HUN-REN Wigner RCP

Developments for HPC Levente Supercomputer

Academia-Industry Matching Event 2025
HUN-REN, Budapest

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Levente HPC

Task:
- Provide a server room for the winning project
- Originally DC No. 1, DC No. 5 is more optimal

Server room:
- Currently in operation
- Plan the relocation
- Determine optimal placement
- Define HPC / conventional IT areas
- Preparation / storage area

IT:
- 850 kW IT capacity (supercomputer modules, network)
- Optical network design
- Network integration with the research network and the Komondor HPC

Mechanical systems:
- Free-cooling system (warm-water)
- Chillers for conventional cooling (summer period)
- Piping network
- Heat exchanger equipment
- Control systems for mechanical and electrical power
- Electrical modifications (UPS, diesel generator)

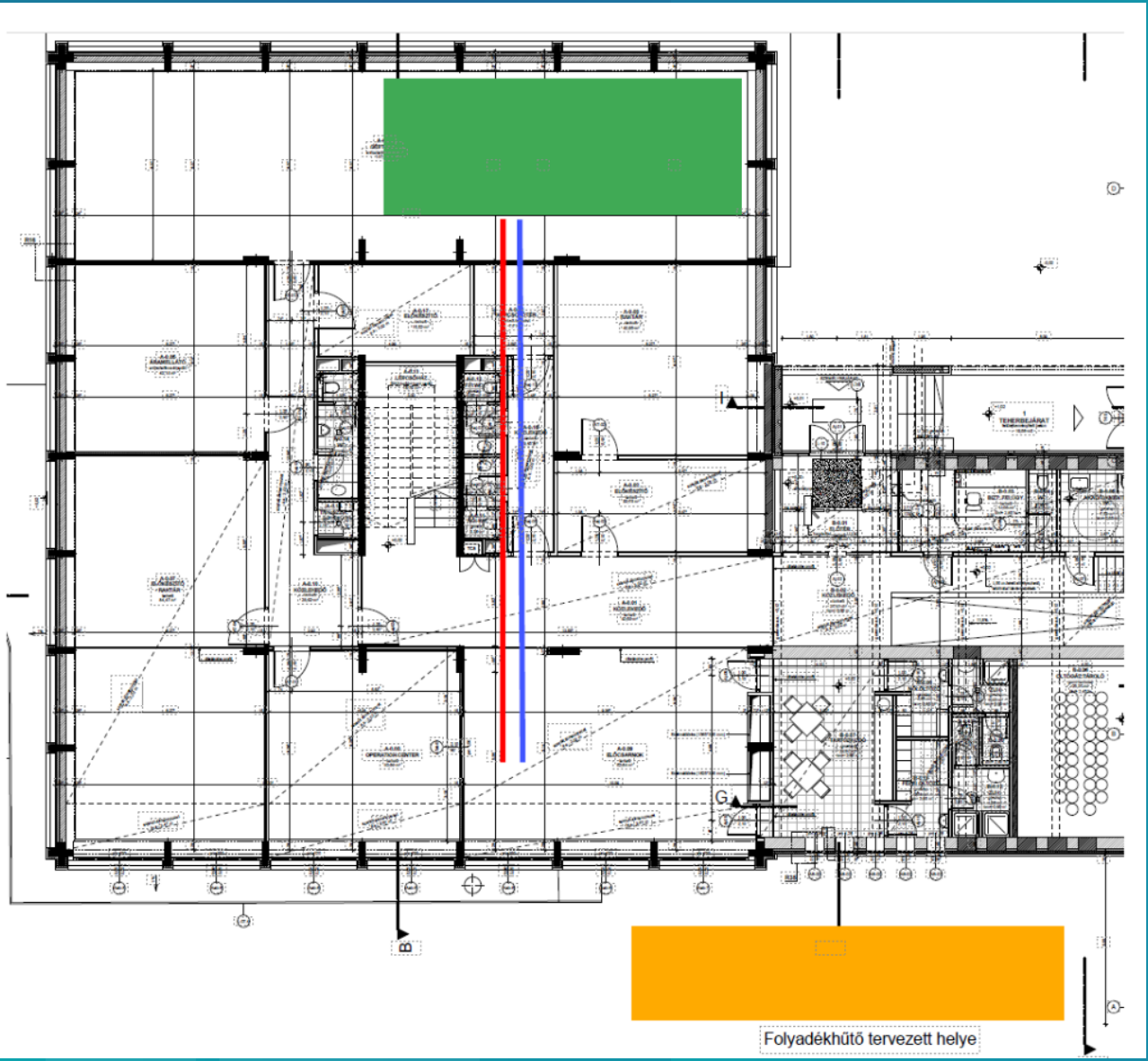
Physical security

2025 Q4
- Cooperation agreement between DKF Ltd. and the HUN-REN Wigner Research Centre for Physics
- Technical description of the server room
- Finalization of the technical description
- Funding confirmation from the ministries
- Initiation of the public procurement procedure (design and implementation)

2026 Q1-Q2
- Public procurement procedure, contract conclusion
- Relocation of IT equipment from the server room to another server room
- Start of the server room transformation (electrical power and mechanical systems)

2026 Q3
- Second phase of the server room transformation

2026 Q4
- Third phase of the server room transformation
- Adaptation in line with the parameters of the winning HPC equipment
- Preparation of testing for the reception of the HPC system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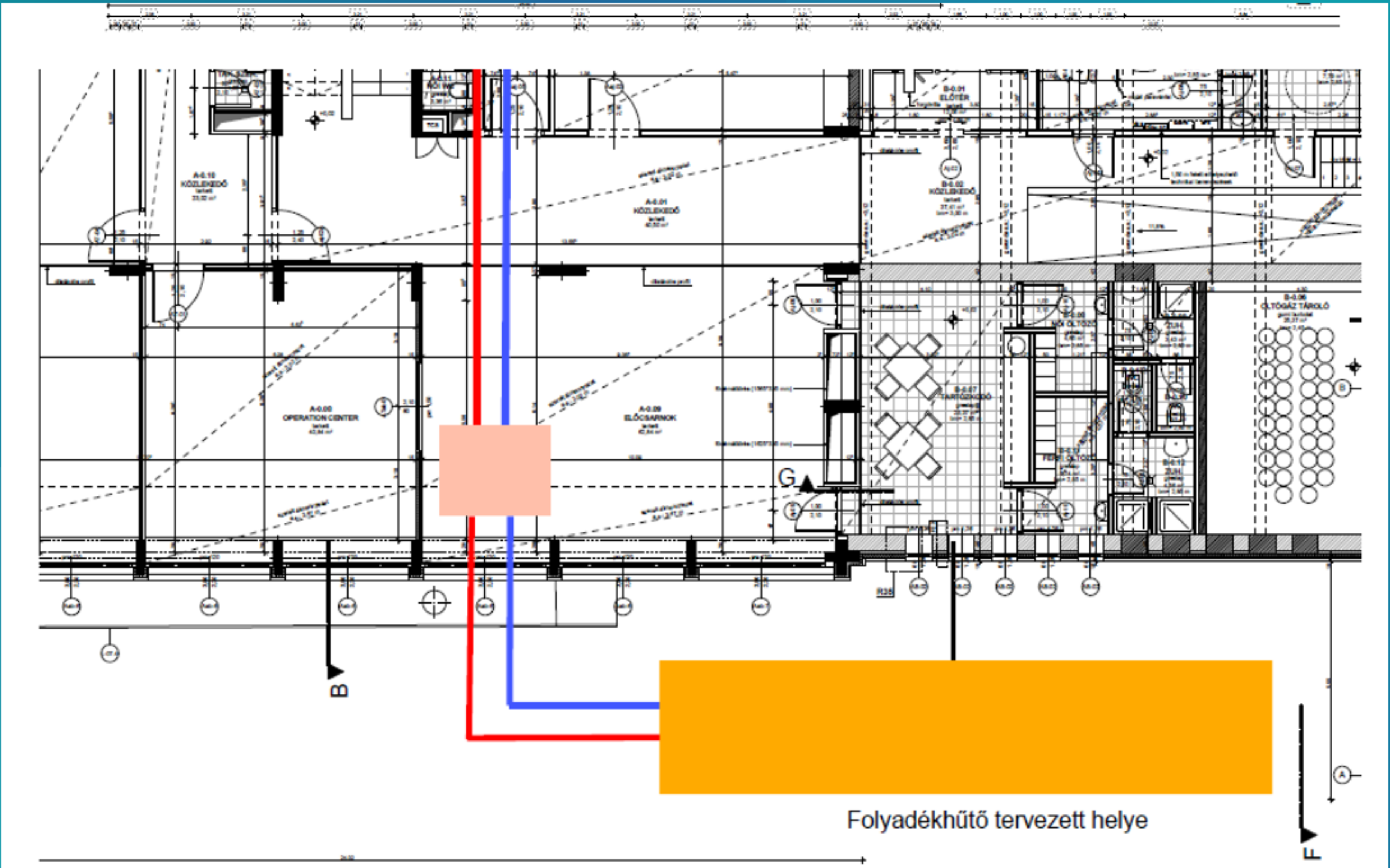
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Thank you for your attention

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