



Bridge over the Beauharnois Canal

Montreal, Canada / 2012

Structural type
Characteristics
Owner
Client
Constructor
Scope

steel and concrete composite double deck launched with stay tower
overall length 1456.0 m, typical span 81.90m, main span over the Canal 150.00m, width 2x14.22m
ministerio de transportes de quebec
A 30 CJV (Dragados - Acciona - Aecon - Verreault)
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construction support



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.



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