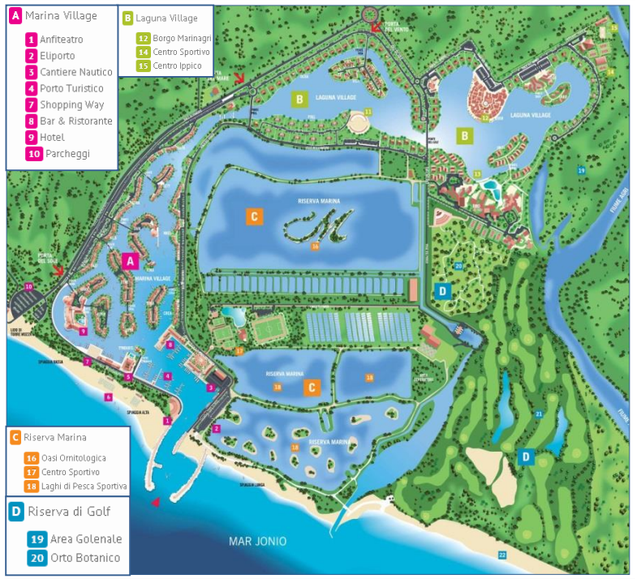
FEATURE OF TECHNICAL SERVICE

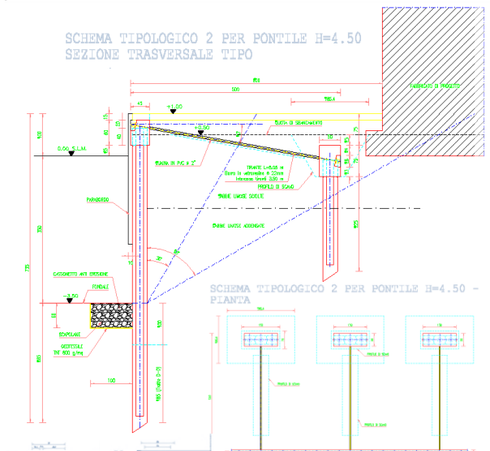
Subject	Preliminary and Executive Design of the maritime, geotechnical and infrastructural works (consolidations, roads, bridges) of the «Integrated Marinagri-Policoro Ecological Tourist Center» (Province of Matera)
Carried out by	SGAI S.r.l. di E. Forlani & C.
Client	ETM Marinagri S.p.a.
Service length	2000 - 2007
Value of works	€ 137’196’122,00
Categories value	V.02 € 7’916’320,00 D.01 € 5’393’843,00 S.05 € 8’204’000,00

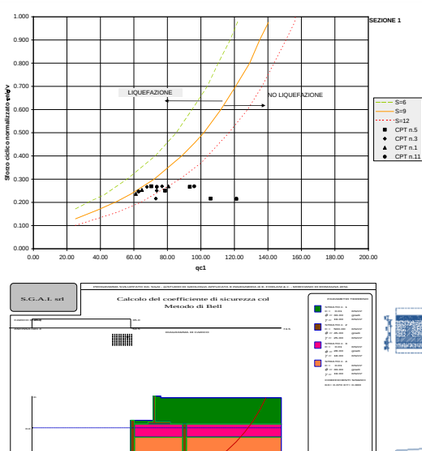


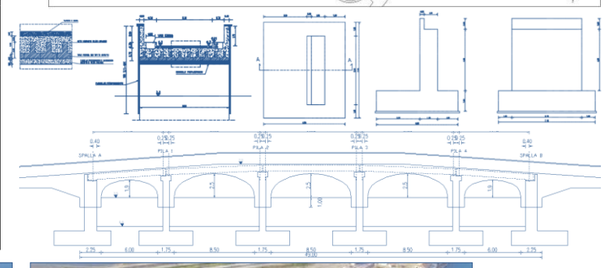
TOURIST CENTER MARINAGRI POLICORO - Design issues and their resolution

The Marinagri tourist center is located south of the outlet of the Agri river, on the Ionian coast of Basilicata, **occupying an area of 350 hectare**s. The area of the tourist complex is organized in different sectors with specific destination (naturalistic-environmental, residential, hotel-commercial and port). The project involves the construction of an internal navigable basin and lagoons, accessible from the nearest tourist port, in which to build, on islands and peninsulas connected by bridges and streets, residential and commercial structures (restaurants, shops, shipyard, service facilities, sports services and 1000 residential units). In support of the design, **an accurate geological and geotechnical campaign was carried out aimed at the litho-stratigraphic characterization of the land on site, verifying its bearing capacity and susceptibility to liquefaction**.
The major design issues were encountered in the design of: **maritime works, costal protections, roads, bridges, special consolidations, water and sewerage distribution networks**. In detail, the basin of the inner port is obtained by excavating the ground in place while the piers are formed by continuous bulkheads, made with sheet piles of prefabricated elements in centrifuged reinforced concrete, fixed by beating in the ground, suitably connected and sealed together. To ensure the stability of the bulkheads, a top beam has been built to contain the tie rods anchoring heads. The various islands are connected to each other thanks to **15 statically independent bridges** of similar construction characteristics. The deck is with isostatic girder with cross section made with beams in c.a.p. and collaborating slab 20cm thick, with an overall height ranging from 60-70cm depending on the deck light. The viaducts are completed by prefabricated panels covered in natural stone.

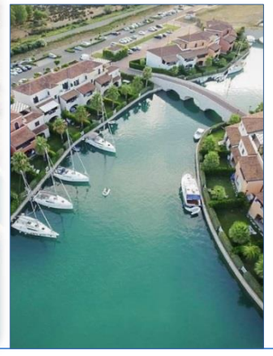
Modeling and checks of the maritime works, piers, bridges and special consolidations







Aerial view of infrastructure during the construction works



HYDRAULIC STRUCTURES, MARITIME ENGEENERING, DAMS