Technical consulting for smart Site Investigations. Quality management to reduce geotechnical risk and provide cost effective and adequate design.
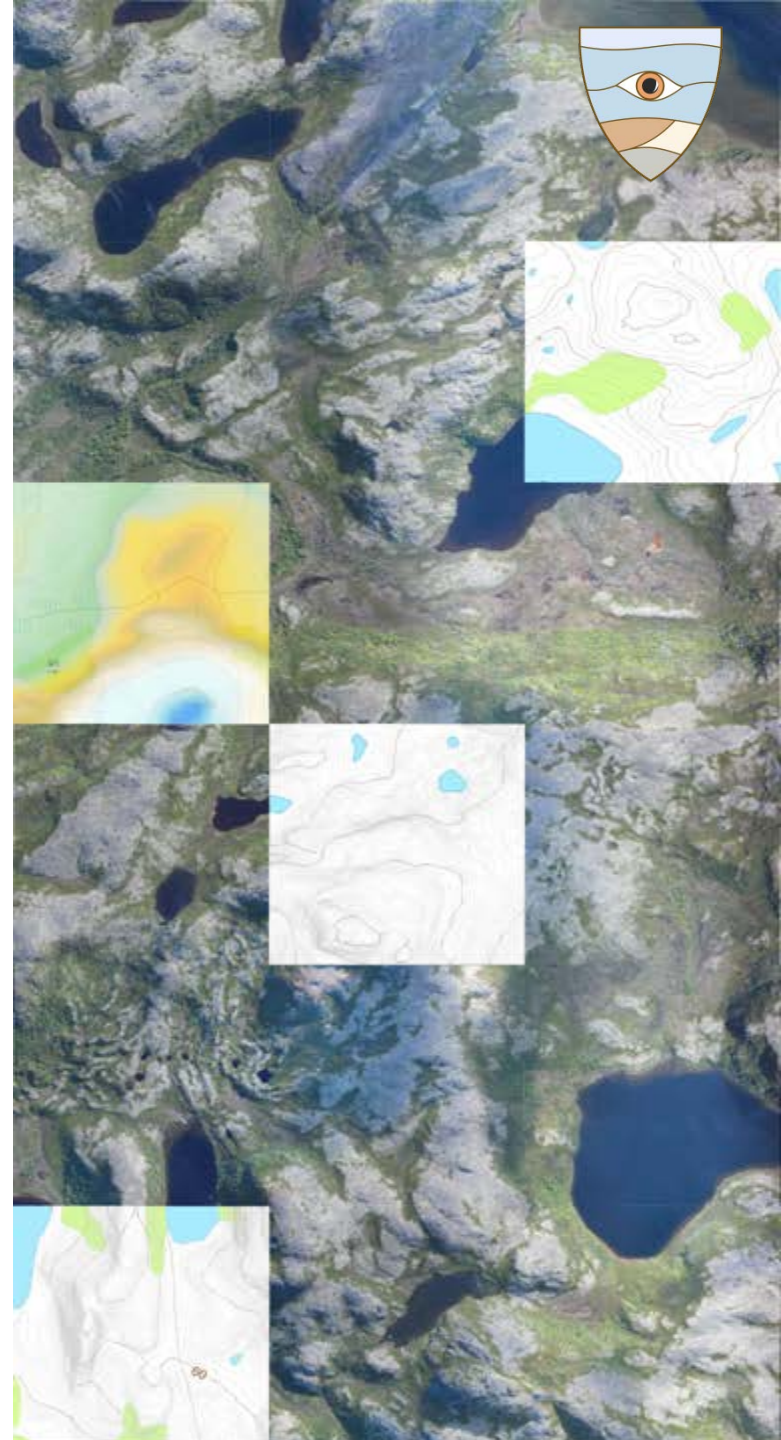
2019г.

Maxim Y. Shokalsky

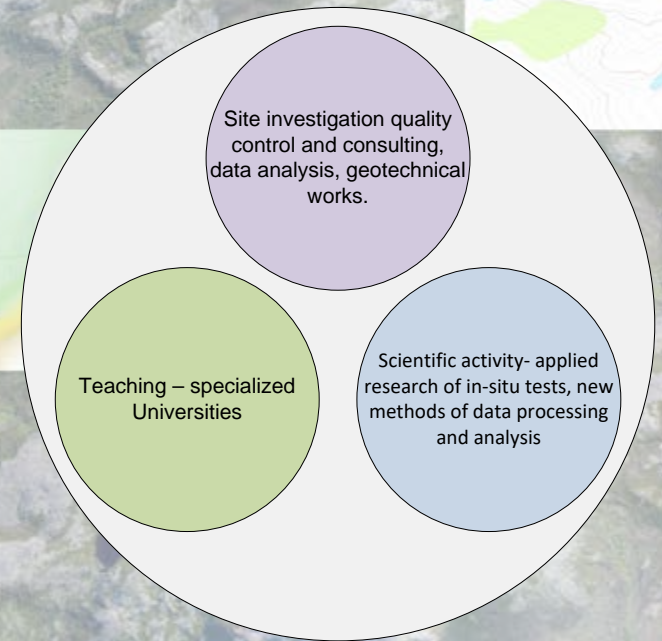+7-910-477-69-90 / +7-916-245-43-31

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About the company

- Company details.

- Contacts, news, website
  www.shminsitu.ru

Site investigation quality control and consulting, data analysis, geotechnical works.

Teaching – specialized Universities

Scientific activity- applied research of in-situ tests, new methods of data processing and analysis

SHMINSITU

About the company   Our activities   Cooperation   Contact data   News_RU   RU

About the company.

The company was founded by specialists in the field of engineering and geological surveys with experience in planning, organization and conduct and, data processing. The company specialists have worked in a wide variety of conditions and countries, they have the skills to use advanced technologies and significant experience in an integrated data processing.

Faced from project to project with typical errors and inaccuracies, the company has developed a set of simple measures to control the quality of geotechnical survey. The use of advanced international experience and developments has significantly increased the information content, reliability of the research, as well as ensure maximum compliance with the design.

The company specialists participate in projects onshore and offshore, in countries such as Kazakhstan, Lithuania, the United Arab Emirates, Hungary and Russia - Moscow and the Moscow Region, Leningrad Region, Krasnodar Territory, Kemerovo Region, Tyumen Region, Saratov Region, Nizhny Novgorod Region, Sakhalin Region and Khabarovsk Region.

Before the foundation of the company, it is took part in more than 1000 projects of various sizes including surveys for nuclear power plants to work on individual residential buildings, industrial facilities and infrastructure, participated in field author supervision, and has have experience in designing foundations. CV of our director is here.

About the company

- Experience onshore, nearshore and offshore.

- Work experience both in Russia and abroad. Knowledge of work practice. High qualification in advanced in-situ technologies.

- Experience throughout the chain - from concept to project implementation. Ability to implement end-to-end quality control.

- The company was established by specialists with significant experience – more than 1000 objects. CV Director. Many errors were analyzed, which will help to avoid them in the future.
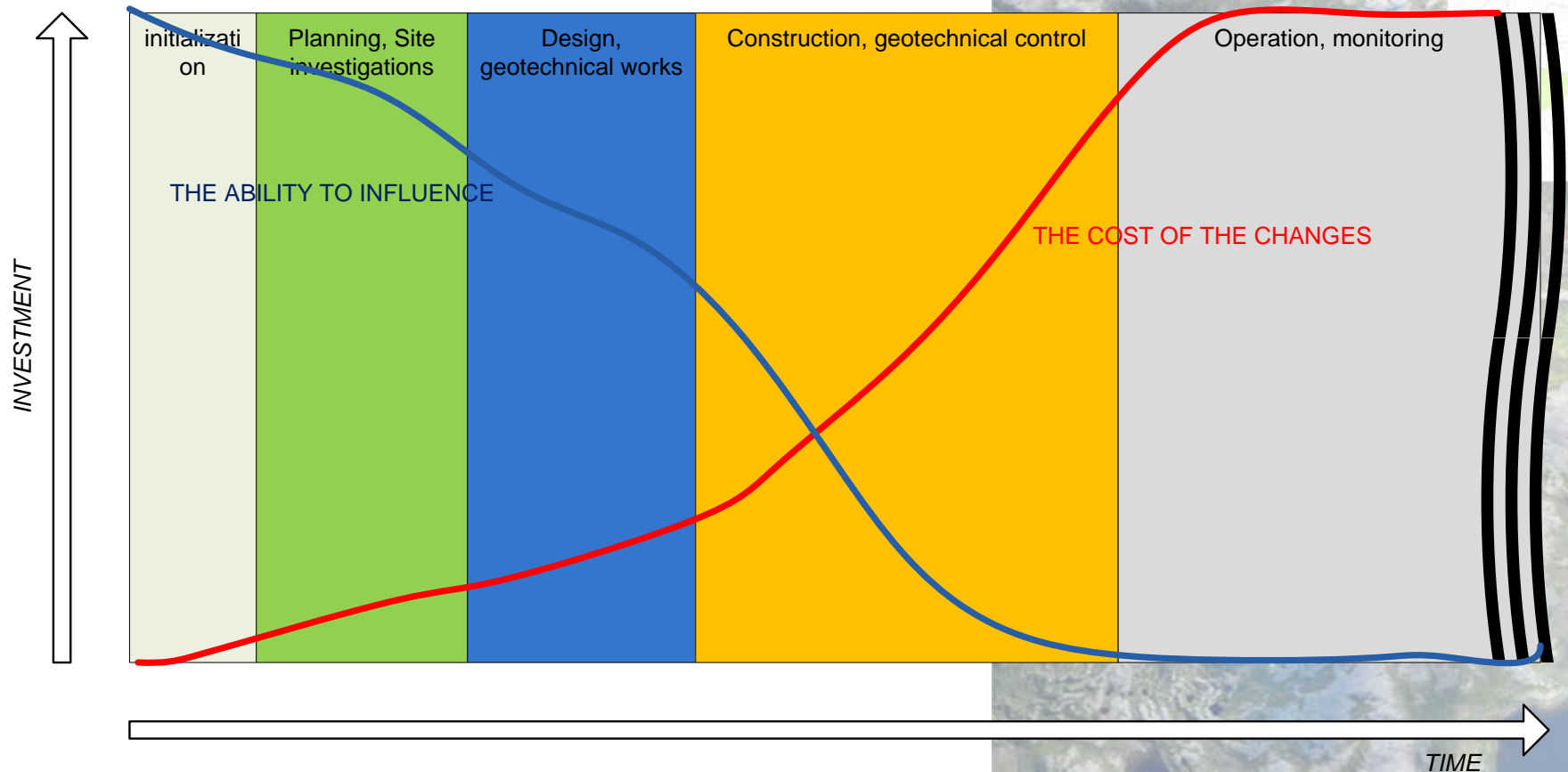
| Client | Design company | Site investigation contractor | Technical and author supervision | Experience in complex analysis and data validation |

Any construction project

- Site investigations, geotechnical works and control – are key activities for design and construction. Smart management and control of these activities – is the way to reduce geotechnical risk and provide cost effective and adequate design.

Any construction project

- Refusal of Technical and Author's supervision of works is like a shot in the leg before a marathon. The wrong way of supervision works is a like refusal from it.
  - **– samples from the practice**.
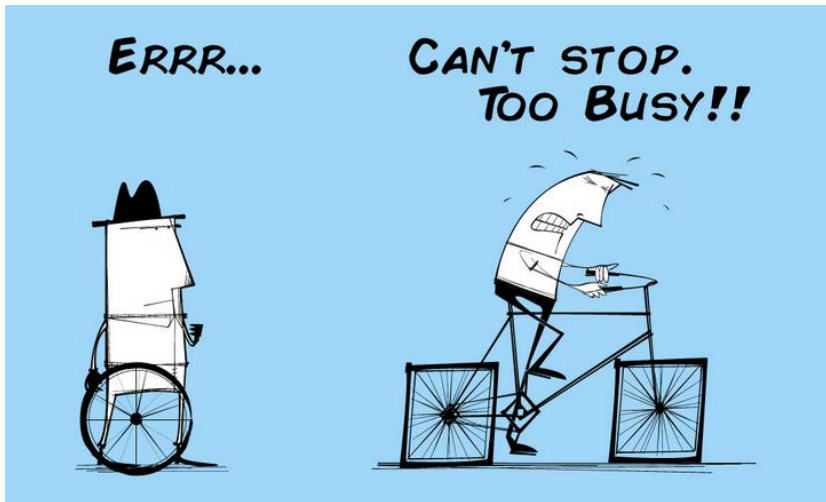
- How much are you willing to spend on quality control and survey, if the total cost of the project-billions of rubles ?
  - **– samples from the practice.**

Complexity of Site Investigation quality control and control of initial construction works.

- Site Investigation quality control and control of initial construction works:
  - *Internal quality control systems of survey companies - do not always work.*
  - *Quality control from the Client side – do not always work or sometimes work not correctly.*
  - *Expertise - not interested in quality, only formal compliance with norm.*
  - *Geotechnical control and author's supervised control - do not always work .*
  - *End to end quality control through all stages – very very very seldom, mostly depend on personalities.*
- **– samples from the practice**.

Why it is so important to manage the quality of Site Investigations?

1. The impact of Site Investigation quality and quality of some geotechnical control works on accidents/problems in construction = loss of time and money - **from 20 to 85% of the total number of problems.**

2. The cost of foundations is a significant part of the construction costs - **inaccurate site investigations = either burying money in the soil, either problems during construction - see above the item 1.**

3. One of the main problems is fragmentation of processes / lack of feedback between project participants. **An integrator is needed. Geotechnical integrity manager. With a wide outlook.**

4. Drawing (fairy tale) surveys **-the responsibility for Site Investigations is often depend on ones, but others implement the project and receive all geotechnical risks. Checking and verification is required**.

– samples from the practice.

Find yourself

- Possible Clients:

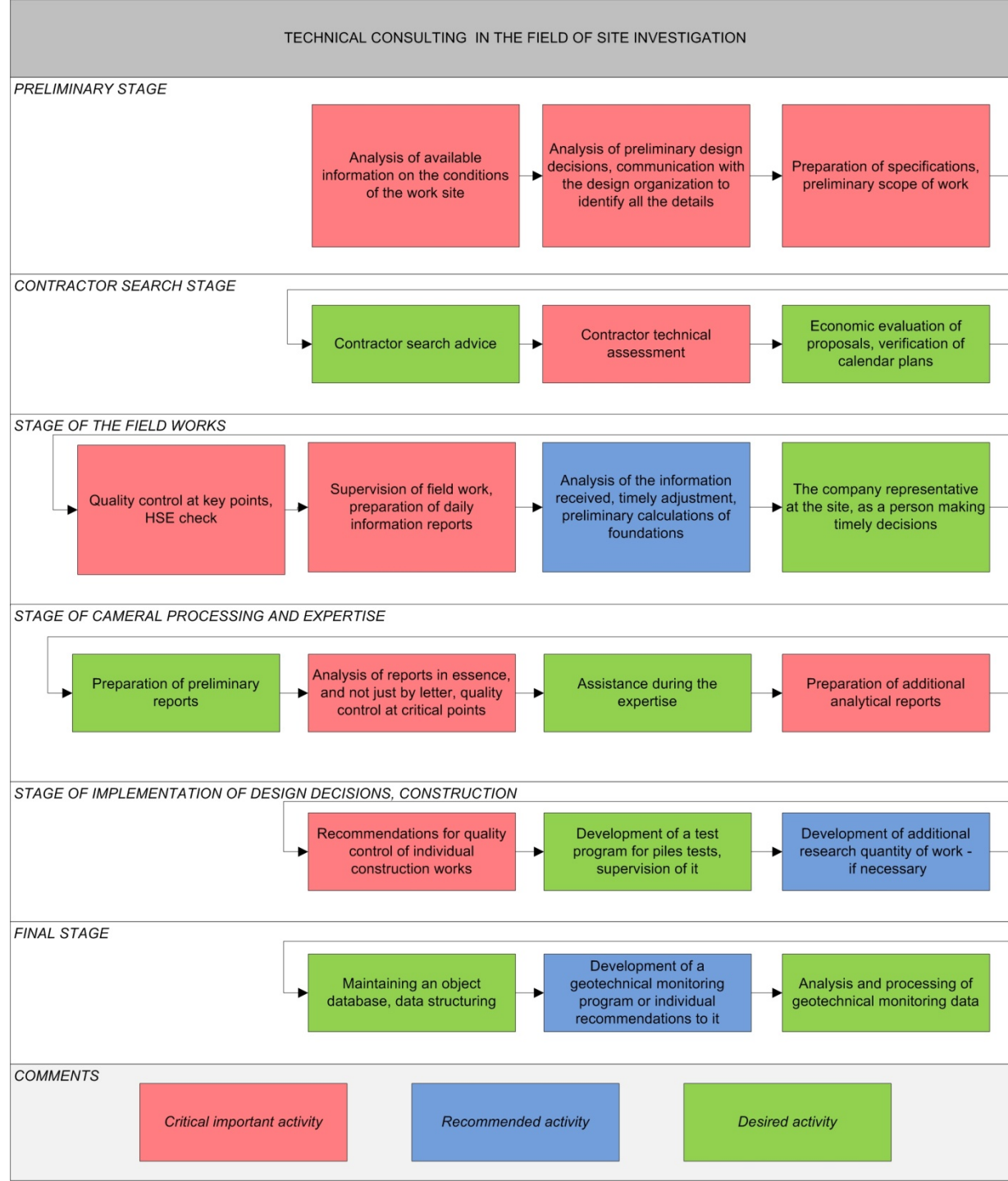|		
Banks- design and construction financing	Insurance company- insurance of risks of construction	Developers / investors
Design companies	Construction companies	Expertise

- Who invests money and has responsibility, who is linked with the project implementation.

our service

- Site Investigation quality management

- Possible as work in the complex, and individual activity.

- Promptly, confidentially, impartially

TECHNICAL CONSULTING IN THE FIELD OF SITE INVESTIGATION

PRELIMINARY STAGE

- Analysis of available information on the conditions of the work site
- Analysis of preliminary design decisions, communication with the design organization to identify all the details
- Preparation of specifications, preliminary scope of work

CONTRACTOR SEARCH STAGE

- Contractor search advice
- Contractor technical assessment
- Economic evaluation of proposals, verification of calendar plans

STAGE OF THE FIELD WORKS

- Quality control at key points, HSE check
- Supervision of field work, preparation of daily information reports
- Analysis of the information received, timely adjustment, preliminary calculations of foundations
- The company representative at the site, as a person making timely decisions

STAGE OF CAMERAL PROCESSING AND EXPERTISE

- Preparation of preliminary reports
- Analysis of reports in essence, and not just by letter, quality control at critical points
- Assistance during the expertise
- Preparation of additional analytical reports

STAGE OF IMPLEMENTATION OF DESIGN DECISIONS, CONSTRUCTION

- Recommendations for quality control of individual construction works
- Development of a test program for piles tests, supervision of it
- Development of additional research quantity of work - if necessary

FINAL STAGE

- Maintaining an object database, data structuring
- Development of a geotechnical monitoring program or individual recommendations to it
- Analysis and processing of geotechnical monitoring data

COMMENTS

- *Critical important activity*
- *Recommended activity*
- *Desired activity*

Preliminary stage

- Analysis of available data.
- Provide specification for geotechnical works, recommendations for the implementation of surveys.
- Assistance in the selection and technical evaluation of a subcontractor.

PDF, word, excel, database.
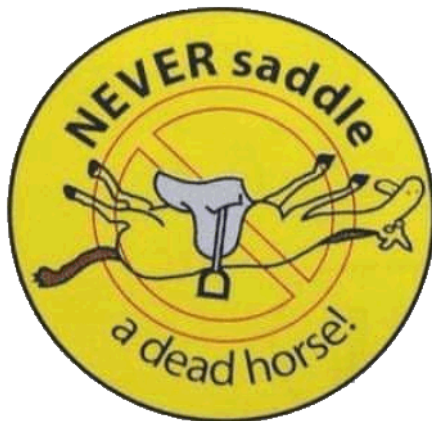
Implementation of modern in-situ methods in practice – CPTU, SCPTU, RCPTU, PPDT&PPST – guaranty of the quality.
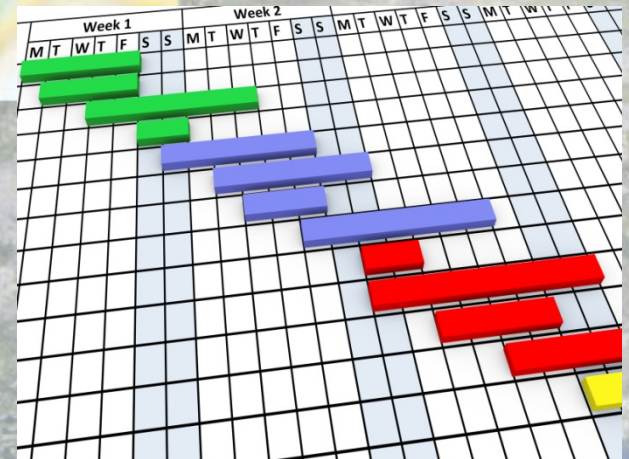
programme of work

Field works stage

- General HSE control .

- Key point control.

- Client site representative onsite.

- **Prompt data analysis + prompt actions = predicted result**
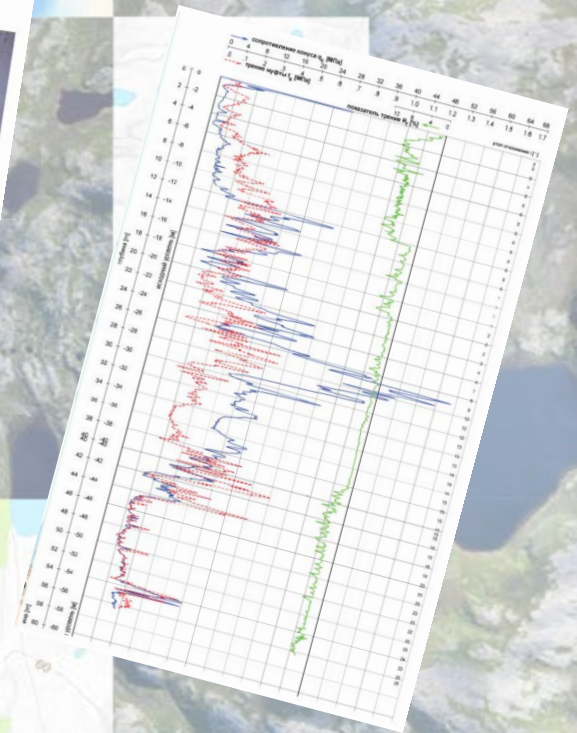
Data processing, reporting.

- Analysis in essence, not by letter.
- Complex data analysis.
- Additional geotechnical recommendations and calculations .
- DATABASE.
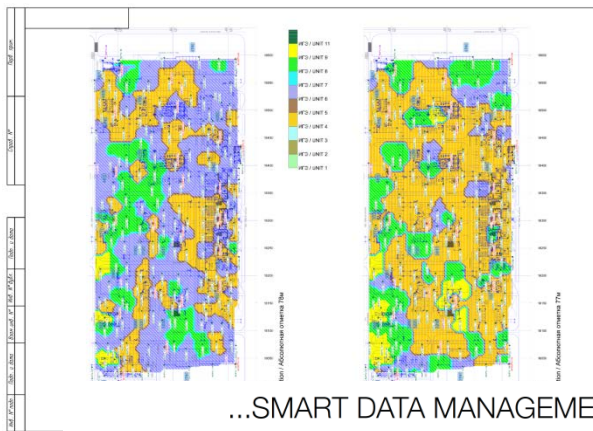
...SMART DATA MANAGEMENT

GeODin Portal Server: это дизайнер динамической Веб-страницы для представления ваших данных. Вы создаете шаблоны для изображения с помощью **GeODin®** инструментов в привычном окружении. Гиперссылки на другие страницы и Мар-Серверы задаются на переменных текстах, Таблицах или временных графиках. **GeODin Portal Server** ведет все Веб-презентации в режиме реального времени на основе существующих данных актуальной БД.

- Создание Веб-порталов с помощью **GeODin®** инструментов
- Динамические Веб-страницы на основе **GeODin®** БД с помощью шаблонов
- Показ гео-данных в режиме реального времени
- Скачивание документации в формате PDF
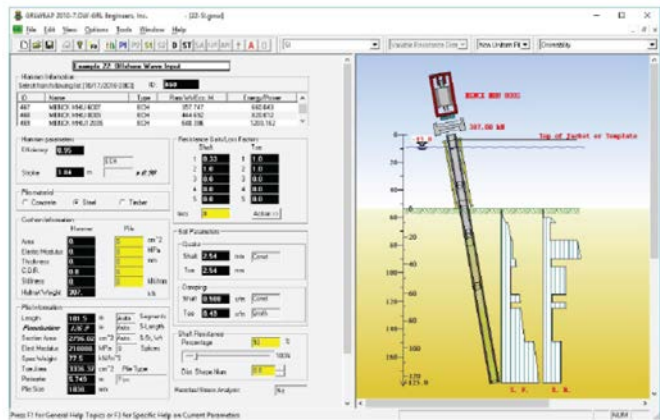- Расширенный **GeODin Guardian** для наблюдения за БД (Система подачи тревоги и регулярные отчеты по качеству)

PDF
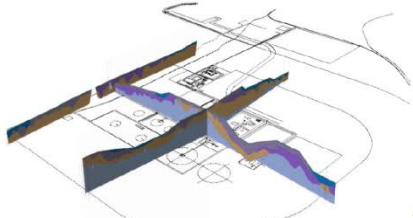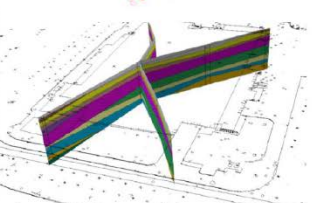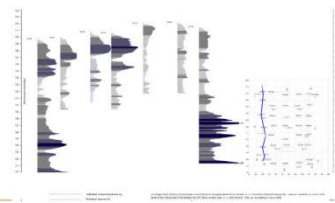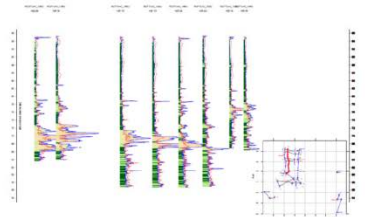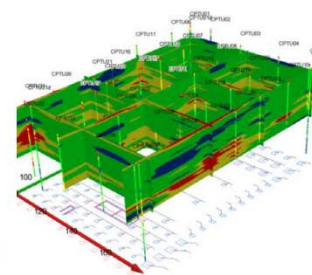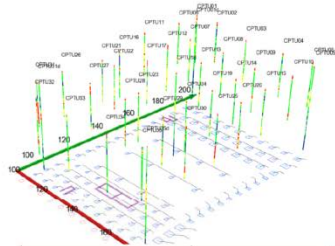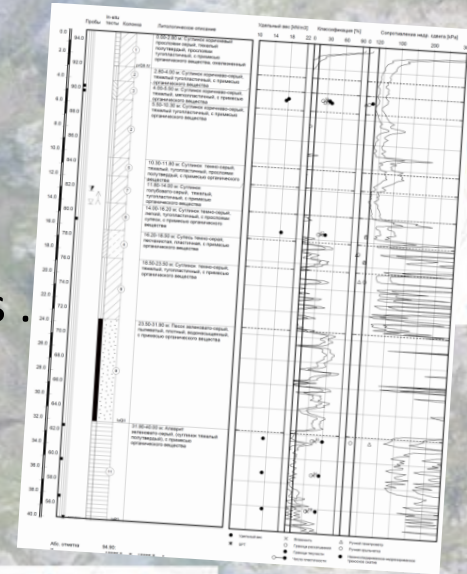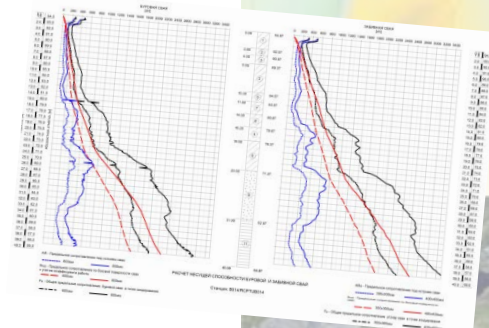
Individual construction activity

- Earthworks – soil improvement control, soil compaction control and so on.

- Pile driving and testing.

- Using of drones for monitoring and control

GRLWEAP Main Input Screen

Static and dynamic PLT , soil sampling, CPT+DMT.

Conclusions

1. *We have a wide range of experience that allows us to manage the quality of surveys at all stages-from the beginning of the surveys to the initial construction work.*

2. *Our support will help you to predict problems and avoid them. Will help reduce geotechnical risk or solve a problem that already exists.*

3. *We will be glad to assist in the implementation of your (our) project! Anywhere in Russia and abroad. Onshore and offshore.*

4. *SHMinsitu - is a powerful player in your team.*

ЕСТЬ
ВОПРОСЫ ?

ANY QUESTIONS ?

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- Information in the presentation is represented schematically, detailed presentation is available upon request.