

Incremental launching of two Viaducts on the A30 Autoroute in Montreal

The new Montreal Bypass road includes the construction of two composite viaducts which are to be built employing the Incremental Launching Method (ILM); The Bridge over the Beauharnois Channel and the Saint Louis Bridge.

The bridge over the Beauharnois Channel is 2,550m in length, 1,455 of which consist of a box girder and the remaining of prefabricated beams. The metal section has twelve 81.90m spans with a 150.0m main span. The depth of the box girder is 3.675m. The work fulfilled by FHECOR Ingenieros Consultores in joint venture with IDEAM consists in the ILM project for the steel section of the bridge, which also includes the adaptation of the

steel structure for it to be launched and the design of necessary auxiliary elements. The main peculiarity of the launching stems from the fact that the launched section has a pronounced longitudinal slope and part of it coincides with a slant in the elevation. The latter greatly hinders the study of the different phases of the launch as well as the design of the auxiliary elements. For the crossing of the standard spans a nose shall be employed and for the main span, a mast with provisional bracing shall be used.

The Saint Louis Bridge has a total length of 244.0m split into four spans 52+70+70+52m and will be launched to its final position employing an auxiliary nose.



Canada/2013

Project data

Structural Type:
Composite bridges with box section
Location:
Montreal, Canada
Opening Date:
2013
Proprietor:
Ministère des Transports du Québec
Construction:
Joint Venture: Dragados - Acciona
Scope of Works:
Launching Project and
Technical Assistance to the Constructor