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Threats in flooded areas of coal mines in Poland



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Country: Poland



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SRK S.A. was established in 2000

It's the State Treasury company





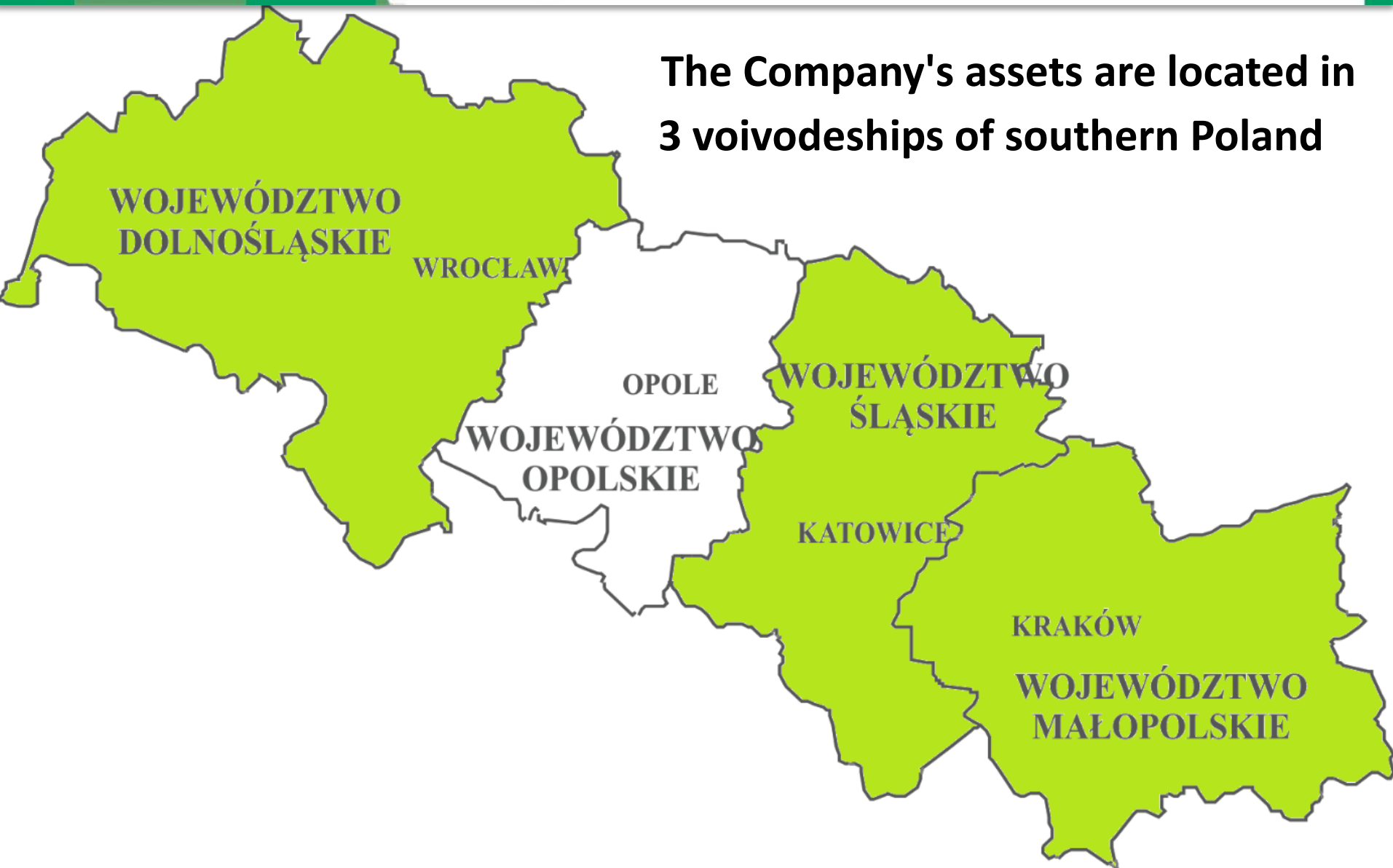
The mission of SRK:

- Effective management, reclamation and revitalization of post – mining areas,
- Taking care of the natural environment,
- Protection against destruction of cultural and industrial heritage





**The Company's assets are located in
3 voivodeships of southern Poland**



We have over 10 000 plots with the area of approximately 2 900 hectares of which approx. 1 900 ha are: post-mining industrial areas, heaps and settling tanks.





SRK S.A. is divided into:

- **Hard Coal Mines in Liquidation**
- **Housing Resource Administration**
- **Central Mine Drainage Plant**
- **Mines of Total Liquidation**



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Hard Coal Mines in Liquidation

are responsible for the management of assets and the prevention of hazards resulting from the restructuring processes of the mining plant





Mines of Total Liquidation are responsible for the management of industrial property, removal of mining damage and restoration of post – mining areas and facilities



Housing Resource Administration

is responsible for the management of non-industrial assets (apartments, garages, commercial premises).





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We manage over 3 000 buildings with 15 000 apartments

The total area of apartments is over 630 000 square meters





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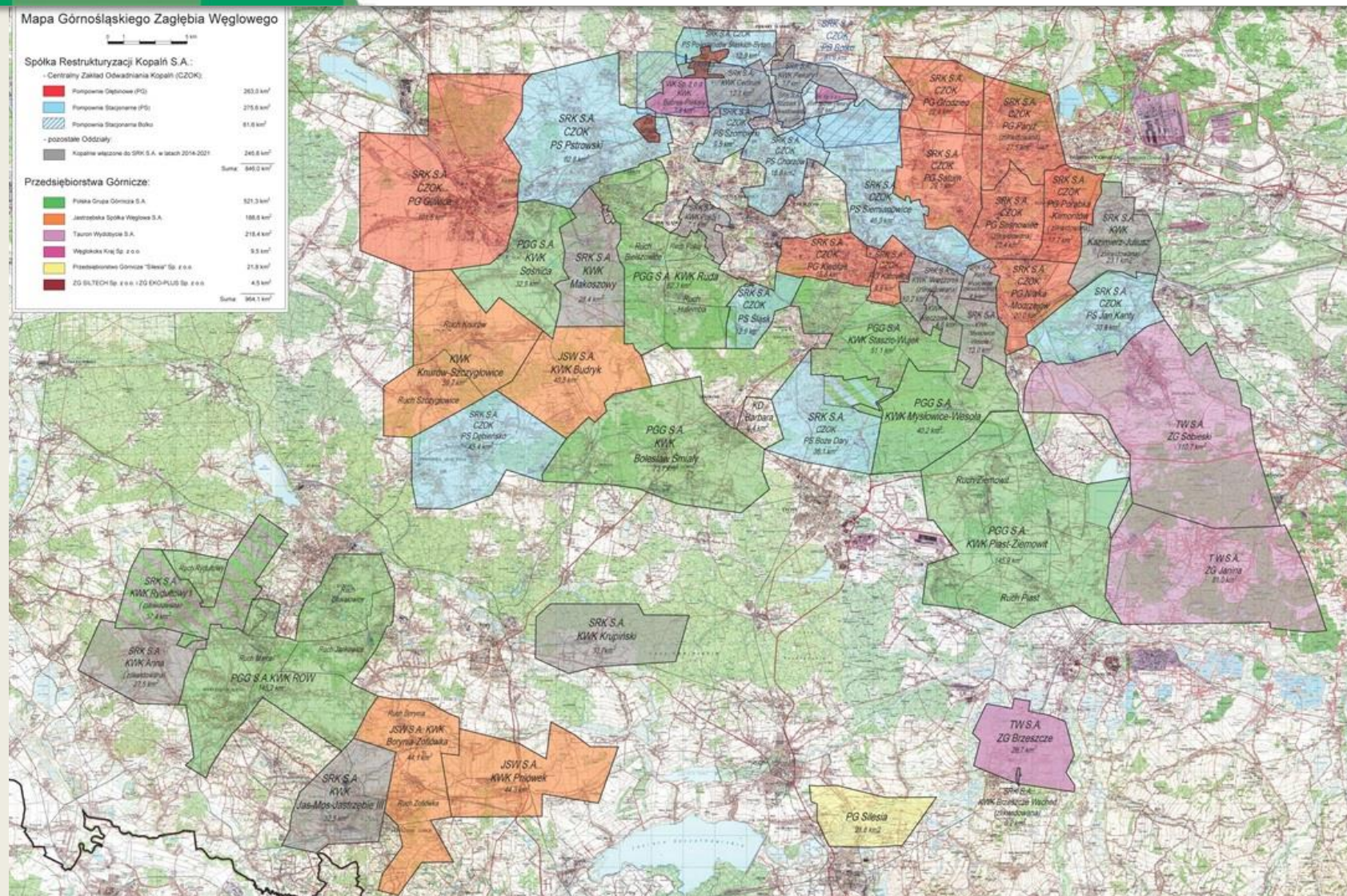


Central Mine Dewatering Plant

is responsible for pumping water from mining excavations



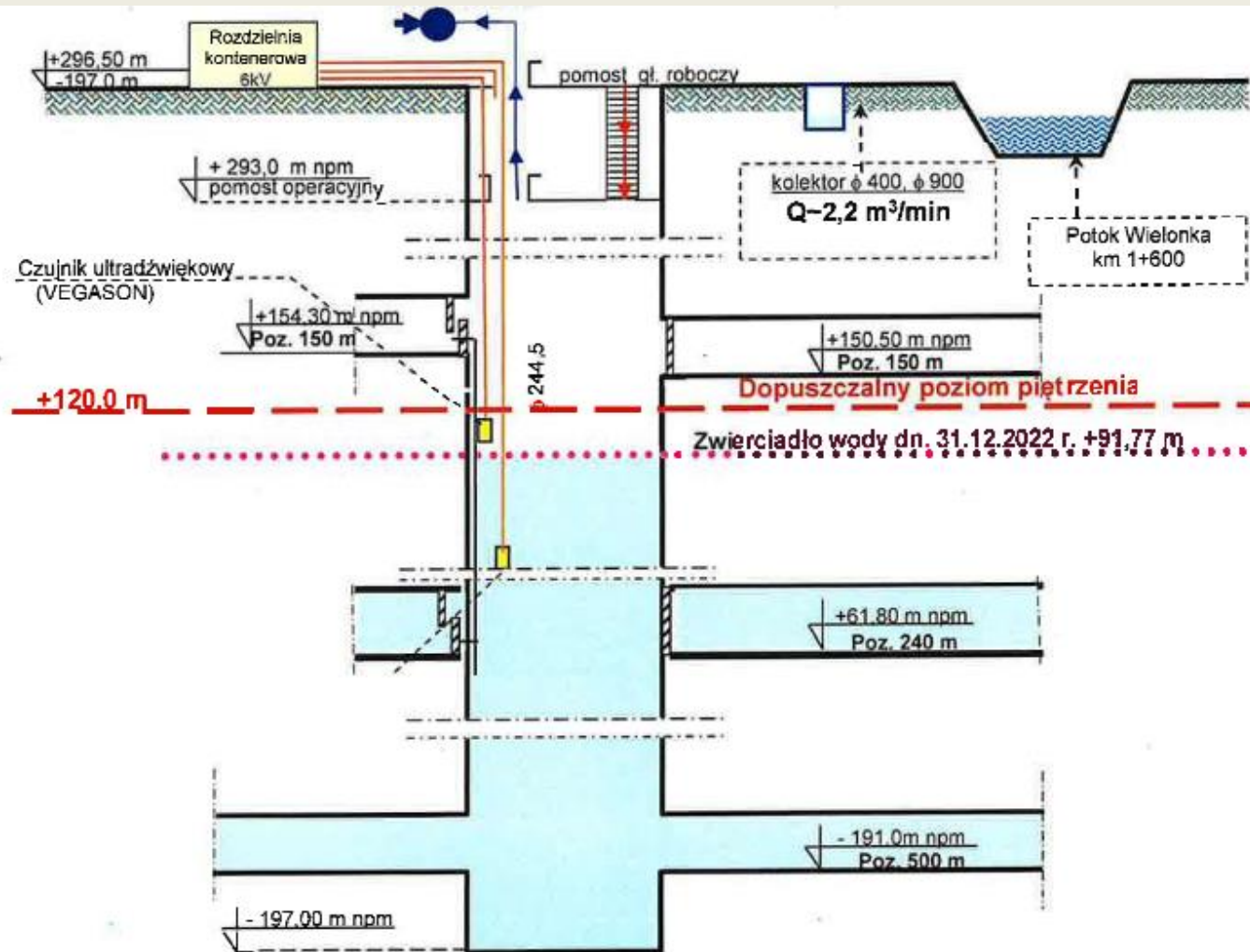
In 2022 – approx. 100 million cubic meters of mine water was pumped, of which approx. 2 million cubic meters was developed



We have 21 pumping stations for the drainage of liquidated mines (6 submersible and 15 underground)

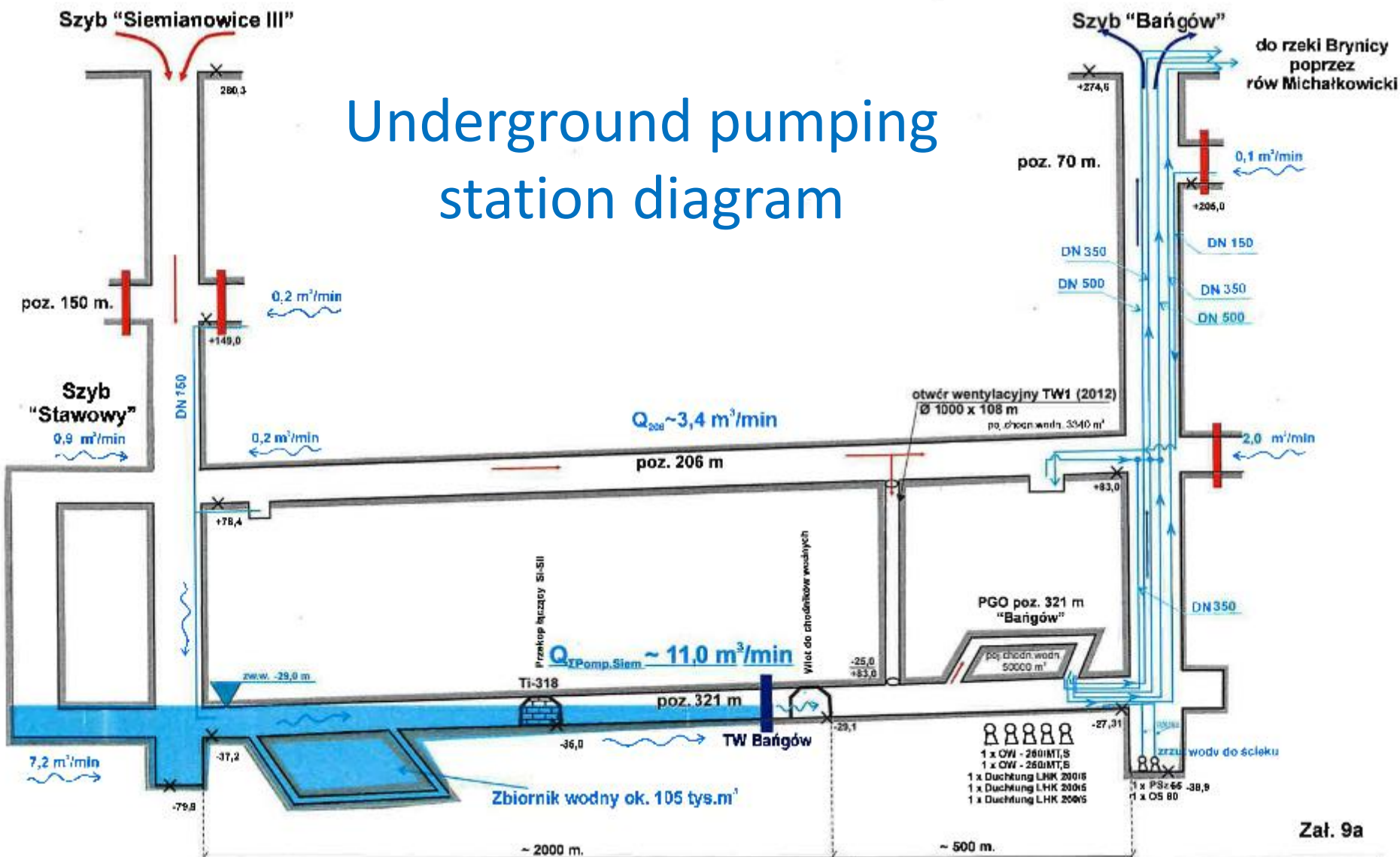


Submersible pumping station diagram

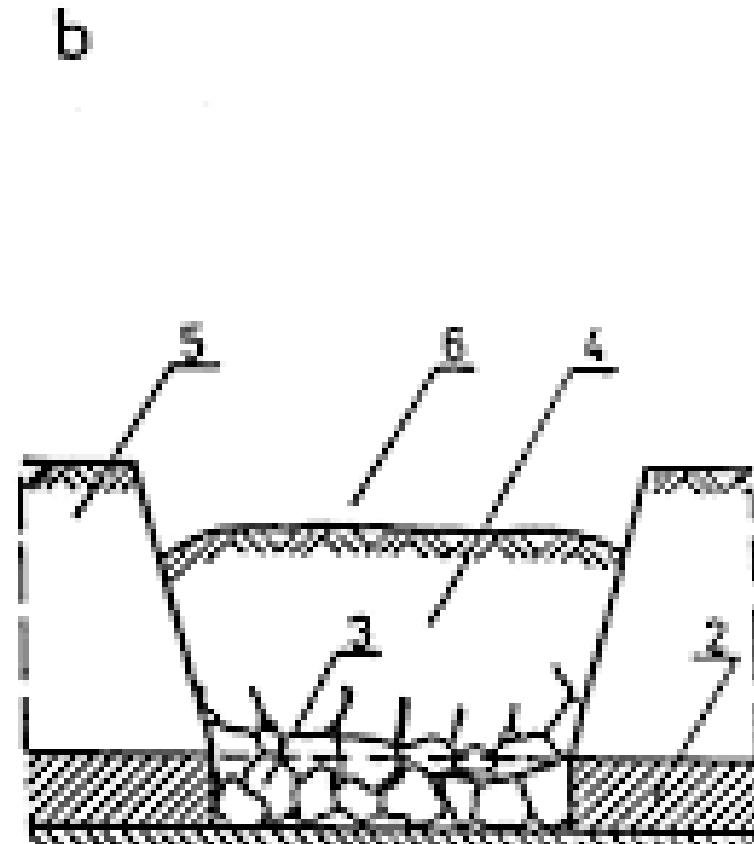
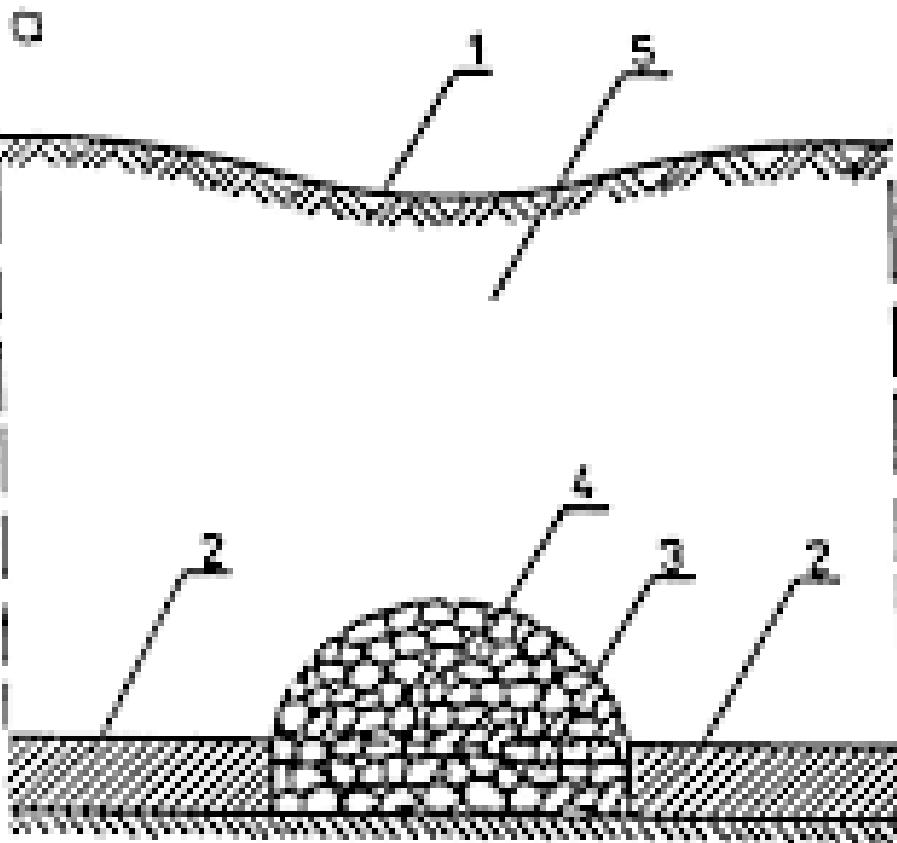




Underground pumping station diagram

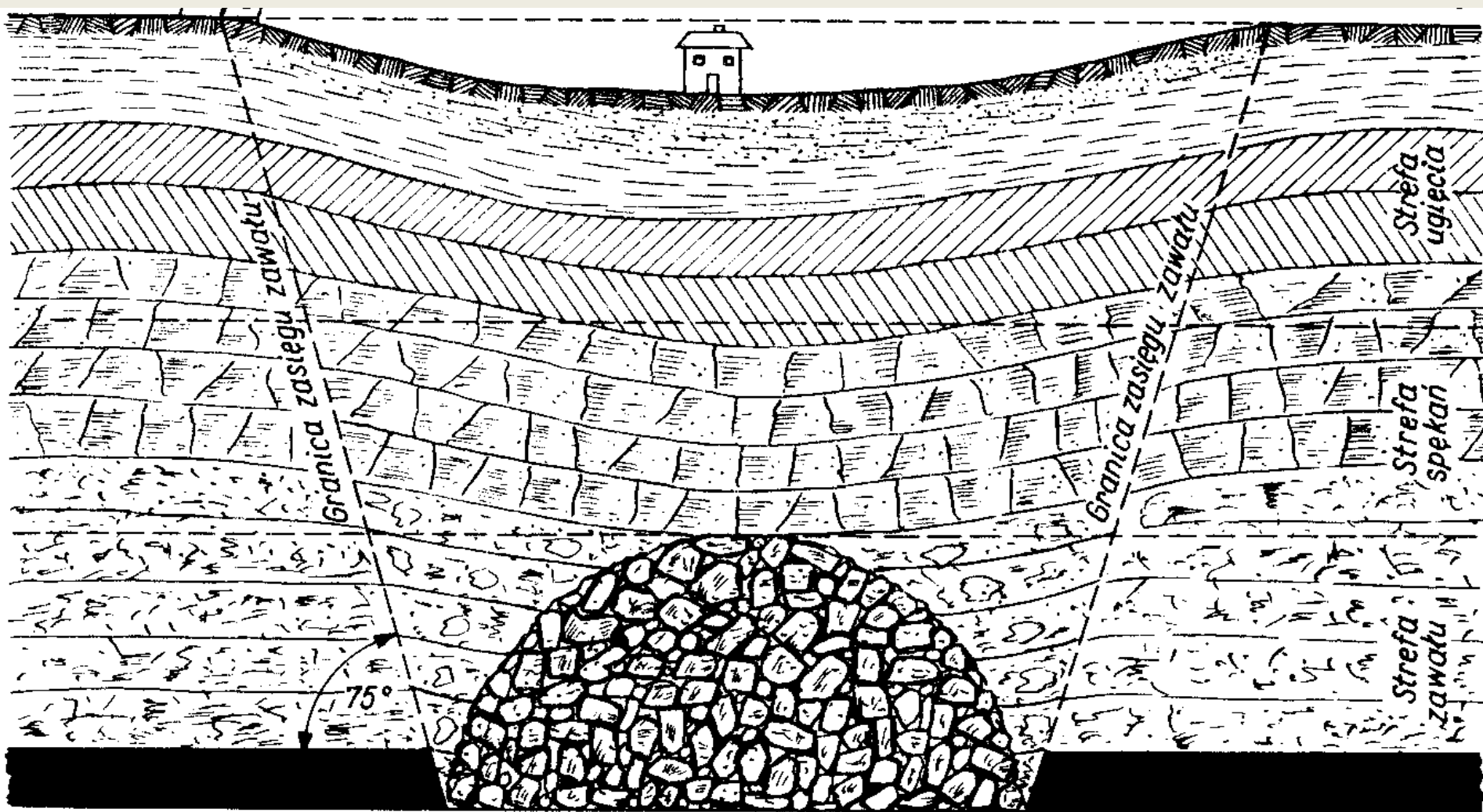


Underground mining of raw materials causes continuous (a) and discontinuous (b) deformations





Deep exploitation usually generates continuous deformations



In the case of the liquidated mine, the biggest problem on the surface are the areas located depressively in relation to the nearest watercourses.





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Continuous deformations cause changes in water conditions





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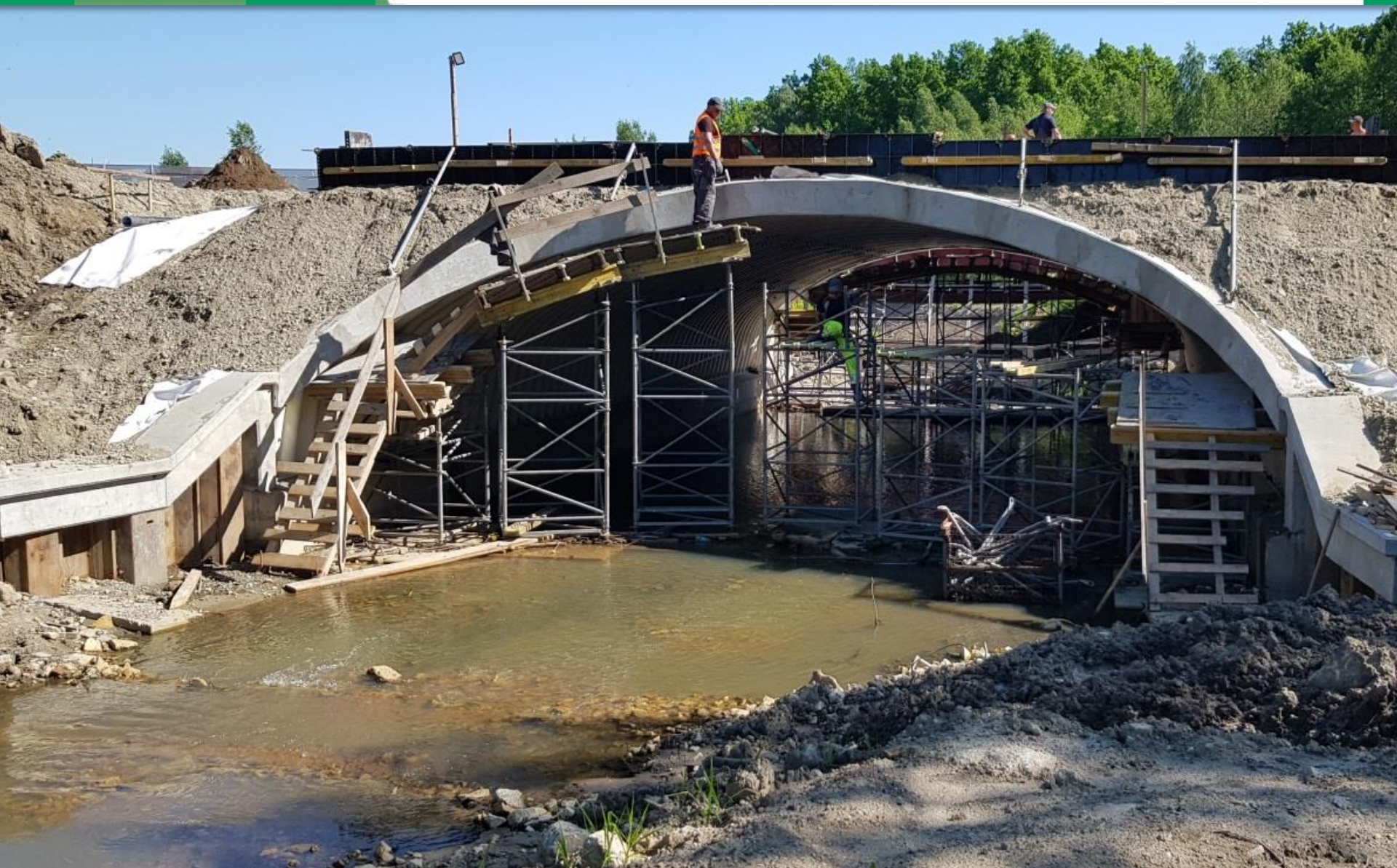
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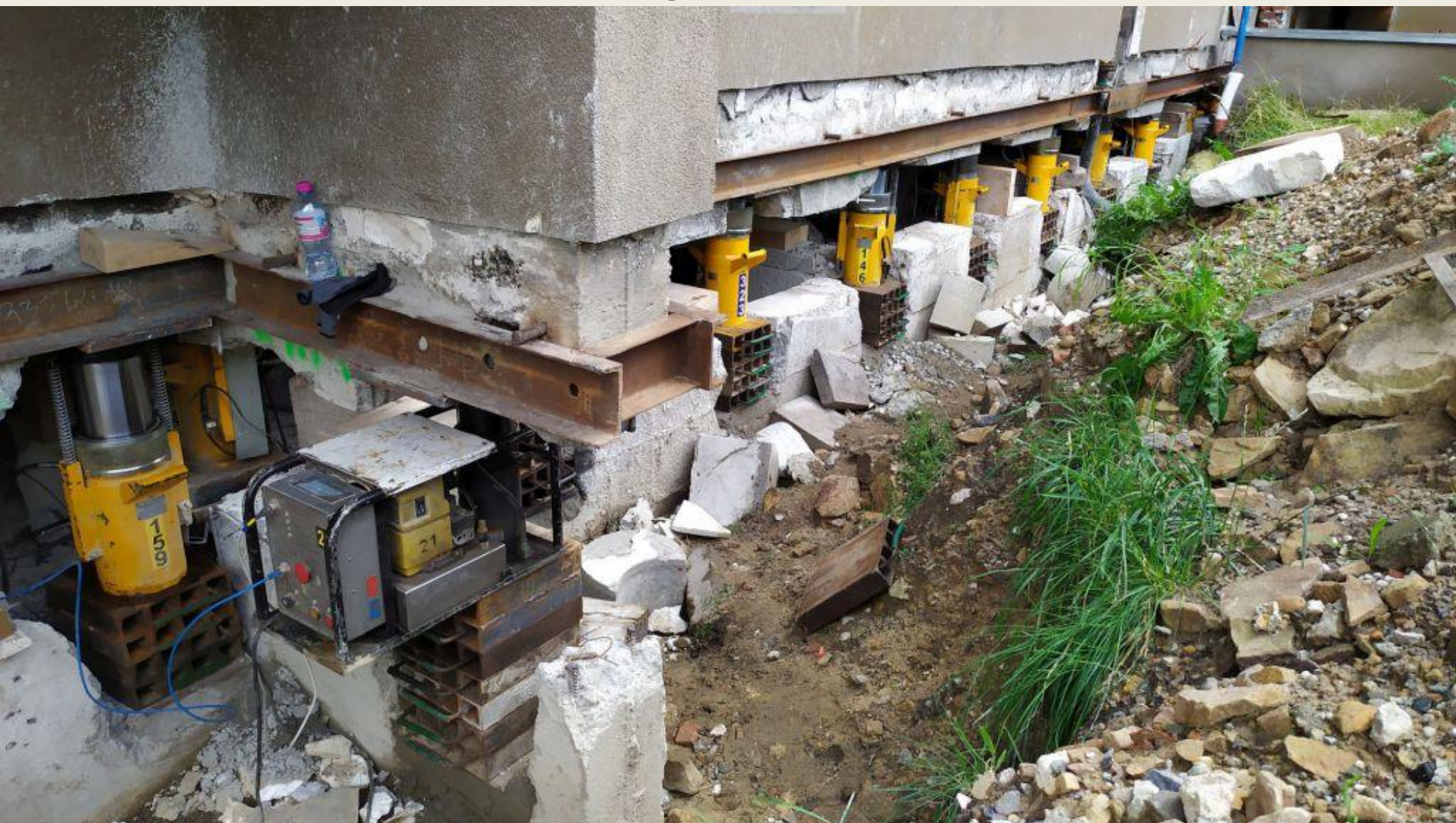
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Building rectification





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In septic basins, a rainwater drainage system is necessary.





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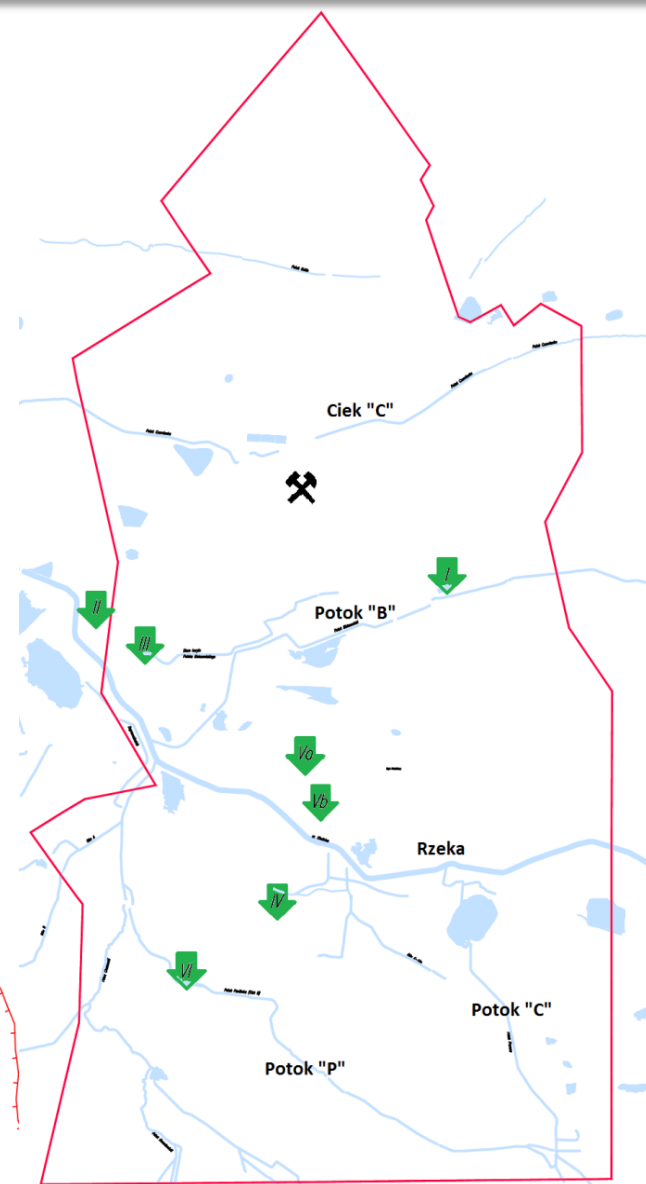
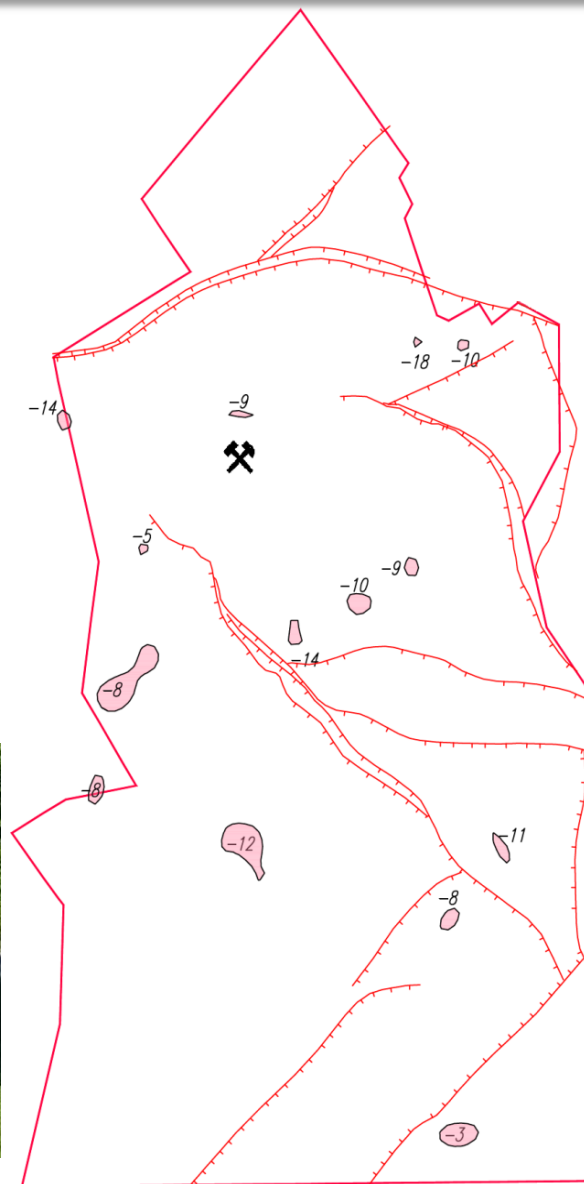
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Rainwater drainage system



Shallow exploitation usually generates discontinuous deformations





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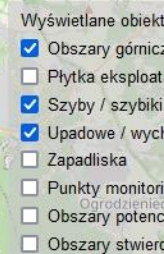


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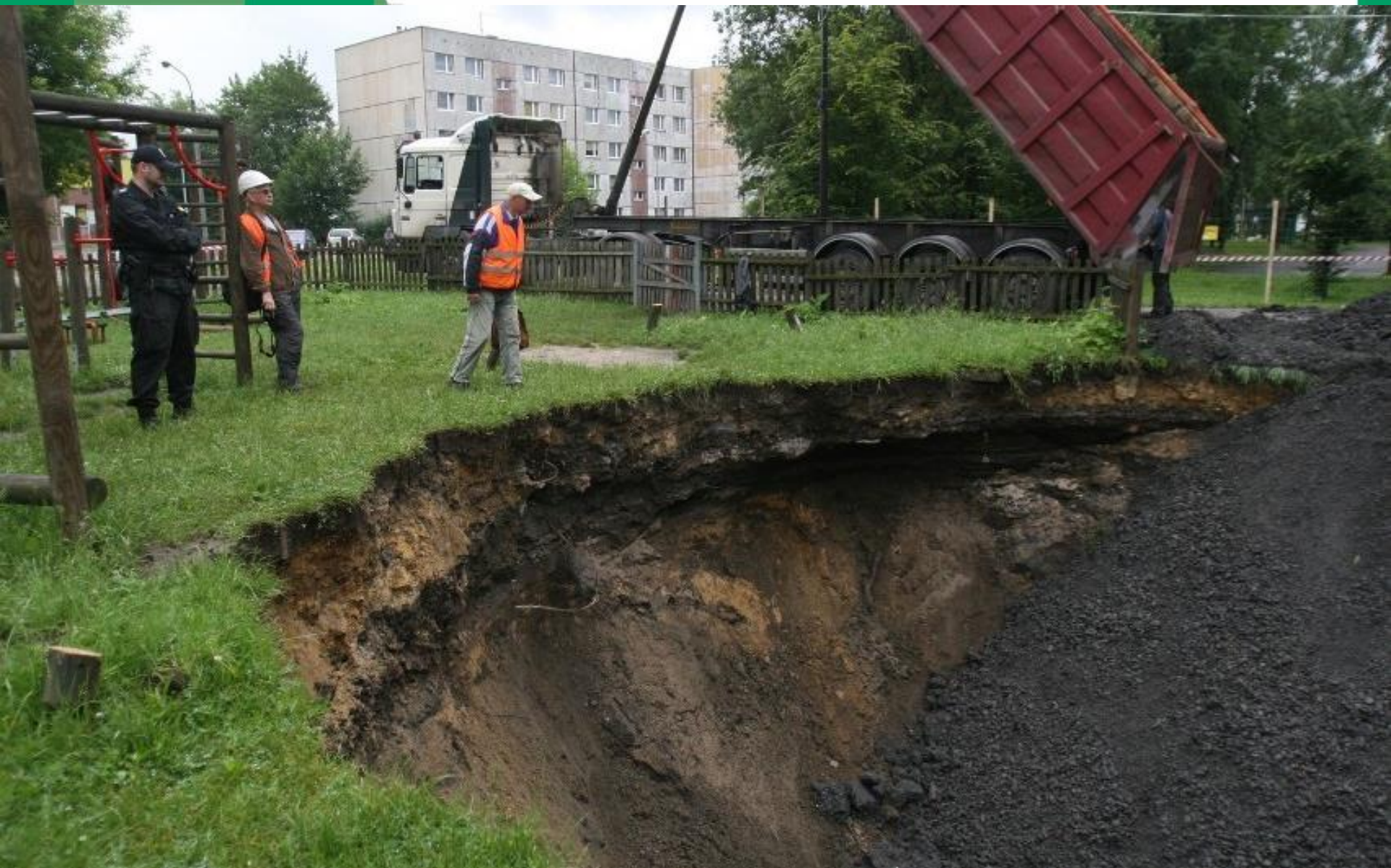
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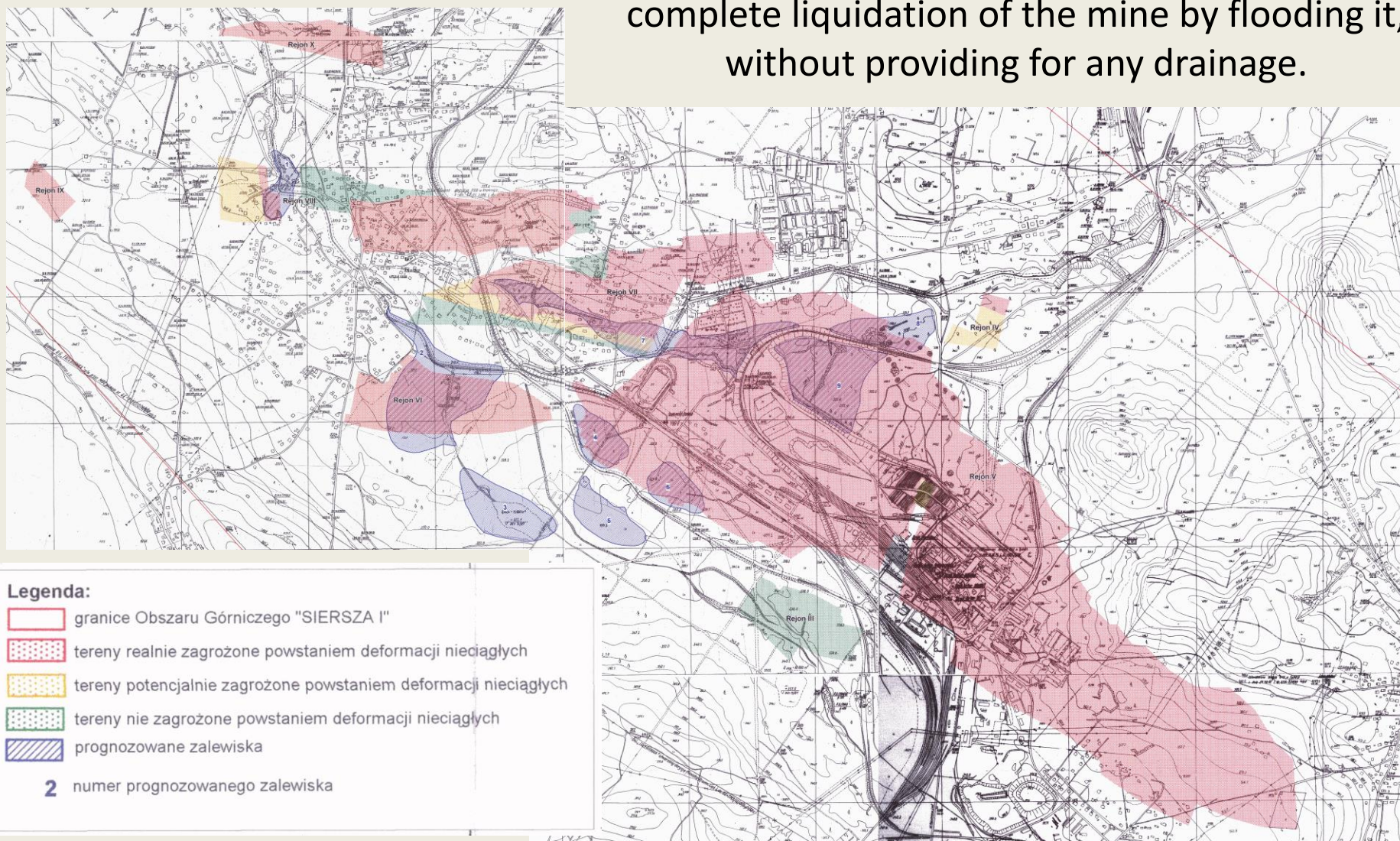


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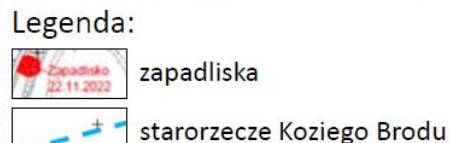




The "Siersza" liquidation program assumed the complete liquidation of the mine by flooding it, without providing for any drainage.



14.02.2023 r.





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[DRON 1](#)

[DRON 2](#)





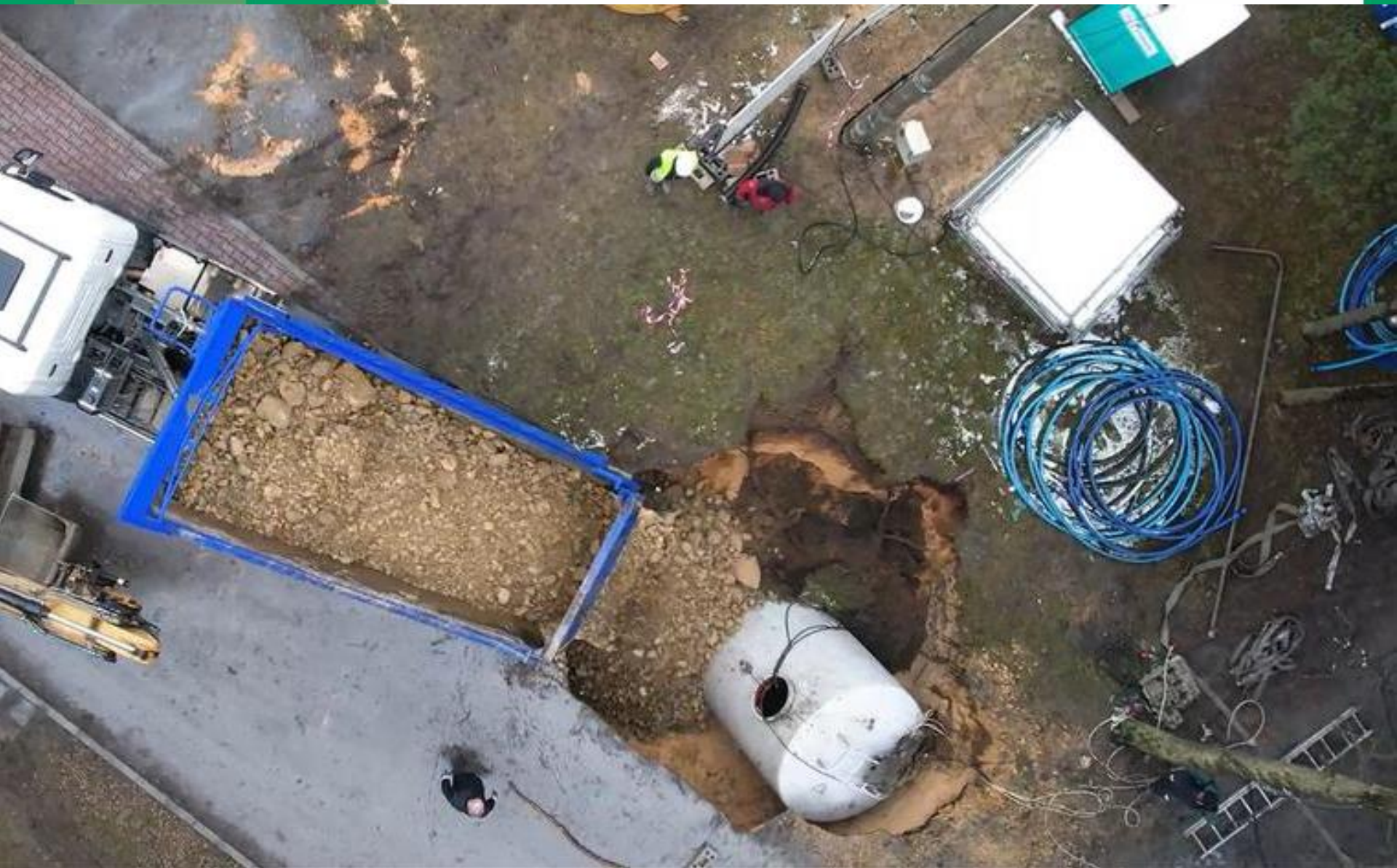
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Trzebinia



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Since 29.05.2023 mine water pumping has begun





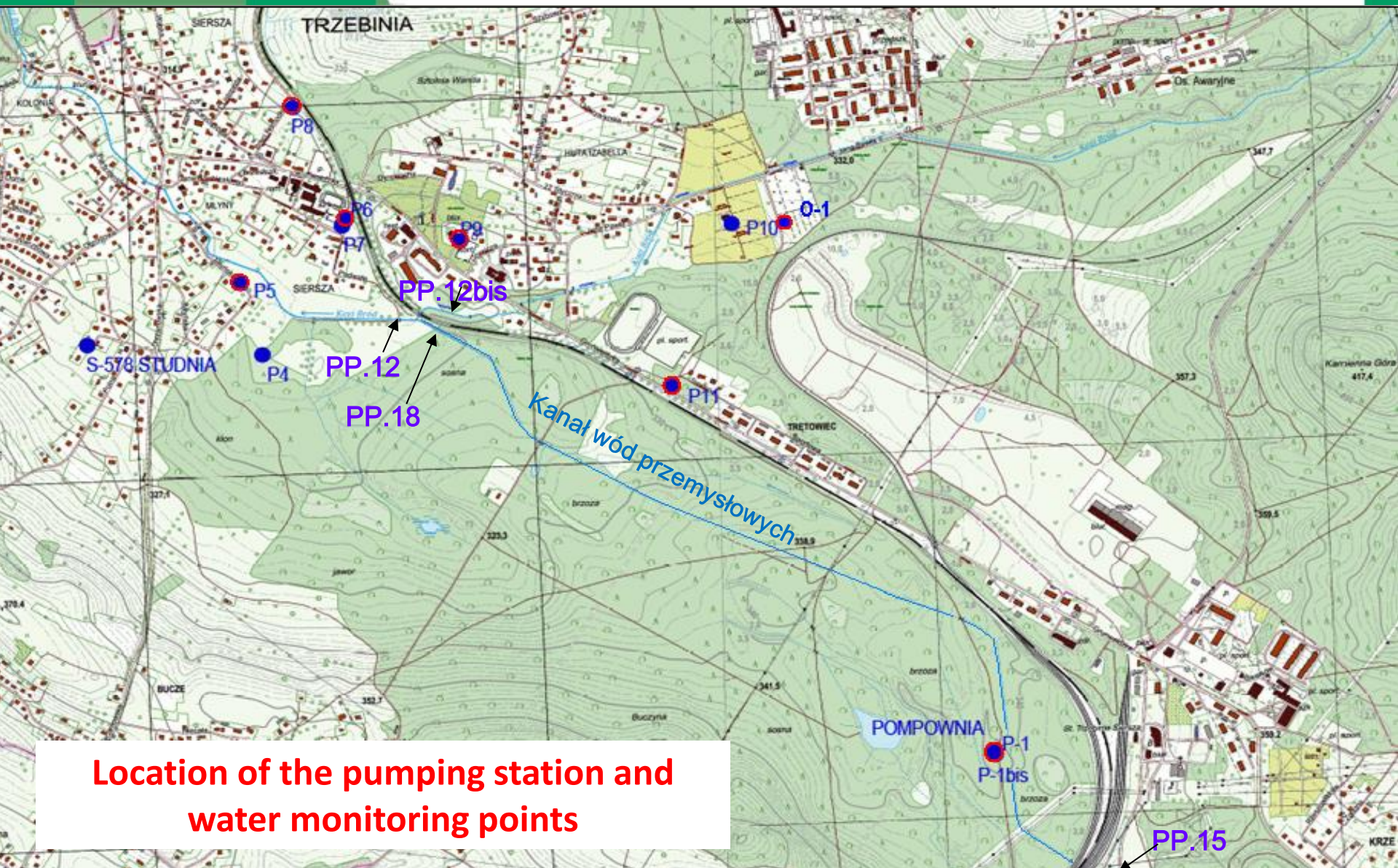
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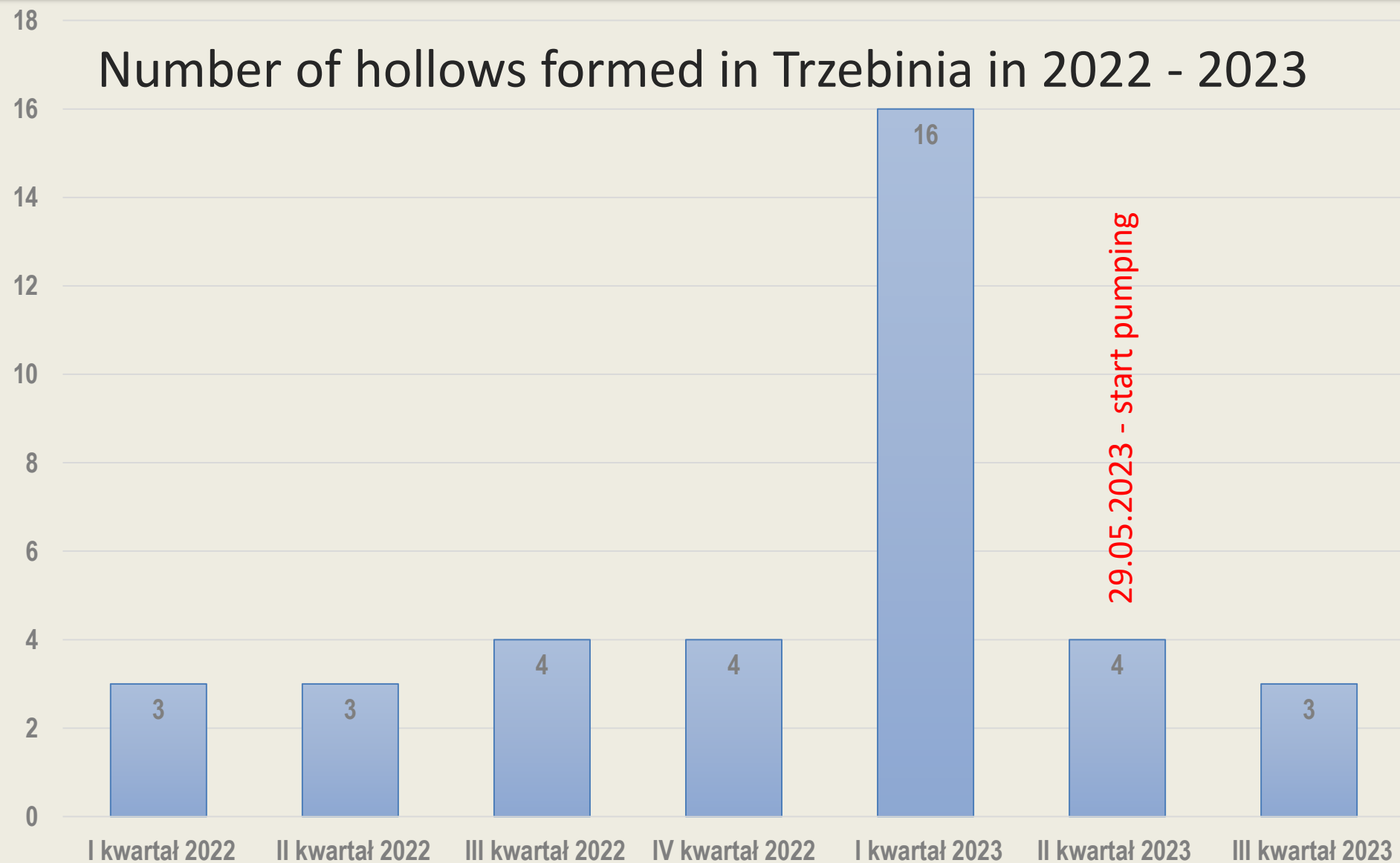
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Number of hollows formed in Trzebinia in 2022 - 2023





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Thank you

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