CAS-MRIO

Shell Footbridge in Manzanares River Park
Madrid, Spain
2010

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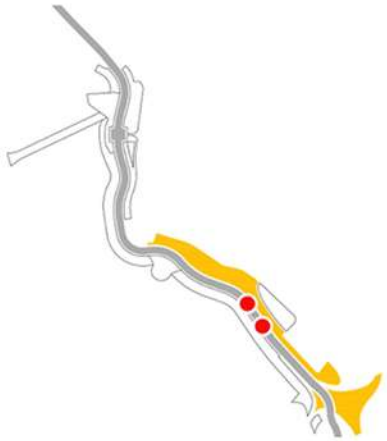
SHELL FOOTBRIDGE IN MANZANARES RIVER PARK
MADRID, SPAIN



Situation	Madrid, Spain
Client	Madrid City Council
Tipology	Bridge
Size	S I 49 m
Architects	Francisco Burgos Ruiz (23/05/1959). Colegiado COAM 7816 Ginés Garrido Colmenero (31/07/1962). Colegiado COAM 9103
Designers	Burgos & Garrido Arquitectos, Porras LaCasta Arquitectos, Rubio Álvarez-Sala Arquitectos & West 8.
Engineering	Fhecor
Date	Contest 2004 I Project + Construction 2005 - 2025
Photography	Imagen Subliminal (Rocío R. Rivas + Miguel de Guzmán) Ana Muller Jerome Musch

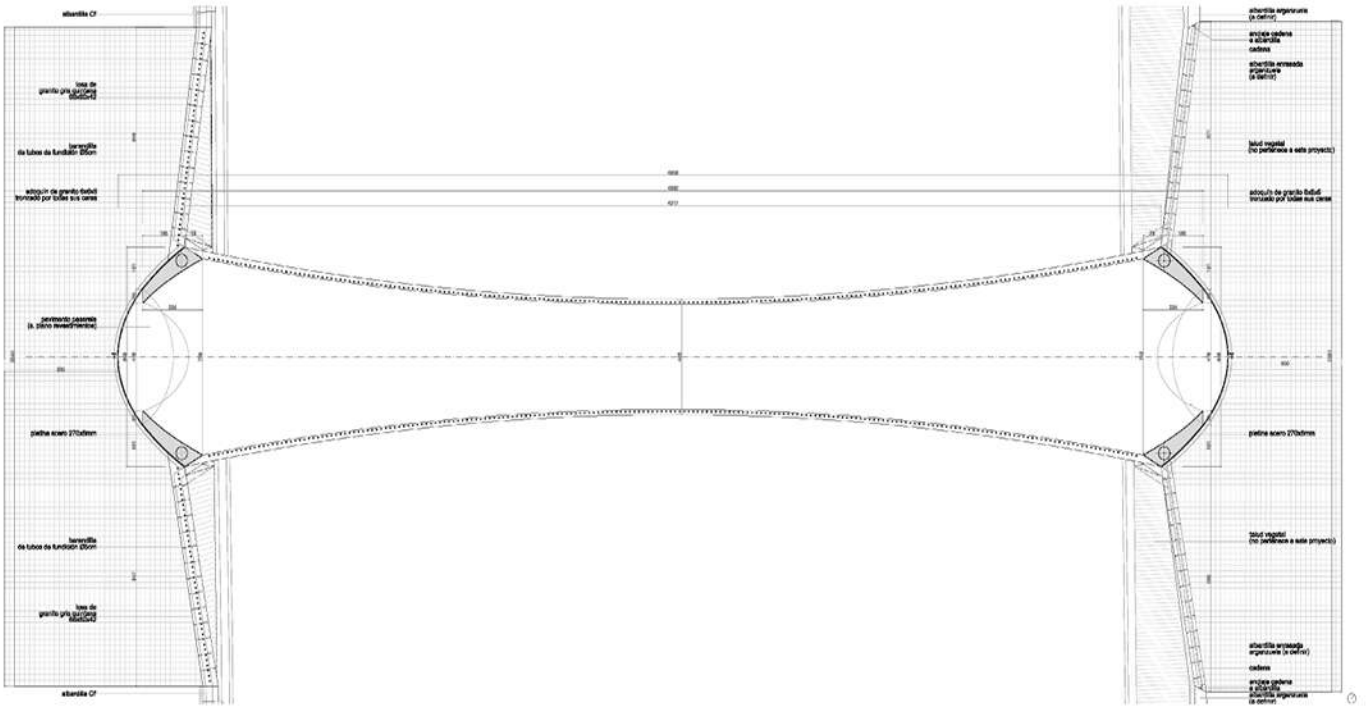
SHELL FOOTBRIDGE IN MANZANARES RIVER PARK

Descriptive text

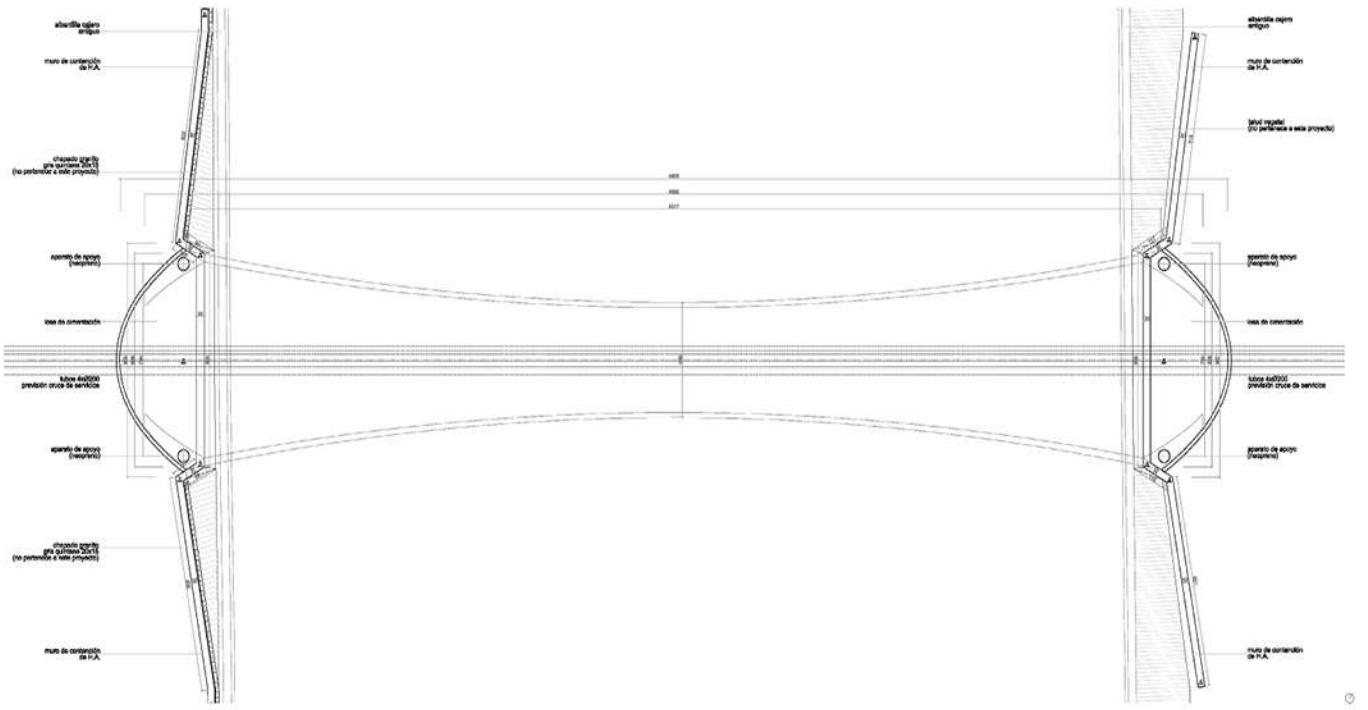
The twin bridges of Matadero are part of the Madrid Río project. They are located in front of the formidable industrial buildings of the former Matadero de Madrid, restored 15 years ago and transformed into the 'Centre for Contemporary Creation', and form two entrance spaces giving access to the Art Centre from the opposite bank of the river.

The bridges are built with a reinforced concrete shell poured in situ that spans 49 metres. From this shell hangs a very dense set of very thin post-tensioned cables - only 8.1 mm in diameter - the bridge deck, the structure of which is made of metal profiles. The shell at the top and the suspension cables on the sides of the bridge form an urban 'room' to be in, not only for crossing the river. A mosaic of coloured glass tesserae designed by Daniel Canogar was installed inside the shells. The mosaic represents the weightless bodies of residents of the Arganzuela neighbourhood photographed by Canogar as if they were the angels and cherubs on the ceilings of a baroque church, transmuting the sacred into the profane; and which are linked to the frescoes painted by Goya in 1798 in the nearby chapel of San Antonio de la Florida.

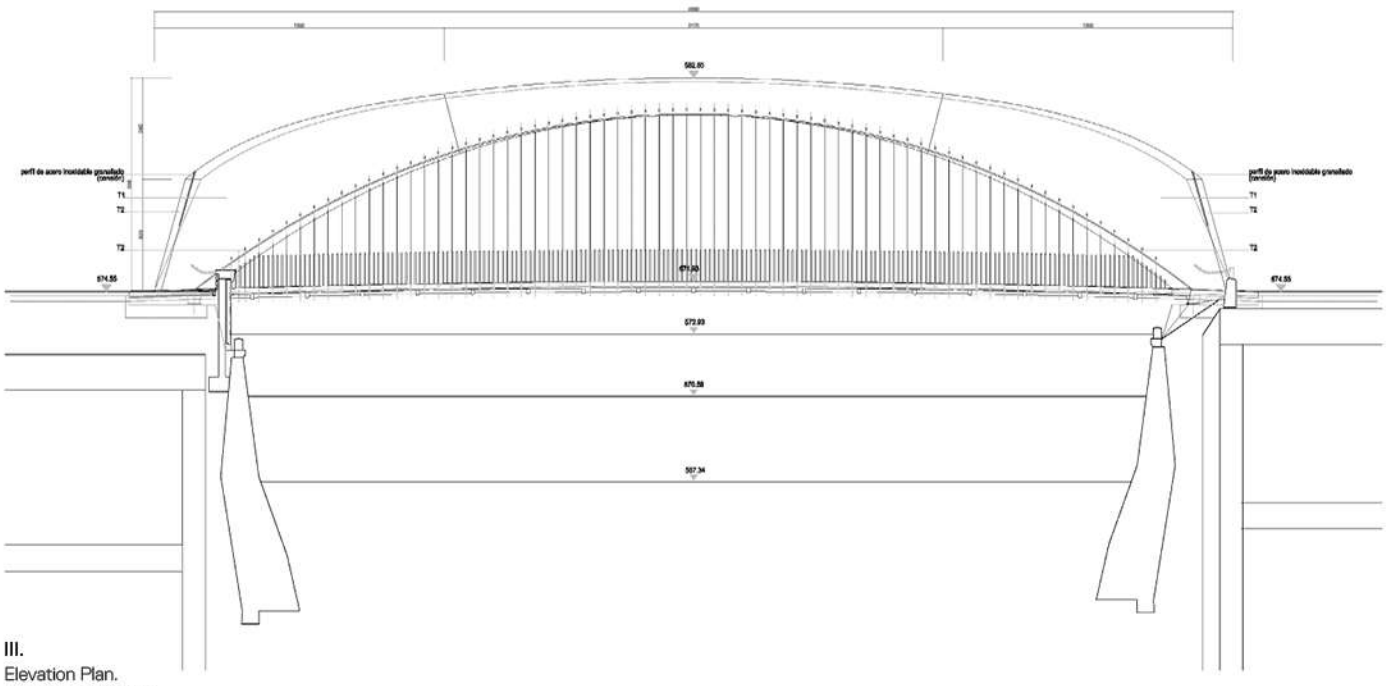
The bridges establish an ambiguous relationship with mass and weight. On the one hand, the shell becomes extraordinarily thin - no more than 7 cm at the centre of the span - as its double-curved shape makes it very efficient structurally, and the thinness of the suspension cables, which will be almost invisible from the outside of the bridge, makes the deck appear to float with an impossible slenderness flirting with gravity. On the other hand, however, the shell starts are thick and heavy, creating 'spans' that give access to the bridge and formalise its status as an enclosure.



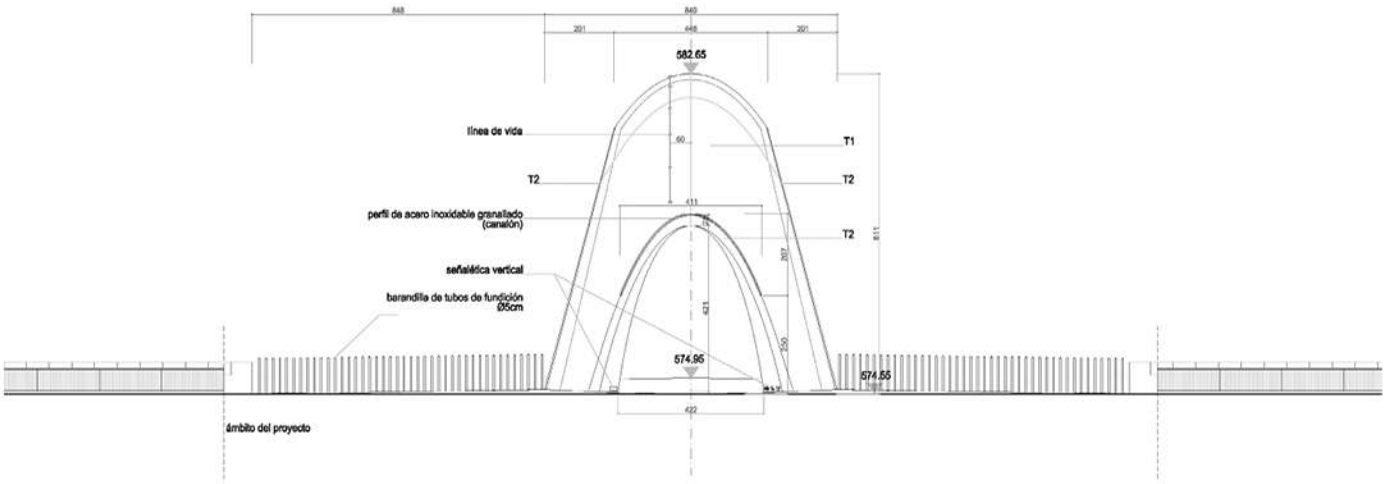
I.
Floor Plan.
Concrete Shell.



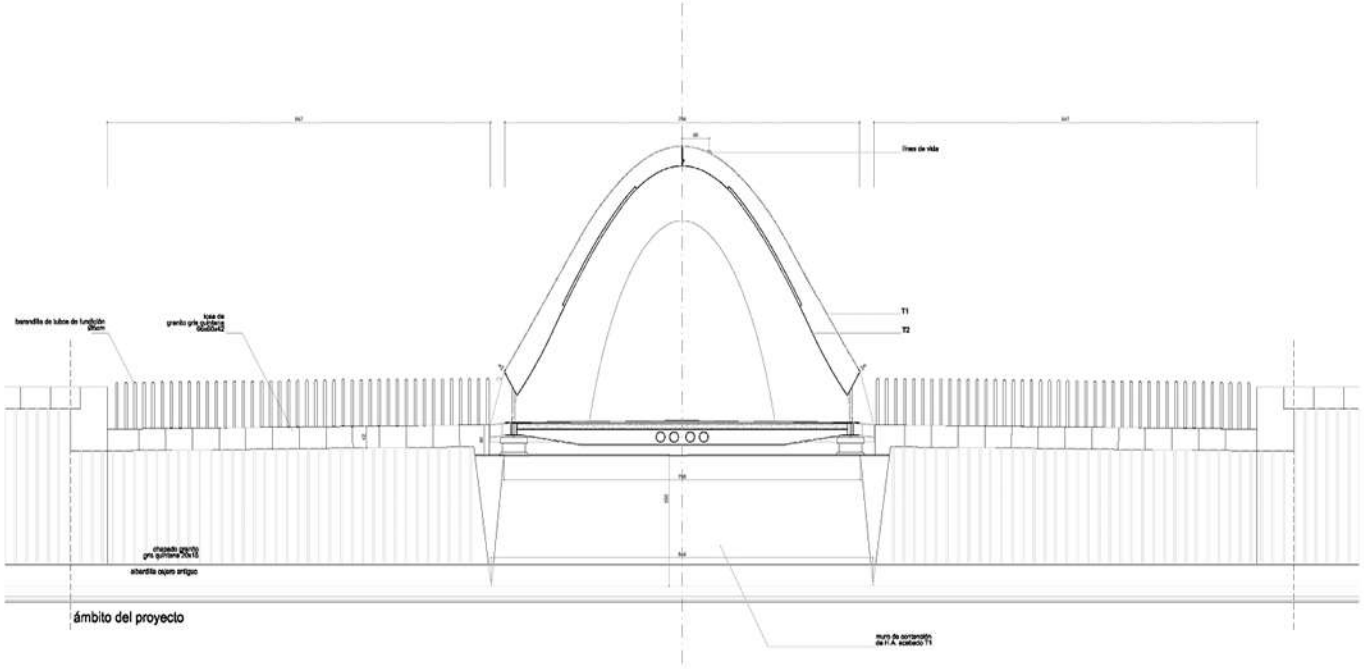
II.
Floor Plan.
Structure.



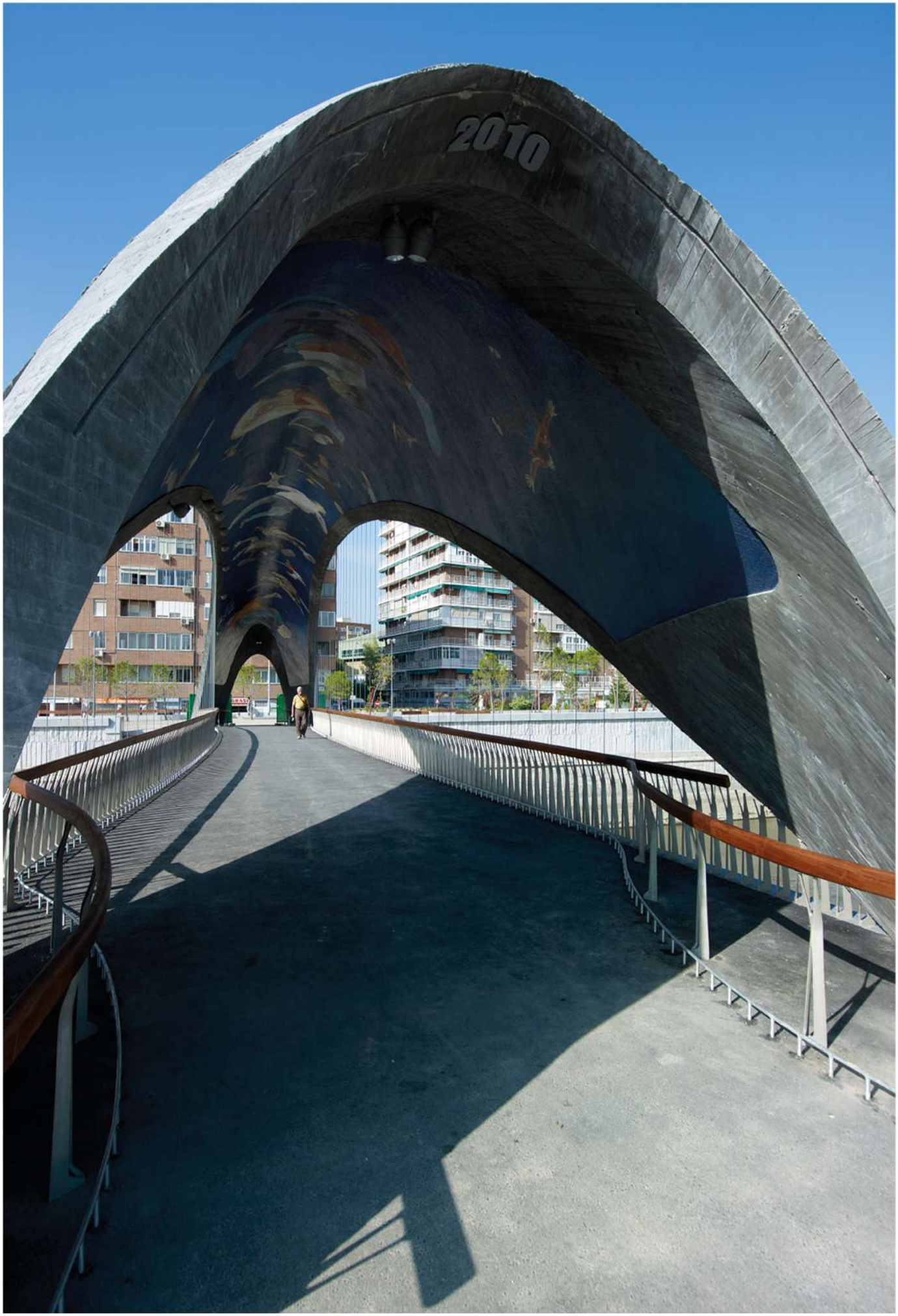
III.
Elevation Plan.
Footbridge Tensioners.



IV.
Elevation Plan.
Section.



V.
Elevation Plan.
Section.



MADRID, SPAIN

To obtain high definition photographs
and technical documents,
please contact:
pr@burgos-garrido.com
917 489 327

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