



DSI References

Client RSL Joint Venture,
 Richmond, Canada +++ **Owner**
 Translink, Vancouver, Canada +++
Design, Construction and
Operation InTransitBC,
 Vancouver, Canada
DSI Unit DSI Canada Ltd.,
 Western Division, Surrey, Canada
DSI Scope Supply of 374 type
 27x0,6", 2.294 type 19x0,6" and
 421 type 12x0,6" anchorages and
 duct; rental of equipment



Efficient Transit Link in Vancouver: Construction of the Canada Line with DSI

The transportation corridor between the cities of Vancouver and Richmond is one of the four main corridors of the region. Approximately 20% of the population and a third of the jobs in Greater Vancouver are located in this area. In order to significantly improve traffic flow, a new rapid transit link is being built in Vancouver: the Canada Line.

The Canada Line is a new Automated Light Metro System joining the Vancouver International Airport (YVR), the suburb of Richmond, and the Vancouver downtown core and providing a fast link to the cruise ship terminals and the Convention Centre.

This large-scale project is approximately 19km long and consists of an elevated guideway, two bridges and an at-grade section at the airport. Furthermore, the project

includes a cut and cover tunnel and a bored tunnel section under False Creek Harbor in downtown Vancouver. The Canada Line will initially have 16 stations and is estimated to carry 100,000 passengers per day. Public operation of the new transit link is scheduled to start in November 2009, just prior to the Winter Olympics.

DSI Canada West was awarded a contract to supply the Multistrand Post-Tensioning Anchorages and stressing equipment for the elevated guideway. The project called for 374 type 27x0.6", 2,294 type 19x0.6" and 421 type 12x0.6" complete anchor assemblies and associated stressing equipment. DSI also supplied the corrugated galvanized steel PT duct for the tendons.

The anchors and ducts were cast into 3m long precast concrete segments. Due to the fast-track nature of the project, supply of the initial anchors had to be carried out at a very fast pace. The precast segments allowed for the necessary flexibility in the span between the columns. The precast segments were trucked to site and installed using a moveable launching truss.

The tendons were installed on-site and stressed by the contractor, who employed two trusses at separate locations to meet the construction schedule. Once a guideway section was completed and stressed, the launching truss was moved to the next column, allowing for less interruption to traffic.

Thanks to the excellent co-operation of all parties involved, and thanks to the highquality systems used, all requirements were met to the complete satisfaction of the owner.

