

Repair of the **R**oof of the **G**e-Quinto water purification plant

General information

- ✓ Years: 2002-2007
- ✓ Customer: Genova Acque SpA
- ✓ Value of work: € 2,200,000

Architectural and structural executive design of a roof fitted out as a terrace garden for public use.

Characteristics of the project

The executive redevelopment project for the Genova-Quinto wastewater treatment plant, while involving work of a plant engineering nature, included the architectural reorganization of the building as a whole, and particularly the roof, fitted out as a terrace garden for public use.

The project, with the need to totally redesign the structure of the roof, included the complete renewal of the garden decoration, seeking to recompose its general design according to criteria of formal elegance, flexibility of use, durability of plant and materials, and good maintenance.

The roof includes a utilities room and a small bar space, with an adjoining store room and toilet facilities accessible to handicapped persons available for those using the terrace.

A wooden deck is positioned along the perimeter of the bar space in order to create a patio area shaded by extendable awnings. There is also an area for playing football and an equipped children's play area.

The new design of the roof has alternating green areas and large paved surfaces.

The greenery

A complex system with rocks and green pockets was created all along the sea front, in front of the railings: an undulating flowerbed with openings in the concave areas allowing rainwater runoff from the terrace. It features halophilic vegetation typical of cliff areas.

An area with waves of earth created with containment walls of heights varying from 1.10 m to 0.40 m was proposed for the central section.



Photograph of the new roof arrangement on the day of inauguration

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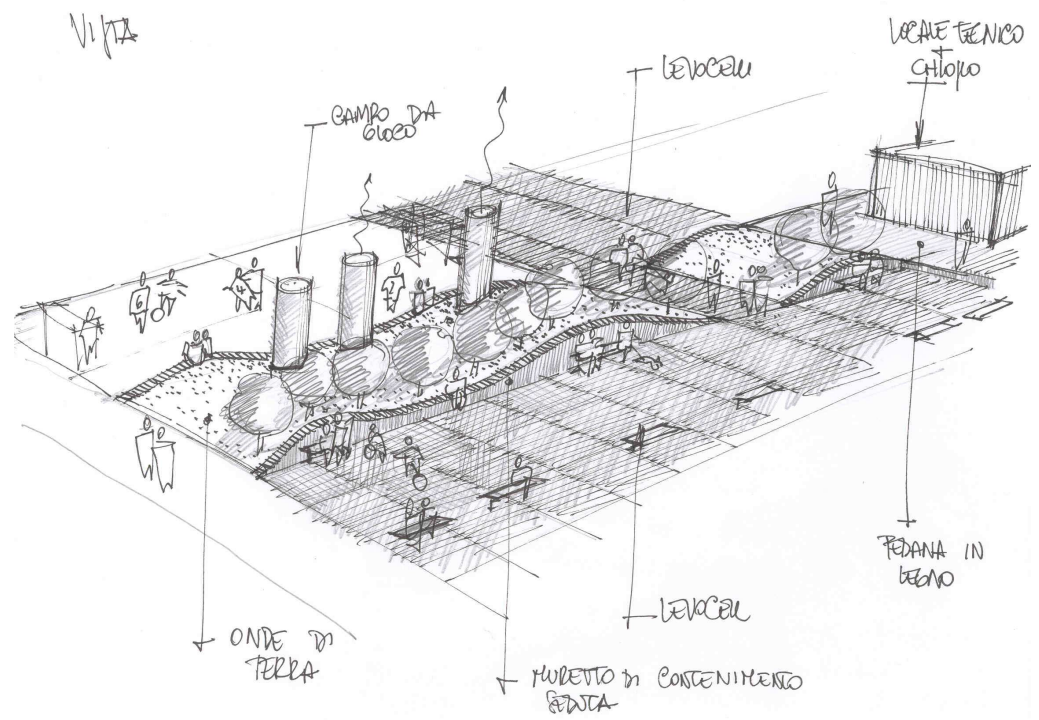
The waves of earth were planted with Mediterranean shrub species, interspersed with ground cover plants. At the point where the three chimneys emerge, the shrubs reach greater heights to assist with their environmental integration. The three chimneys from the underlying plant were clad with mosaic tiles in various shades of blue.

Along the boundary with Via Quarto, it was decided to create a fifth green barrier using shrub species of different sizes; the height of the vegetation therefore remains below the level of Via Quarto.

The paving

The paving was created in sandstone along the pedestrian perimeter ring to allow the creation of a small bicycle circuit. The central areas are paved with different materials, depending on the various uses; play areas are completed covered with shockproof rubber material while the paved area is covered with levocell.

A wooden deck was placed over the areas exclusively dedicated to rest, creating a platform for games, walks and relaxation.



Design sketch of the green area characterized by waves of planted earth at variable heights, accommodating the emergence of the chimneys and providing seating.



Green pocket arrangement along the boundary with the cliff: this is characterized by halophilic vegetation typical of cliff areas, which reaches a maximum height of 50 cm and creates pleasant colour effects.