

A Green Infrastructure Project for the Central Market – Mercado

In September 2015 the Globo Television Network contacted three schools of architecture: FAU USP, Escola da Cidade and FAU Mackenzie, to join VERDEJANDO CHALLENGE, on of the actions of Verdejando Project, within the Program Globo Universities. The project consisted of the television monitoring the process design of mentioned three schools, in a series of special reports on the issue of the green in São Paulo City. It was the third year that the series were displayed on local TV news of São Paulo, with the novelty of the participation of mentioned university teams to discuss the shortage of green and its impact on changes in the urban climate as well as to make proposals for possible interventions in combating the effects of these phenomena. The LABVERDE - Green Lab - was nominated to represent the FAU USP between the other two schools. Thus, each school chose an area in São Paulo as a subject for study and future scenarios propositions.

The region of Mercado as the choice of the LABVERDE FAU USP team.

The region of the Municipal Market of São Paulo, popularly known as Mercado, is characterized by intense movement of vehicles and pedestrians, the transit of goods and transport of wastes. As a result of intense transaction services and trade, all the open spaces around were occupied by roads, sidewalks, parking spots, which made the surface, completely waterproof with total suppression of vegetation, including the banks of Tamanduateí River Canal.

That region can be considered the center of the city heat island, suffering all the effects of temperature discomfort, humidity, ventilation and air quality that such a phenomenon brings. Users of that region are also affected by the preferred occupation given to the vehicles on tires, making unsafe pedestrian movement and access to that market. It is necessary to add to that situation the total annihilation of the original landscape, including Tamanduateí River and its banks, as well as the disqualification, due to inadequate use of open spaces with its significance and value, of the architectural and urban heritage of the Market building and its surroundings.

The challenge was to imagine a green landscape, able to revitalize and initiate the recovery of that site. Thus, an exploration of the possibilities to bear a new cover of vegetation was held, aiming to provide a better environmental comfort, safety and easier

movement and access. Within the Green Infrastructure concept, the future scenarios will accommodate the infrastructure of rainwater, using the bio-retention in landscape design, opening simultaneously, new possibilities of use and appropriation of open spaces that surround the market. The target of the vegetation re-introduction, that can be developed vigorously, is to offer the improvement of the microclimate conditions, promote the use of pedestrians and contribute to a viable example to the goal of producing a more sustainable and resilient city to climate change, starting with an iconic and memorable site of São Paulo City.

As the surroundings of the São Paulo Municipal Market include public open spaces ranging from Rua da Cantareira, Rua Com. Assad Abdalla and Avenues Mercurio and Estado, with the banks of Tamanduateí River Canal, the work consisted of a preliminary study of landscaping in area 38,795 SQM, including an indication for topographic reshuffle with naturalized drainage scheme, definition of access, floors, urban equipment, street furniture, besides the indication, quantification and location of the vegetable species.

Transformation: the Mercado and its surroundings

Originally located in the floodplain of Tamanduateí River, near the confluence of Anhangabaú River, at the foot of the hill where the City of São Paulo was founded, the existing building, designed by the Office of the architect Ramos de Azevedo in the 20's of the last century and inaugurated on 25th January 1933, became an icon of the city transformation project in a large metropolis. Renovated in 2004, the building has regained its majesty, which, at the same time, stressed the deterioration of buildings and open spaces of its surroundings. That happened as a result of a public policy vision that focused only the building project in isolation, ignoring the strategic role of the surrounding open spaces and infrastructure.

Thus, the motto that the LABVERDE FAU USP team took over for the project was the revision of that logic and imagine new possibilities for the Building links, as a living organism, in its relations with the uses and occupations of the surroundings. Aiming to do so, a strategy of setting up a green and blue configuration plot was taken, which originated in the building itself, aiming to spread from its immediate surroundings to achieve more structural elements of their ecological and socio-economic bases, with the target to have a real sustainability in the wider urban scales.

The orientation of the building, aligned to the cardinal points, inspired approaches to its virtual expansion and joints with the city on 4 fronts: Square North, South Square, Boulevard Cantareira and Boulevard Tamandateí (Figure 1)



Figure 1 – Mercadão General Plan and its near surroundings; North Square, flanked by Mercurio Avenue; South Square, flanked by Rua Comendador Abdalla; West Side, Boulevard Cantareira; and, East Side Boulevard Tamandateí.

The surrounding open spaces are considered as multifunctional, accumulating infrastructure and urban use functions, overlapped and simultaneous, which may be characterized as:

Blue Plot: drainage and water treatment in retention basins, semi-porous floors and buried pipes directing waters to the existing galleries and canals.

Green Plot: defined by the tree canopy and rain gardens.

Yellow Plot: connections and circulation in a shared way of pedestrians, bicycles, transport of goods as well as public and individual transport.

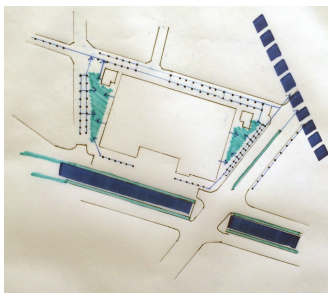


Figure 2 – Blue Plot: retention basins in light blue, dots and blue lines represent the collection and directing of waters, the continuous blue band represents Tamandateí canal and the dashed band the Anhangabaú River gallery.

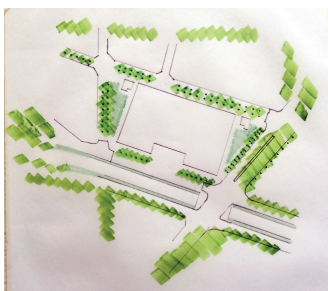


Figure 3 – Green Plot: composed by the canopy of trees, their planting boxes and rain gardens.



Figure 4 – North Square



Figure 5 – Boulevard Cantareira



Figure 6 – South Square



Figure 7 – Boulevard Tamanduateí view

Future scenarios

The phase described above can be expected to an intervention that can be done within one year, after the establishment of the Full Project of the Green Infrastructure. Anyhow, the Mercadão Project may become the starter for a future urban transformation that makes the City of São Paulo more friendly to the citizen and with the natural processes that occur on that site. For this event, there is no way to not considered an offshoot of the initial phase that unites the Mercadão the other side of the Tamanduateí River, having a pedestrian walkway linking their functions to the future installations of SESC and to the Parque Dom Pedro, after a properly recovery.

It can also be imagined a future scenario with the de-pollution of Tamanduateí River accompanied by the implantation, after the banks are recovered, of a linear park, starting at the river springs in Mauá City, and get to where its waters meet the Tiete River, next to Anhembi Park. It is possible to envisage a final phase, in which the Tamanduateí banks may harbor containment ponds and river beaches, at the foot of the hill the Patio do Colégio, where the City of São Paulo was founded and, why not, see small boats gliding its waters with the passenger transport function and pleasure, as can be seen in rivers of cities like Berlin and London. Why not?

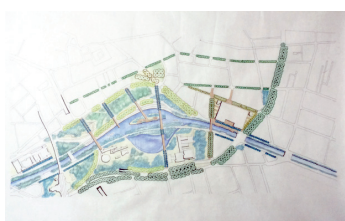


Figure 8 – Future Scenario 2050: Mercadão as part of Tamanduateí Park