

POLITECNICO DI TORINO
SECOND SCHOOL OF ARCHITECTURE
Master of Science in Architecture
Honors theses

Redevelopment of Santa Caterina dello Ionio's coastline. Waterfront project and salvation of the dune's system

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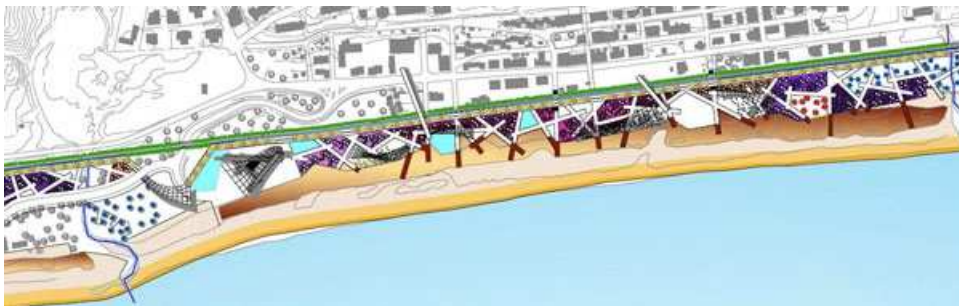
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The thesis deals with the redevelopment of Santa Caterina dello Ionio's coastline, located on the east coast of Calabria region. The project is focused on the requalification of the waterfront and pays attention to its dune system, which suffers from continuous destruction due to the anthropic effect.

The project is developed in several steps, triggering a lots of ideas and involving different project areas: architectural and landscaping design, environmental protection and real realizability of the project.

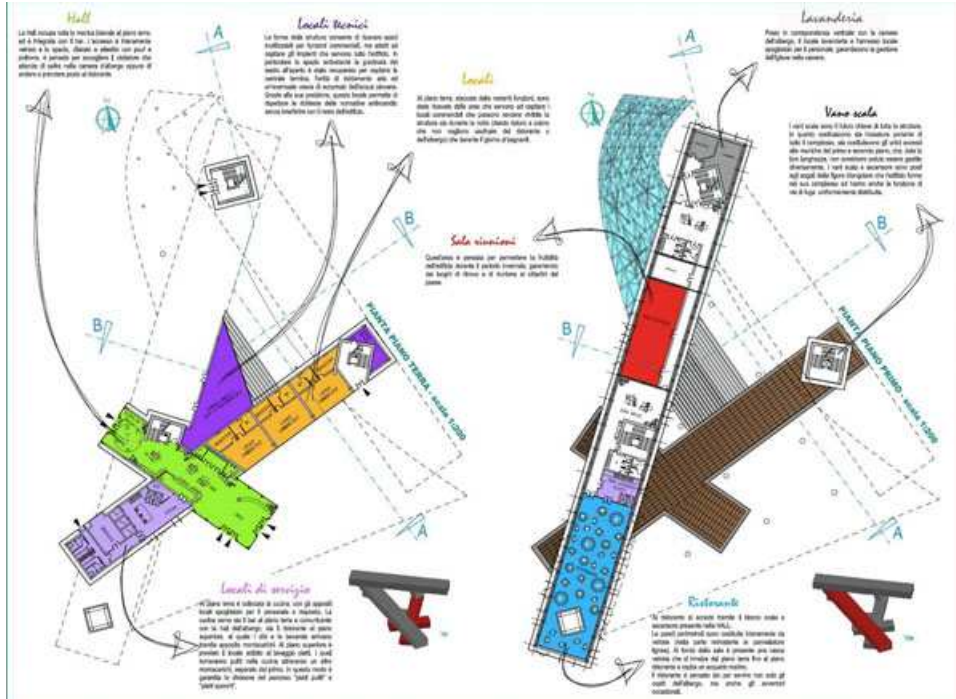
The research of the historical, territorial, environmental, hidrological, climatic and economic characteristics of the area is the base for the development of the thesis. Analysis of the morphology of the coast, of phenomena related to coastal dynamics and the study of the dune's system vegetation are the necessary steps that suggests why the dune's protection is very important.



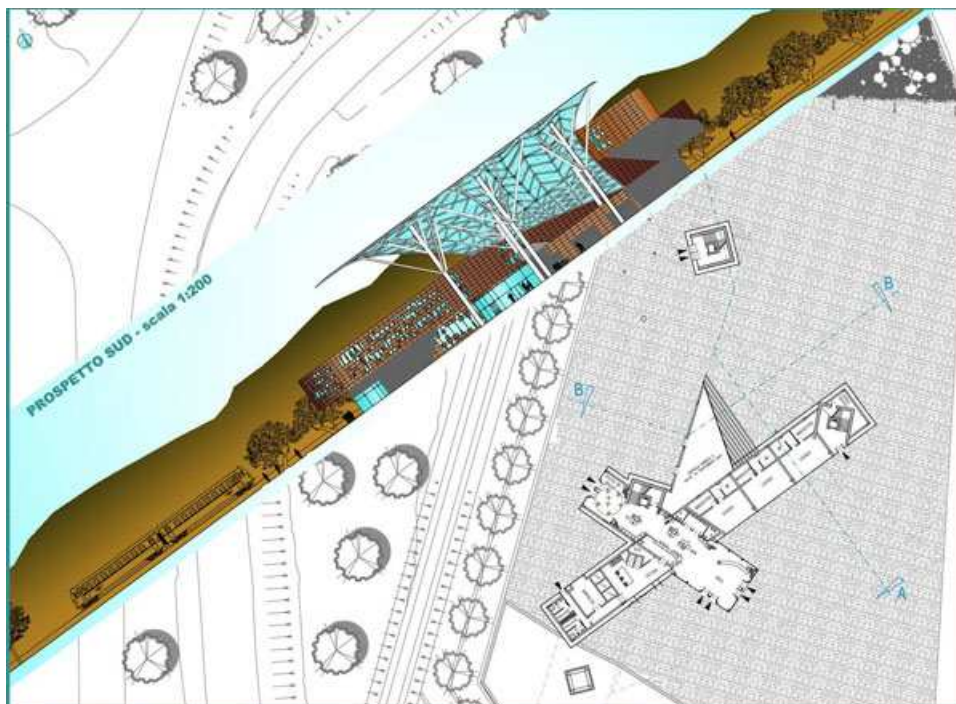
Design of the waterfront

The architectural project first wants to solve the problem of the division between the town and the beach with the project of two pedestrian bridges over the railway and with the waterfront design. Secondly it wants to propose the project of a multifunctional centre which contains a restaurant, a hotel, meeting rooms, a disco and some shops.

The thread of the masterplan is the design of the waterfront, that is extremely squared and rational on which a glass and steel coverage drawing with a fluid form is superimposed. This structure borrows from the building and develops during the promenade covering different places: open spaces, pick-nick points, squares, etc... The multifunctional center is composed of three parallelepipeds which intersect on several floors forming a triangular and permeable square in the middle. The sinuous glass structure covers the building and its square.



Plants of the multifunctional centre



Facade of the multifunctional building

The environmental-landscaping theme has two main points: the organization of the spaces inside the promenade and the dune's protection.

The waterfront is thought as a place in its own right, more natural and relaxing compared to the town, that's why the view of railway is screened with rushes, the bicycle and footing path are divided by an avenue of trees and the promenade is called "the perfume's street"; in fact the flowerbeds of the esplanade are planted with many spices of Mediterranean tradition.

All the plant species chosen are native species with a flowering period during the time of major tourism affluence. The dune's salvation instead has been realised with some wooden planks that allow unique access to the beach without trampling dune's vegetation. The access to the dune is also prohibited by the insertion of a wooden barrier.

The last part of the thesis is dedicated to the effective realizability of the project, evaluating the administrative processes at the city council, regional and national level, also in cases where the project could be realised on a larger scale.

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