



Bridge (2A) for the South Metropolitan Highway Bypass. Bilbao

Bilbao. Spain / 2009

Client
Constructor
Scope

Saitec
Saitec
detailed design and construction support



The composite boxes for the roads cover maximum spans of 43.40m for ST-14, 44.69m for ST-16 and 40.00m for TR1. The minimum depth for the steel boxes is 1.20m with a 0.50m cantilever in the three solutions, with a 0.25 compression slab in the first solution and a 0.35 slab in the latter two (giving depth/span ratios of 1/30 and 1/22 for the ST-14, 1/29 and 1/22 for the ST-16 and L/26 and L/20 for the TR-1). Structures ST-16 and TR-1 have a greater compression slab thickness so as to bear platforms measuring 11.50m and 15.00m in the first case and 13.00m in the second.

The two metal footbridges have the same 6.35m width. The structure has been lightened employing corrugated steel profiles as a lost formwork in the deck construction.

A noteworthy point of interest in structure ST-15 is how future maintenance has been reduced by eliminating points of support and substituting the current abutments, which consist of load beams set on a reinforced grade area, for a solution corresponding to an integrated bridge solution. Another interesting point is how the existing pretensioning has been offered continuity in the final project.



C/ Barquillo 23, 2º | 28004 Madrid | España
T. (+34) 917 014 460 | F. (+34) 915 327 864
www.fhecor.com | fhecor@fhecor.es