T/E/S/S ATELIER D'INGÉNIERIE



Rotary greenhouse

Location: Square des Tulipes, Paris XVIII

 ${\it Architect: Mutations Architectes + Green Resistance}$

Client : Jardins du Ruisseau + Mairie de Paris

Package : Façade et toiture vitrées, mur trombe opaque, ossature bois

Scope: Conseil technique et mise au point de l'appel à projet

Date: 2019-2020

The Jardins du Ruisseau were conceived of in 1998 and inaugurated in 2004. Thanks to a group of residents, work was done to rehabilitate an abandoned and neglected section of the Petite Ceinture railway at the Porte de Clignancourt. Nearby, the Square des Tulips is at the corner of Boulevard Ney and Rue du Ruisseau, at the heart of a redeveloping neighborhood. Previously inaccessible to the public, this 125m² plot offered little to the residents, despite the lack of accessible green space in the area. The Mayor of Paris, who owns the land, mandated the association to take over management of the little garden, and to develop and reclaim the space for agricultural and educational purposes.

The goal was to build a greenhouse suitable for all seasons, sending a message to the city about the role of green space and nature in the urban environment. The constraints of the small plot and surrounding buildings led the team to imagine a vertical greenhouse. Planting boxes are placed on motorized carousels, enabling them to be moved to receive light and to create an optimal growing environment. The intentional use of materials adds to the sustainability of the project, using biosourced, local, or recycled materials. The greenhouse can accommodate 35 people at a time, and will host regional plants due to the excessive climatic needs that exotic plants require.

The Serre du Ruisseau is a community greenhouse, showcasing environmental and cultural activities, previously located in a trench in the Petite Ceinture. The aim of the project is to be a tool in the greening of the city and educating the residents, as well as producing seedlings for residents. Relying on low-tech systems to operate the greenhouse, it ensures that the greenhouse will remain a cost-effective and user-friendly asset for the community.

The structure is made of wood, with vertical mullions supporting the north wall as well as the glazed facades on the east, west, and south side. The transparent envelope to the south makes use of reused materials when possible, and has an opaque wall on the north side made up of earth and straw blocks, sealed with plaster.

T/E/S/S assisted the Jardins du Ruisseau with the technical and architectural definition of the greenhouse. The agency Mutations Architectes, founded in 2014, designated the winner for the competition in association with Green Resistance, a collective of landscape architects and builders.

The collaborative project is supported by the Île-de-France Region, the City of Paris, and the Léa Nature Foundation. A crowdfunding campaign is also underway.

For more information : http://lesjardinsduruisseau.fr/square-des-tulipes/