

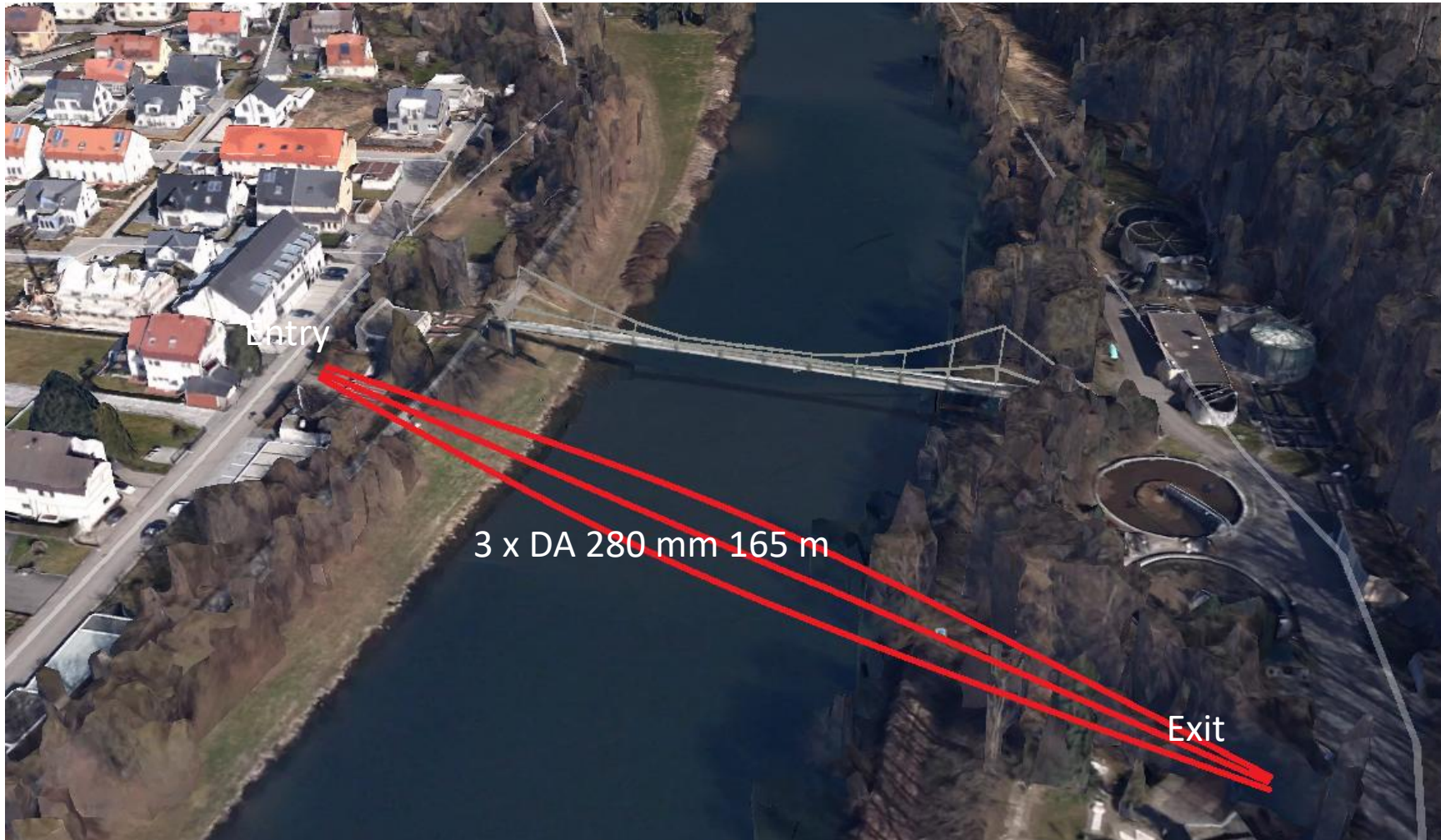


30th DCA Annual Congress
Rome, 1st October 2026

**We are in trouble –
how can we shoot it?**

Steering/Locating

HDD-Project with Walk-Over-System

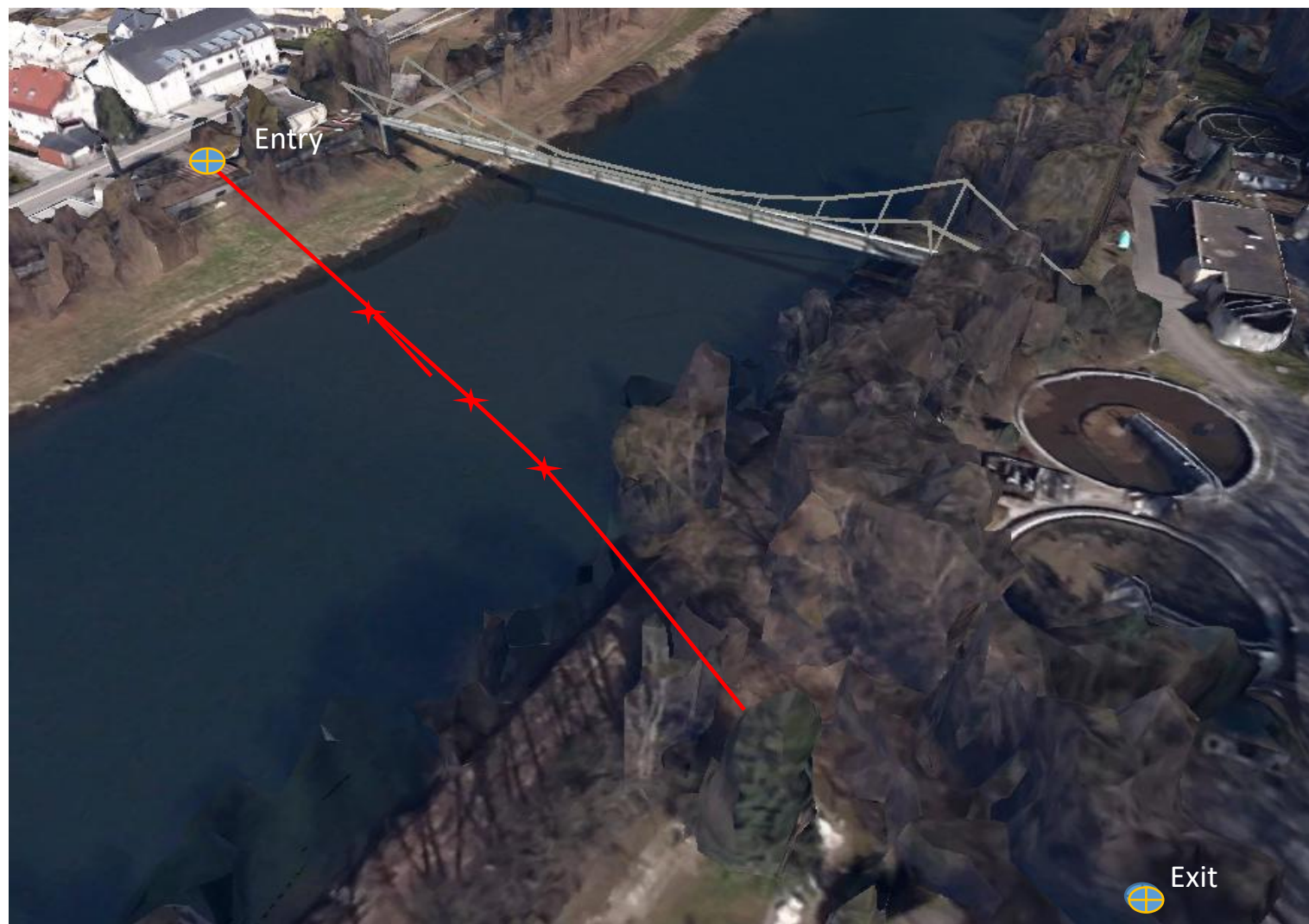


Source:
LEONHARD WEISS
GmbH & Co. KG

HDD-Project with Walk-Over-System

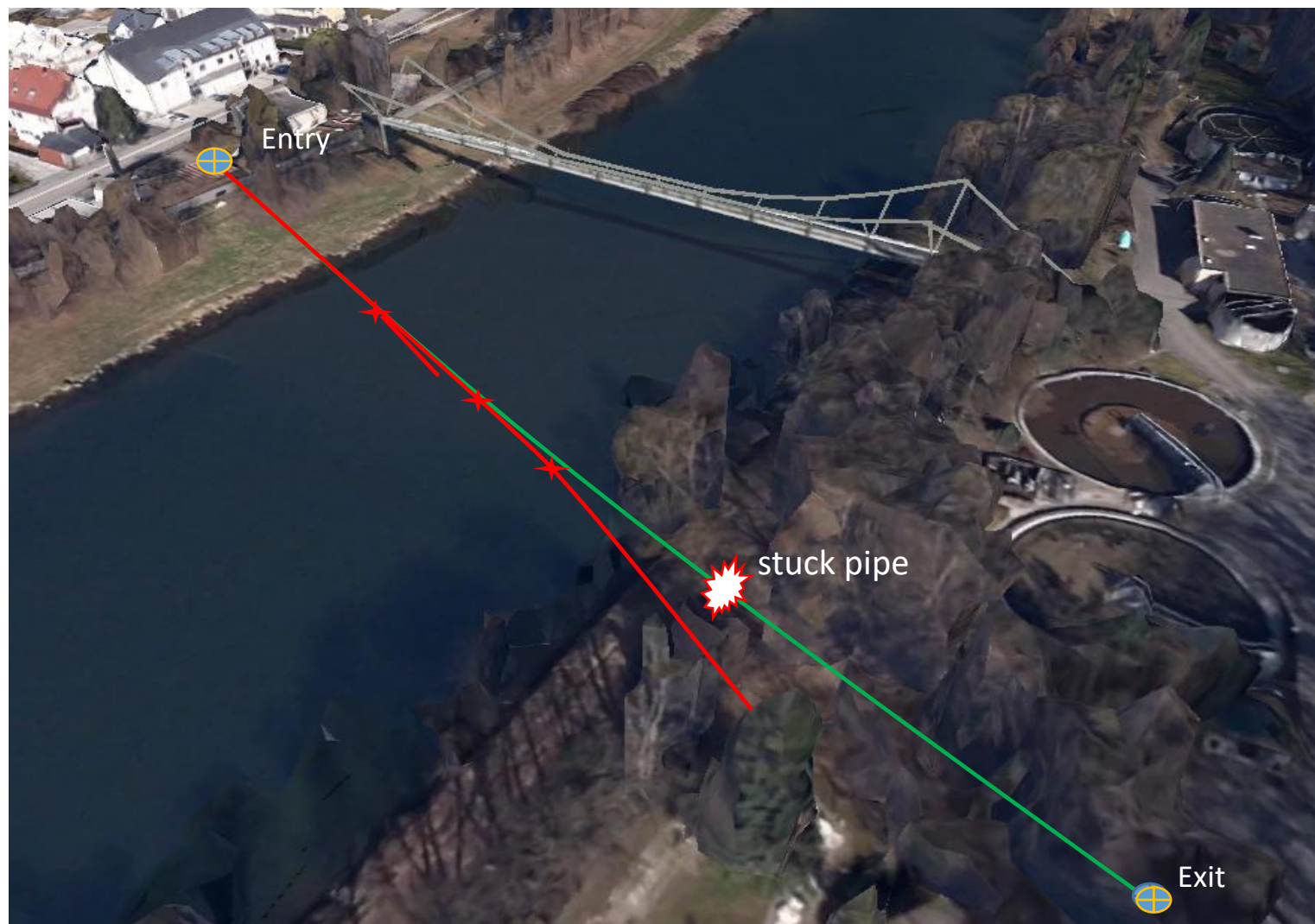


Source:
LEONHARD WEISS
GmbH & Co. KG



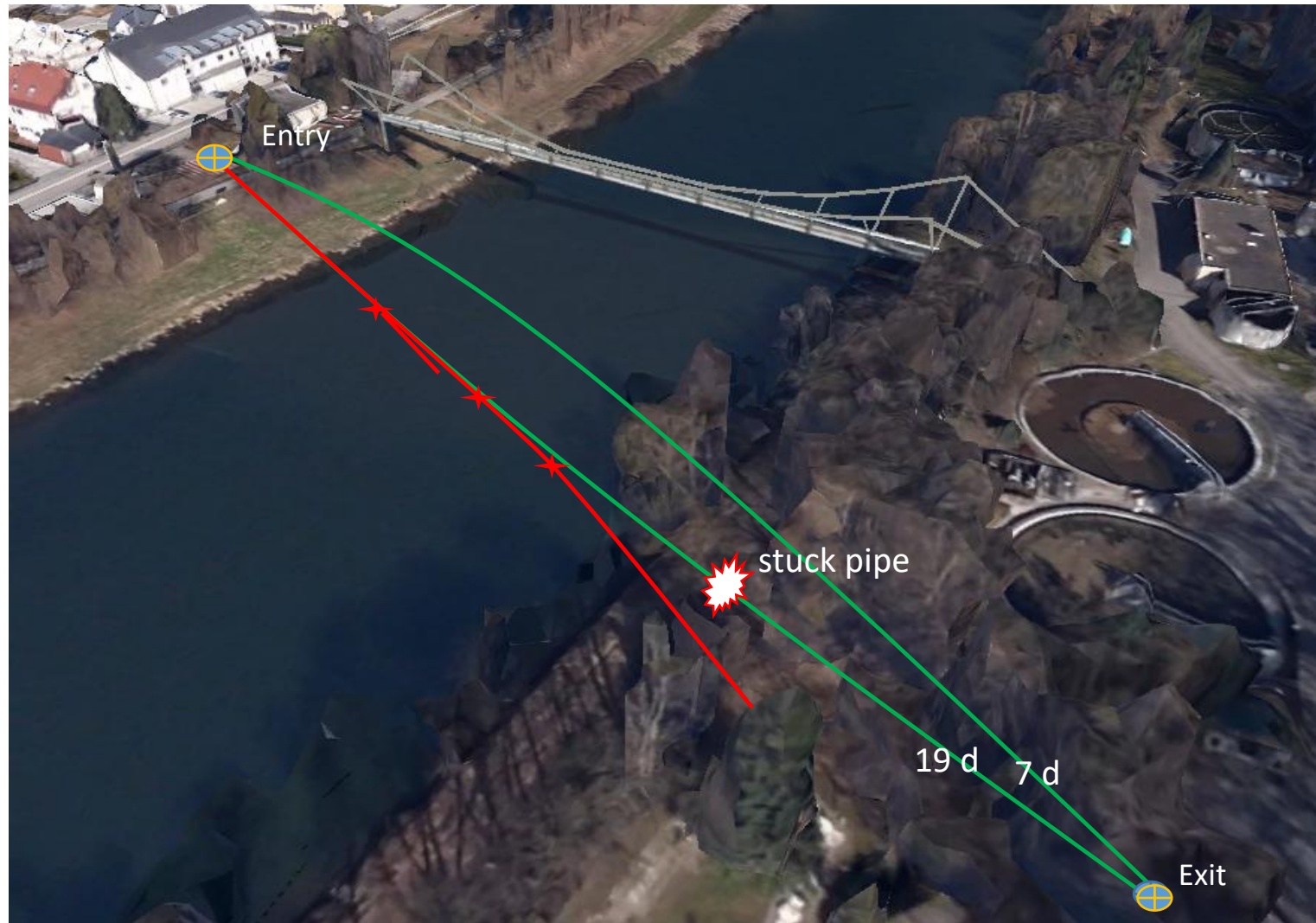
**Trouble
with
steerability**

Source:
LEONHARD WEISS
GmbH & Co. KG



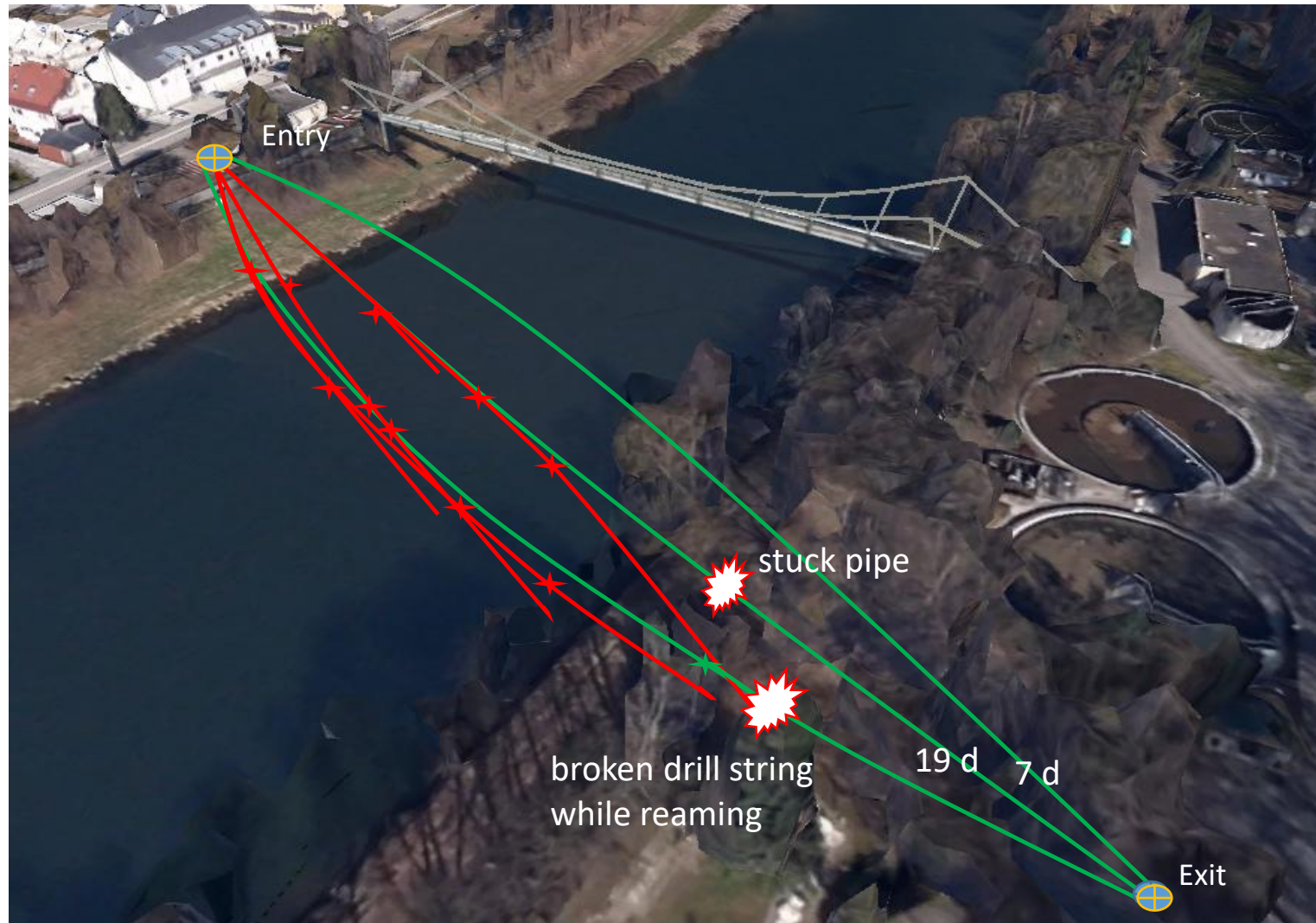
**Trouble
with
steerability**

Source:
LEONHARD WEISS
GmbH & Co. KG



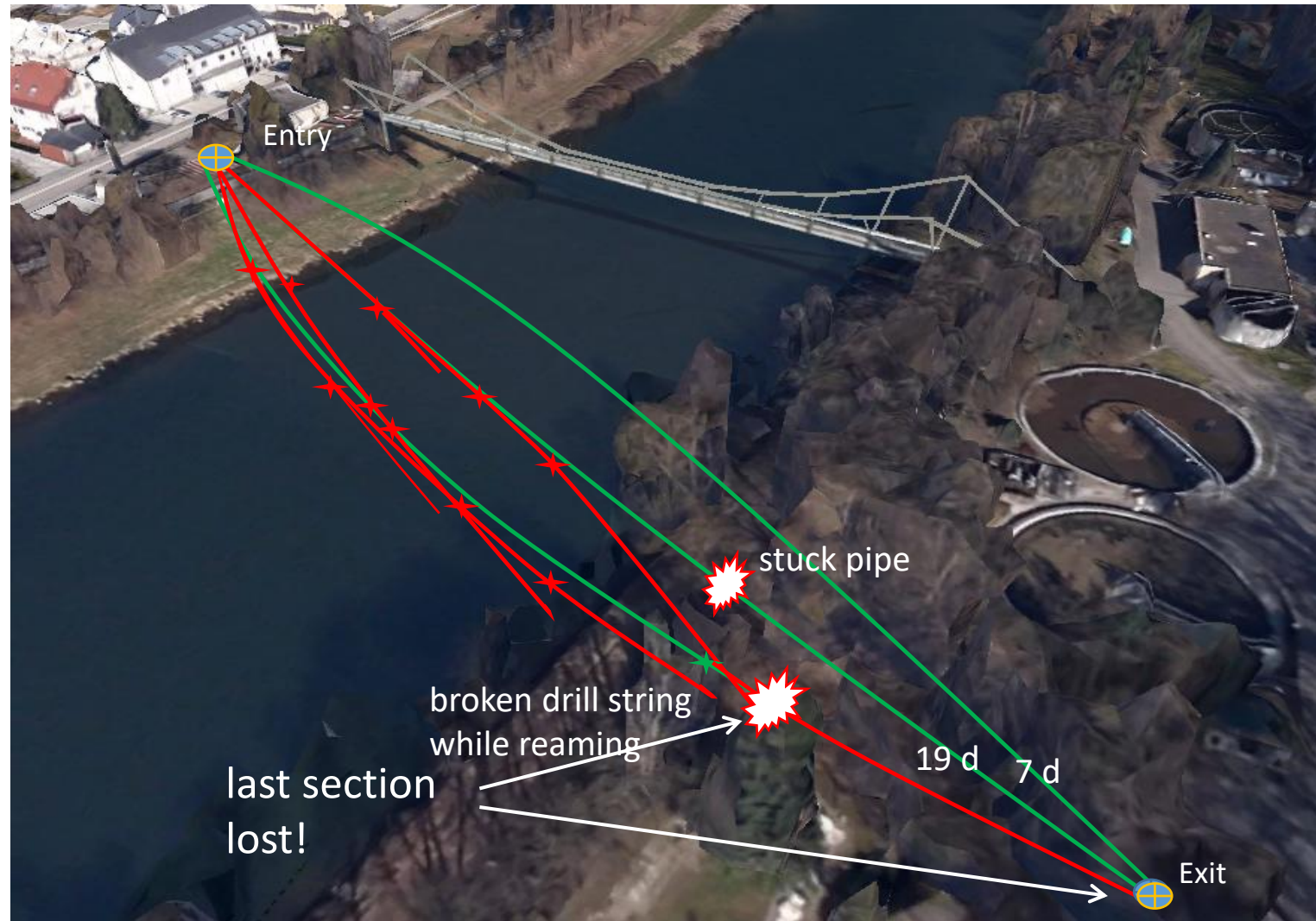
**Trouble
with
steerability**

Source:
LEONHARD WEISS
GmbH & Co. KG



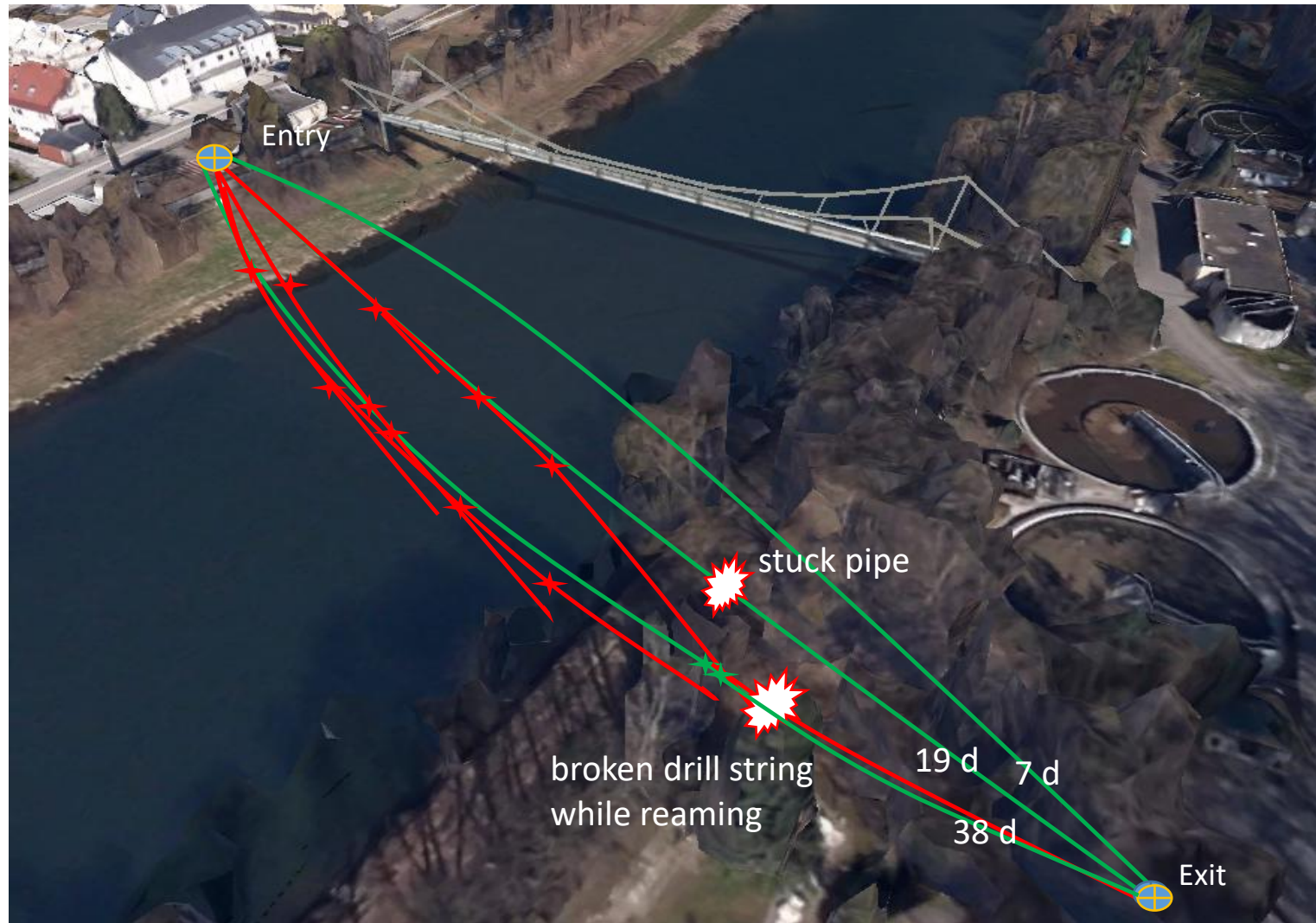
**Trouble
with
steerability**

Source:
LEONHARD WEISS
GmbH & Co. KG



**Trouble
with
steerability**

Source:
LEONHARD WEISS
GmbH & Co. KG



**Trouble
with
steerability**

Source:
LEONHARD WEISS
GmbH & Co. KG

What have been the causes? Why had we trouble with steering?

- Varying ground conditions / heterogeneous soil
- Rock joint structure and direction / fissures / fractured formation
- Drill string and tools followed the path of least resistance (rock/soft soil)
- Using casing pipes at the entry point made it difficult to drill a new bore hole

Approach /Measures to fix these problems



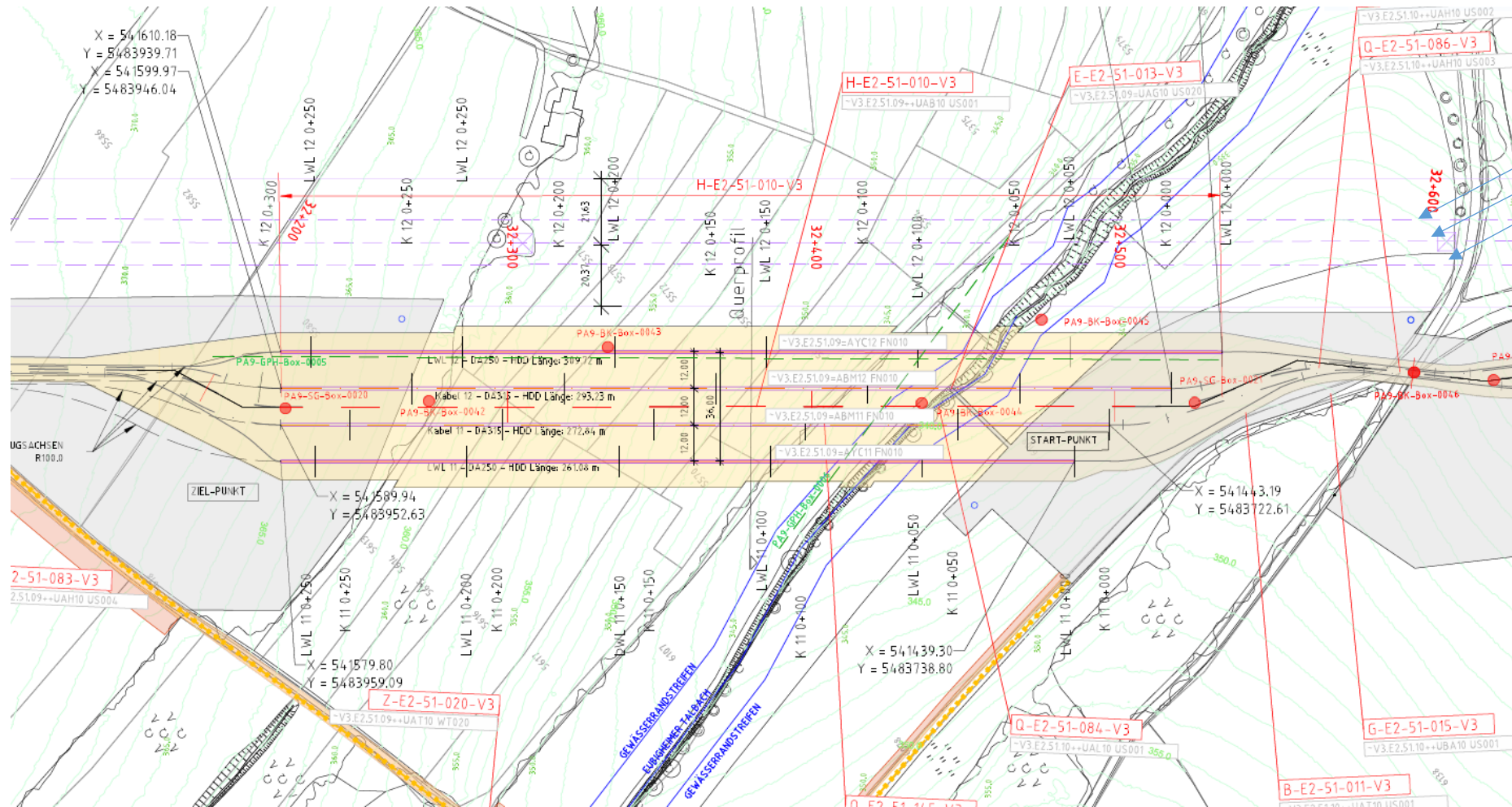
What have been the causes? Why had we trouble with steering?

- Varying ground conditions / heterogeneous soil
- Rock joint structure and direction / fissures / fractured formation
- Drill string and tools followed the path of least resistance (rock/soft soil)
- Using casing pipes at the entry point made it difficult to drill a new bore hole

Approach /Measures to fix these problems

- | | |
|--|----------------------------|
| • Changing tools according changing ground conditions | -> applied here |
| • Using rig with less flexible drill string (higher stiffness) | -> <u>not</u> applied here |
| • Working with very well experienced drillers | -> applied here |
| • Cementing the old bore hole to drill a new one | -> applied here |
| • Trying again, and again, and again.... | -> applied here |

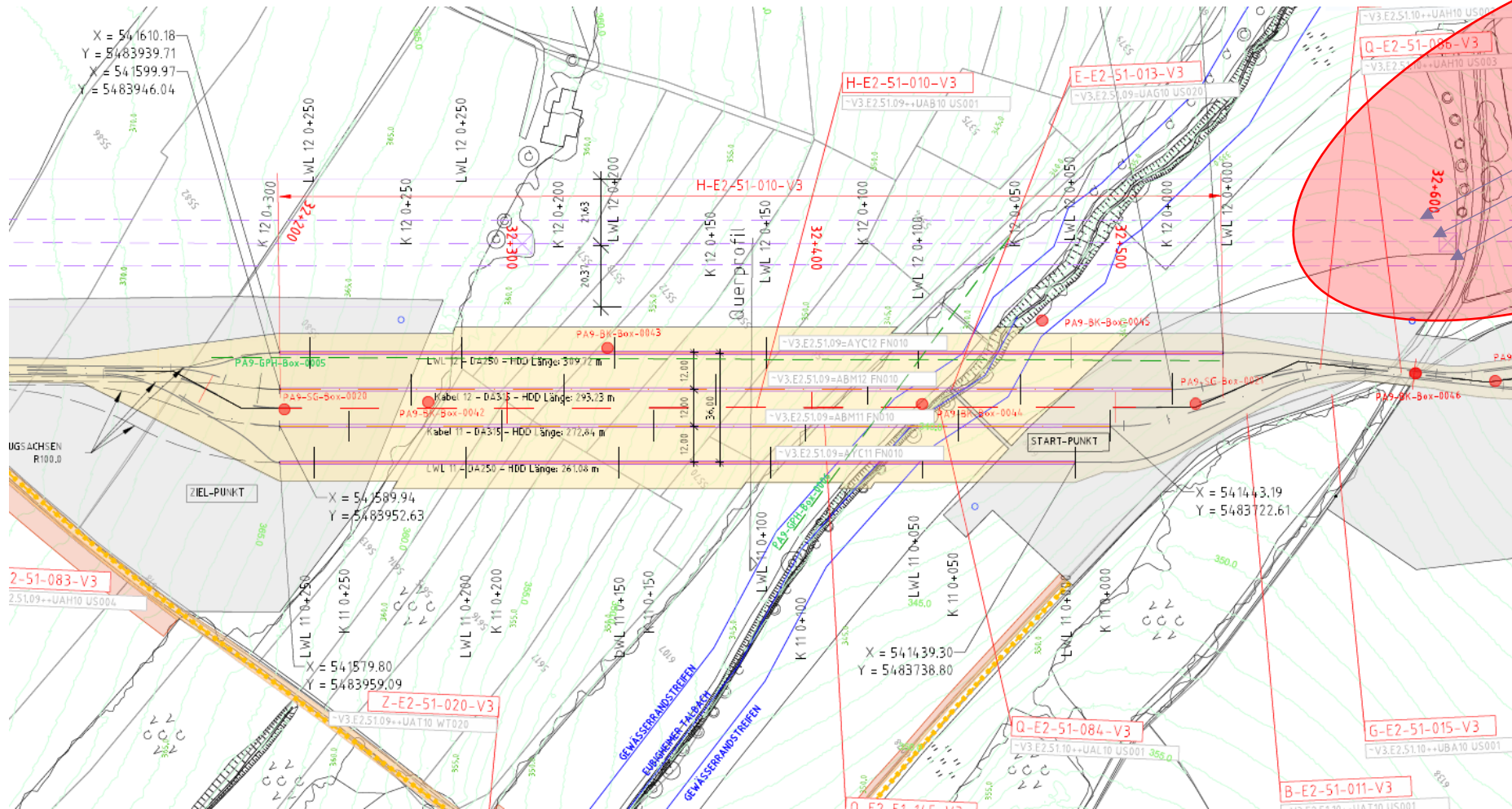
HDD-Project with Walk-Over-System and Wire-Line-System



overground
power line

Source:
Lageplan
TransnetBW/
ILF Consulting Engineers

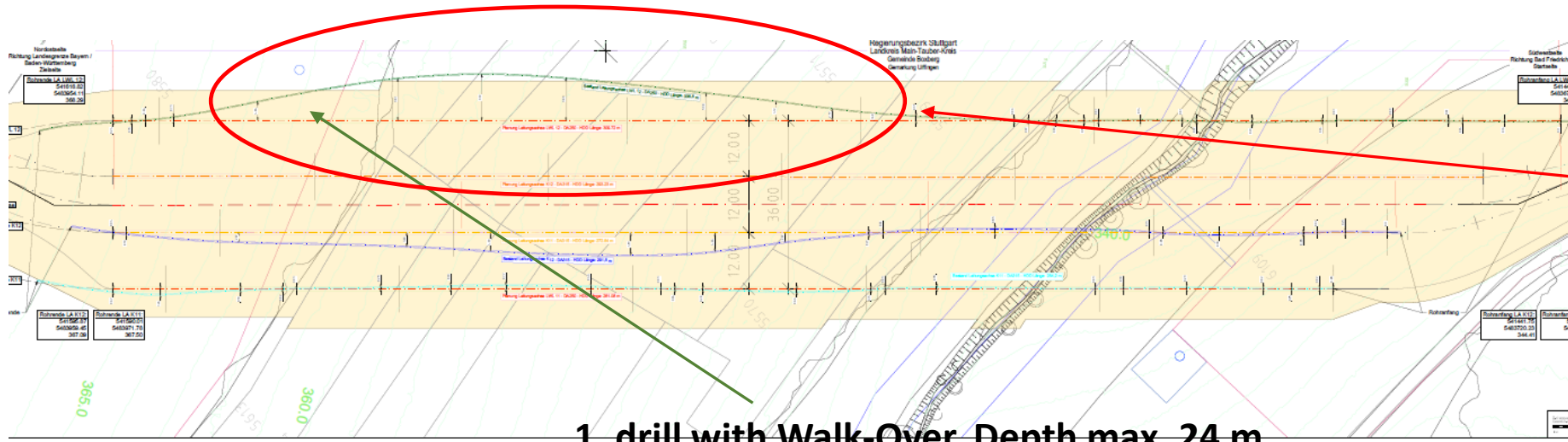
HDD-Project with Walk-Over-System and Wire-Line-System



! overground power line

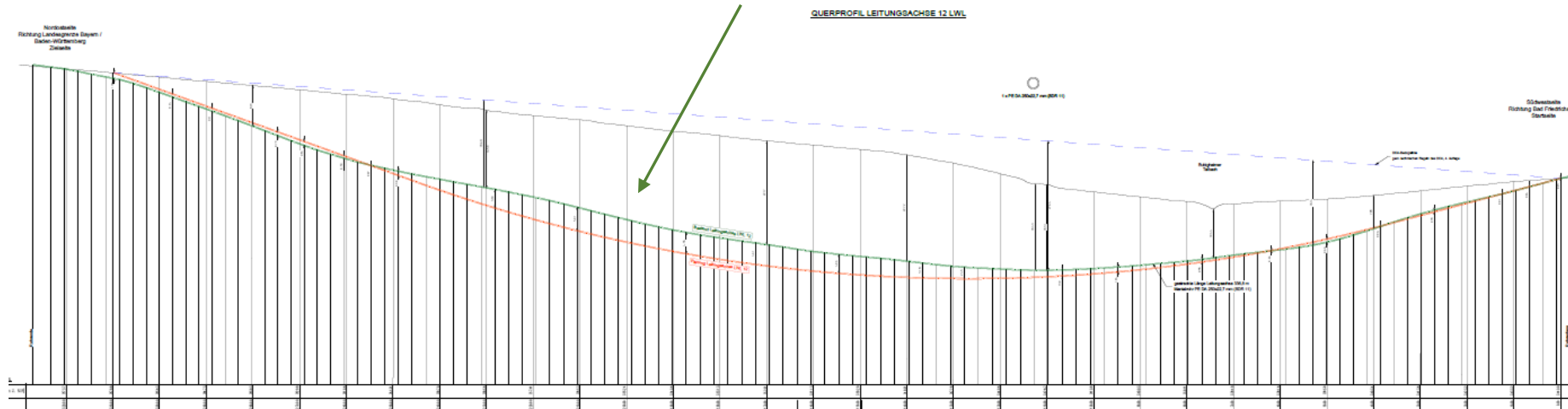
Source:
Lageplan
TransnetBW/
ILF Consulting Engineers

HDD-Project with Walk-Over-System and Wire-Line-System



1. drill with Walk-Over, Depth max. 24 m

sudden
deviation
around 10m !!!
from signal the
night before ->
Overground
powerline
parallel !



Source:
LEONHARD WEISS
GmbH & Co. KG

HDD-Project with Walk-Over-System and Wire-Line-System



Received question from a member:

What are the audience`s main frustrations with their current steering/locating systems?

- Cost
- Ease of use
- Speed
- Accuracy
- Reliability

Received question from a member (the audience!!!):

Do you see a value in being completely autonomous in the use of a steering/locating systems?