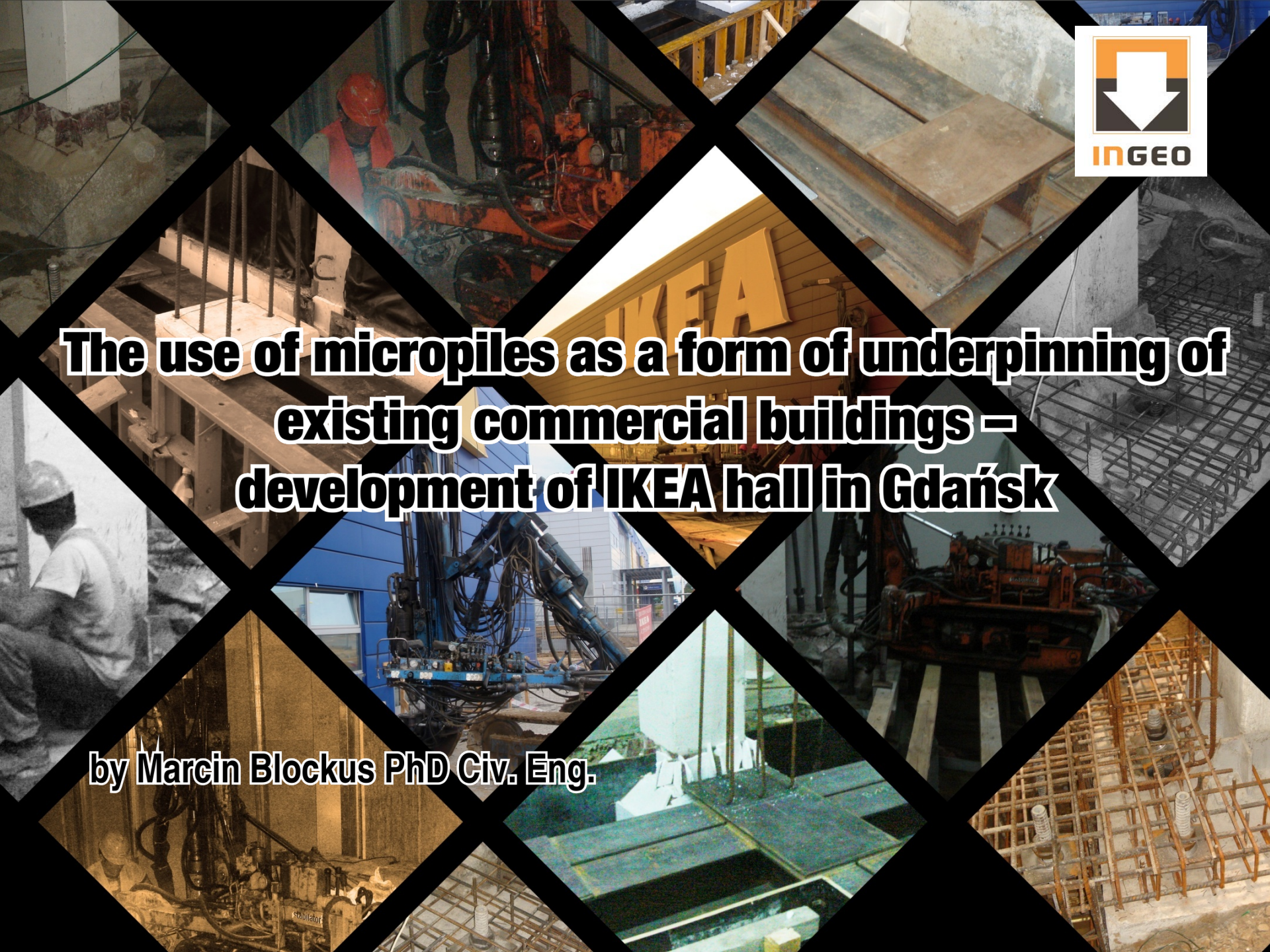




The use of micropiles as a form of underpinning of existing commercial buildings – development of IKEA hall in Gdańsk

by Marcin Blockus PhD Civ. Eng.



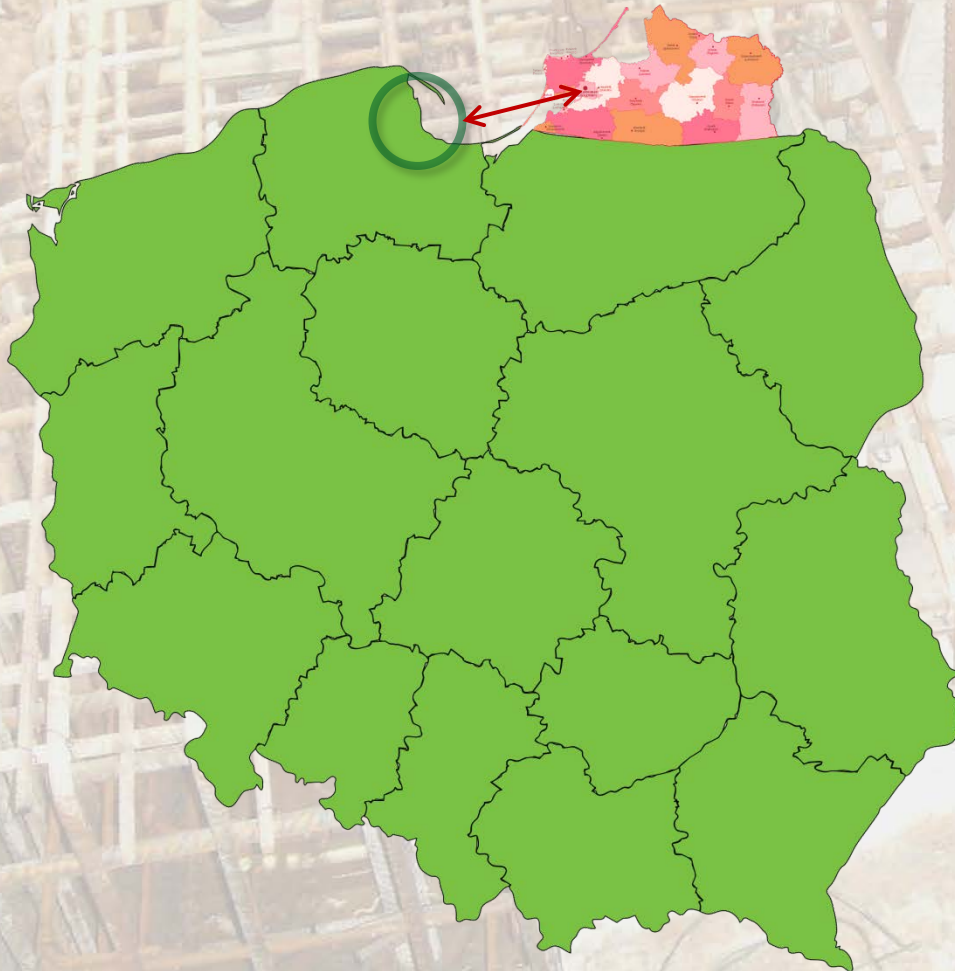
Presentation plan:

- Introduction – general information**
- Description of the applied technical solutions**
- Execution of the piling works**
- Summary**

Introduction – general information



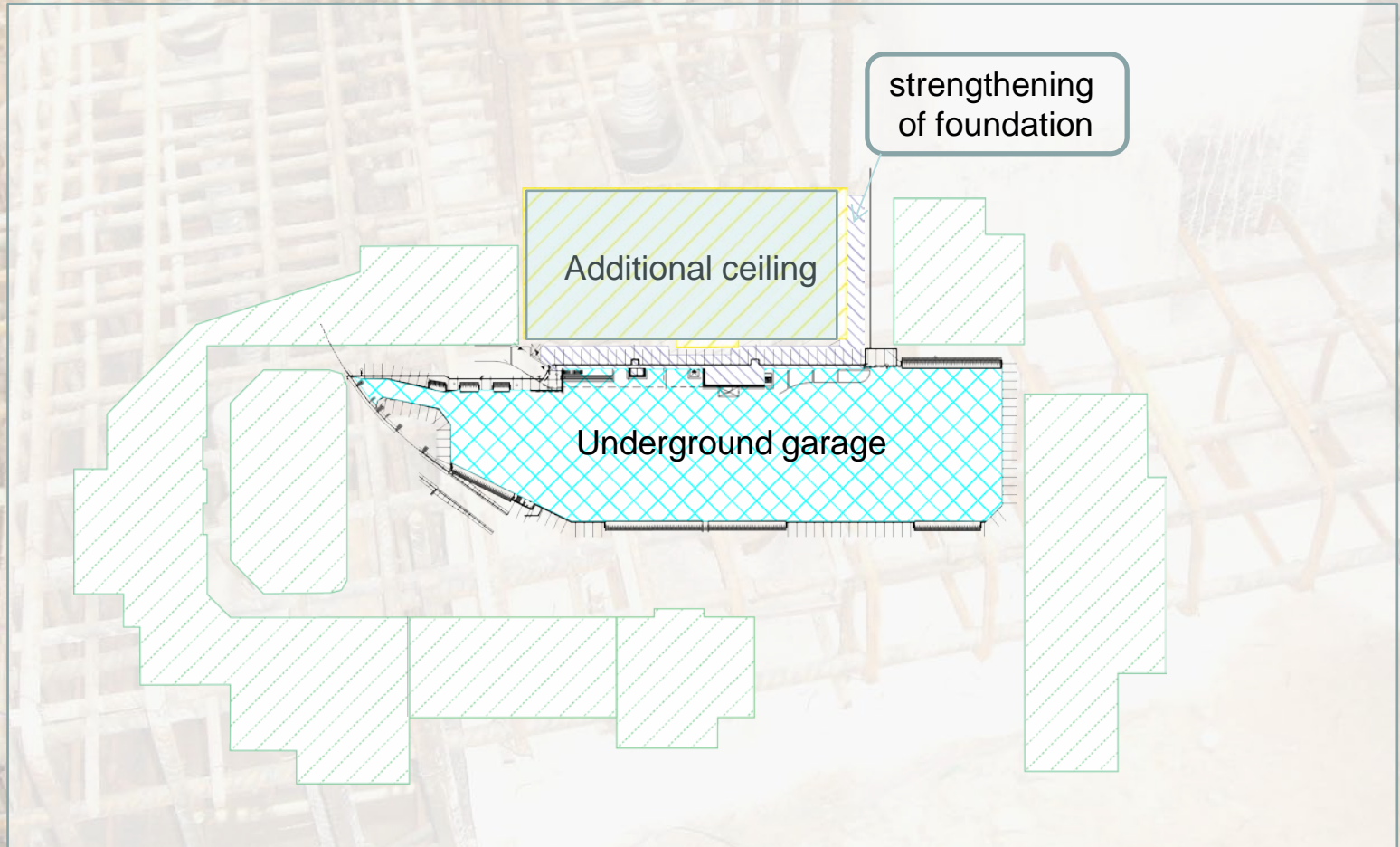
- Location of the commercial center



Introduction – general information



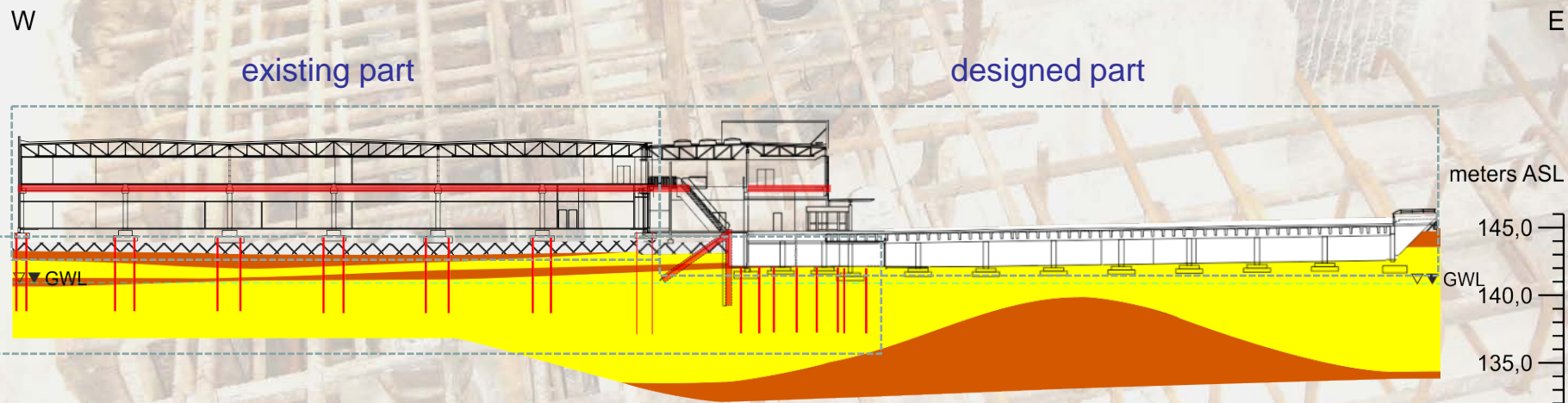
- Stages of the investment



Description of the applied technical solutions



- Typical cross section



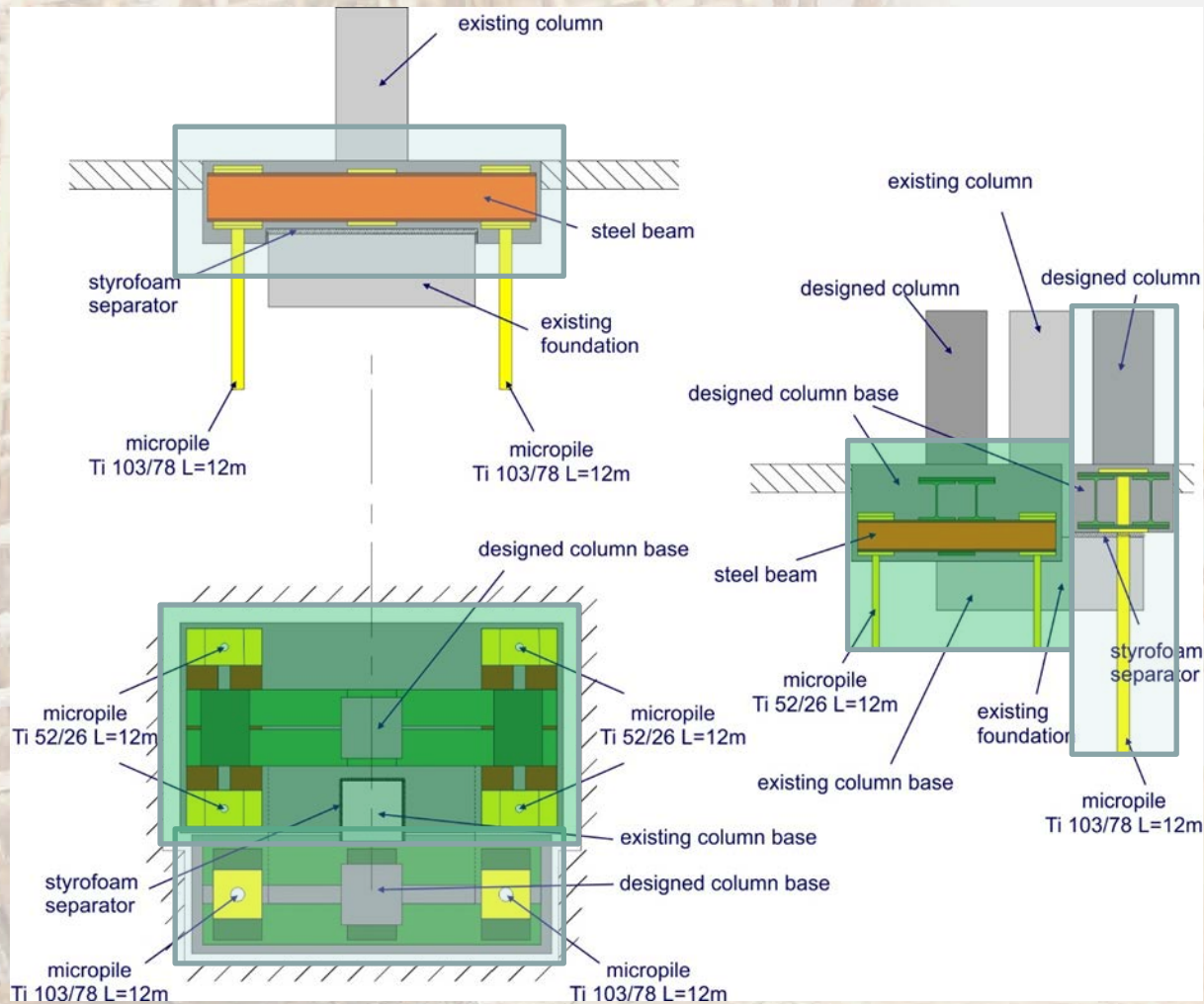
Description of the applied technical solutions

- Scheme of the micropiles installed in the existing foundation



Description of the applied technical solutions

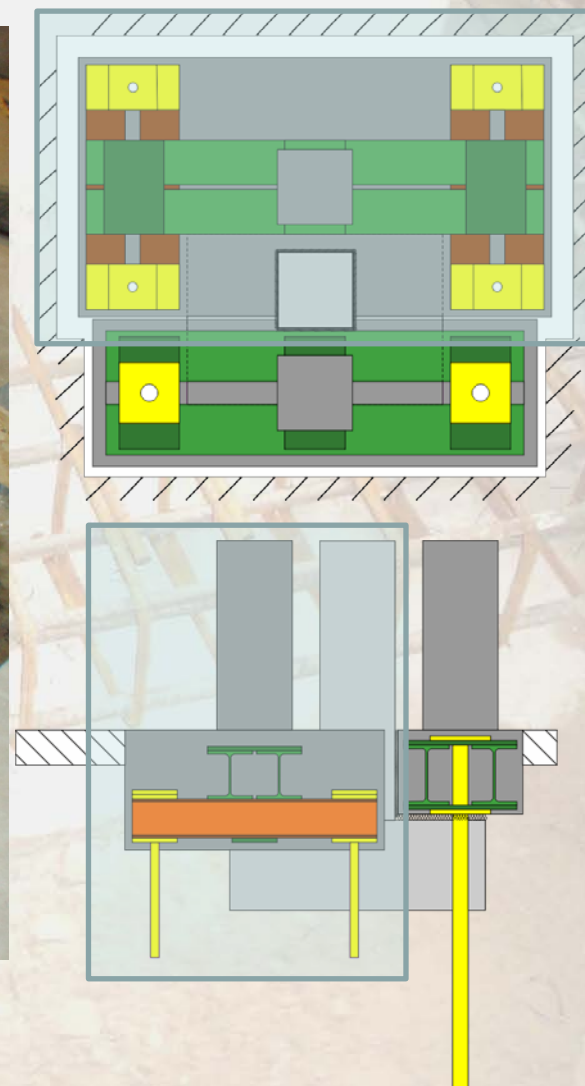
- Scheme of the construction of independent support of the columns



Description of the applied technical solutions



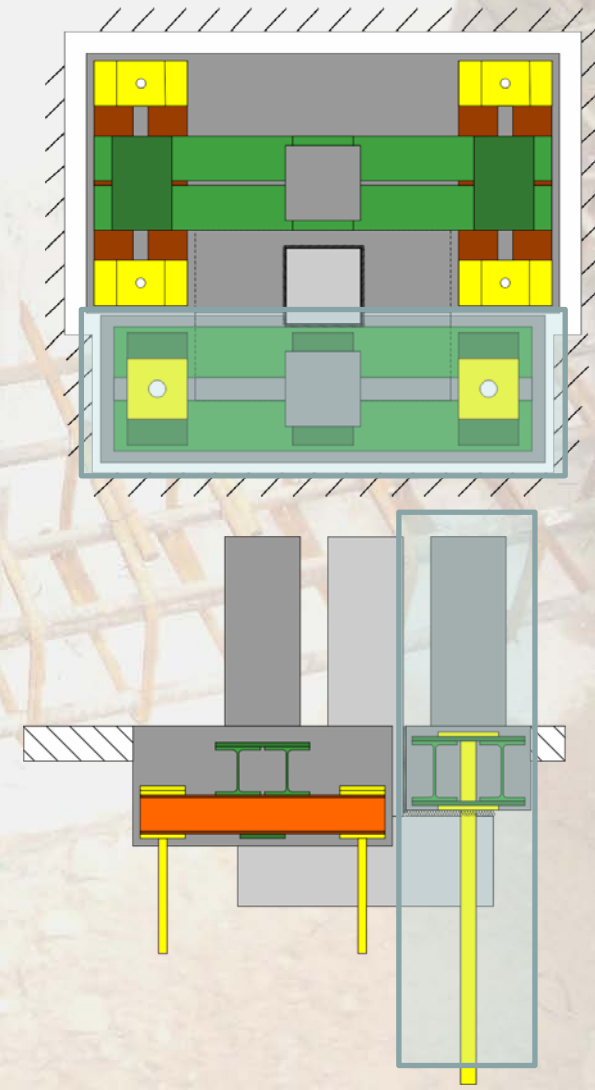
- Scheme of the construction of independent support of the columns



Description of the applied technical solutions



- Scheme of the construction of independent support of the columns



Execution of the piling works



- Outdoor works



Execution of the piling works



- Outdoor works



Execution of the piling works



- Indoor works



Execution of the piling works



- Indoor works



Summary and conclusions



- Effective and economical technology
- In the analyzed case the injection micropiles were used for:
 - underpinning the existing foundations and constructing the new foundations
 - anchoring the support of the excavation of the underground parking lot
- The use of the micropile foundations was an optimal solution allowing for continuous operation of the shopping center



Thank you for your attention