WOMEN empowering HDD by DCA

Spring Talks, on the 28th of May 2026

From the first line to the finished drilling path

The story behind the technical drawing

Dörthe Oetjens, 28.05.2026

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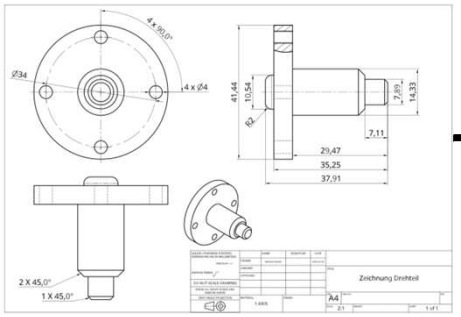
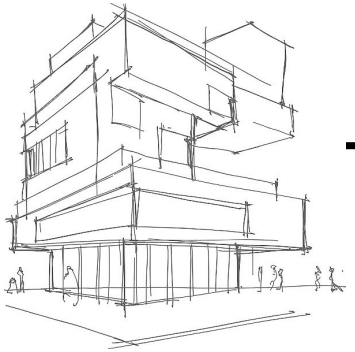
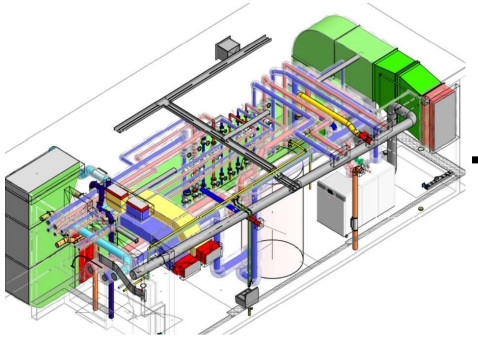
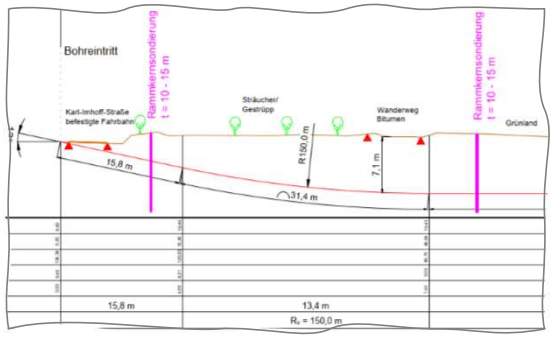
Professional and personal background









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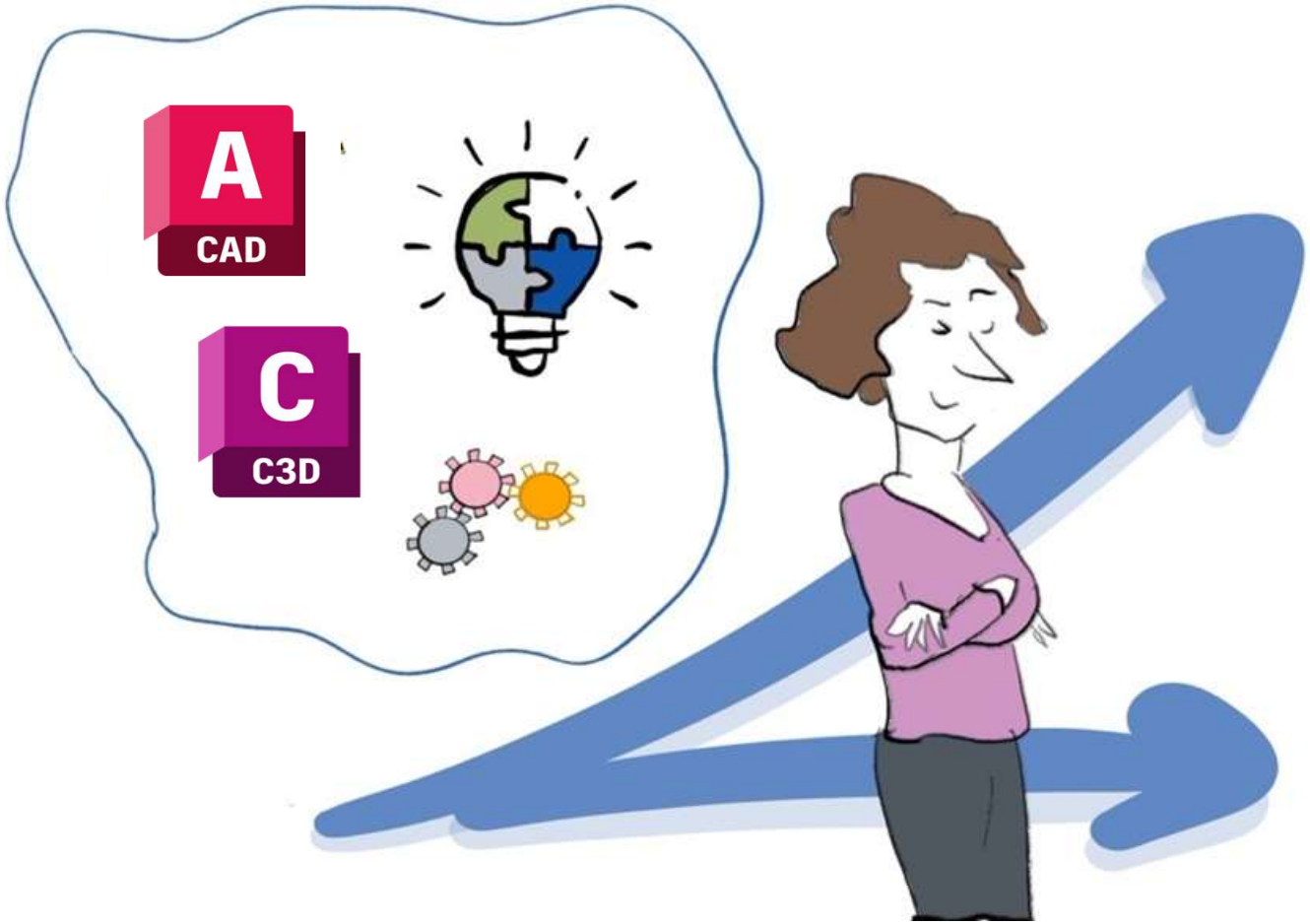

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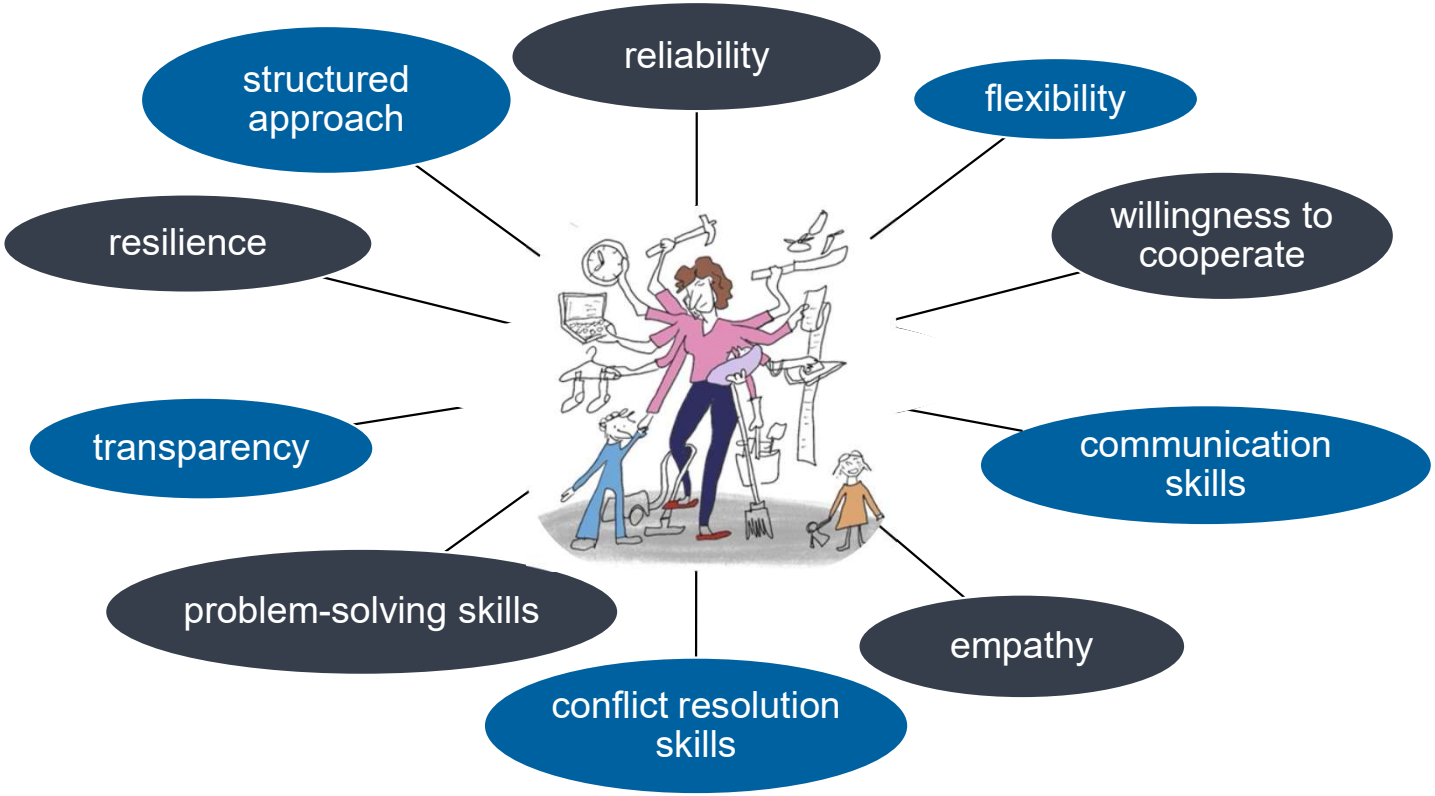
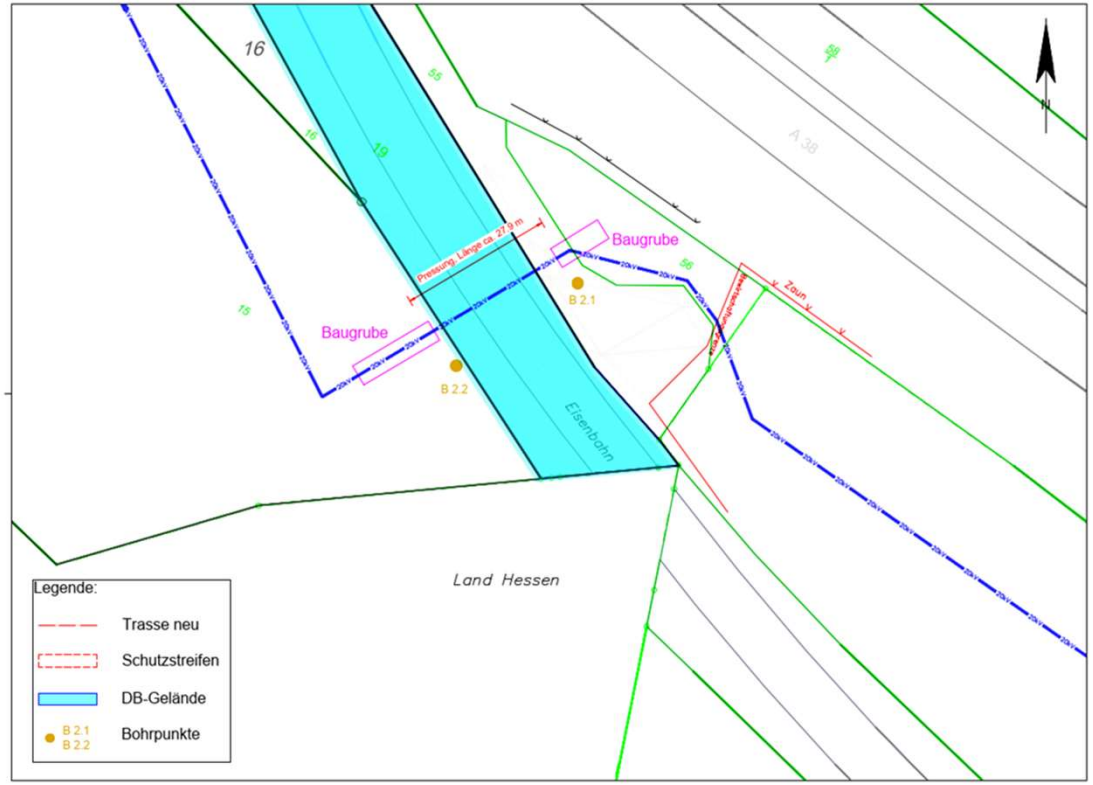

reliability
structured approach
flexibility
resilience
willingness to cooperate
transparency
communication skills
problem-solving skills
empathy
conflict resolution skills

Technical design work requires

- spatial awareness
- basic knowledge of geometry
- artistic ability
- technical understanding

Creating drawings

- long and cross-sections
- site plans
- process flow diagrams
- detailed drawings
- schematic diagrams



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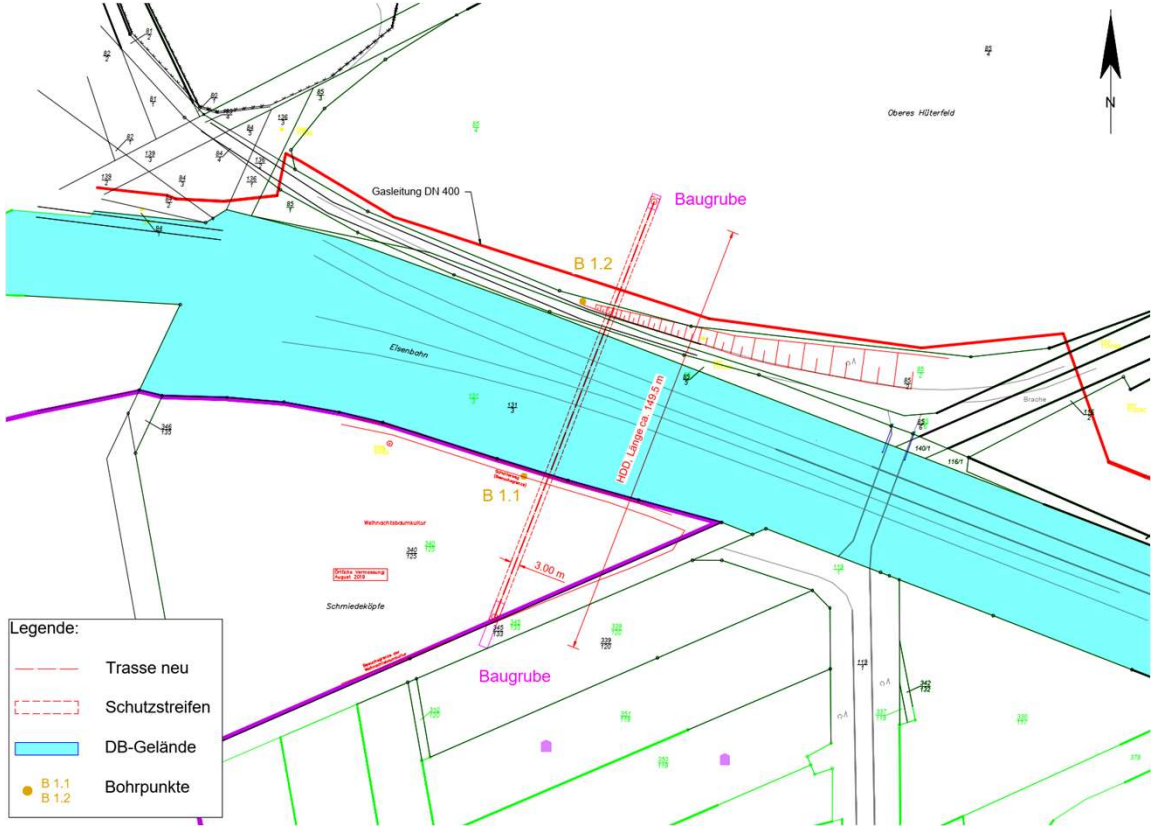
My tasks as a technical designer

- coordinate surveying for wind assessments
- route selection
- applications for level crossings for the railway
- building specifications
- quantity take-offs and bills of materials
- settlement measurements + analysis
- strain gauge readings + analysis

Small-scale project – site plan



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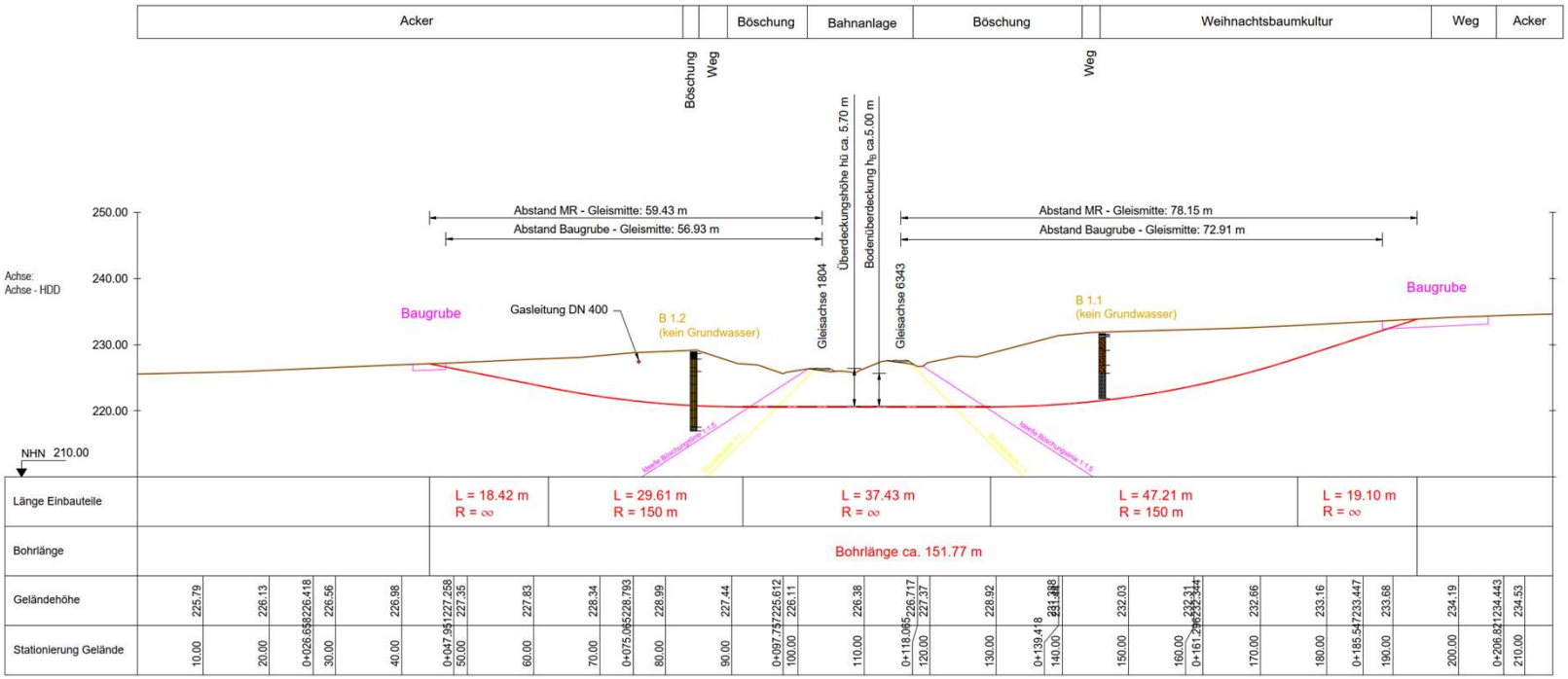
Small-scale project – long section

Längsschnitt
(M 1 : 500)



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Comparison of small and major projects

small-scale project

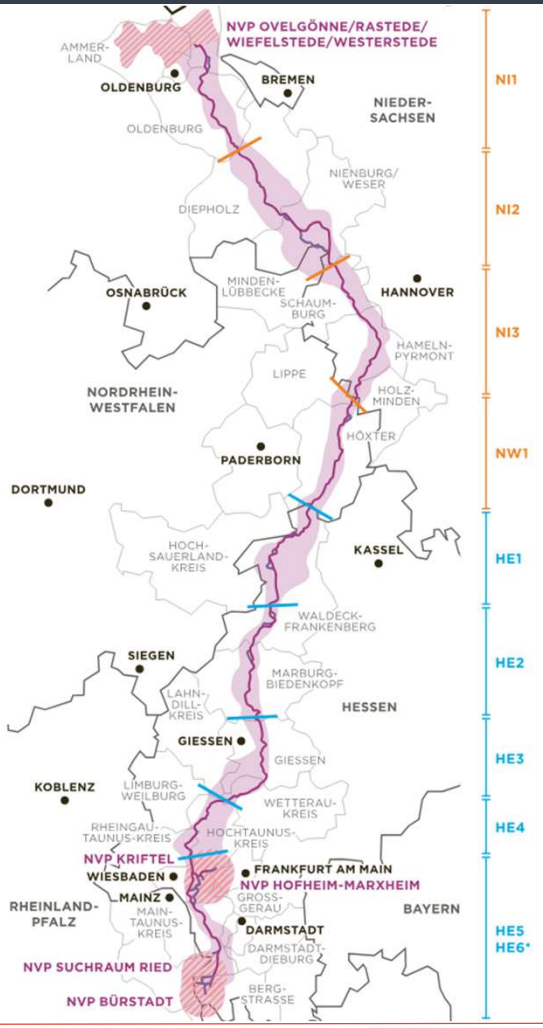
- small number of participants
- direct communication
- simple team structure
- easy decision-making
- predictable risks and costs

major project

- many project stakeholders
- increased need for coordination and administration
- diffusion of responsibilities
- lots of rules
- uncertainty regarding scheduling
- complex quality management

Rhine-Main-Link

- 600 km route
- 10 planning approval stages
  - 3 in Lower Saxony (NI1, NI2, NI3)
  - 1 in North Rhine-Westphalia (NRW1)
  - 6 in Hesse (HE1, HE2, HE3, HE4, HE5, HE6)
- Extra-high-voltage direct current link
- 4 projects, each with 3 underground cables
- 2 GW per project



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Rhine-Main-Link

Veenker:

HE1 (Hesse 1) and
HE2 (Hesse 2)

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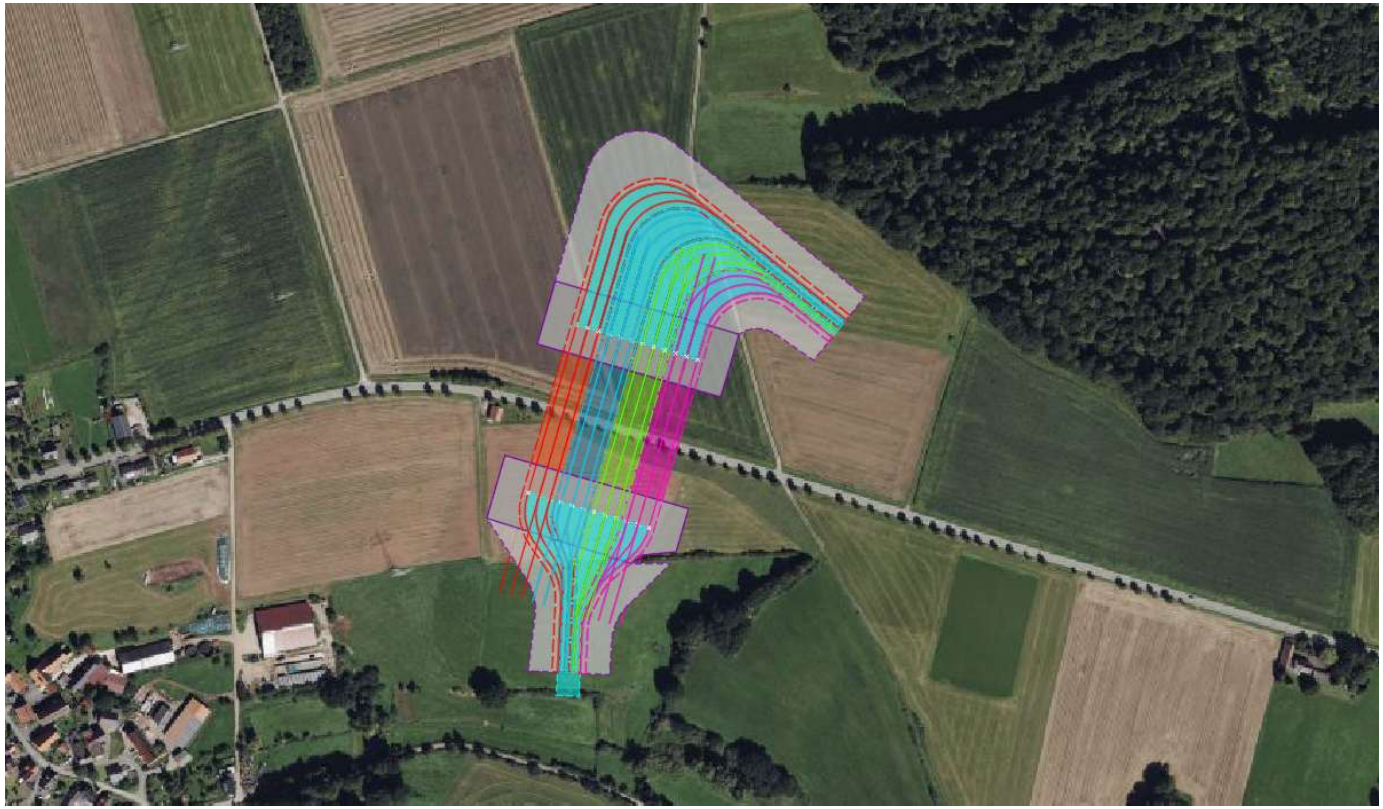
Example of a crossing



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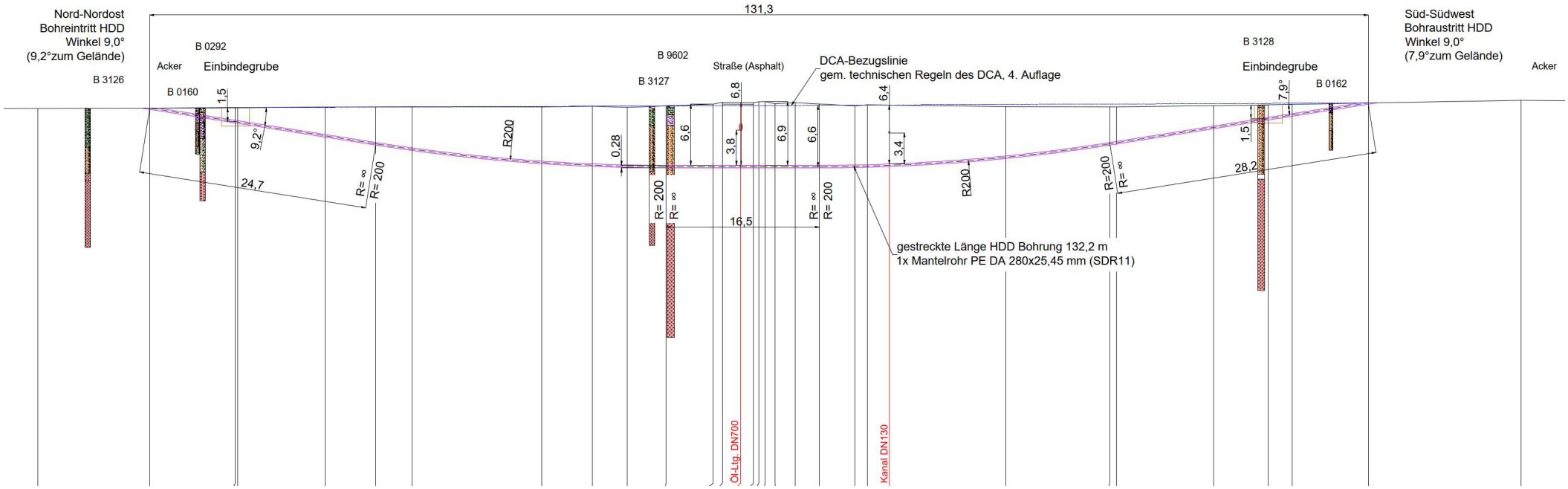
Example of a long section



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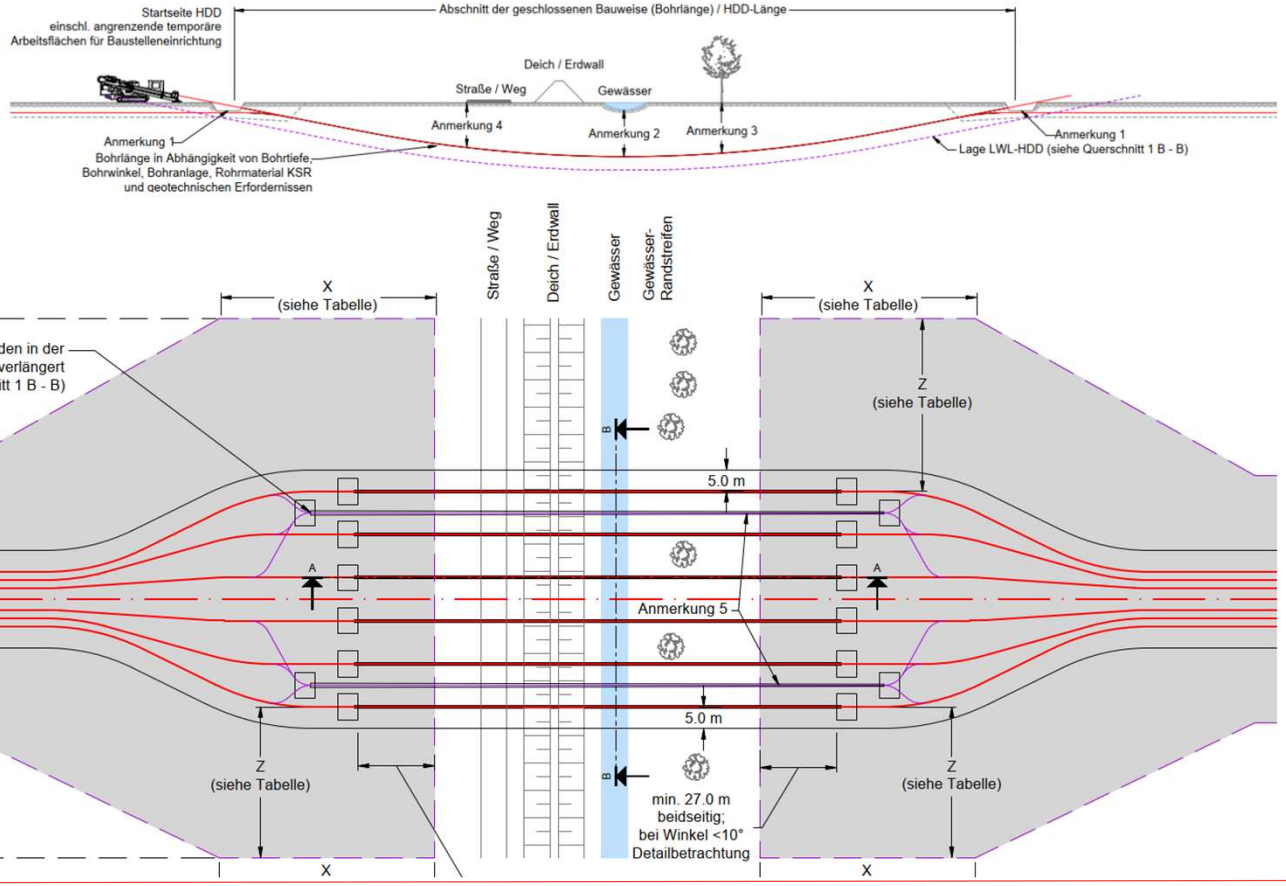
Example of a crossing



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