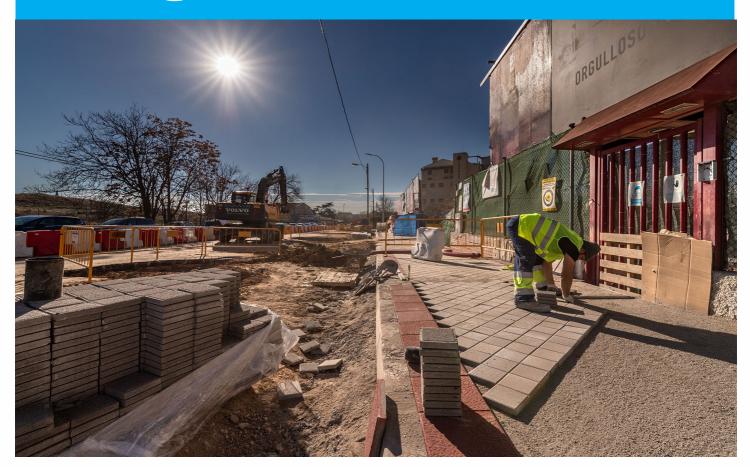
# soriguē



**Urban maintenance / Public roads and signage** 

# Remodelling of Avenida de La Democracia in the Puente de Vallecas district of Madrid.

Client	Work period
Madrid City Council	2021 - 2022

€1,035,514.58

Cost

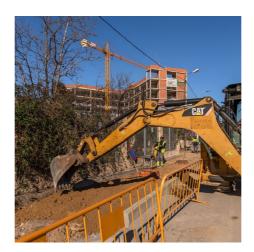
Location

Madrid

Scope

The actions carried out were aimed at the renovation and adaptation of roads, pavements and pedestrian walkways on Avenida de La Democracia, located in the Puente de Vallecas district of Madrid. The works have served to restore the functionality of the road, remove architectural barriers, create a new bike lane, rearrange the road intersections and create new parking spaces, thus improving functionality in terms of mobility and road safety.







#### **Description of the work**

The work carried out has improved both road safety and the functionality of the road. A bike lane, new pavements and parking spaces have been added, modifying the cross-section of Avenida de La Democracia.

The completed cross-section consists of:

- Pavement on the odd-numbered side of the road: variable width between 2.5 and 3 m.
- 2.5 m wide one-way bike lane, plus a 1.25 m wide pedestrian walkway.
- 2.5 m wide in-line parking.
- Three-lane road with a total average width of 9.6 m.

The following actions have been carried out:

- Creation of new pavements and a new bike lane, complying with current accessibility regulations.
- Upgrade of the existing road and renovation of its wearing course.
- Creation of an in-line parking lane.
- Construction of car park protection islands along the entire section of the road.
- Improvement of the areas surrounding the EMT bus stops, with the creation of new platforms complete with bus shelters.
- Planting of trees and the corresponding installation of a programmable drip irrigation system.
- Renovation of the public lighting network, with new underground conduits and installation of new poles and lamps.

- Upgrade of the sewer system rain water collection through the construction of a new network of pipes with corresponding manholes and gutters.
- Updating of fire hydrants in line with the new regulations in force.
- Installation of pedestrian fences, benches, litter bins and bicycle racks along the project area.

In addition, to carry out the works, Acsa, Obras e Infraestructuras has made the following environmental improvements:

- Use of improved BC35/50 bitumen with rubber from disused tyres (in accordance with Art. 25.18 of PCTGAM) on wearing courses.
- Paving with bituminous mixes made from the material from the milling of old hot bituminous mixes, in a proportion equal to 10% of the total mass of the mix, on wearing courses, and 15% of the total mass of the mix, on lower courses (in accordance with Art. 40.63 of the PCTGAM and Art. 542 of the PG-3).
- Paving with a recycled concrete (RC) base made of recycled coarse aggregate from crushed concrete waste with a recycled coarse aggregate content of 20% by weight of the total coarse aggregate content (in accordance with EHE 08).

 Upgrade and update of traffic lights and road signs for traffic management.







#### Main service details

#### Surfacing

2,183 ml Pre-cast concrete kerbs (types I, III, IV and IX).

2,697 m<sup>2</sup> 15×15 Hydraulic tile flooring + 30×30 bush hammered terrazzo tiling.

1,263 m<sup>2</sup> 20×10×6/8 cm pre-cast paving stone.

14,063 m<sup>2</sup> HMA AC22/32 + AC 16/22.

396 m² Compotraffic multilayer continuous paving.

#### **Lighting network**

1,514 ml Underground conduits.

23 units 10 m tall AE-21.1 poles with 1.5 m arm.

23 units 150 W Class I LED enclosed lamps

#### **Traffic lights**

322 ml Underground conduits.

15 units CL-TN-2400 traffic light columns

3 units 6 m traffic light poles with 1.5 m extension.

1 unit Central communications enclosure.

2 units Traffic control enclosures.

4 units Double loop vehicle detectors.

#### **Drainage network**

86 ml PVC 315/400 mm SN8 corrugated pipe.

3 units Manholes.

20 units Drainage pits.

### Landscaping and irrigation network

41 units 16-18 cm Celtis 1 unit DN100 mm hydrant. australis.

2 units Irrigation phases with single-station timer

798 ml Secondary irrigation network conduits.

51 units Integral dripline rings.

## **Network of hydrants**

#### Signage

3,206 ml Longitudinal road marking with white acrylic paint.

1,090 m<sup>2</sup> zebra crossings/symbols with white thermoplastic paint.

52 units Level 2 reflective signs.

22 H-75 markers.

1 unit European system information post, 1 section.

1 unit European system information post, 5 sections.

#### **Street furniture**

8 units MU-51 bike racks.

15 units Cibeles 50 L polyethylene litter bins.

24 units MU-54 recycled rubber bollards.

7 units MU-16 benches.

113 ml MU-46A Sol high fence

13 units MU-35 J aluminium bollard.



