Hydropuncture

Publicly-accessible water retention and treatment complex, Mexico City, Mexico

Summary and appraisal of the project by the jury

Working with the topography of the site, this project reintroduces soft surfaces for water retention into a city that has all but eliminated them. The jury was impressed by the equal attention given to technical considerations of water management, social provision of public space, and the economics of construction as well as long-term maintenance. Moreover, the design is spatially compelling — by articulating the logic of the water, it creates an attractive, dignified public realm in an area lacking basic infrastructure.

Further authors

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Resumen y apreciación del proyecto por parte del jurado

El proyecto trabaja con la topografía del lugar y logra reintroducir en la ciudad la utilización de los suelos blandos para la retención de agua, que habían sido prácticamente eliminados. Uno de los aspectos que impresionó al jurado fue el proyecto de los espacios técnicos del manejo del agua, al uso social del espacio público, la economía de la construcción, y el mantenimiento a largo plazo del diseño. Además, el diseño es convincente desde el punto de vista espacial, ya que articula la lógica del agua y logra crear un entorno público dignificado y atractivo en una zona que carece de infraestructura básica.

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Project data

Project group: Landscape, urban design, transportation infrastructure and public utilities
Client: Delegación Iztapalpa
Project background: Public commission
Planned start: December 2016

Image 1: Located on the hillside of Sierra Santa Catarina, the site directly serves 28,000 inhabitants in urgent need of recreational spaces and water by removing the borders and placing a transparent permeable fence. The park becomes a sustainable water management landmark located in an important crossroads. It fosters street life by adopting Paraíso Street and turning it into a shared mobility thoroughfare with commerce, reducing crime in what was formerlya desert on the road leading to the site.

Image 2: The site will become a soft water management infrastructure powered with solar energy. It will filter 68,000 m³/day of waste water will be treated for its further use in a system of public toilets that serve those that, although having the facility, do not have access. Furthermore, the park will store enough water to cover 3½ days of the area, augmenting open space from 1–3 m²/person.

Image 3: The site is surrounded by formula Terrán Parque, old cisterns, view towards Sierra Santa Catarina.

Image 4: The park stitches together the community, emphasizing flows. Park program underneath.

Image 5: Cross section relating sidewalk and park. Underground runoff collection system.


Image 7: Street pavement transition from the sidewalk to the stairs.

Image 8: Each public square is represented by an endemic tree species, providing it with identity.

Image 9: Social center roof terrace view, southeastern access. Endemic plants adjust to climate conditions.

Image 10: Adding a museum and a library with cafeteria are part of the community’s proposals.