

Ingegneria BELLO







ABOUT OUR COMPANY



S.I.B. Studio di Ingegneria Bello S.r.I. is a company operating in the field of engineering and architectural services, capable of developing complex projects in infrastructure, construction, environment and sustainable development, with offices in Benevento and Rome. The company is certified ISO 9001 - ISO 14001 - ISO 45001 - ISO 500001 - SA8000 - Quality Management System.

The company brings together different professions, mainly women, perfectly integrated in a system aimed at carrying out actions for the rehabilitation of cities and territories, also thanks to the experience accumulated in over sixty years. S.I.B. is able to offer an integrated consultancy for the design and management of complex urban regeneration programs and major interventions for public and private contracts.

OUR SERVICES

The field of activity is vast and covers various sectors of engineering and architecture. In recent years, in light of the increasing attention to energy saving, the sectors of energy efficiency and energy production from renewable sources have been consolidated, through interventions aimed at the redevelopment of public and private buildings, as well as infrastructures. The design activity addresses the issue of environmental sustainability with the purpose of saving the environment, history and the territory.



OUR NETWORK

The company combines all the expertise in linear infrastruc-tures, bridges and large structures, environment and territory, port construction, Architecture and structural rehabilitation, which integrate perfectly in a system capable of combining different roles and functions, also thanks to the experience accumulated in over sixty years.

and institutional clients such as ENEL, ENI, ANAS, Autostrade spa, the Ministry of Infrastructure (MIMS), the



ENVISION SUSTAINABILITY PROFESSIONAL

An Envision®SP specialist is a professional trained and licensed to use the Envision® rating system for sustainable infrastructures. He is a key figure in the certification process who collaborates with the project team on behalf of the client so that the highest levels of sustainability are achieved.



EGE CERTIFICATIONS (EXPERT IN ENERGY MANAGEMENT)

The EGE (Expert in Energy Management) is a subject entitled to conduct energy diagnostics, in particular at "energy-consuming" companies of all sizes.





Project manager BIM Manager



These certifications are awards that certify the creation, application and maintenance of a management and work organization system compliant with specific reference standards, valid internationally.



IN RECENT YEARS, ALL PROJECTS HAVE BEEN DRAWN UP IN BUILDING INFORMATION MODELING (BIM). STUDIO DI INGEGNERIA BELLO SRL BELIEVES IN THE BIM PROCEDURE AS AN INDISPENSABLE TOOL FOR A RATIONAL, SUSTAINABLE AND EFFICIENT DESIGN, ALSO ABLE TO IMPROVE RELATIONS WITH

The strength of the company is the personal development and well-being of employees, to create safe and accessible working environments both in our offices and at customers and construction sites.



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CIVIL AND NETWORK INFRASTRUCTURES

Network projects that are functional to ensure an organic development of the relationships between the different activities through which a community develops its own settlement of the territory.Transportation networks and

Municipality of Caserta: Connection of the primary urbanization of the plan for productive settlements in the locality "San Benedetto"

- CLIENT: Municipality of Caserta DESIGN LEVEL: Definitive and executive design
- COST: 1.766.819,51 €
- YEAR: 2014

The action consisted in the completion of urbanization works in the area PIP of the municipality of Caserta. The project included, in particular, the installation of the parking lot and the building to be set up as a "service center" with appropriate equipment.

Framework Agreement No. 81016096 - Renewal of Safety Guardrails - A14 Trunk Directions Motorway DT3 (Bologna) and DT7 (Pescara)

- CLIENT: Autostrade S.p.A.

- DESIGN LEVEL: Preliminary, definitive and executive design, CSP, technical assistance for construction

- COST: 46.528.345,24 €
- YEAR: 2021

The project concerns design services, including surveying and safety coordination during the design phase and technical support during the construction phase, for the replacement of guardrails in front of DM 223/92, to be carried out on sections DT3 and DT7 over a length of approximately 40 km.





Strada del Parco - connecting road Vallo - Laurino - Bellosguardo - Campagna junction - I° section Vallo-Laurino - Vallo della Lucania municipality

- CLIENT: Campania Region

- DESIGN LEVEL: technical and economic feasibility project
- COST: 362.591.370,69 €
- YEAR: 2021

The project aims to create a road infrastructure that connects the Valle Calore road with the municipality of Vallo

della Lucania, in order to create a transversal road system between the two main axes of penetration of the territory of Cilento Vallo di Diano and the Alburni National Park, i.e. the A2 freeway and the bypass SS 18. The entire route will be built on a new section of 13,260 m (3,381 m on a viaduct, 4,717 m in a tunnel, 5,162 m in an embankment / ditch) and on 2,314 m by adapting the existing road system.



Road completion of the Retroporto of Salerno - II Lot "Porta Ovest" - Municipality of Salerno

- CLIENT: Campania Region
- DESIGN LEVEL: DocFAP preliminary document of project
- options, Preliminary, definitive and executice design
- COST: 36.156.878,33 €
- YEAR: 2022

The project for the variant of the junction of Cernicchiara was originally developed at the express request of the Supreme Council for Public Works. The Supreme Council of Public Works requested a complete revision of the functionality of the intersection, since the execution of the final project, which had been put out to tender, was considered unsuitable to meet the practical requirements of the new road system.

The primary objective was to allow traffic to flow smoothly, taking into account all possible roads entering and leaving this junction of the road network, considering their scale and importance.







Framework agreement n.01/19 - Maintenance and improvement of the safety of tunnels, bridges and viaducts - lot 7 ANAS Calabria

- CLIENT: ANAS S.p.A.
- DESIGN LEVEL: Executive design
- COST: 135.000.000,00 €
- YEAR: 2021

The project concerns execution design services for the special maintenance of bridges, viaducts and tunnels on the ANAS road network in the Calabria region.



Fondo Valle Calore - Completion - 1° Lot - Section AB - Province of Salerno

- CLIENT: Campania Region
- DESIGN LEVEL: Definitive design
- COST: 31.468.155,86 €
- YEAR: 2021

A section of about 5,100 metres, entirely within the Municipality of Aquara, which starts from State Road 166 (at km 26+800) and joins the section of the Fondovalle Calore under construction at Mainardo.



Fondo Valle Calore - Completion - I Stralcio - Section D-E - SR 488 Località Molino Gramata - SP 88 - Bivio **Tempone (Grotte - Serre)**

- CLIENT: Campania Region

- DESIGN LEVEL: Definitive design
- COST: 55.938.000,00 €

- YEAR: 2019 - 2022

The section of road that is the subject of this section is part of a wider route of the Calore Salernitano valley road that, when completed, will have a total length of more than 21 km and will cross the municipalities of Serre, Postiglione, Controne, Castelcivita and Aquara, all located at the foot of the Alburni massif on the Calore Salernitano hydrographic right.



Adaptation and extension of the provincial road n. 727b 'Monte San Giacomo - Piaggine

- CLIENT: Campania Region
- DESIGN LEVEL: Definitive design
- COST: 5.005.394,55 €
- YEAR: 2020

The project aims to reduce the causes of isolation of the local communities, reduce the connection time with Sala Consilina and the A3 highway, restore the functionality of the road network between the two municipalities, improve the safety standards of the road network in question and strengthen the measures to combat hydrogeological instability in the area.

Framework Agreement Embankments Reinforcement -Motorway A26 Genova Prà-Gravellona Toce, D36 Branch Stroppiana-Santhia, Motorway A1 Roma-Napoli, Motorway A8 Milano-Varese, D8 Branch Gallarate-Gattico, R49 Junction Piacenza Sud-A21, D14 Branch to Ravenna, T06 Complanar of Bologna, A11 Firenze Pisa, A23 Palmanova-Tarvisio and A27 Venezia-Belluno within the jurisdiction of The Direction Trunk DT1 (Genova), DT2 (Milano), DT3 (Bologna), DT4 (Firenze) e DT9 (Udine)e)

- CLIENT: Autostrade S.p.A.

- DESIGN LEVEL: Executive design, CSP, technical assistance for construction
- COST: 49.074.862.44 €
- YEAR: 2022

The project concerns the arrangement and regulation of waters and their conveyance through the mantainance and construction of embankments located upstream and downstream the motorway sections affected by the intervention for about 50 km.



Salerno ring road link - Costa d'Amalfi Airport -Capaccio - II Lot - II Stralcio - Road Adaptation

- CLIENT: Campania Region
- DESIGN LEVEL: Executive design
- COST: 24.005.114,00 €
- YEAR: 2022 In progress

The primary objective of the project is to ensure the continuation of the SP 417 so that the same artery is effectively adapted to serve as an alternative to State Road 18 'Tirrena Inferiore' and Provincial Road 175, a direct connection between Alto Cilento and the provincial capital, connection of the territories crossed with the Salerno ring road, a rapid connection to the Paestum site and direct connection of the Salerno-Costa d'Amalfi Airport.

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Widening of the road at the junction Castiglione - Ravello ex SS 373 in the locality Civita

- CLIENT: Campania Region

- DESIGN LEVEL: Definitive design
- COST: 3.011.082,18 €
- YEAR: 2019 In progress

The route on which the intervention takes place runs along the hill of Ravello through hairpin curves that reach the back of the city hill. This stretch is part of a wider route within the SS373 state road. The aim of the project is to improve the functionality of a section of SS373 by enlarging the roadway to allow traffic in both directions.

Construction works for the municipal road Ginestre - Fortino as an alternative to SS 18 - Municipality of Vibonati

- CLIENT: Campania Region
- DESIGN LEVEL: Technical and economic feasibility project
- COST: 5.610.000,00 €
- YEAR: 2020

The project creates a fast connection between the hamlet of Fortino to the east and the villages of Villammare and Ginestra to the west. The territory of the municipality of Vibonati is protected by Ministerial Decree under Article 136, paragraph 1 of the Code, within the framework of the protection of Landscape Value 15 - Gulf of Policastro.





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ENERGY EFFICIENCY IMPROVEMENT AND ENERGY PLANNING OF PUBLIC BUILDINGS

In recent years, the company has gained significant experience in energy planning, building efficien-cy, power generation, energy audits, energy diagnosis and monitoring, and environ-mental plans for sustainable energy,

Municipality of Capaccio Paestum: adaptation works for the new school complex

- CLIENT: Municipality of Capaccio Paestum

- DESIGN LEVEL: Preliminary, definitive and executive de-
- sign, and CSP
- COST: 584.721,28 € YEAR: 2018

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Municipality of Ceppaloni: improvement of safety and energy efficiency in the school in Via Cretazzo

- CLIENT: Municipality of Ceppaloni DESIGN LEVEL: Definitive and executive design,construc-
- tion management, CSP, CSE
- COST: 786.709,90 €
- YEAR: 2012/2015





Measures to renovate public and private buildings in terms of energy efficiency, bringing systems up to standard, removing architectural barriers and improving the quality of space.

The project included a series of measures such as improving the performance of the heating system, replacing windows and doors, installing a photovoltaic system and many other interventions to increase the energy efficiency of the entire building envelope.





Measures to increase the energy efficiency of the kindergarten "Agazzi" in the municipality of Macerata, Campania

- CLIENT: Municipality of Macerata Campania DESIGN LEVEL: Definitive and executive design, construc-
- tion management, CSE
- COST: 577.777,09 €
- YEAR: 2015

The execution project aims at a highly efficient thermal insulation of the building, an energetic and technological renovation of the lighting system, the installation of a highly efficient system for the production of thermal energy for heating and hot water and the installation of a photovoltaic system.



New civil and industrial buildings designed with environmentally sustainable criteria to reduce environmental impact, using efficient and biocompatible materials and construction techniques:

- Municipality of Puglianello (fig 1)
- Municipality of Vitulano (fig 2)
- Municipality of Durazzano (fig 3)









Improving the energy efficiency of the Leonardo Da Vinci School in Ave Gratia Plena

- CLIENT: Municipality of Limatola

- DESIGN LEVEL: Definitive and executive design, construc-
- tion management, CSP, CSE
- COST: 700.000,00 €
- YEAR: 2015

The project focused on improving the energy efficiency of the school by insulating the structure and upgrading the heating and electrical systems.

Improvement of the energy efficiency of the former Municipal House of Bucciano

- CLIENT: Municipality of Bucciano
- DESIGN LEVEL: Definitive and executive design, construc-
- tion management, CSP, CSE
- COST: 765.000,00 €
- YEAR: 2015

The project involved improving the energy efficiency of the public structure of the former municipal building, which will be converted into a multipurpose centre. In particular, the building was insulated both structurally and systems-wise.



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URBAN REGENERATION

Municipality of Capaccio Paestum: environmental rehabilitation and improvement of the safety of the coastal strip

- CLIENT: Municipality of Capaccio Paestum DESIGN LEVEL: Definitive and executive design
- COST: 5.255.000€
- YEAR: 2020/2021

The project concerns several initiatives for environmental

rehabilitation and improvement of the safety of the coastal strip, which is affected by numerous infrastructures and tourist activities that represent one of the main economic sources of the area. The objective is twofold: safety and environmental rehabilitation of a stretch of coastline that is of great importance for tourism.



Municipality of Santa Maria Capua Vetere: "Via degli artisti" district contract

The experiments related to the action promoted by the Municipality of Montesarchio focused on the identification of innovative solutions from a technological and environmental point of view related to the envelope closure system.

In particular, the research activity focuses on the solutions proposed for the external vertical closures in order to improve the aspects of energy saving, environmental protection, ease of maintenance and durability.

Municipality of Sant'Anastasia: District Contract "Quartiere Caduti Del Lavoro"

The development of the experimental activity aims to identify, through an articulated research programme, tools and practises to control the thermal and environmental behaviour of the residential/building structure and to improve the operating models applied to interventions in residential buildings.





Municipality of Teano: district contract "Via Abenavolo"

The solutions proposed for the tests are generally aimed at improving the thermohygrometric and acoustic performances of the building envelope, promoting the aspects of energy saving, thermal and acoustic comfort of the living spaces, durability and ease of maintenance, in order to reduce the expected management costs during the life cycle of a building.



Municipality of Gromola: renovation and conversion of a former rural area for social housing and services in the village of Gromola in Capaccio Paestum (SA)

- CLIENT: Municipality of Capaccio Paestum
- DESIGN LEVEL: Definitive and executive design
- COST: 3.644.868,85 €
- YEAR: 2021

The project involves the restoration and conservative renovation of the complex called "ex Bufalara", along with

three other buildings that identify the village of Gromola Vecchia. The challenge is twofold: to preserve the historical value and undeniable architectural beauty of the entire complex in order to transform it into social housing and services, while providing the entire area with its own historical-functional and environmental dignity, thus also fulfilling a social function.

Municipality of Casavatore: District Contract "Zona Madonnina"

One of the expected results of the experiment, perhaps even the most important, is the transfer of the tools and methods developed and perfected by the proposed research to the activities foreseen in the programme for the renewal of the building stock. The research proposal is divided into a series of initiatives and activities aimed at pursuing the objectives of the Experimental Programme in relation to both the construction and management phases of new construction.





Municipality of Valmontone: urban redevelopment of the "Villaggio della Rinascita 1"

- CLIENT: ROAD HOUSE S.r.l.
- DESIGN LEVEL: Ameliorative executive design, CSP, con-
- sultancy and on-site supervision
- COST: 3.644.868,85 €
- YEAR: 2017/in progress

Rehabilitation, completion and urban renewal of the complex in the "Villaggio della Rinascita".

Protection, renewal and enhancement of the coast in the municipality of Salerno - area 4 - Earthworks and a new road system

- CLIENT: Campania Region
- DESIGN LEVELS: Definitive and executive design COST: 30.985.922,79 €
- YEAR: 2020/in progress

The project has taken into account the strategic rehabilitation guidelines of the Administration, aimed at solving the environmental problems of the area, mainly due to erosion and deteri-oration of the coastal strip, as well as carrying out an urban rehabilitation that is close to nature and respectful of the environment.





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RESTORATION AND RECOVERY

The company has developed several rehabilitation and restoration projects to preserve the existing architectural heritage. In particular, it has acquired significant knowledge in the restoration and functional recovery of old buildings of historical and architectural value.

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Municipality of Montesarchio: Experimental restoration of a building complex in the village of Cappuccini

- DESIGN LEVEL: Construction management, CSE
- COST: 6.430.536,43 €
- YEAR: 2012/2019

The proposal for Montesarchio is a residential project that has followed the path of the ethnographic

project from the beginning: a complex work that combines social, cultural and technical objectives, all complementary and intended to have a positive impact on the ecology and the quality of life of the individual and the community.





An urban intervention in which we have "thought globally but acted locally" and which represents an Italian approach to ecologically oriented design, less radical than the European solutions we know from books and trade journals, but all the more interesting for that very reason. Buildings and outdoor spaces are designed to form a coherent, unified organism. The open spaces, modulated in different contexts - public, semi-public and private - become the centre of relations in the neighbourhood.



The network of connections between the different areas, characterised by different materials and tree species, is conceived as a narrative path where landscape and architecture become episodes, moments of narration and recomposition of the history and identity of this corner of the Campania Region

The area in front of the residential buildings is designed as a real covered square, an extension of the outdoor domestic life and an element of merging old and new residential buildings. The square is paved around the buildings and is made of poor materials typical of the local building tradition, reflecting the shapes and colours of a rural province



At the entrance to the property of the Cappuccini Monastery there is a beautiful avenue that ends in an open square. From here a path leads up the hill and through an arched passageway to the back of the monastery to the outdoor fountain and park. The entire square will be paved with limestone, interrupted by narrow green paths, with two different orientations, one according to the facade of the monastery, the other according to the axis of the natural slope.

On the side facing the residential buildings, there will be a series of terraces accessed by paths made of rammed earth. The terraces, supported by natural viminates or gabions made of local limestone, will have natural wooden fences. In these areas, which will be assigned to the families that will occupy the apartments, it will be possible to plant small plants, lawns or flowers.

The outdoor activities and the commitment to the direct maintenance of these areas will reinforce the attachment of the residents to the areas outside the buildings, which will thus be perceived as a natural extension of their homes.





The building is compact, "C"-shaped, and consists of two blocks perpendicular to a larger body that has been restored in the past. The project focuses on the smaller wings (which are of different sizes and are referred to as Block A and Block B)

B), attempting to reorganise the spaces and openings, but within the limits set by a load-bearing wall structure.

The only new body added is the greenhouse - a mediating space between inside and outside conceived as a small square - inserted in a gap already present in the original building.

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The project is of priority importance in the context of the project proposal of the Municipality of Buonalbergo according to the requirements of the PSR Campania 2007/2013, measure 322 (renewal of rural villages), in order to prevent the depopulation of small communities through measures that promote the attractiveness of the places, improve the living conditions of the inhabitants and increase the level of employment.

Palazzo Angelini is a key building for the townscape of Buonalbergo, which is a rural village of remarkable importance, well preserved but not properly developed. From a structural point of view, the intervention strategy consists in improving the mechanical properties of the masonry, reducing the static load, installing compatible elements to eliminate local weak points and reinforcing part of the resistant elements.

From the point of view of restoration, the main objective is to preserve the complex authenticity of the building in its historical and formal values





Palazzo Stabile - New institutional seat for the Municipality of Capaccio Paestum

- CLIENT: Municipality of Capaccio Paestum
- DESIGN LEVEL: Executive design
- COST: 1.813.819,50 €
- YEAR: 2021

Today Palazzo Stabile, which is mostly empty, is only partially used as a private residence. In order to preserve the authentic values of the building, it has been decided

to use part of it as the new institutional seat of the Town Hall, while another part will host exhibitions, cultural events and art galleries. This change of use will not compromise the typological, formal and cultural characteristics of the building while ensuring a useful service to the community. The building is subject to landscape constraints and will be restored, earthquake-proofed and adapted to fire safety standards.



The project includes all necessary measures to ensure the good functionality of the building without compromising its historical and artistic value. In accordance with the recommendations of the NOR. MA.L., the interior and exterior walls will be cleaned, consolidated and protected. To meet the new function, several categories of works will be carried out as strictly necessary:demolition of materials incompatible with

the historic value of the building, restoration of the interior plaster, replacement or restoration of the interior and exterior wooden frames, replacement of iron frames or wooden frames in an advanced stage of deterioration with new wooden frames of the same shape and type as the existing ones; structural consolidation works, replacement of wooden floors in an advanced stage of deterioration, construction of a new wooden roof.



Municipality of Puglianello: safeguarding, restoration and reconstruction of the "Palazzo Marchitto"

- CLIENT: Municipality of Puglianello

- DESIGN LEVEL: Definitive and executive design, construc-
- tion management, CSP, CSE
- COST: 3.889.426,19 €
- YEAR: 2009/2016

The project includes the restoration, consolidation

and upgrading of the entire complex to be converted into a lodging facility. The vertical and horizontal structures were consolidated and adapted to the current standards for protection against seismic risks, the floors were reinforced, the roof was completely rebuilt with a glulam structure, and the old masonry was restored and restored.

Municipality of Montesarchio: Restoration of the Clarisse Monastery and the exterior areas to create a centre for higher education and excellence

CLIENT: Comune di Montesarchio
 DESIGN LEVEL: Definitive and executive design, construction management, CSP, CSE
 COST: 1.251.778,06 €
 YEAR: 2003/2017





HYDRAULIC INFRASTRUCTURES AND HYDROGEOLOGICAL ARRANGEMENT

Measures for the construction of aqueducts, sewage systems and treatment plants, for the conservation and protection of natural and environmental resources through reforestation works, the renewal of drainage systems, the consolidation of slopes and stream banks, favouring naturalistic engineering methods and techniques.

Municipality of Durazzano: measures to protect the soil - hydrogeological shaping of the **Torrente Monti**

- CLIENT: Municipality of Durazzano
 DESIGN LEVEL: Definitive and executive design
 COST: 566.986,25€
- YEAR: 2017

The project takes into account the territorial aspects through vegetation, hydraulic and geo-pedological analyses. The interventions are based on naturalistic engineering techniques, respecting the environment and the morphology of the intervention sites and using environmentally friendly materials.





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The project included excavation works to adjust the discharge in the floodplain in order to reduce the velocity of the flood flow, to connect the hydraulic sections planoaltimetrically, and to recover excavated material" for the reconstruction of the project embankments, which represents a significant economic advantage.

In addition, the following problems were solved: modification and integration of the intake structure of the Consortium on the left bank of the Sele to eliminate the interference with the flood flow; definition of the access ramps to the floodplains of the river and to the feeder channels; elimination of the interference between the project works and the existing municipal wastewater treatment plant on the left bank of the river, as well as the ancillary works (included within the economic limits of available funds).



Municipality of Capaccio Paestum: completion and optimization of the municipal sewerage network, transfer of wastewater to the treatment plant

The main objective of the project is to complete the sewerage network and connect domestic, agricultural and industrial users to this system.

In particular, it concerns interventions on the outfall distributors and lifting stations with the associated hydraulic pressure operation, located downstream of the lifting stations of the project.



Municipality of Capaccio Paestum: Project for the environmental rehabilitation and improvement of the safety of the rock face above the village of Capaccio at "Madonna del Granato"

The measure aims at securing a part of the rocky ridge above S.P. 13 a, which is the main artery for the direct connection from Capaccio to Madonna del Granato, where the homonymous sanctuary is located, a tourist site of high cultural interest. It is planned to carry out selective and localised interventions such as rockfall barriers and the laying of a protective net



Municipality of Bonea: Completion of the municipal sewerage network

- DESIGN LEVEL: Definitive and executive design

The project included some road sections in the municipality of Bonea, connecting an area of about 90 hectares to the new network.





Municipality of Arpaia - maintenance works for hydrogeological instability of valleys, river banks and landslides, carried out on behalf of provinces and municipalities

- DESIGN LEVEL: Definitive and executive design

The project focused on the protection of riverbanks through nature-based engineering measures such as gabions.

Municipality of Paolisi

- DESIGN LEVEL: Definitive and executive design

The project included the naturalistic enhancement of the valley in front of the city centre through the construction of weirs made of wood and stone.



Municipality of Rotondi - "Renovation of Madonna della Stella Street and the square in front of the Sanctuary of Madonna della Stella"

- DESIGN LEVEL: Definitive and executive design

The design dealt with the improvement of the safety of the The design dealt with the improvement of thesafety of the Madonna della Stella road with measures such as the construction of rockfall barriers and the redesign and subsequent widening of the hairpin curves.





Municipality of Schio:

"Extension of the sewerage system in Via Villani and Via Braglio, extension of the water supply system in Via Braglio"

- CLIENT: Municipality of Schio

- DESIGN LEVEL: Technical and economic feasibility study, Definitive and executive design

VIACQUA:

Municipality of Creazzo:

"Extension of the water supply network in the eastern part of the municipality with simultaneous renewal of some sections of the sewerage network and extension of the Piazzon elevator"

- CLIENT: Municipality of Creazzo

- DESIGN LEVEL: Technical and economic feasibility study, Definitive and executive design
- YEAR: 2021





VIACQUA:

Municipality of Valdagno: "Renewal of the water distribution network in Via Redi, Genoa, Livorno, Sandri e Menti"

- CLIENT: Municipality of Valdagno
- DESIGN LEVEL: Technical and economic feasibility study, Definitive
- and executive design
- YFAR: 2021

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CONSTRUCTION

The design covers the entire life of the work (or part of it), from the initial concept to the final structural design, which includes the study of engineering drawings (project and details), structural analysis, study of construction techniques, to the editing of the maintenance manual.

Several new projects and consolidations of public buildings, especially schools, have been developed based on seismic vulnerability analysis.

Municipality of Capaccio Paestum: realisation of a new urban centre for the development of

- CLIENT: Municipality of Capaccio Paestum

- DESIGN LEVEL: Preliminary and definitive design
- COST: 20.700.000,00 €

- YEAR: 2021/2022

The concept aims to redesign the urban space by establishing a dialogue with the existing urban fabric and the surrounding plant. The project proposal aims to establish a positive connection with the morphology of the neighbouring buildings and create a direct link between the station, the large square and the existing urban context. The project includes a new train station with a bridge made of steel, glass and concrete and the construction of a square designed according to the principles of bioclimate and sustainability with zero CO2 emissions.









Municipality of Capaccio Paestum: works for the construction of a municipal cinemaand theatre - former Miriam cinema - multipurpose hall for cinema, theatre, conference room and commercial activities

- CLIENT: Municipality of Capaccio Paestum
- DESIGN LEVEL: Definitive design
- COST: 2.615.143,22€
- YEAR: 2020

The project involves the construction of a new building to house a cinema-theatre, replacing the original cinema, now demolished.

The new building is the result of the increasingly urgent needs of the "city", which have found in the municipal authorities the effective will to create in the city centre and in the heart of Piazza Santini a multipurpose structure of primary public interest, aimed at the general improvement of both the living conditions of citizens and the environmental, architectural and urban planning quality of the entire area.



Therefore, the importance of the project should be evaluated not only in urbanplanning and architectural terms, but also in cultural and social terms. The new building will be characterised by a two-story portico that encloses the central part of the scenographic tower and leads to Piazza Santini and its buildings through a covered and protected passageway. The portico adopts the morphological and typological characteristics of the buildings that characterise Piazza Santini, including the former Myriam Cinema, thus harmoniously integrating with the context in which it is inserted.

The new building was rotated from its original position and the scenographic tower was set back from the street and the square to create greater openness and make the square more visible. Access to the cinema hall is via a staircase along the

Viale della Repubblica, to give the area its own urban identity as a meeting place and an extension of the square itself.



Municipality of Capaccio Paestum: Project for the new midway station type B - Carabinieri

- CLIENT: Municipality of Capaccio Paestum
- DESIGN LEVEL: Definitive design
- COST: 3.698.000.00€
- YEAR: 2021

Considering the altitude and the morphology of the site, as well as the specific functional requirements of this type of station, the project envisages the construction of an approximately rectangular building on two levels for the various functions (station/logistics) and a building for residential purposes. The project fits into the existing terrain both in terms of elevation and landscape, limiting the building's impact on the environment and providing two floors, the upper of which is set back from the street to meet the requirements and safety features necessary for this type of building.

Municipality of Ciampino: regulatory adaptation and renovation of the MIT archive of the HANGAR 159 - Airport "G.B. Pastine"

- CLIENT: State Property Agency (Agenzia del Demanio), Regional Directorate of Lazio - DESIGN LEVEL: Preliminary and executive design

- COST: 1.352.848,04 €
- YEAR: 2017/2019





Municipality of Ceppaloni: Service Centre

The project concerns the construction of a service centre for the administrative activities of the companies present and to be established in the area.

The building consists of a single compact structure in order to make the most of the functionality of the spaces, including a meeting and conference room and offices. The supporting structure is designed in reinforced concrete with an overlapping roof in laminated wood, so that the profile with a curved mixtilinear tendency ensures the brightness of the rear areas of the school building.

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STRUCTURAL DESIGN

Design and construction management were also developed in the strategic area of structural renovation and seismic vulnerability. The actions aim to evaluate the structural condition of the infrastructures and buildings.

Municipality of Portici: Project of structural consolidation of the school building - LOT 3 - 5°

- CLIENT: Municipality of Portici

- DESIGN LEVEL: Seismic vulnerability assessment, prelimi-
- nary and executive design, CSP
- CÓST: 689.481,75 €
- YEAR: 2018/2020



As a direct consequence of the conclusions of the vulnerability assessment, the project will implement all necessary consolidation measures to improve seismic safety. The project provided for the demolition and reconstruction of parts of the complex, eliminating architectural barriers and creating easier and more appropriate escape routes.



The most important measures are the encapsulation of the piers, the confinement of the beam-column junctions and the cladding of the beams with carbon fibres.



Improvement of the seismic performance of the City Hall of the Municipality of Durazzano

- CLIENT: Municipality of Durazzano
- DESIGN LEVEL: Definitive and executive design, construction management, CSP E CSE
- COST: 589.879,50 €
- YEAR: 2016/in progress

The project included an analysis of the existing structure: mechanical characterization of the soils, materials and structural typologies; Description and interpretation of the damage to the existing buildings; Definition of the seismic design forces for the area, definition of the intervention criteria; Determination of the calculation models for the seismic testing; Determination of the safety levels before and after the intervention.



Municipality of Calvi Risorta: project to improve safety and modernise the school building "Cales"

- CLIENT: Municipality of Calvi Risorta

- DESIGN LEVEL: Definitive and executive design, CSP
- COST: 628.499,91 €
- YEAR: 2018/2019

Among the planned actions, the priority is the seismic retrofitting of the building to ensure the physical safety of

students, school staff and all users in general. The aim of the project is to make the building safe, protecting the health of all users, while ensuring a "safe" territorial garrison for the entire local community, both for the normal activities open to citizens and for the occurrence of extraordinary events.



Municipality of Caserta: architectural renovation, energy efficiency and seismic adaptation of the secondary school "Dante Alighieri"

- CLIENT: Municipality of Caserta
- DESIGN LEVEL: Executive design, construction management, CSP, CSE
- COST: 2.183.857,76 €
- YEAR: 2018



- CLIENT: Municipality of Capaccio Paestum
- DESIGN LEVEL: Preliminary, definitive and executive de-
- sign, and CSP
- COST: 584.721,78 €
- YEAR: 2018





Municipality of Calvi Risorta: safety improvement and modernization project for the municipal school building "Don Milani"

- CLIENT: Municipality of Calvi Risorta
- DESIGN LEVEL: Definitive and executive design, CSP
- COST: 322.750,00 €
- YEAR: 2018/2019

Province of Naples - Municipality of Torre del Greco: improvement of the seismic performance of the Liceo "De Bottis" - AL block

- CLIENT: IMPREGINA S.r.I.
- DESIGN LEVEL: Ameliorative definitive design, executive design, CSP $% \left({{\rm{CSP}}} \right) = {\rm{CSP}} \left({{\rm{CSP}}} \right)$
- COST: 829.128,69 €
- YEAR: 2016/2017



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URBAN PLANNING, PLANS AND PROGRAMMES

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TRUCTION REPORT

COLOUR PLANS

The architectural and colour study of facades for a redesign of the cityscape and especially the historic centres.



In the elaboration of the plan, the weight of the historical layers was taken into account, as learned from Brandi's lesson on the coexistence of aesthetic and historical instances, still relevant today according to the latest restoration theories. Following this consolidated theory, the pre-existence was not be cancelled out by perceptual-aesthetic parameters. The collected visual material didn't provide any clues about the chromatic elements. It did, however, make clear that the buildings largely retained their former proportions, even when they were replaced.



Colour Plan: Municipality of Dugenta

The elaboration of the colour plan was based on a study of the traces of the old colours, carried out with the aim of preserving or proposing new ones, aware that it's impossible to reconstruct the "original configuration" of the buildings. Therefore, in the design phase, the preservation of the few identified colour elements was combined with design decisions based on the perceptual principles of the building and in compliance with the relevant regulations.



Colour Plan: Municipality of San Bartolomeo in Galdo

The project is based on a direct and detailed study of the material elements and on an analysis of the urban structure of the historic centre through qualitative and quantitative surveys, paying particular attention to the curtain walls.

In this way it was possible to find the best and most appropriate solutions for this particular area.



Colour Plan: Municipality of Vitulano

The careful study carried out prior to the elaboration of the The careful study carried out prior to the elaboration of the plan included morphological, perceptual and material analyses of the urban fabric, with particular attention to the numerous stately palaces and religious buildings The project was based on the principles of integration and colour compatibility with the context, coherence with the essential characteristics of the buildings and preservation of the existing historical and architectural heritage.



Colour Plan: Palazzo Cerulo in Vitulano

Palazzo Cerulo is an elegant building located in Piazza S. Menna that has preserved its ancient structure inside the building, the stone portal and the windows with ornaments and masks.

The intervention, respecting the historical importance of the palace, included the cleaning of the facades, the consolidation and repointing of the joints and the maintenance and protection of its parts.



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URBAN REGENERATION INTEGRATED PROGRAMMES

Improve urban quality and the provision of services and infrastructure through an integrated financial system of public and private funds.



Municipality of Sant'Agata De' Goti: Via Generale Diaz - Via Giacomo Ciardulli

The aim of the project was to rehabilitate the urban, structural and environmental fabric and to promote local resources as a fundamental element to trigger economic development processes.

The primary objective of the project was to protect the identity features of the territory of the municipality of Sant'Agata De' Goti.

Municipality of Mondragone

The main objective of the rehabilitation programme is to promote the enhancement of the historical, artistic, cultural and environmental heritage through the protection of the anthropogenic presence, the rehabilitation and the structural, environmental and conservation restoration of the historic centre.





Municipality of San Marco Dei Cavoti: "Integrated Programme for the Urbanistic, building and environmental regeneration"

The protection and enhancement of the historical and cultural heritage have been identified as priority objectives for the preservation of the identity of the territory and its communities, along with the promotion of qualified forms of development. This project also pursues the important aim of revitalising city centres and marginal areas.



Municipality of Ceppaloni – Piazza Santa Croce

The area has preserved its original urban layout. The project has the objective of redeveloping it from an architectural and environmental point of view, thus protecting and enhancing local resources.



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SEISMIC VULNERABILITY ASSESSMENT, SURVEY AND ENERGY AUDIT

The survey of geometric, architectural, technological, plant and structural characteristics, carried out with the method BIM, aims to record the actual condition of the buildings; subsequent assessment of seismic vulnerability and proposals for possible measures to improve and adapt to seismic conditions; energy audit; elaboration of the project.

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BASILICATA _ LOT 2

State property in Basilicata (Lot 2 - technical and economic feasibility study) - COST: 1.587.620,00 € - YEAR: 2020



Barrack - Municipality of Ruoti (fig 1) Barrack - Municipality of Avigliano (fig 2) Barrack - Marsico Nuovo Forestale (fig 3)

- CLIENT: State Property Agency (Agenzia del Demanio), Regional Directorate of Puglia and Basilicata

Seismic vulnerability assessment, energy diagnosis, geometric, architectural, technological and plant investigation, prepared with the Building Information Modelling method (BIM), for State properties in Basilicata - Lot 2.





BASILICATA _ LOT 3

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State property in Basilicata (Lot 3 - technical and economic feasibility study) - COST: 2.603.310,00 € - YEAR: 2020

Moliterno Barrack (fig 1 and 2) Grumento Nova Museum (fig 3)
- CLIENT: State Property Agency (Agenzia del Demanio), Regional Directorate of Puglia and Basilicata
Seismic vulnerability assessment, energy diagnosis, geometric, architectural, technological and plant investigation, prepared with the Building Information Modelling method (BIM) for state buildings in Basilicata - lot 3





Lauria Fire station

The technical and economic feasibility study concerns the Fire Station of Lauria, an Italian municipality in the province of Potenza, classified in seismic zone 1. The building is located near the city centre and consists of several adjacent buildings. According to the vulnerability assessment, the possible measures to improve the seismic performance of the building concern the increase of the load-bearing capacity of the structural elements, the resistance of the beam-column connection elements respecting the capacity design,and the improvement of the efficiency of the connections through overlapping.



Marsicotevere Barrack

The building is used as Carabinieri barracks and is located in Via Roma in Villa d'Agri, the main town of the Marsicovetere municipality.

Based on the results of the cognitive phase, a set of measures for the seismic retrofitting of the building has been defined according to the relevant legislation.





PUGLIA

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Bari di Pregio (Lot D) Financial Offices - COST: 8.196.721,00€



- CLIENT: State Property Agency (Agenzia del Demanio), Regional Directorate of Puglia and Basilicata

Seismic vulnerability assessment, energy diagnosis, geometric, architectural, technological and plant investigation, prepared using the Building Information Modelling (BIM)



CAMPANIA

- Napoli Former Cesare Battisti barrack
- Napoli di Pregio 2021 (Lot 1: Radiomobile Service Station, Former Garibaldi barrack, Court of Auditors)



Interventions in the framework of urgent actions for the rehabilitation of unused public buildings with the aim of restoring buildings with symbolic and cultural value and, consequently, restoring the environment in which they are located.

Prior to this, the seismic vulnerability is evaluated and all the necessary studies are carried out.

CALABRIA

State property in Calabria (Lot 1, 6 properties) - COST: 16.545.844,48€



Safety assessment of the Aversa and Santa Maria Capua Vetere Hospitals and the Capua Community Hospital

- CLIENT: ASL Caserta
- DESIGN LEVEL: Seismic vulnerability, testing and surveys
- COST: 25.000.000,00 €
- YEAR: 2021

The project concerns the preliminary study of the hospitals of Aversa, Santa Maria Capua Vetere and Capua, the surveys and the elaboration of the seismic vulnerability assessment.

Safety assessment of the Giovanni Da Procida Hospital in Salerno

- CLIENT: San Giovanni di Dio and Ruggi d'Aragona University Hospital

- DESIGN LEVEL: Seismic vulnerability, testing and surveys
- COST: 6.000.000,00 €
- YEAR: 2021

The project concerns the preliminary study, the cognitive surveys and the elaboration of the seismic vulnerability assessment of the buildings that are part of the Hospital Da Procida with an extension of 56.800 m³.

INTERVENTIONS FOR QUALIFIED ENERGY SAVING "ECOBONUS" AND "SISMABONUS" INTERVENTIONS

Introduced by Decree no.34/2020 (Relaunch Decree art.119) then converted into Law no.77/2020, the 110% Superbonus is a fiscal incentive that allows building interventions to improve the energy efficiency of existing buildings and to ensure their safety from seismic risk.

Grattacielo Residence condominium complex -Via Acquatraversa 100, Formia

- CLIENT: Grattacielo Residence Condominium
- DESIGN LEVEL: Executive design
- COST: 4.695.063,63€
- YEAR: 2021



Parco Ameno Condominium - Largo dell'Assunta 5, Caserta

- CLIENT: Parco Ameno Condominium
- DESIGN LEVEL: Executive design
- COST: 8.028.268,18 €
- YEAR: 2021

The building is located in a residential area in the Municipality of Caserta and consists of three separate buildings, two The building is located in a residential area in the municipality of Caserta and consists of three separate buildings, two of which are identical and symmetrical, connected by a corridor accessible by a walkway. These buildings are connected on the first floor by a structure that houses a school. The project aims to achieve energy efficiency and seismic improvements, as well as integrating the buildings into the environment by increasing their aesthetic quality.

Via Ruta 46 Condominium – Via Ruta 46, Caserta

- CLIENT: Via Ruta 46 Condominium
- DESIGN LEVEL: Executive design
- COST: 302.578,18€
- YEAR: 2021

The condominium consists of a block of four interconnected buildings with similar characteristics. The structure is made of reinforced concrete and is regular in plan and height. The project aims at energy efficiency and seismic improvements, with the objective of improving the aesthetic aspects that could regenerate the urban context in which it is embedded.





IX Fabbricato De Santis Condominium – Via Carlo da Tocco, 11 Benevento

- CLIENT: IX Fabbricato De Santis Condominium
- DESIGN LEVEL: Executive design
- COST: 3.219.843,18€
- YEAR: 2021

This residential building is located in the centre of Benevento in a highly urbanised area with numerous service businesses. The intervention concerns the energy efficiency of the building envelope and the production of energy from renewable sources.



Appulo 10 Condominium - Via Guglielmo Appulo 10, Napoli

- CLIENT: Appulo 10 Condominium
- DESIGN LEVEL: Executive design
- COST: 2.188.443,99 €
- YEAR: 2022

The building is located in the Materdei district, a populous and important neighbourhood of the city of Naples, which experienced strong growth in the second postworld-war period. Built in the 1960s, the frame building is architecturally designed with a series of overhangs and setbacks that accentuate the facades and create spacious terraces. The project, carried out at BIM, took into account not only the need for energy and earthquake resistant construction, but also the need to enhance the area in which the building is located, highlighting its beauty and distinctiveness.

Bozzi Condominium – Via Torre della Catena 44 - 64, Benevento

- CLIENT: Bozzi Condominium
- DESIGN LEVEL: Executive design
- COST: 1.473.118,18 €
- YEAR: 2022

An important building in the historic center of Benevento near the Lombard walls, built in the 1960s in load-bearing masonry. Although it was in a good state of conservation, energetic and structural measures were necessary to extend the useful life of the building and improve the habitability of the rooms.





Pompilia Condominium – Via delle Querce, 14 -Caserta

- CLIENT: Pompilia Condominium
- DESIGN LEVEL: Executive design
- COST: 3.863.002,27 €
- YEAR: 2021

The complex is located in a residential area with buildings constructed between the 1980s and 1990s, and consists of three approximately square structures placed end to end, with a basement that is in turn connected to the superstructures. With the aim of improving living comfort and seismic safety, a functional and building-specific detailed design was prepared in BIM.



Viale Mellusi 141 Condominium - Viale Mellusi, 141 - Benevento

- CLIENT: Viale Mellusi 141 Condominium

consists of a basement, seven floors and turrets.

- DESIGN LEVEL: Executive design
- COST: 2.463.618,18 €
- YEAR: 2021

the centre of the city. The building overlooks one of the main streets of the city and

Corimbo 8 Condominium - Via M. Santoro, 14, 16 - Casagiove

- CLIENT: Corimbo 8 Condominium
- DESIGN LEVEL: Executive design
- COST: 1.688.177,27 €
- YEAR: 2021

The project is a reinforced concrete residential building with a "T-shaped plan, composed of a basement, a first floor, five floors and a turrets, located near the Royal Gardens of the Royal Palace of Caserta in a purely residential area. Built in the 1980s, the building presented critical problems from a structural and energy point of view, which were perfectly solved by the measures carried out.



The design took into account the existing building, reusing

the facades clad with brick bands, which enhances the

structure and gives aesthetic value to an imposing building in



Giardino di Roma Condominium - Comparto Z/2 – Edificio D – Via Nora Ricci n.13 - Roma

- CLIENT: Giardini di Roma Condominium
- DESIGN LEVEL: Executive design
- COST: 2.650.000,00 €
- YEAR: 2022

The building complex is located in Municipality X of Rome outside the Grande Raccordo Anulare in a residential area. It was built in the 1990s using reinforced concrete construction and consists of a regularly shaped structure with a basement and six floors above ground. The project, presented at BIM, focused on improving residential comfort through energy-saving and anti-seismic interventions.

SPORTS AND RECREATIONAL FACILITIES

The company has developed a specific know-how for the construction of sports facilities and major projects for the tourist development of the area. These works, together with the urban renewal projects, are aimed at achieving urban transformation and the implementation of local development systems.

Theme park: in the heart of Cilento a new frontier of Entertainment

- CLIENT: Municipality of Capaccio Paestum DESIGN LEVEL: Master plan

The mixing and combination of different leisure activities increases the attractiveness of Cuore Cilento. It is a strategic investment in a synergic group of activities that acts as a multiplier for potential users. The visitors of each activity, or at least a part of them, are induced to visit more than one attraction during the same visit, creating tourist exchange and discovery flows.







ENGINEERING COMPANY



- DESIGN LEVEL: Preliminary, definitive and executive design, and CSE - COST: 991.507,20 €

- YEAR: 2019

The project concerns the transformation of the "Tenente Vaudano" sports field and, in particular, the laying of a latest generation artificial turf with associated systems, as well as the new fencing, the installation of separate paths for guests and locals, the toilets and the complementary works necessary to create a sports and leisure centre.

Municipality of Acquaviva Delle Fonti: creation of green areas and parks - Via Colanino and Via Tateo

- CLIENT: Municipality of Capaccio Paestum DESIGN LEVEL: Definitive and executive design, CSP
- COST: 481.508,17 € YEAR: 2017

The aim of the project is to improve the discontinuous structure of the area, to create a well-equipped urban park and to enhance an unused urban space that can be a place for civic and social gatherings and a catalyst for the entire neighbourhood.









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