Your partner for Geotechnical Services and Construction Technology

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stroehle engineering
Geotehnică * Tehnologia Construcţiilor

Content

About Us

- The main company Dipl.-Ing. Kurt Ströhle Ziviltechniker GmbH was founded in 2007 in Vienna, Austria.
- The subsidiary company S.C. STROEHLE ENGINEERING S.R.L. was founded in 2011 in Timisoara, Romania.
- Our qualified and professional team is lead by Dipl.-Ing. Kurt Ströhle, which has an experience of over 20 years in the field of Geotechnics and Construction Technologies.
- We are recommended by our experience in challenging construction projects located mainly in Romania and Austria, but also in locations such as Hungary, Bulgaria, Slovakia and China and by our constant vision for progress.

Partners

zt-ströhle
Geotechnik * Bautechnologie

Dipl.-Ing. Kurt Ströhle Ziviltechniker GmbH

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Operational field:

- Soil mechanics
- Geotechnics
- Geology and Hydrology
- Geotechnical and Structural Design

LABORATOARELE BAUMATEST

S.C. LABORATOARELE BAUMATEST S.R.L.

- Str. Ovidiu Cotrus Nr. 2A, RO-300514 TIMISOARA
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- E-Mail: office@baumatest.ro
- Web: www.baumatest.ro

Construction technical tests and analysis:

- Concrete
- Asphalt
- Soils

Areas of expertise

- All geotechnical related problems;
- Breakdown into simpler, more manageable contexts, especially with the help of our geotechnical laboratories;
- To achieve the highest standards possible for the benefit of our customers – both from the technical point of view and regarding the quality of our services;
- Optimization of geotechnical design with compliance to all safety measures;
- Lateral thinking: Incorporating the interest of the client on the entire range of solutions regarding geotechnical services and construction technology.

Range of our Services:

Geotechnical Reports:

- For construction projects of all sizes, from single-family houses, industrial parks with tens of thousands of square meters, linear structures such as highways and buildings with different underground or upper levels.
- Planning, carrying out and supervision of the geotechnical investigations: investigation pits, core drillings, DPH, CPT etc.
- Carrying out soil mechanical laboratory tests.
- Interpretation of the geotechnical investigations carried out in-site or in the geotechnical laboratory.
- Determination of the required soil mechanical and hydrological parameters.
- Determination of the required excavation safety measures, foundation systems and dewatering systems.

Range of our Services:

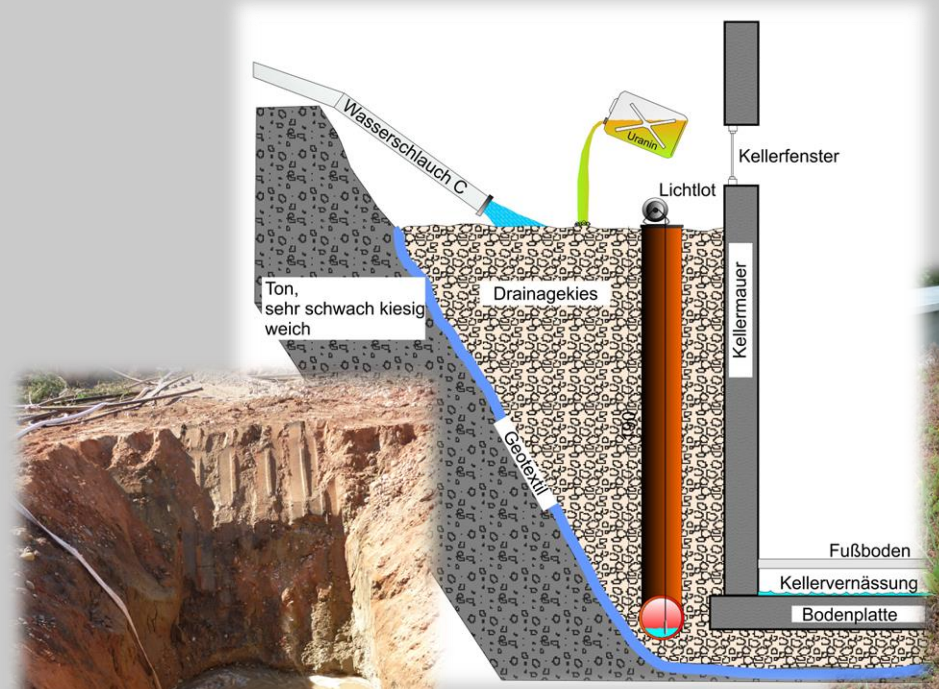
Testing and measuring technology:

- Soil mechanics laboratory tests: shear tests, compression tests, grain size distribution, determination of density, Atterberg limits;
- Soil physics field testing: dynamic and static load plate tests, dynamic penetration heavy (DPH);
- Pile testing: pile integrity test;
- Vibration measurements: during execution of piles, impulse compression or deep vibration methods.

Range of our Services:

Hydrogeology:

- Elaboration of dewatering concepts;
- Supervision of the execution of dewatering and drainage works;
- Design of the dewatering concept for the execution of the excavation pits and linear structures;
- Elaboration of required documentation for hydrological related permits.



Range of our Services:

Geotechnical static design and supervision of execution works

- Determination of the most suitable foundation system and safety excavation measures from both technical and economical point of view;
- Elaboration of land levelling concepts;
- Carrying out geotechnical support during the execution phase;
- Carrying out geotechnical supervision of the execution works.

Range of our Services:

Masonry Reports:

- Evaluation of masonry bearing capacity by using non-destructive methods such as adapted Schmidt Hammer;
- Evaluation of the masonry moisture content;
- Elaboration of drying out or rehabilitation concepts.


Strength testing with the Schmidt hammer


Masonry sampling

Our References

„EVN Südschiene“: High-pressure gas pipeline Fischamend - Peisching, Austria

2009-2010

- Design of the dewatering system, based on the tender documentation as well as on the hydrological measurement results;
- Supervision of the execution works and adaptation of the design according to the encountered situation;
- Planning and design of the dewatering system by means of dewatering wells;
- Planning and design of the drainage and retention basins for the collection of the pumped water;
- Static calculation of the sheet pile walls of the pits;
- Implementation of the hydrogeological construction supervision on behalf of the BH Vienna, BH Baden and BH Wiener Neustadt.

AHS Schwechat Austria

2011

- Design of the deep excavation safety measures by means of shotcrete wall with nails.
- Design of the deep foundation system by means of drilled piles;
- Geotechnical monitoring of construction including carrying out deformation measurements on the excavation pit or on the neighboring buildings.

Andritz Vienna Austria

2011

- Design of the deep excavation safety measures by means of shotcrete wall with nails.
- Static verification of the existing basement wall to be used within the deep excavation safety measures;

Windpark Pantelimon 50 Wind Turbines, Romania

2011-2013

- Determination of the geotechnical parameters based on the existing geotechnical reports and additional carried out cone penetration tests (CPT);
- Design of the deep-foundation system for the wind turbines;
- Elaboration of the static pile testing concept;
- Design of the superstructure of the access roads and crane platforms;
- Determination of the type of binder and the binder content for the stabilization of the subgrade of the access roads and crane platforms;
- Geotechnical supervision of the execution works.

Promenada Mall Bucharest, Romania

2011-2012

- Design of the deep-excavation safety measures by means of diaphragm walls, with different types of bracing:
  - Prestressed anchors;
  - Horizontal or inclined struts;
  - Top-down support.
- Design of the anchors
- Preparation of all calculations and drawing as basis for execution in English and Romanian, including all documents required by Romanian building law
- Preparation of all formwork and reinforcement plans for the diaphragm wall, guiding beams and for additional reinforced concrete elements (capping beam, top-down support);
- Geotechnical supervision of the execution works.

Windpark Dorobantu-Topolog
42 Wind Turbines, Romania

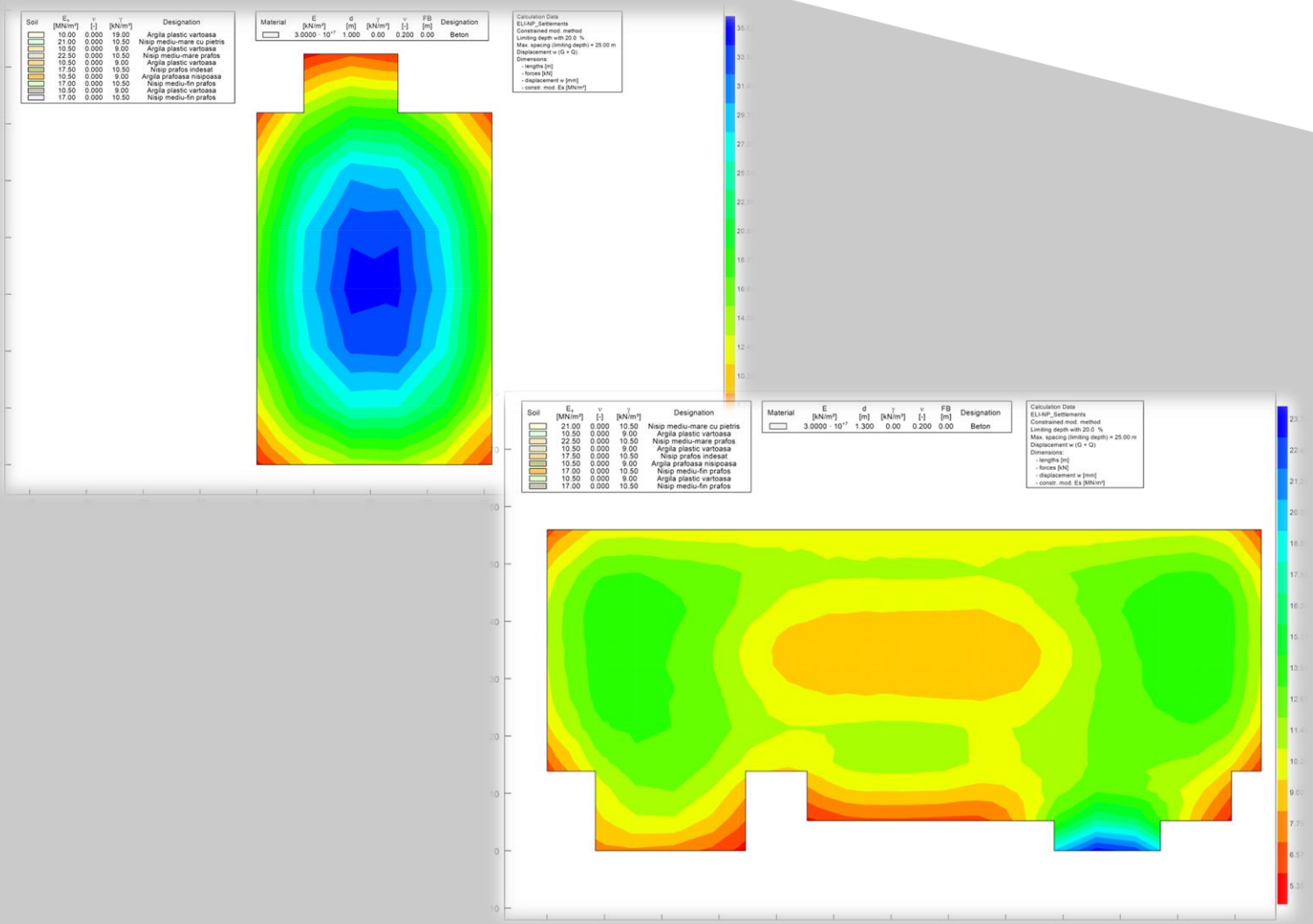
2012-2013

- Planning and coordination of geotechnical investigations (core drillings, CPT, laboratory tests)
- Elaboration of the geotechnical report;
- Design of the deep-foundation system for the wind turbines;
- Elaboration of the static pile testing concept;
- Design of the superstructure of the access roads and crane platforms;
- Determination of the type of binder and the binder content for the stabilization of the subgrade of the access roads and crane platforms;
- Geotechnical supervision of the execution works.

Extreme Light Infrastructure Nuclear Physics (ELI-NP) Magurele, Romania

2014

- Determination of the geotechnical parameters based on the existing geotechnical reports;
- Determination of the spring stiffness based on the compression tests;
- Carrying out settlement calculations with determining the expected settlements and settlement differences.



Kara I & Kara II Logistic Center Hagenbrunn, Austria

2014-2016

- Planning and implementation of the geotechnical investigations;
- Elaboration of the geotechnical report;
- Design of the superstructure in the various areas of use - in the area of the hall and in the area of the outdoor facilities - as well as the acceptance criteria required for these;
- Geotechnical supervision of the execution works.

Jaguar-Land-Rover Nitra, Slovakia

2015-2018

- Planning and coordination of the geotechnical investigations;
- Elaboration of general geotechnical report;
- Elaboration of detailed geotechnical report for each building/group of buildings;
- Elaboration of the land leveling concept;
- Pre-design of the soil improvement measures;
- Support of the client in the bidding process for the deep foudations of the buildings;
- Review of the geotechnical design;
- Geotechnical support for the design team and client;
- Geotechnical supervision of the earthworks and soil improvement works.

The Mark
Bucharest, Romania

2016-2017

- Planning and coordination for the execution of the cone penetration tests (CPT);
- Determination of the geotechnical parameters based on the existing geotechnical reports and additional carried out cone penetration tests (CPT);
- Calculation of the expected settlements and determination of the bedding moduli for different areas of the foundation raft, according to the expected loads;
- Design of the deep-foundation piles;
- Design of the deep-excavation safety measures by means of diaphragm walls with bracings;
- Geotechnical support.

I-Tower
Sofia, Bulgaria

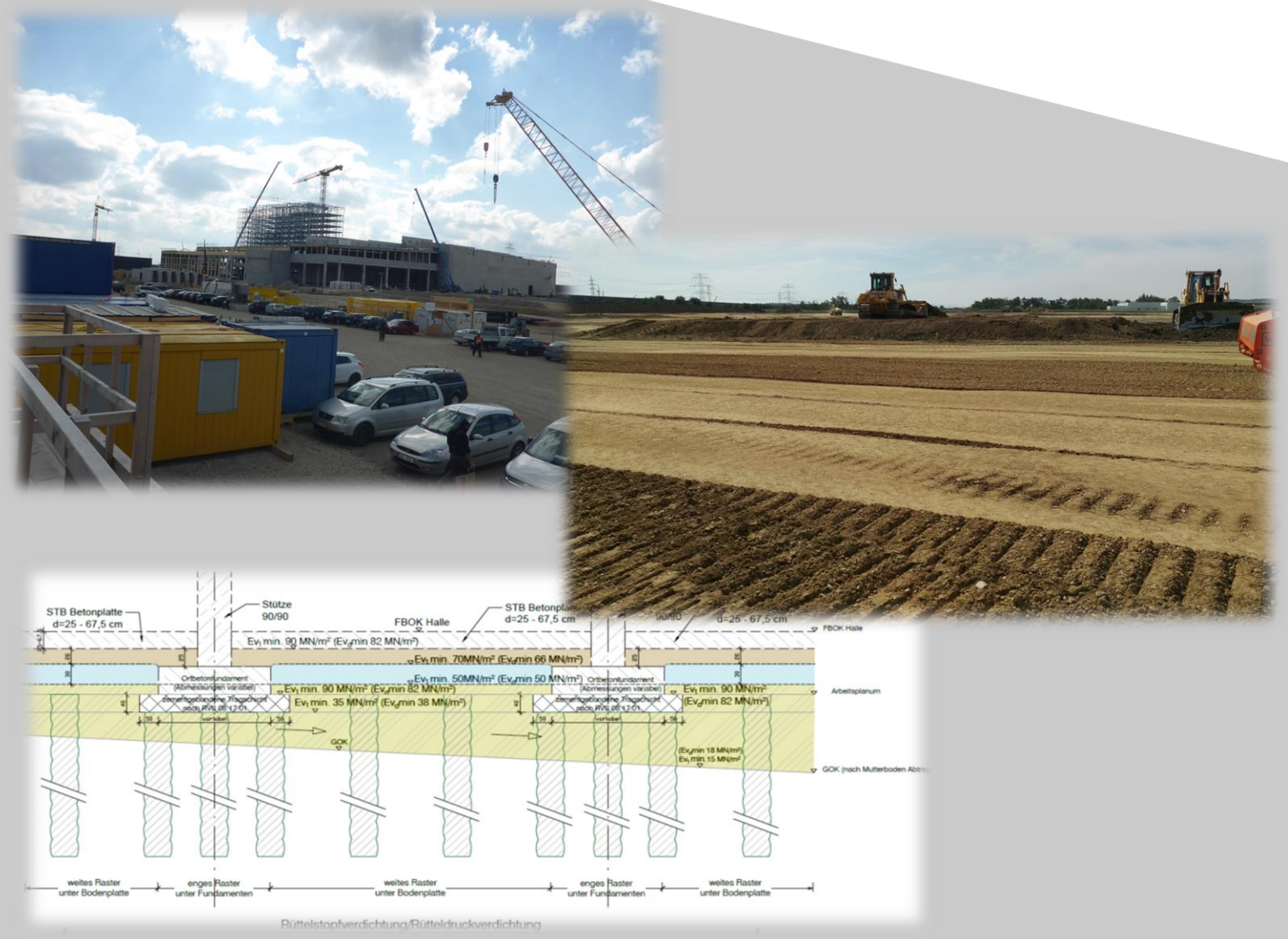
2017-2018

- Determination of the geotechnical parameters based on the existing geotechnical reports and additional carried out cone penetration tests (CPT);
- Design of the deep-excavation safety measures by means of diaphragm wall with anchors;
- Design of the prestressed anchors;
- Elaboration of the testing program for the anchors;
- Geotechnical supervision.

Lidl Zentrallager Großebersdorf, Austria

2018-2020

- Elaboration and implementation of the concept for deep vibro compaction under the hall structures as well as testing program;
- Elaboration and implementation of the concept for drilled piles under the high loads areas as well as testing program;
- Determination of the column grid under the floor slab of the warehouse, based on the results of the test fields and the results of the settlement calculations;
- Geotechnical supervision.



One Mircea Eliade Bucharest, Romania

2018-2019

- Determination of the geotechnical parameters based on the existing geotechnical reports;
- Calculation of the expected settlements and determination of the bedding moduli for different areas of the foundation raft, according to the expected loads;
- Design of the deep-foundation piles;
- Design of the deep-excavation safety measures by means of shotcrete wall with nails and drilled pile wall with bracing;
- Geotechnical support.

One Verdi Park Bucharest, Romania

2019-2020

- Planning and coordination for the execution of the cone penetration tests (CPT);
- Elaboration of the geotechnical report;
- Design of the deep-excavation safety measures by means of diaphragm wall with bracings;
- Geotechnical support.

One Cotroceni Park Bucharest, Romania

2019-2020

- Planning and coordination for the execution of the cone penetration tests (CPT);
- Determination of the geotechnical parameters based on the existing geotechnical reports and additional carried out cone penetration tests (CPT);
- Design of the deep-excavation safety measures by means of inclined slopes and drilled pile wall;
- Geotechnical support.

BMW
Debrecen, Hungary

2018 – ongoing

- Elaboration of geotechnical report;
- Elaboration of land leveling concept;
- Elaboration of static pile testing concept;
- Determination of the pile load bearing capacities based on the pile load tests;
- Pre-design of the soil improvement measures;
- Pre-design of the deep-foundation measures;
- Review of the geotechnical design;
- Geotechnical support for the design team and client;
- Geotechnical supervision of the earthworks and soil improvement works.

Highway A1, Sibiu-Pitesti, Lot 1 Romania

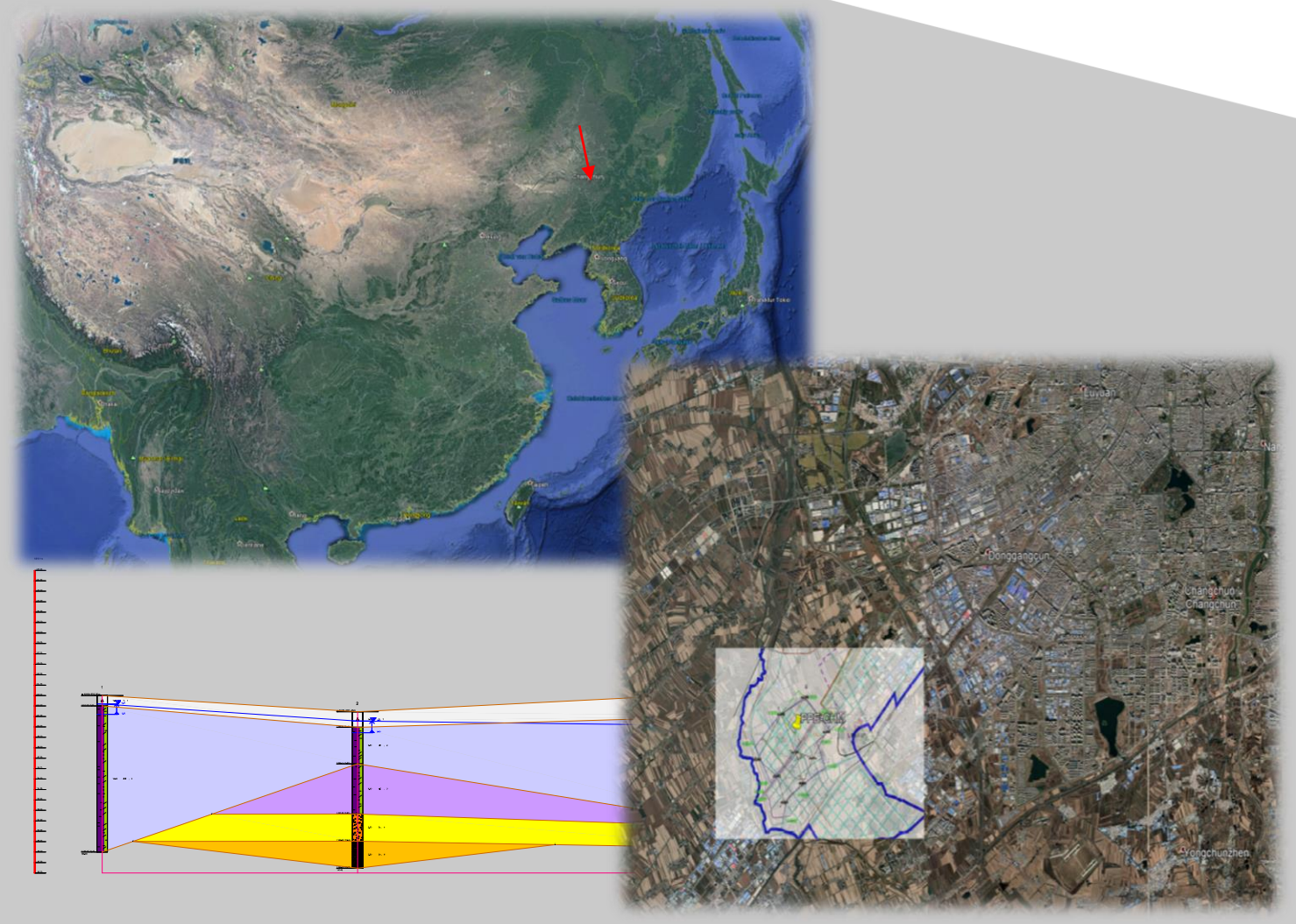
2019 - 2022

- Planning and coordination of the geotechnical investigations;
- Elaboration of the geotechnical report;
- Information regarding the foundation on the highway route;
- Information regarding the foundation of the bridges;
- Information regarding the consolidation works and slope stability;
- Design of the and soil improvement measures and platforms of the temporary scaffoldings on the longest and most challenging bridge within the project;
- Geotechnical support for the design team and client.

Audi
PPE-CHM
Changchun, China

2020 - 2022

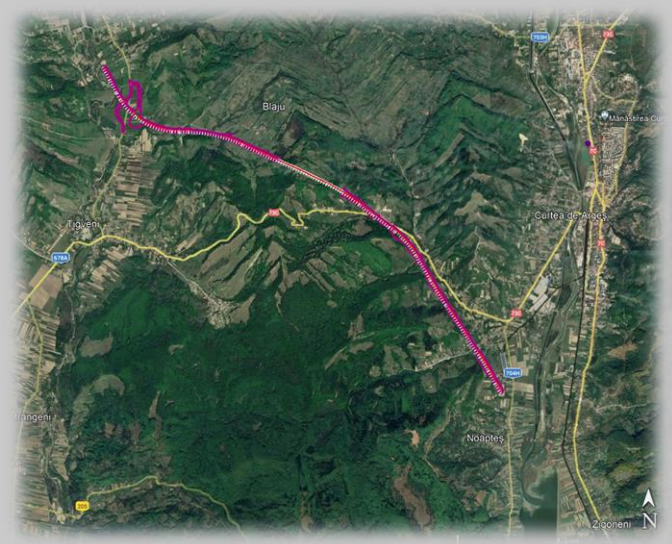
- Elaboration of the ground modell based on preliminary investigations;
- Elaboration of the preliminary report regarding the geotechnical situation;
- Information regarding the required geotechnical investigations;
- Elaboration of the concept for earthworks;
- Elaboration of a start-up concept;
- Pre-design of the deep-foundation system;
- Review of the tender and implementation design.



Highway A1, Sibiu-Pitesti, Lot 4 Romania

2022 - ongoing

- Planning and coordination of the geotechnical investigations;
- Elaboration of the geotechnical report;
- Information regarding the foundation on the highway route;
- Information regarding the foundation of the bridges;
- Information regarding the soil improvement works and slope stability;
- Elaboration of the geotechnical monitoring program;
- Geotechnical support for the design team and client.



Thank you for your attention!