre reinforced sprayed concrete lining which was furnished by a state of the art on-site batch plant. The final liner includes PVC waterproofing and a 30cm thick, typically unreinforced, cast-in-place concrete.

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Tea and biscuits will be available at 5:30pm

**Advance booking not required**

In case of any query please contact; The Secretary, BTS Tel: 020 7665 2229

or e-mail: [bts@ice.org.uk](mailto:bts@ice.org.uk)

or visit: <http://www.britishtunnelling.org.uk>