

Project with the Secret Name

Dubai is one of the fastest growing cities in the world; its global relationships are increasingly determined by economic factors such as shortages of natural resources. In addition to architectural and urban superlatives, Dubai is facing strong shifts within its social fabric and ecosystem: with the highest consumption of energy and water per capita, Dubai has the dubious distinction of having the largest ecological urban footprint in the world. The tourist economy that consumes a good portion of these resources is expected to double within the next three years to fifteen million visitors per year. Responding to the urgency caused by those shifts, the project with the secret name¹ examines a piece of desert in Dubailand scheduled to become the Disneyland of the Middle East as a test case for sustainable urban development.

While projects within Dubai are typically theme-based, the project with the secret name¹ takes sustainability as a non-theme, shifting from asking first 'what does it look like?' to 'what does this do?'. Rigorously comparing common Dubai practices and the project with the secret name), Dubai must choose between a purely revenue-oriented machine and a context sensitive 'Dubai' urbanity – an answer to the local conditions and needs.

The urban master plan for T.P.w.t.S.N., set on a parcel of 45 hectares, is composed of a number of dense urban clusters located within a uniquely (un)landscaped setting. The proposed landscape is predominantly arid and green areas are concentrated in humid zones mapped out from satellite imagery of existing vegetation, thus leaving the remaining area for development. The shape and composition of the clusters not only recall the forms prevailing wind currents carve in desert sand, but also permit the development to profit from the cooling sea breeze. This is beneficial both from a bioclimatic point of view and for the sake of human comfort.

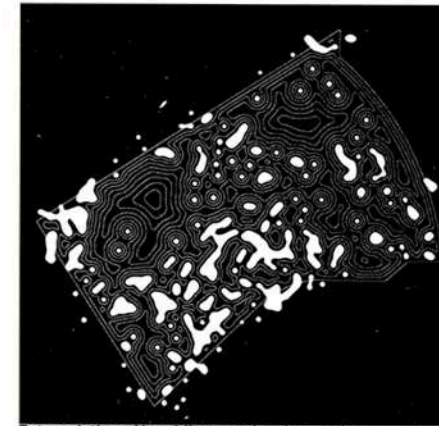
Solar Powered Streetlights and a Shaded Promenade

An urban promenade surrounds and interconnects each cluster. It ties together the café, restaurants, hotel lobbies and retail stores on the one side of the boulevard and the landscape on the other. The urban sun shade – a continuous hybrid structure that includes photovoltaic discs, solar powered street lighting panels and seating elements – combined with flowing water channels turns the boulevard edge into a place for strolling, sitting in a café or window shopping. Narrow, shaded alleyways lead to the cluster cores – in the case of the largest cluster to an urban green and aviary.

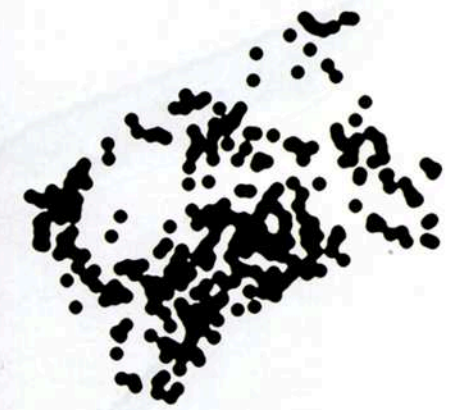
The urban clusters accommodate diverse functions including boutiques and tourist hotels, townhouses, patio villas, apartments and furnished apartments juxtaposed in non-prototypical combinations to create a vibrant social fabric.

Each parcel is situated to maximally benefit from its close proximity to the landscape, the improved micro-climate and the grand vistas. The landscape, a primary component of the development, can be explored via a jogging and cycling track which runs through it. Additional public nodes such as a library, desert museum, public pool as well as the mosque act as attractors at either end of each cluster turning the T.P.w.t.S.N into a destination in its own right with urban flair and close ties to a characteristic local landscape.

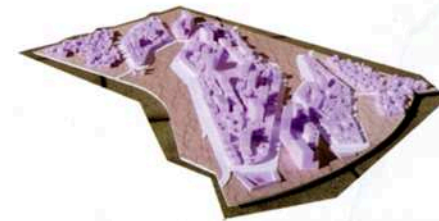
1. Commissioned by an anonymous developer.



Extrapolation of humidity mapping. Isographs suggest a possible site layout including specifications for development and areas to be left open



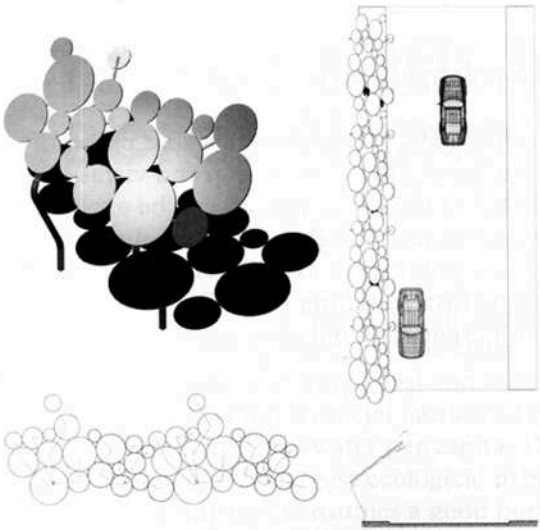
Humidity map of desert site. Scarce tree distribution on a real photograph indicates hidden water resources



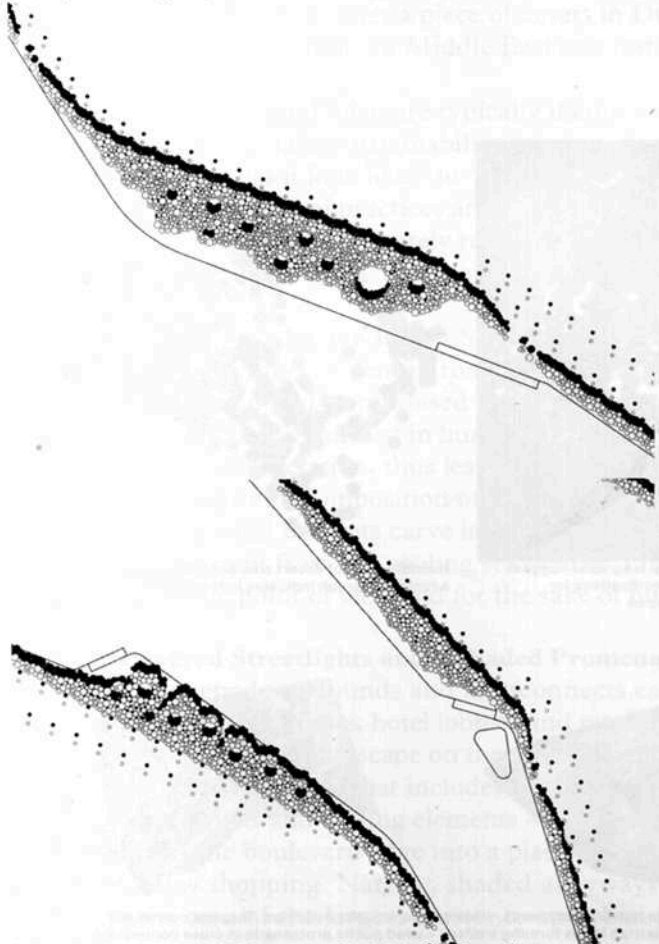
Five islands of development contain hotels, apartments, villas and community buildings. They are connected via a system of vehicular and pedestrian loops forming a mixed – used public promenade in close connection to the landscaped areas



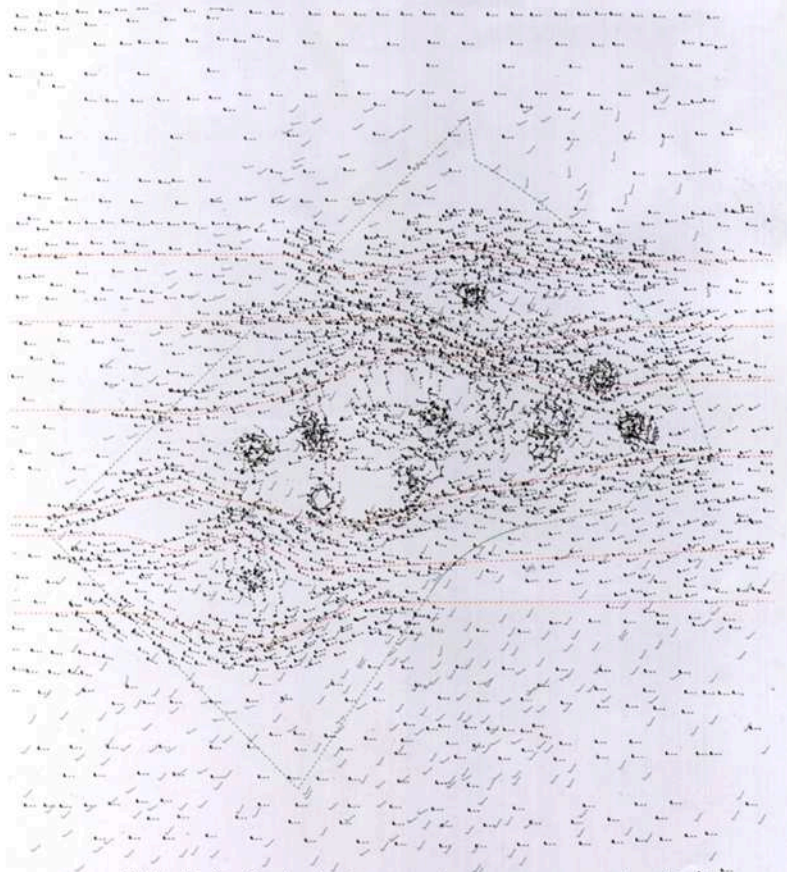
Project diagram on actual site. Island layout facilitates the shading of pedestrian east – west alleys



Solar powered shading and lighting system. Iso, plans and section. The public promenade is shaded with a system of photovoltaic cells. These provide energy for promenade and street lighting



Solar powered shading and lighting system. Partial plans of the public promenade



Wind circulation. The project is conceived as a local modification of the desert climate. Urban layout with its east – west orientated landscapes and routings lets moderate west winds stream through the development while hot south winds are hindered from penetrating the islands. Towers (up to 15 floors) create wind turbulences and facilitate additional air circulation