

HELLENIKON METROPOLITAN PARK AND URBAN DEVELOPEMENT
ATHENS. 2004
First Prize Winner

Client: Greek Ministry of Environment

Site: Hellenikon International airport, Athens, Greece

Size: 530 hectares

Cost: € 700 millions

Design Team : David Serero and Elena Fernandez | Iterae Architecture with Philippe Coignet | OLM Landscape Architect and Erwin Redl, Artist

Twenty kilometers from Athens on the Greek coast of the Mediterranean Sea, the former Hellenikon airport closed in 2001 and was used to build the Olympic village of the 2004 summer Games. The Greek Minister for the Environment sponsored an open international competition to find the "21st century urban park of exceptional scale and remarkable design". The program included housing, offices and social services and a park with "green areas, cultural, sports and leisure facilities" on a 530 hectares site. The brief asked for the new urban development to generate enough income to finance the park and called for the restoration of the Saarinen main terminal built in 1960.

In April 2004, the competition results proclaimed winner the Iterae/OLM project, which will transform the airport site into an urban park, possibly the "biggest park in Europe" as announced by the Minister of Environment on February 4th 2005.

1. Concept / Soft grounds

The project is about developing a design process and a time sequence strategy based on rainwater collection and topographic modifications. A series of six corridors of 200 to 300 meters wide is established to link the existing city on the upper level to the coastline sixty meters below. These corridors or "softscapes" integrate a new drainage system as well as a road network, bicycle paths and walkways.

The project focuses on the construction of a new "ground", in both a formal and a theoretical way. The goal is to generate the Hellenikon Park from discrete topographic modifications based on former water creeks channels destroyed by the construction of the airport in 1950.

The modified topography is both a membrane to cultivate the soil and a structure to organize the new urban program: housing is developed in between each corridor in order to create a catalyst for built residential, commercial and leisure development. The geometry and materiality of this new ground fluctuates from soft to hard, horizontal to oblique, physical to visual aspects.

2. Strategies / Interacting logics

The design strategy maximizes and concentrates the effort of transforming the former airport along internal spines and edges at specific locations.

– Softscapes

The channels or 'softscapes' are integrated systems articulated around three main components: ground, water and planting. Along them, a program of outdoor activities, cultural events and mixed-use urban development will structure the 550 hectares. On the traces of natural irrigation are patterned the Softscapes, which link the city and the park, combine soft programming and a water management strategy. On days of high precipitation, water flow is channeled, delayed and temporarily stored along those lines. A series of retaining walls, embankments and terraces, assembled continuously in response to local contiguity of these spines, generate the surfaces of the Softscapes.

Rather than projecting an artificial landscape on the site, this system uses existing conditions and establishes the root of a natural ecosystem, which channels and distributes natural resources to the park vegetation and reduces the park's maintenance. The northern softscape integrates the new highway using a set of berms and trees for acoustical protection and visual screening.

- Hardscapes

The huge scale of the runways and the remaining airport facilities and concrete navigation devices are conceived as "objets trouvés" to define the main visual and circulation axis of the park, in a similar way as the "great perspective" of Le Nôtre in Versailles.

Out of the three main runways, the central one is kept to create an internal pedestrian boulevard. It ties together different areas from Glifada to Alimos, connecting high residential areas to middle class zones.

The East-West runway, partially covered by the Olympic village, is extended towards the sea, bridging over the highway to create a direct connection to the shore and the Aghios Kosmas sport facility. The large concrete decks are preserved and create internal pedestrian boulevards. The lawns between the former runways are re-investigated as a series of new "platforms" for lounging, playing, contemplating.

- Planting / phasing strategies

The scale of site and the program complexity compelled us to develop the project in successive phases. The topographic transformations will be the first to emerge, acting as spines across the park. Once established, vegetation, circulation and program will expand and thicken them on a time basis.

The planting strategy is developed around the strict use of on-site collected rainwater and around a limited number of species. Pioneer plants (garrigue type) will be implanted first and will colonize the site to prepare the ground for mature trees (pine, olive and oak) in function of wet and dry areas, creating a new ecology and habitat type. This process will give a controlled diversity to the softscapes, reinforcing the scale of the runway.

The design aims to organize a set of conditions and devices (topographic transformations, water systems, and planting strategies) that will 'fabricate' the park and develop an integrated system in relation to changing ground conditions over a twenty-year period and not to predict every aspect of the 550 hectares.

- Edges / Maximize Frontage

Maximizing the city frontage to the park we increase the interaction between the park and the new buildings and therefore the real estate value of the development. Like the edge of a river in a delta, which draws between ground and water a border of infinite length, the progressive corrugation of the urban edge stretches the surface of contact between the urban and the open space. A set of macro and micro corrugations of the park's edge triggers inversions between park and city.

- Urban development / Deep Intricacy

On the fluctuating boundaries between the park and highways leading to the airport, 120 hectares of mixed-use urban development is programmed. The city is not merely extended on the site but is rather seen as an artificial growth of the park. This strategy implies setting up logics of development based on the corrugation of the frontage to the park, the optimization of solar protection, and the proliferation of open terraces.

This process will generate a new topographic condition, an elevated park - "Jardins en hauteur", which duplicates and extends Hellenikon Park. This process of inversion is part of the ambition of the project to deeply intricate the park environment with

the new urban fabric.

- Park Activation / Programmatic Noise - interferences

The existing Hellenikon site is composed of many incoherent structures: two churches, an airport hospital, a fireman house, a control tower, some natural flora, the Saarinen Terminal, five concrete runways, a baseball stadium, a fencing alley, an antique temple, a waste treatment plant, an Olympic square, a salted water kayaking arena. In contrast to Villette, all of this fabricates a surface punctuated by disparate and incoherent events that triggers unexpected encounters, in a kind of "cadavre exquis".

Notions of event and activation are not based on the projection of an abstract grid of points, but instead on the idea of keeping all these activities alive. The project plans also to reclaim airplane hangars and on-site abandoned facilities, points of resistance to the topographic manipulation, and convert them into museums, theaters, markets halls, commercial center. The morphing of the ground will generate undercuts, points of differentiation, support for specific interventions like kiosks, picnic areas, shading booths, newsstands...

The location of these elements is not master-planned but transformed from the existing "grounds" in order to create maximum exchange, between these activities and the open space. We envision them as a field or "programmatic noise" that will unfold and punctuate indifferently with Hardscapes and Softscapes.

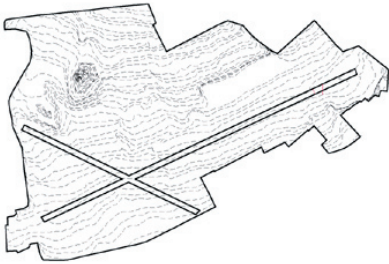
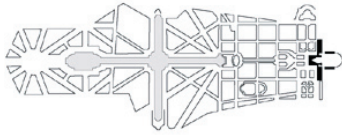
- Circuits / Experience

The main peripheral circuit of twenty kilometers (the equivalent of a half-marathon) will structure the different entrances of the park towards several smaller circuits set on the Hardscape system: baby strollers, biking, roller-blades or jogging. The degree of curve, ground type or the length of path will influence the type of activity associated with it the motion.

"Cool" circuits will use shading devices and misting systems to allow parts of the park to be engaged by everyday uses. These circuits will allow the site to be experienced in multiple ways.

- Art installation / Light pools

The lighting typology used for planes and the airport is converted into a guiding system for visitors. At night, some of the open areas adjacent to the former runways are reused as light pools, providing a unique experience of landscape. Each light point is a cluster of high-brightness LED's set in a grid pattern powered by a matrix of both structural and electrical wires. Each color indicates a particular area for entertainment, sports arenas, museums or rest areas.



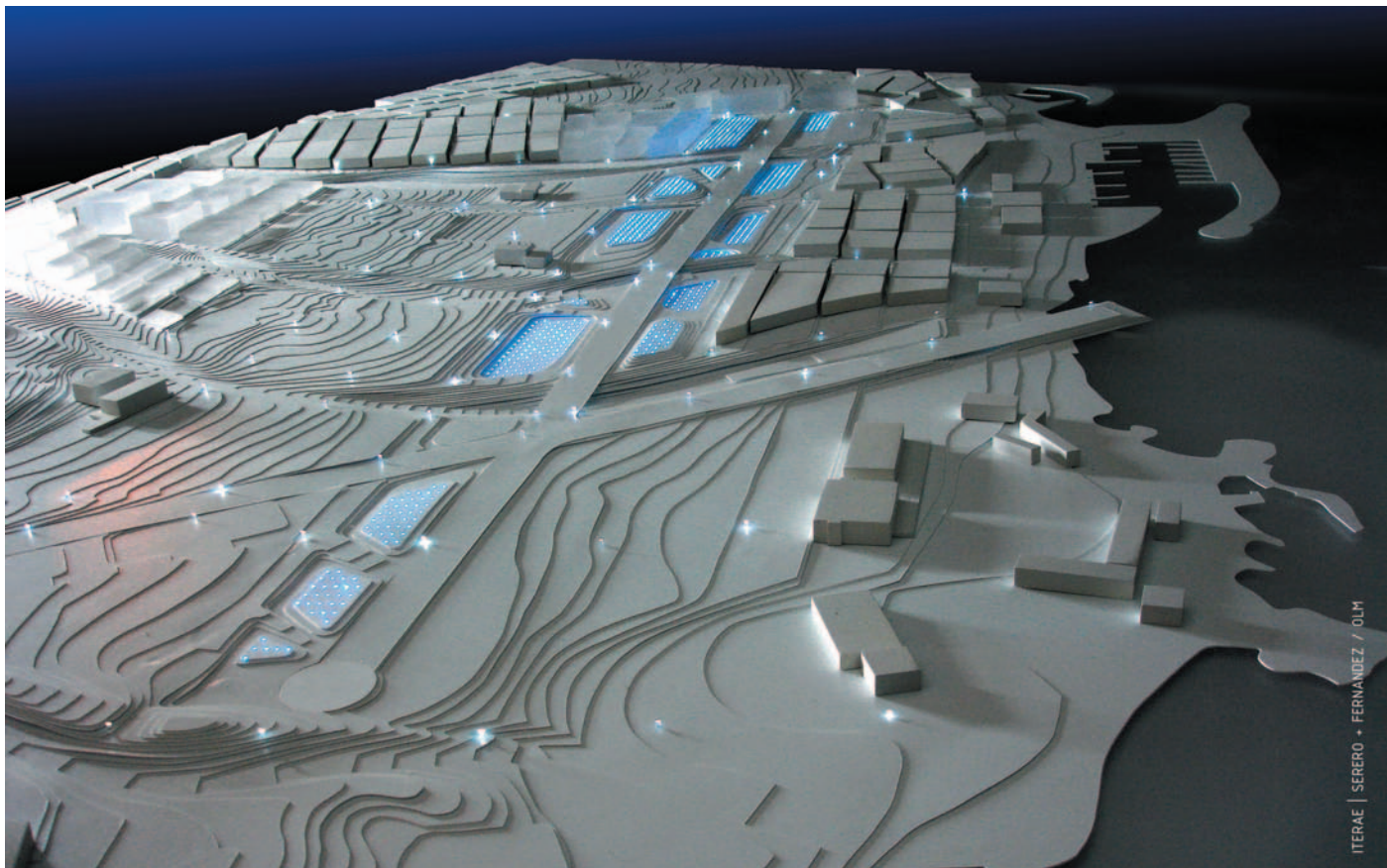
Size of Hellenikon Airport site (bottom) in comparison to Central Park and Park de Versailles



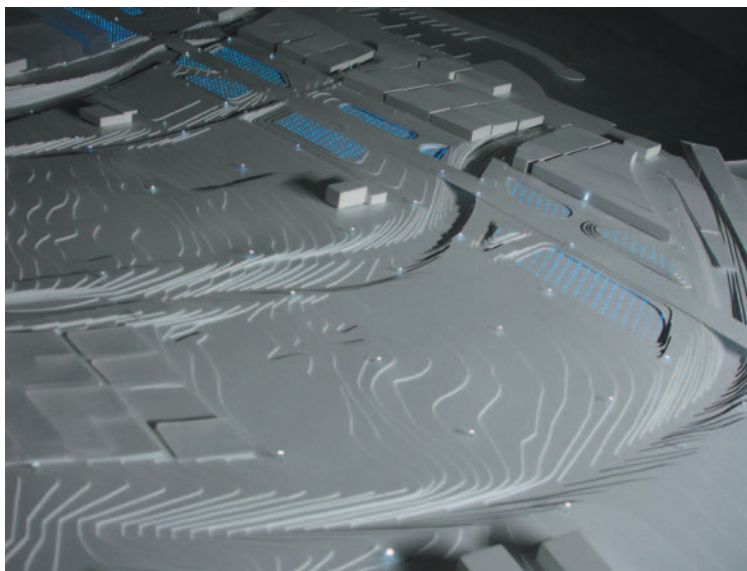
Existing site of Hellenikon Airport



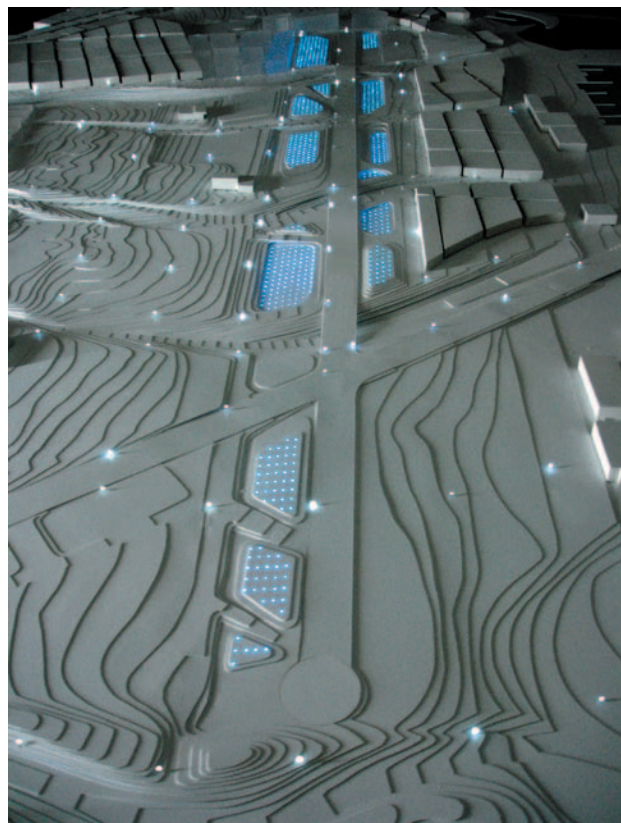
Park and Urban development Proposal



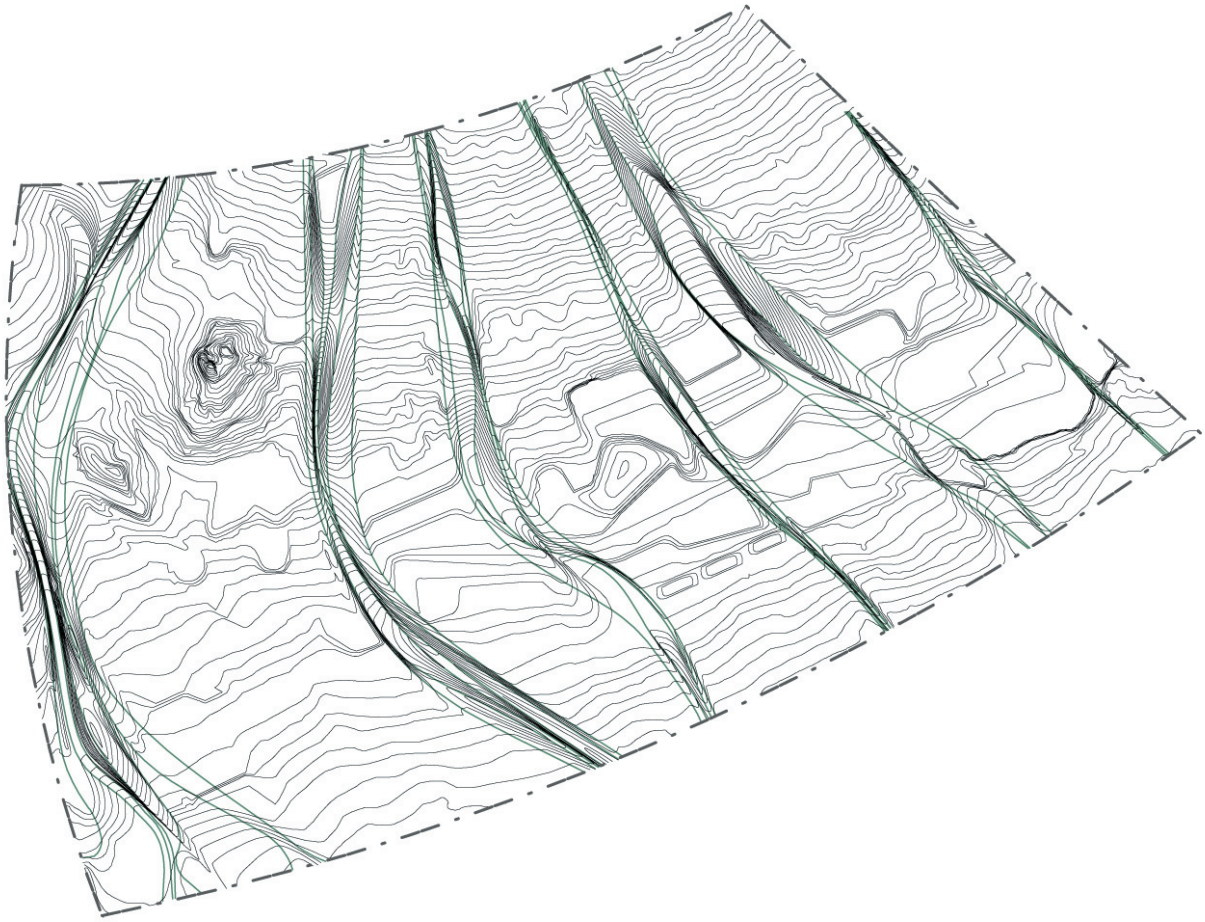
Overall View of project



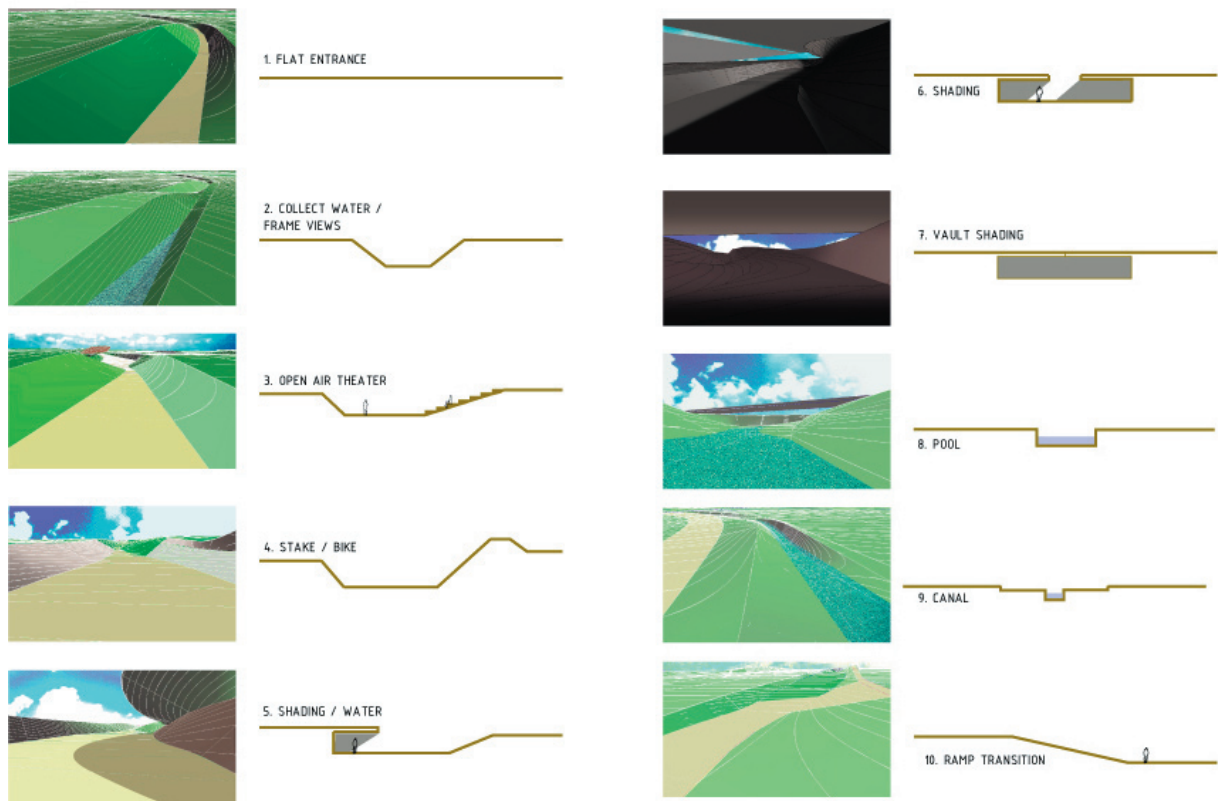
Detail view of one "softscape"



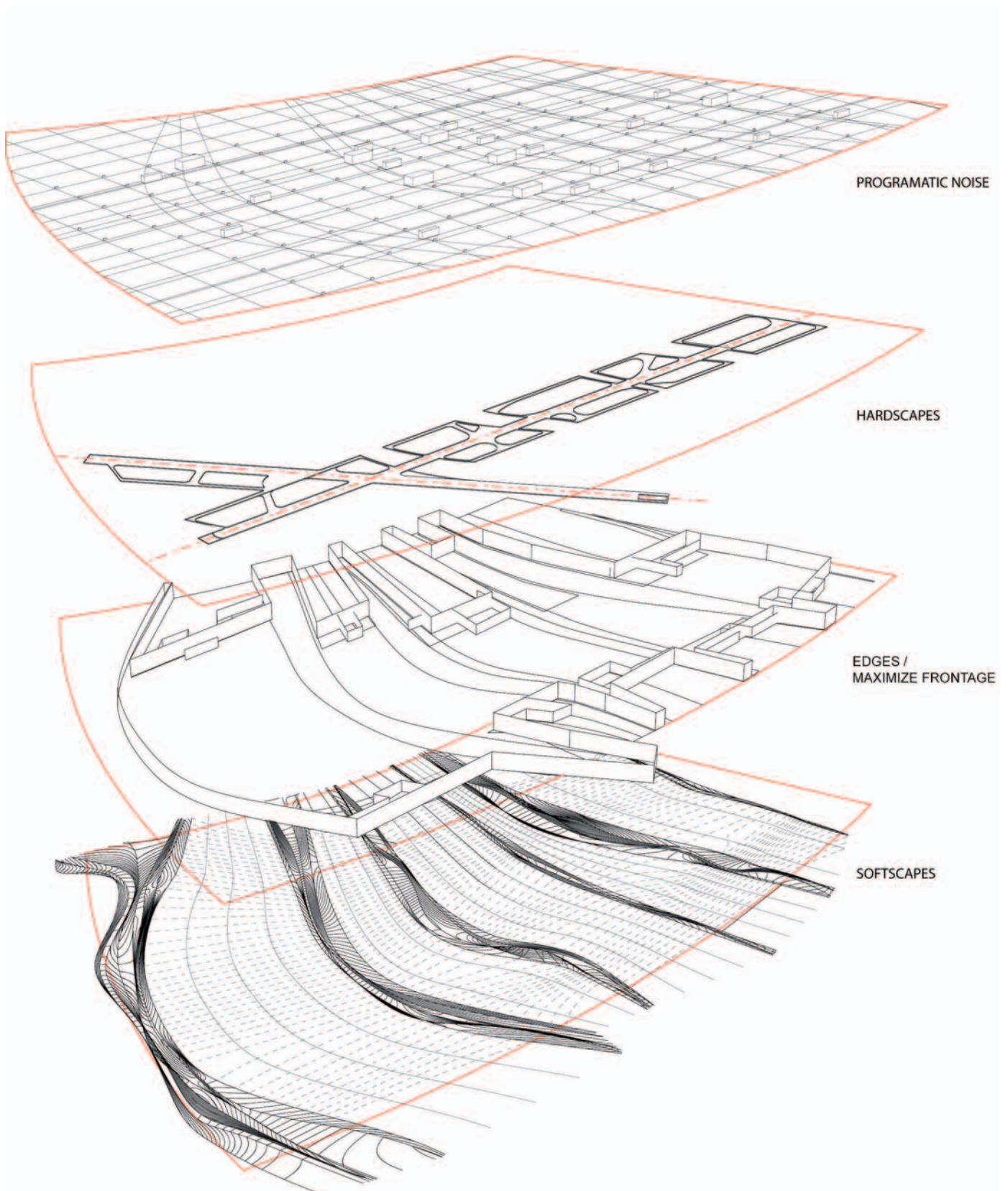
The airport main runway is integrated in the park project



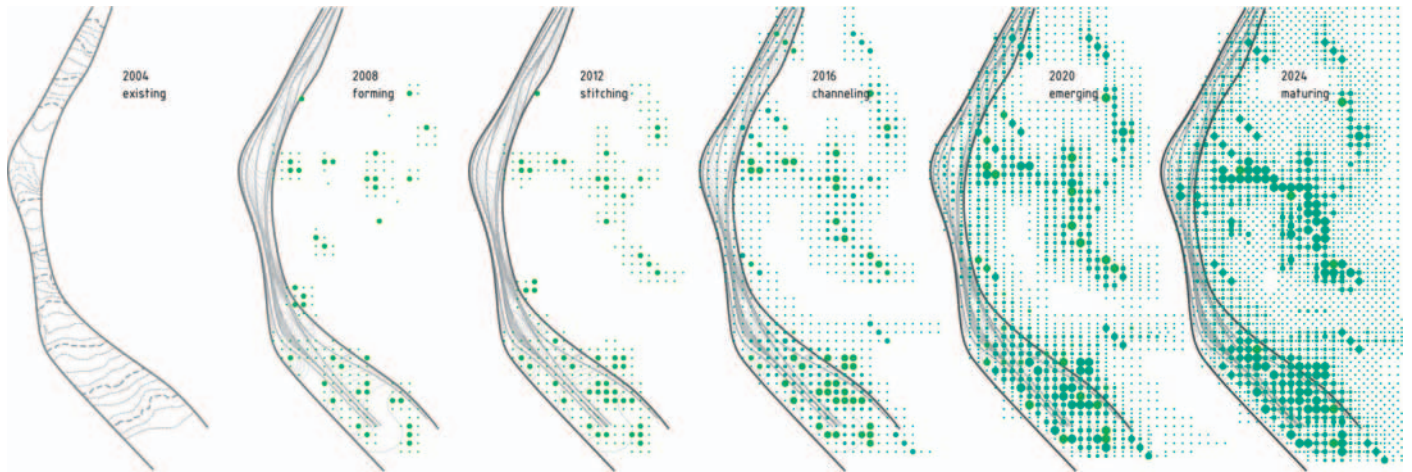
Computation model of water drainage on the site



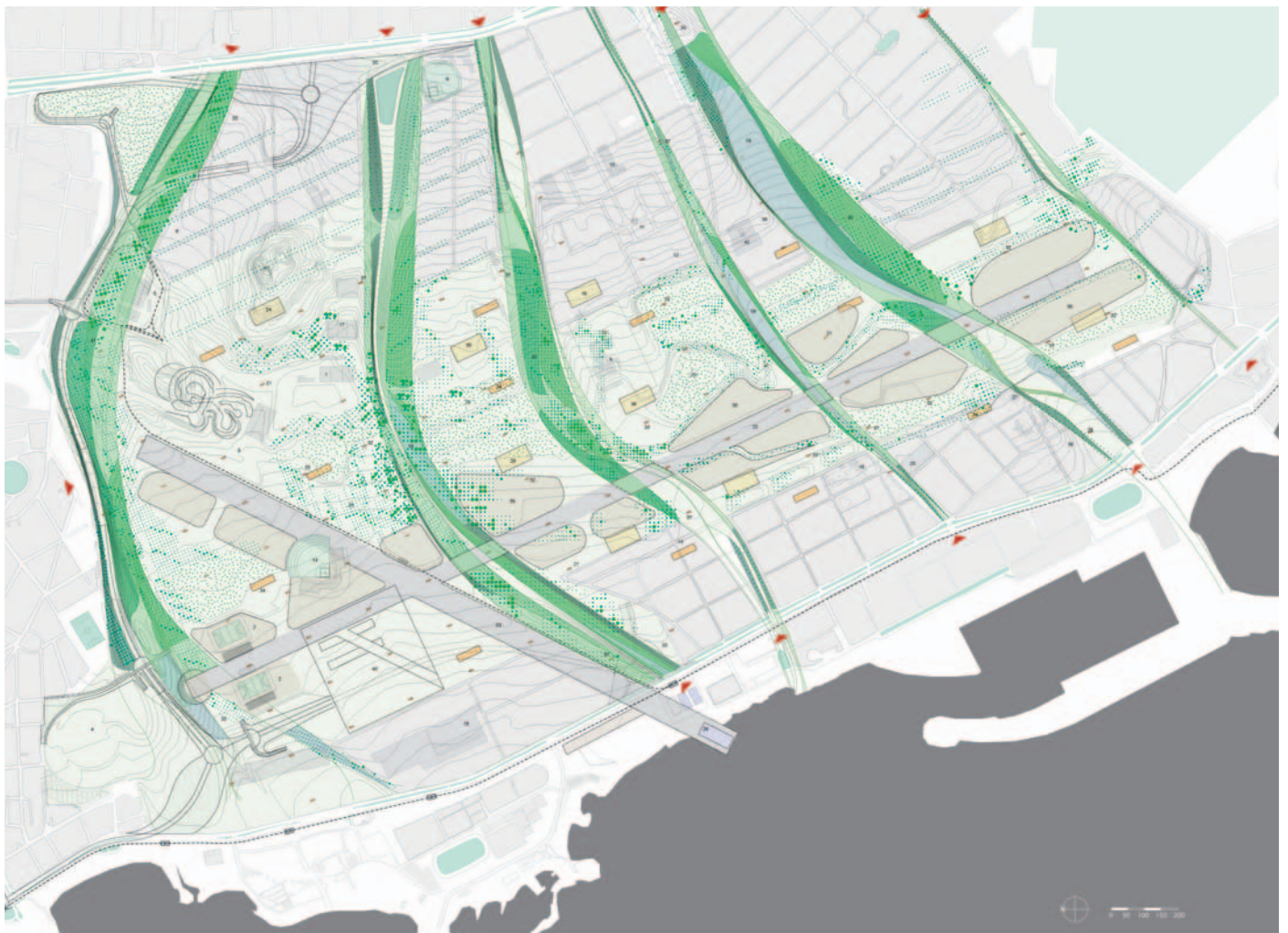
Sectional conditions of Softscape for water drainage



Axonometry of the 4 principles which interact to create the project : Hardscapes, Softscapes, Maximized Edge, and programmatic noise



Simulation of planting growth linked to water on the site



Site plan of Metropolitan Park and Urban Development