

GEOMELETI



Infrastructure Design

*...committed to the Art and Science
of Geotechnical Engineering*

*...aiming for maximum quality
through simple and cost-effective solutions*





COMPANY PROFILE

GENERAL

GEOMELETI is a Consulting Engineering Company managed and operated by experienced engineers / geologists committed to the art and science of Geotechnical / Infrastructure engineering, always aiming in giving high quality, simple and cost-effective solutions to the projects undertaken.

GEOMELETI operates in accordance with and has been accredited in the following management systems:

- ISO 9001:2015 - Quality Management
- ISO 17001:2015 - Environmental Management
- ISO 45001:2018 - Occupational Health & Safety Management
- ELOT ISO/IEC 27001:2013 - IT - Information Security Management

The Company owns modern equipment including drilling-rigs, in situ and laboratory testing devices and with the use of specialized software, can give reliable, fast and economical design solutions to all Geotechnical Problems.

OUR CLIENTS - COLLABORATIONS

GEOMELETI provides design, supervision and consulting services to the main organizations, managing infrastructure projects in Greece and abroad, such as:

- Greek Ministry of Public Works and Transportation,
- Greek Railways and Metro Authorities,
- Greek Highway Authorities,
- Infrastructure, Building and Industrial Contractors (Hochtief, AKTOR, GEK, TERNA, J&P, ABENGOA, etc)

Our collaborations also include major international engineering firms, such as, W.S. Atkins (UK), Faber-Maunsell (UK - USA), Hochtief (Germany), 3P (Austria), SSF and ISP (Germany), DBI International (Germany, Qatar), etc.

MANAGEMENT

Petros Laskaratos:

Geotechnical - Civil Engineer M.Sc, having more than 30 years of working experience in Geotechnical Engineering Projects, offered Consulting Services to the owners of the major highway authorities (Attiki Odos, Athens - Thessaloniki Highway, Egnatia Odos) in Greece, the Athens Metro and having an extensive experience in design of all types of infrastructure engineering projects, including building foundations, ground improvement, tunnels, bridges, dams, motorways, etc.

Tassos Katsoularis:

Engineering Geologists, having more than 20 years of working experience in investigations, quality control and geological and geotechnical design for all types of infrastructure engineering projects, including buildings, tunnels, open-cuts, dams, bridges, motorways, railway lines, etc.

- Bridges
(Precast Beams, Cantilever, Box Girder, Incremental Launching, Solid and Voided Slabs)
- Buildings
(Industrial offices, Commercial, Educational, Athletic)
- Special Constructions
(Silos, Cooling Towers, Tanks etc)
- Restorations, Strengthening and Repairs of Buildings

STRUCTURAL

- Detailed Hydraulics and MEP Design
- Water Reservoirs and Irrigation Works
- Dams (earth-soil, RCC, concrete)
- Potable Water Distribution Networks
- Storage Tanks
- Pump Stations
- Waste Treatment Facilities
- Solid Waste Treatment Plants
- Sewerage Networks and Installations

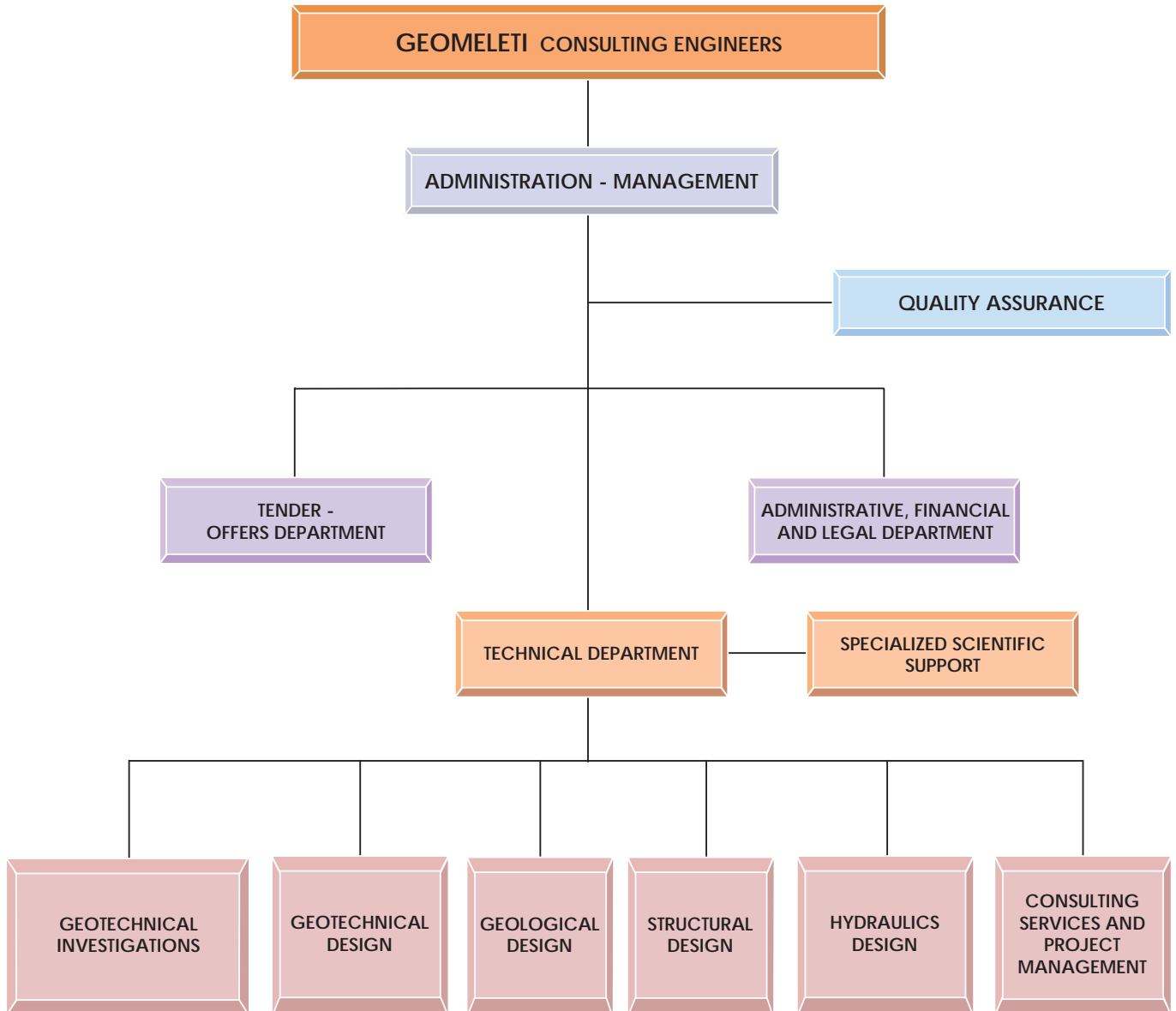
HYDRAULICS - MEP

- Investigations
(Programming, Execution and Interpretation of Results)
- Geotechnical Design
(Tunnels, Roads, Railway Lines, Bridges Foundation, Building Foundation, Retaining Structures, Hydraulic Projects, Dams / Reservoirs, Dewatering Design)
- Geological Design
- Geophysical Survey
- Hydrogeological Design
(Well Exploration, Pumping Tests, Geological - Hydrogeological Studies, 3-D Modelling, Desalination Systems, Geochemical Analyses, Artificial Recharge Studies)

GEOTECHNICS

- Expert Evaluations - Consulting Services
- Checking of Design
- Quality Control Works
- Monitoring Evaluation
- Preparation of Tender Documents
- Modification Of Design During Construction
- Evaluation of Contractors' Offers

CONSULTING SERVICES



SELECTED PROJECTS

EXPERIENCE IN

GEOTECHNICS



GEOTECHNICAL INVESTIGATIONS

with more than 30.000 m of coring boreholes, both on-shore and off-shore, for more than 500 different projects

GROUNDWATER MANAGEMENT

Geological/Hydrogeological Studies, 3D Modeling, Well Testing & Development, Dewatering Design, Desalination Systems, Geochemical Analysis, GIS Applications

ROADS

Highways and provincial roads of approximately 320 km in length, with 80 high open-cuts, 60 embankments, Pavement Design, etc

BRIDGES

110 Road and Railway Overpasses / Underpasses and 30 Long Bridges - River Crossings, Valley Bridges, etc

RETAINING STRUCTURES - UNDERPINNING

RAILWAYS

More than 10 Railway Stations and several hundreds kilometers of railway line

HYDRAULIC WORKS

17 Dams, 20 Reservoirs, 14 Irrigation/ Sewage Networks and Pumphouses

AIRPORTS, PORTS / OFF-SHORE STRUCTURES

2 Airports, 15 Port Structures and Participation in the Design of 2 Oil Platforms



GEOTECHNICS

GEOTECHNICAL INVESTIGATIONS

FIELD & LABORATORY

- More than 30.000m of coring boreholes, both on-shore and off-shore, for more than 500 different projects
- Laboratory Tests in Soil Mechanics & Rock Mechanics, Chemical Analysis Tests in Water & Soil Samples, Concrete Testing
- In Situ Tests (SPT, CPT, PMT)
- Permeability Tests



BRIDGES

ATHENS - THESSALONIKI NEW HIGHWAY, GREECE

Client:
MINISTRY OF PUBLIC WORKS

Geotechnical Design of two Valley Bridges (L=180-250m in length) and 20 Road Bridges (L=25-150m in length) along a 25km long section of the motorway.
(Section: Ag. Theodoroi - Almiros).



AIRPORTS / PORTS

IMPROVEMENT OF EXISTING HARBOR FACILITIES AND EXTENSION, SYROS ISLAND

Client:
KYCLADES PREFECTURE

Geotechnical Design of the foundation conditions of the new port facilities.



"ARISTOTELIS" KASTORIA AIRPORT, KASTORIA PREFECTURE

Client:
MINISTRY OF TRANSPORTATION

Geotechnical Design of the new airport pavement and extension of the existing one.



ROADS

**EGNATIA ODOS, SECTION 5.3,
WESTERN MACEDONIA, GREECE**

Client:
EGNATIA ODOS S.A.

Inspection and Interpretation of
Geotechnical Investigations,
Final Geotechnical Design
of 2 Single Span Bridges,
4 Embankments (L=250-550m) and
25Km of Pavement Design.



RETAINING STRUCTURES

**NEW SHOPPING MALL CENTER,
CENTRAL RAILWAY STATION AREA, ATHENS**

Client:
KAROYZOS CONSTRUCTION S.A.

Geotechnical Design for the
Temporary Retaining Structure
consisting of a 21.5m deep
Anchored Piled Retaining Wall,
designed for the construction of
a 5 floor underground
parking station.



HYDRAULIC WORKS

"ERESSOS" DAM, LESVOS ISLAND

Client:
MINISTRY OF AGRICULTURE

Quality Material Control, Geotechnical
Consulting Services during construction
of a Dam, 30m in height, 350m long and
2.750.000m³ in volume.

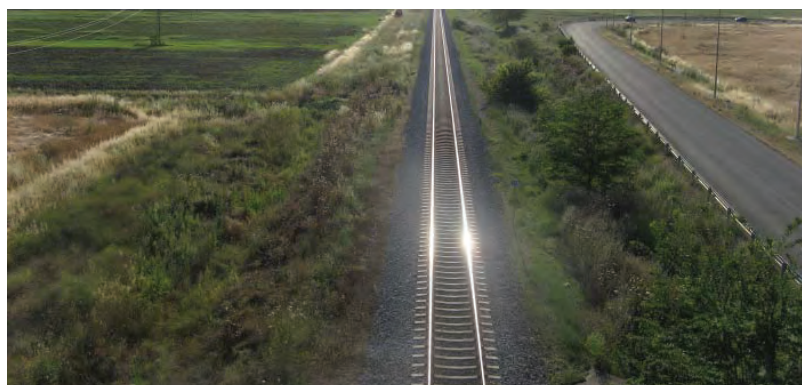


RAILWAYS

**SOFADES-KARDITSA-TRIKALA-KALABAKA
RAILWAY LINE, CENTRAL GREECE**

Client:
ERGOSE S.A.

Geotechnical investigations, design
and material quality study for the
railway track foundation of 60 km of
Railway Line.



EXPERIENCE IN

BRIDGE DESIGN



Design of more than 50 Road/Railway Bridges
of different structural systems: Precast beams, Cantilever,
Box girder, Incremental launching, Solid and Void slab.

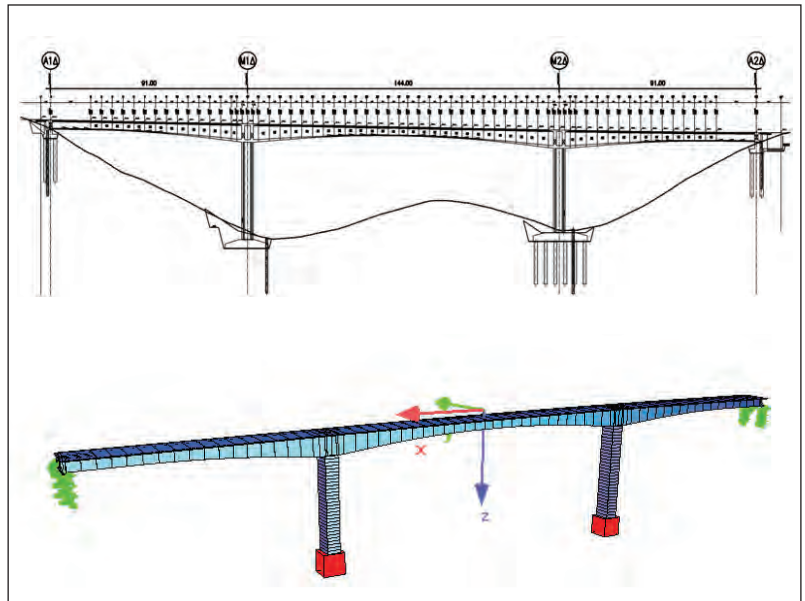


BRIDGE DESIGN

DOUBLE BRANCH BRIDGE, SECTION 4.3.1.S, EGNATIA HIGHWAY, WESTERN MACEDONIA, GREECE

Client:
EGNATIA ODOS S.A.

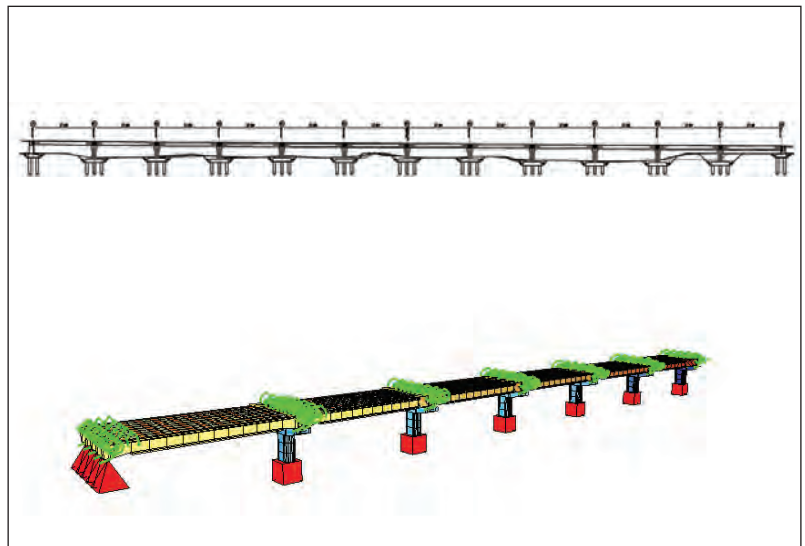
Detailed Design of a 321m total length bridge, with 3 Spans (2x91m+1x144m), Box Girder (cantilever construction) Structural System.



NESTOS RIVER CROSSING DOUBLE BRANCH BRIDGE, EGNATIA HIGHWAY, SECTION 14.1.2, THRACE, GREECE

Client:
EGNATIA ODOS S.A.

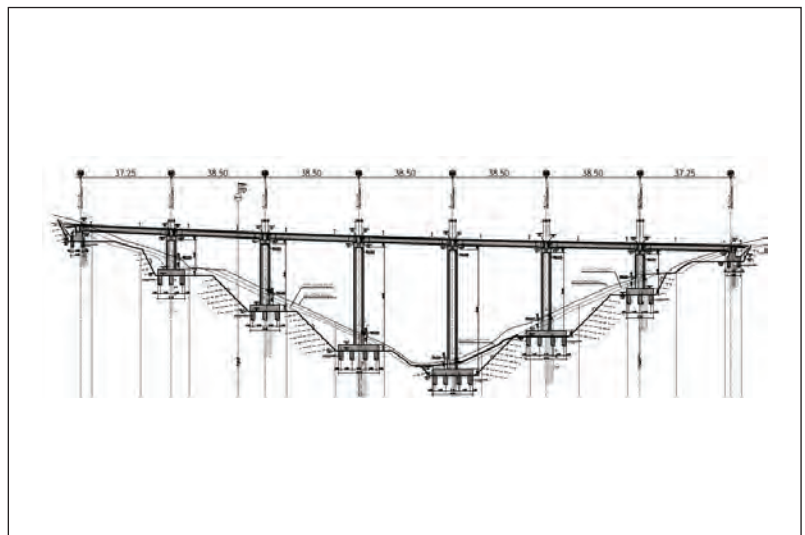
Detailed Design of a 453m total length bridge, with 12 Spans (38m), with precast beams and in situ cast slab deck .



VALLEY BRIDGE AT A. EFTHIMIA - LIDORIKI PROVINCIAL ROAD, CENTRAL GREECE

Client:
MINISTRY OF PUBLIC WORKS

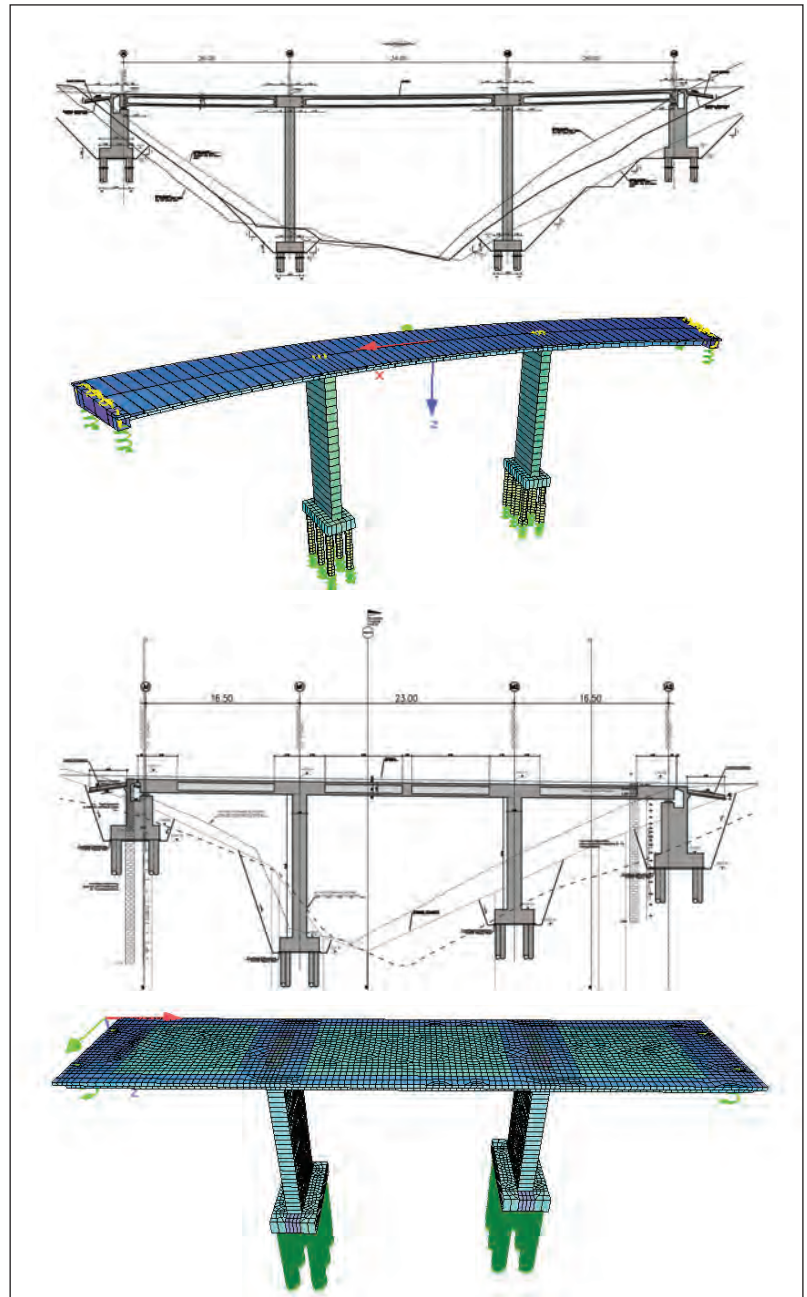
Detailed Design of a 460m total length bridge, with 12 Spans (38m), with precast beams and in situ cast slab deck.



**MAIN BRIDGES
AT AGIOS PETROS-ASTROS
PROVINCIAL ROAD,
PELOPONNISOS, GREECE**

Client:
MINISTRY OF PUBLIC WORKS

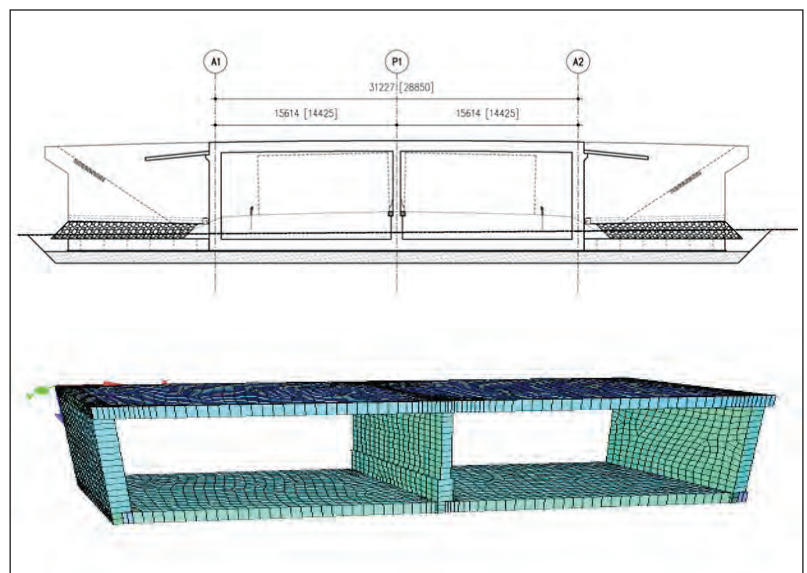
Detailed Design of 2 main bridges,
86m and 56m total length,
with 3 Spans and Box Girder
Structural System.



**ELEYSINA-KORINTHOS-PATRA
MOTORWAY, GREECE**

Client:
OLYMPIA JV

Detailed Design of a double
span closed frame bridge,
of a total width of 31m.



EXPERIENCE IN

HYDRAULICS

SEWAGE-DRAINAGE NETWORKS, WASTE TREATMENT PLANTS DAMS, RESERVOIRS



More than 25 Sewage Networks Projects, 3rd Grade Waste Treatment Plants, more than 500Km of Pipe Line Systems, more than 15 Potable Water Refinery Systems, 10 Solid Waste Treatment Plants, 10 Hydroelectric Plants, 25 Storm Water Drainage Systems, 17 Soil - RCC Dams, 20 Lined Reservoirs

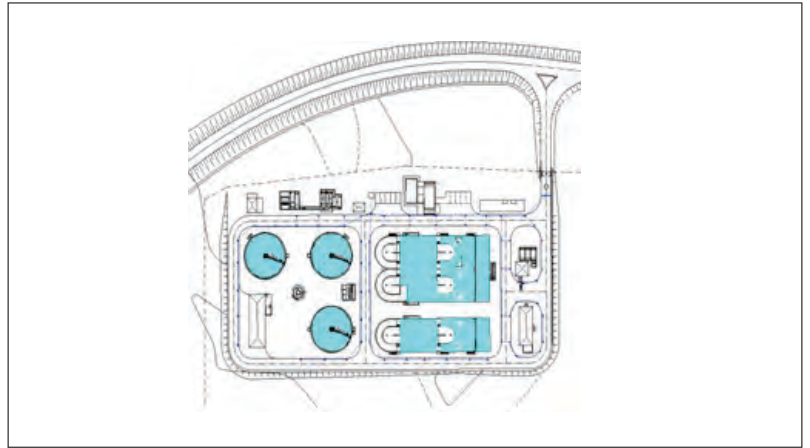


HYDRAULICS

SEWAGE SYSTEM, WASTE WATER TREATMENT PLANT, UNDERWATER DISPOSAL PIPELINE, ATTICA PERFECTURE, GREECE

Client:
PERFECTURE OF MACEDONIA

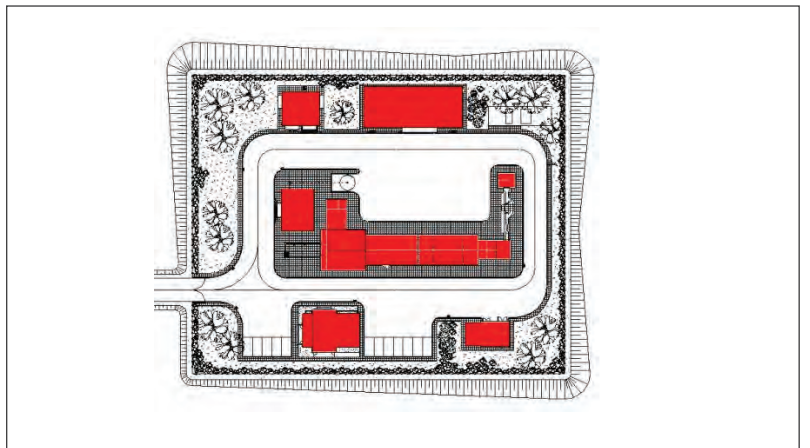
Treatment Plant For 200,000 eq.
People, 35,000 m Pipelines and a
1,500 m Underwater Disposal Pipeline.



POTABLE WATER REFINERY PLANT ALEXANDROUPOLIS, GREECE

Client:
ENVITEC S.A.

Detailed Design of a Potable Water
Refinery Plant for 50,000 People.



"KATO PITSA" RESERVOIR, PELOPONNESE DISTRICT, GREECE

Client:
MUNICIPALITY OF KORINTHIA

Design and Consulting Services -
Quality Control during construction of
the Reservoir, 15m in height,
120m long and 315.000m³ in volume.



"ERESSOS" DAM, LESVOS ISLAND, GREECE

Client:
MINISTRY OF AGRICULTURE

Design and Consulting Services
during construction of a Dam, 30m in
height, 350m long and 2.750.000m³
in volume.



SEWAGE NETWORK AND WASTE WATER TREATMENT PLANT IMPROVEMENTS, HERAKLEION, CRETE, GREECE

Client:
MUNICIPAL WATER SUPPLY AND SEWAGE COMPANY OF HERAKLEION

Detailed Design of the Expansion of the Existing Sewage Network, the Intermediate Pump Stations and the Waste Water Treatment Plan for over 100,000 People.



SOLID WASTE TREATMENT PLANT, SAMOS ISLAND, GREECE

Client:
MUNICIPALITY OF SAMOS ISLAND

Detailed Design of a 300,000 ton/year Solid Waste Treatment Plant in a 150,000m² Landfill Area.



“EGARES” RESERVOIR, NAXOS ISLAND, GREECE

Client:
MINISTRY OF AGRICULTURE

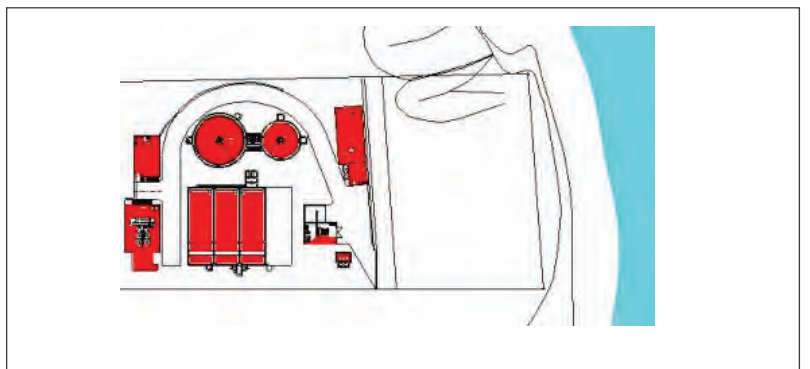
Design and Quality Control Consulting Services during the construction of the reservoir, 20m in height and 150m long and 600.000m³ in volume.



SEWAGE SYSTEM AND WASTE WATER TREATMENT FACILITIES AT SKYROS ISLAND, GREECE

Client:
MUNICIPALITY OF SKYROS ISLAND

Design of the Main Sewage System and the Waste Water Treatment Facilities of Skyros.



EXPERIENCE IN

TUNNELING

Railway/Road Tunnels, Cut and Covers and Large Conduits.



TUNNELING

ATHENS METRO

Client:
ATTIKO METRO S.A.

Geotechnical Consulting Services, consisting of the management of the Athens Metro owner Geotechnical Department for Lines 2 and 3 of the Metro (25km underground lines, 21 stations, depot and other auxiliary structures).



**NEW HIGH SPEED RAILWAY LINE
ATHENS - KORINTHOS - PATRAS,
"AIGIO" AREA TUNNEL**

Client:
ERGOSE S.A. / WS ATKINS S.A.

Geotechnical Investigation with
Coring Boreholes and Pre-Final
Geotechnical Design of the
main Tunnel (L=3,5Km), 2 Cut &
Covers and 3 Escape Tunnels
(L=250-350m).



**NORTH PELOPONNESE
OLYMPIA ODOS MOTORWAY**

Client:
HOCTHIEF-AKTOR J/V

Geotechnical Investigation
with Coring Boreholes and
Geotechnical Design of Cut &
Cover (L=160m) at Ch. 29 + 900.



**DOHA METRO,
QATAR**

Client:
DEUTSCHE BAHN INTERNATIONAL /
QATAR RAIL

Geotechnical & Tunneling Services
for Tender Preparation
for the Phase 1 of Doha Metro,
50Km of Double Tube Tunnel,
25 Stations and other auxiliary
Structures.



