

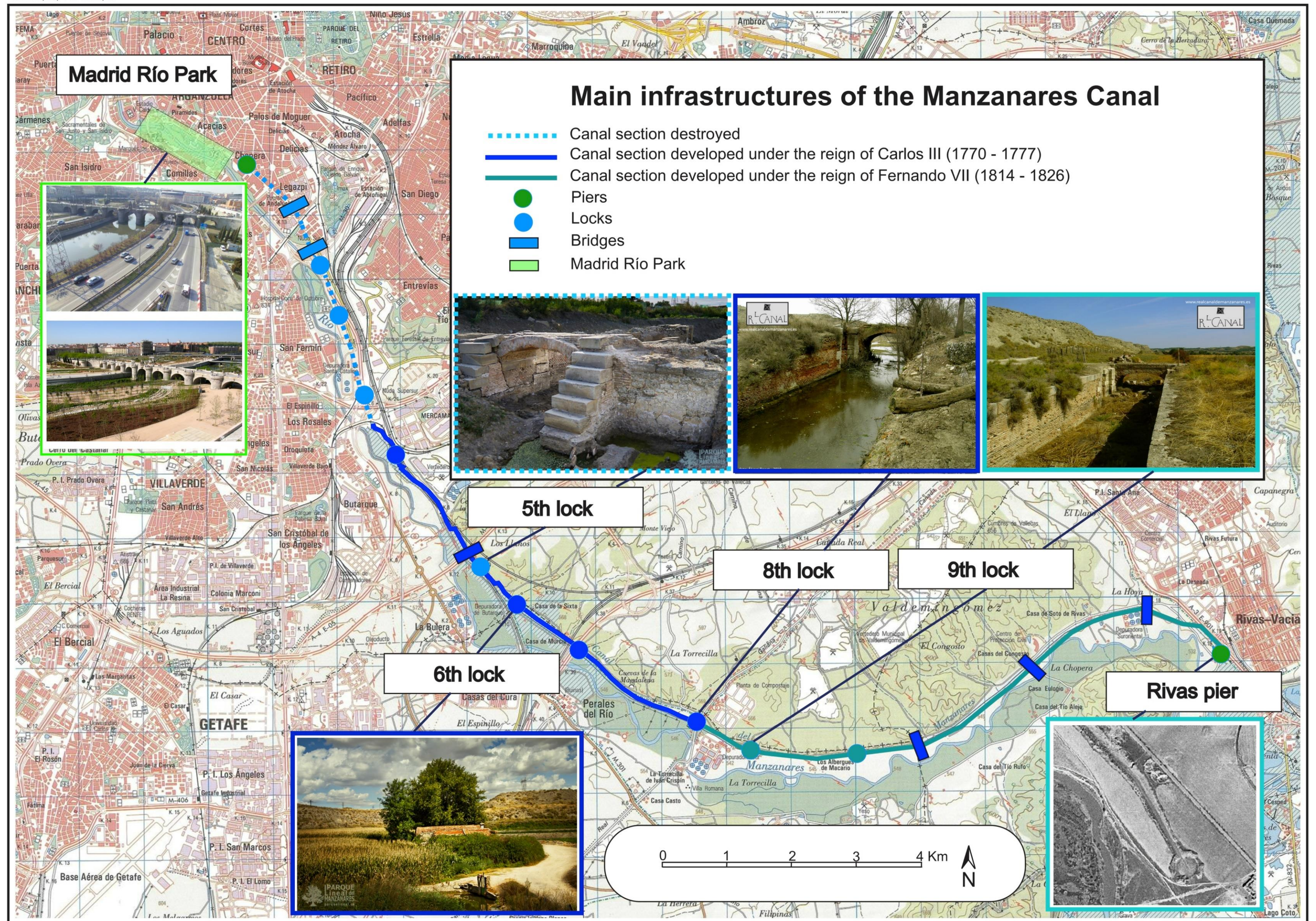
ENGINEERING, POLITICS AND TERRITORIAL PLANNING OF MADRID'S RIVER SPACES. THE HISTORICAL TRANSFORMATION OF THE MANZANARES RIVER THROUGH GREAT URBAN DEVELOPMENT OPERATIONS

Ingénierie, politique et aménagement du territoire des espaces fluviaux de Madrid.

La transformation historique du fleuve Manzanares
à travers des grandes opérations de développement urbain

437269,38; 4474054,26

456830,46; 4474054,26



16th – 19th centuries

20th century

21st century

EXPANSIONIST VISION

Felipe II canal project (1556)

One of the first expansionist works to be undertaken was the creation of the Manzanares Canal. The project, designed by the Italian military engineer Juan Bautista Antonelli, was to link up Madrid and Lisbon and involved creating a 20-kilometer long canal parallel to the Manzanares river in the municipality of Vaciamadrid, where a port of longboats was to be set up connecting the river with its tributary, the Jarama river to the east of Madrid. From there the Jarama river was to be used to reach Aranjuez and from there the navigable waterway would reach Toledo via the Tagus, the longest river in the peninsula. The waterway would eventually reach the Atlantic Ocean in Lisbon following the Tagus river.

Carlos III (1770) and Fernando VII (1818-1830) canal projects

The canal project was resurrected in 1770, when King Carlos III, with the financing of the Crown, set the costly navigability project in motion. Following the French invasion, between 1818 and 1830, King Fernando VII continued to construct locks as far as Vaciamadrid. However, a lack of funds and the inauguration of the Madrid-Aranjuez railway in 1851, which quickly showed itself to be more economically efficient than the canal, led to various river sections being cancelled.

UTILITARIAN VISION

The Manzanares River Act (1908)

It was not until 1908 that the Courts passed the **Manzanares River Act** (*Ley Básica del Manzanares*) in which the State decided to canalize the Manzanares through Madrid's urban section and to give the riverfront a facelift. When the call for proposals was declared void, the more modest plan, proposed by the Headquarters of the Canal of Castille, for the canalization of the Manzanares was carried out between 1914 and 1925.

The M-30 motorway project (1970)

After the civil war, in 1943, a new project sought to resuscitate the intentions of 1908 plan. These works meant **confining the river between concrete walls** within a section that was 40 meters wide and 4 meters high, thus reducing the area occupied by the floodplain and the first terrace.

In 1970, in response to the requirements of the 1929 Zuazo-Jansen Plan (*Plan Zuazo-Jansen*) and the General Urban Plan of Madrid (*Plan Bidagor*), of 1946, the city's first ring road (the M-30) was eventually built on both banks of the river. The new M-30 motorway, however, was to act as a **barrier, impeding direct access to the river** and so it became isolated and eventually invisible.

ENVIRONMENTAL VISION

The Madrid-Río Park (2006-2011)

The Urban Renewal Plan for the Banks of the River Manzanares (*Plan de Renovación Urbana del entorno del río Manzanares en Madrid*), which, between 2003 and 2007, saw the M-30 covered over and the drawing up of renovation strategies for the city's riverbanks, led to the building of the *Madrid-Río Park*, between 2006 and 2011. The *Madrid-Río Park* has ushered in a social and cultural transformation of the relationship between the *Madrid* and the Manzanares river. *Madrid-Río* works both as an **urban linear park** and as an **environmental and social corridor**, integrating its natural conditions and heritage including historical infrastructure, such as the bridges of Segovia (1582) and Toledo (1732) to the city.

However, the plan could have gone further and recovered more of the city's historical heritage, such as the remains of the original Manzanares Canal that were unearthed and then buried when constructing the M-30. Although the concept of a north-south running ecological corridor prevails, **Madrid-Río still has problems of connectivity with the lower river course**, in the municipalities of Getafe and Rivas-Vaciamadrid, where the **environmental quality needs to be improved** and where the **integration between natural resources and heritage has yet to be completed**.