# Rigging Case Study: Roof Top Cherries

# 1: Design Brief / Description of task:

- To install three trees on the roof
- Lifting by crane then transporting along gangway and dropping into place.
- Removing them after 2/3 years to be replanted elsewhere.

# 2: Surveying and data collection:

- How heavy are the trees?
- How tall and how wide are they?
- What are the root ball dimensions?
- What are the dimensions of the work space?
- Will the mesh flooring take the mass of the trees on the pallet truck?
- How are we going to lift, lower, and transport them without damaging them?

- Will the overhead structure be strong enough?
- How can we have full control of the exact positioning?
- How can we maintain an upright position during lifting?
- How are we going to lift them back out in 2-3years time?

# Planning and excecution:

- Arrival of the trees:

TEAM 7

# Transport:

- Boardway
- Pallet and pallet truck
- Tree support frame

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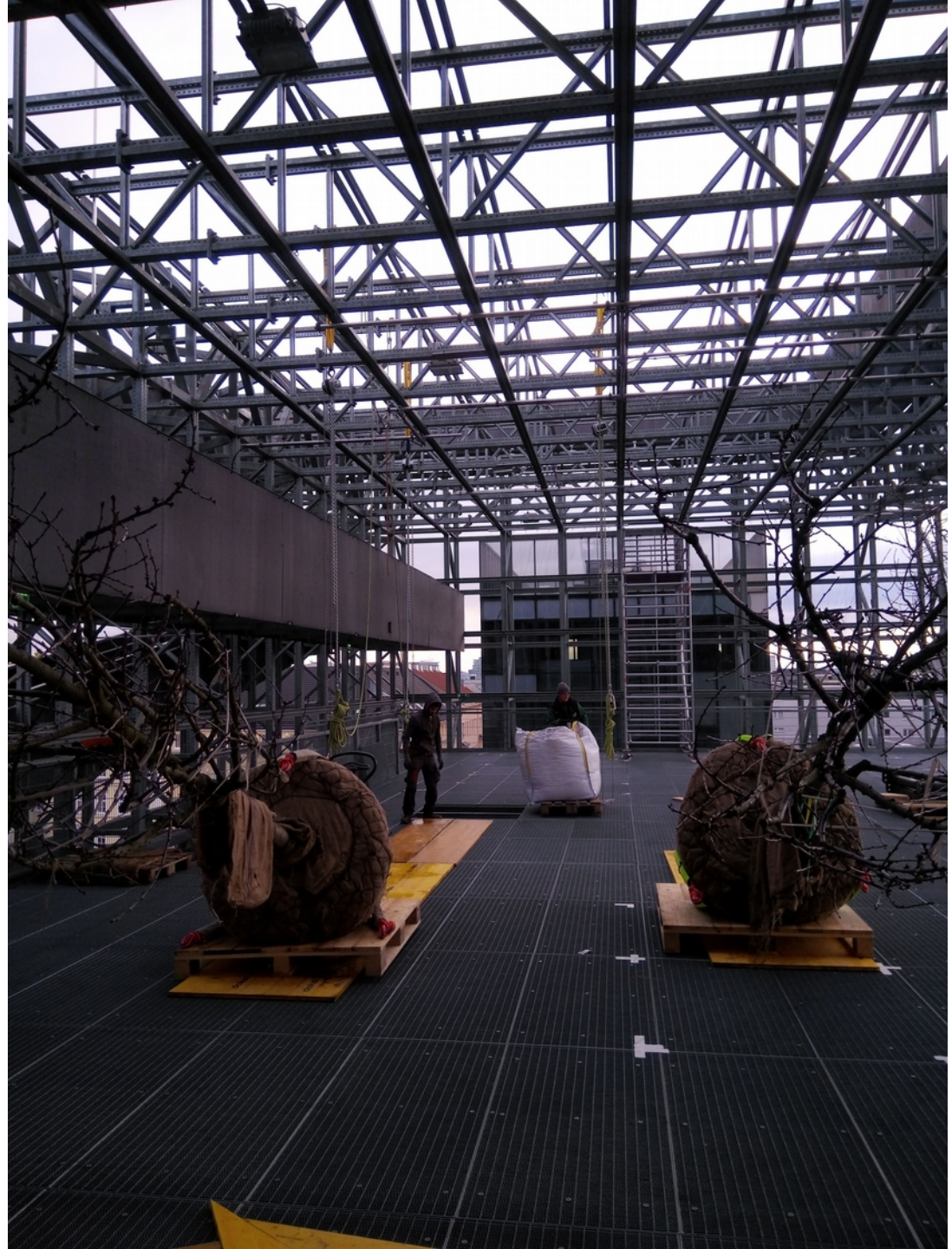

# Slinging the trees:

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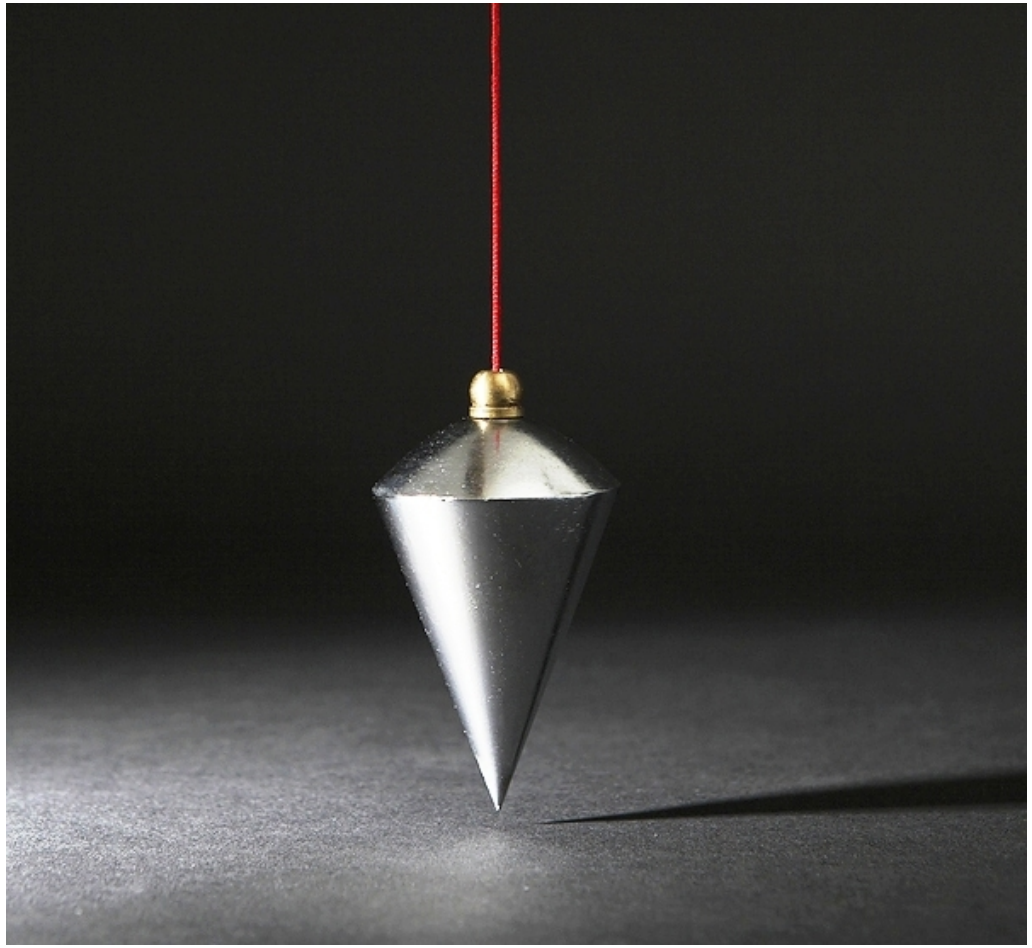
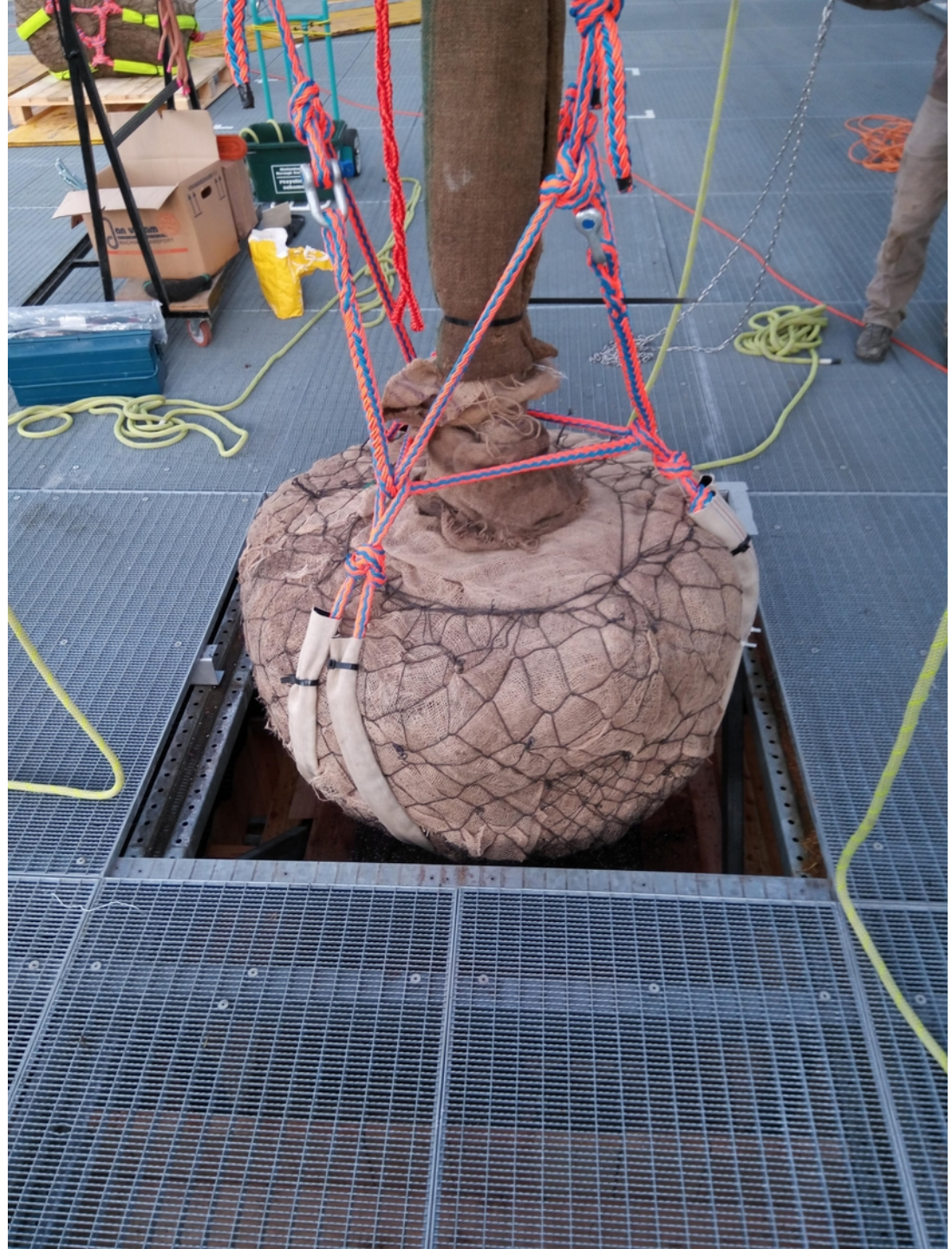
# What rope did we use?

- 22.2mm Trex hollow braid



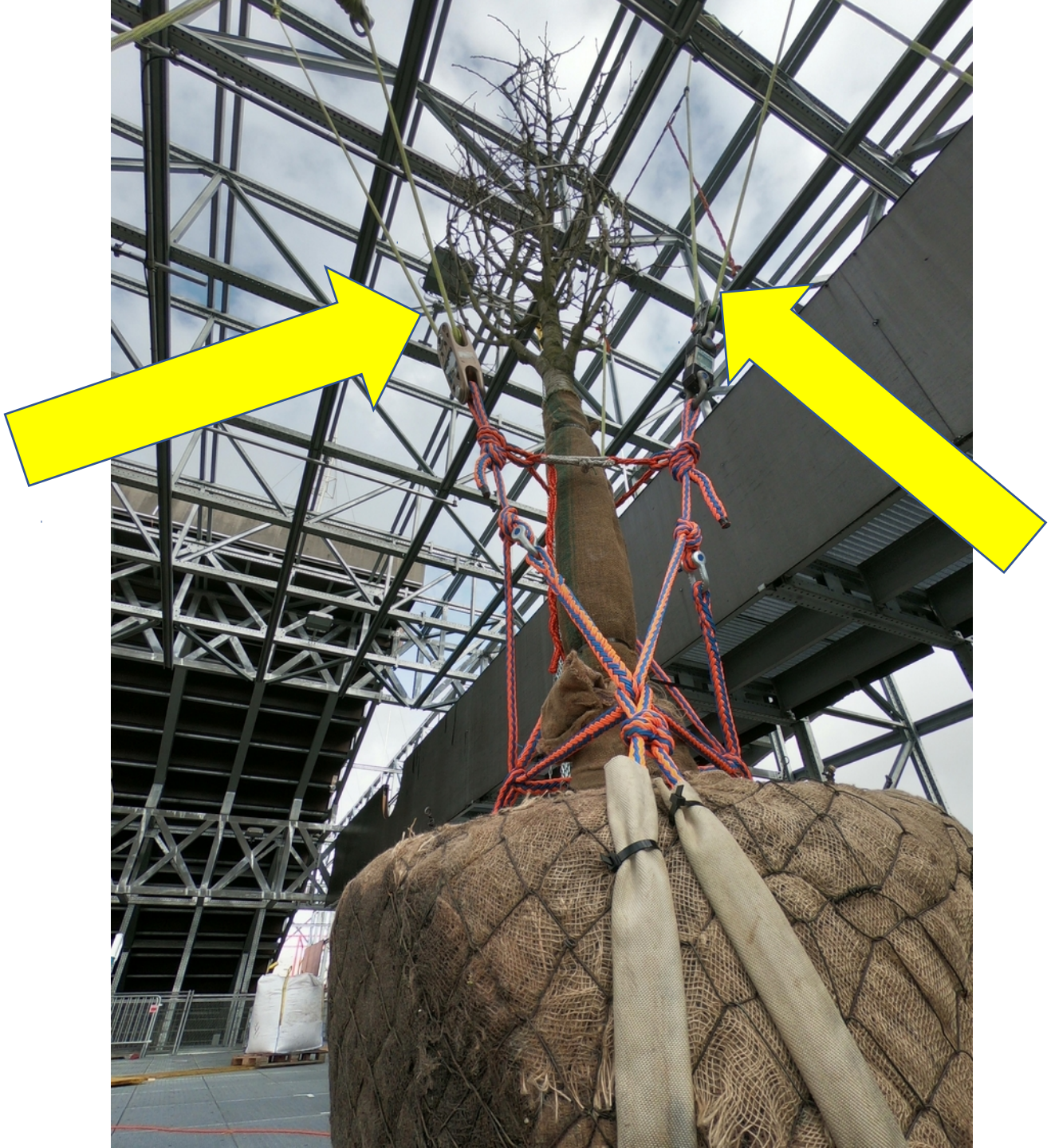
# Lifting:

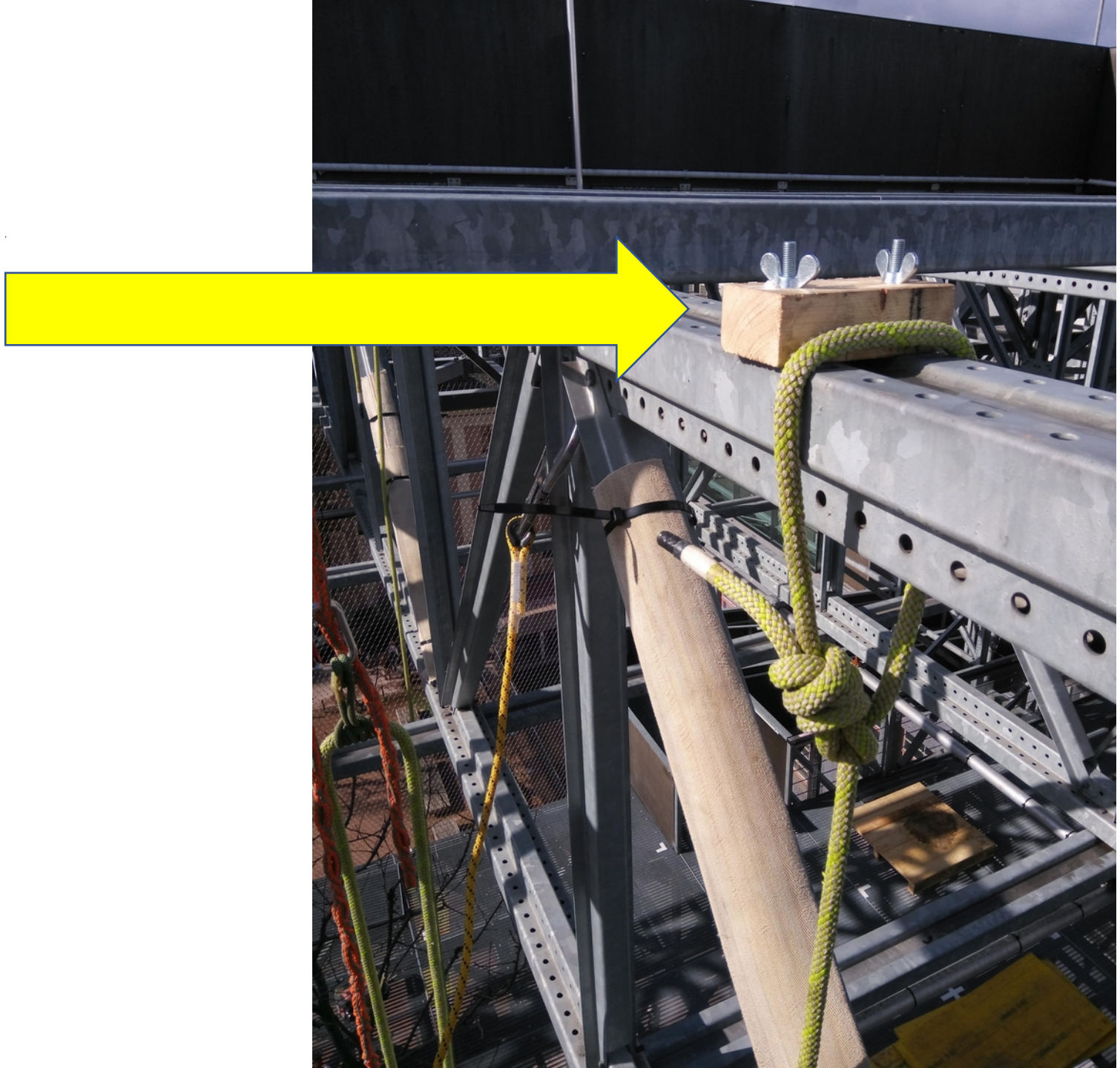
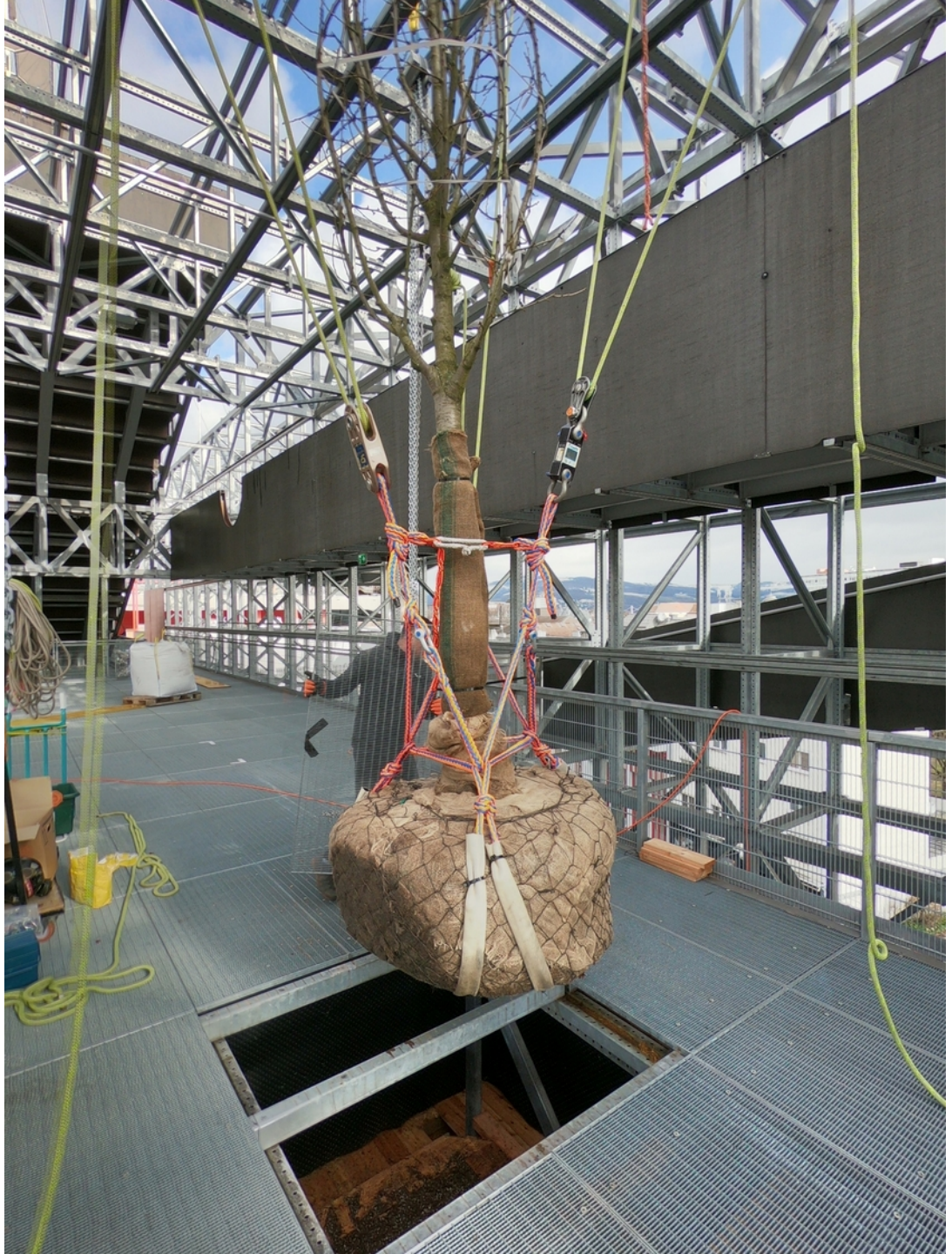
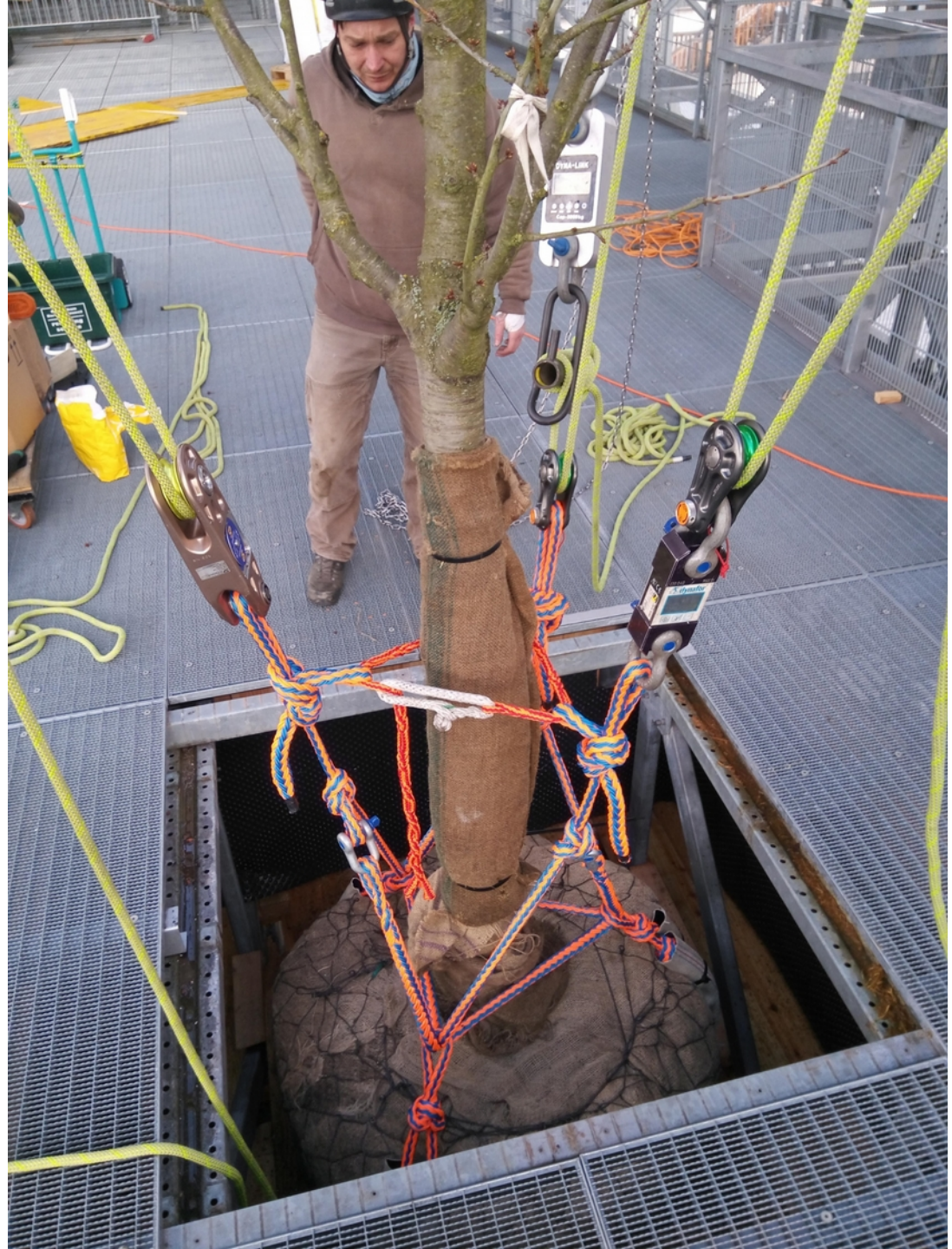
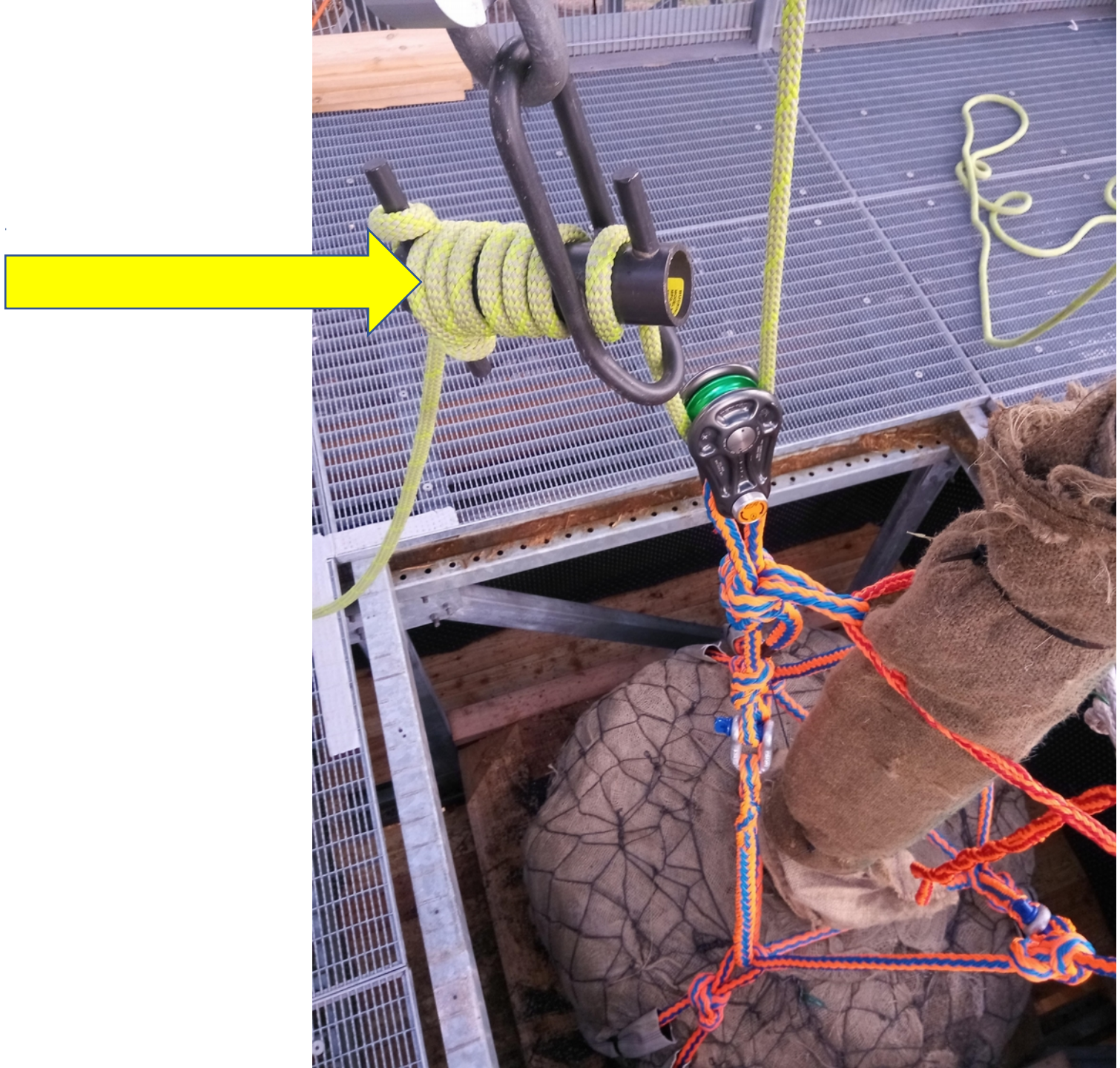
- Triple suspended lift for maximum manouverability.



# Force management:

- Three pairs of equalised anchors.
- Loading across 6 separate points of main structure.
- Keeping the pulleys as low as possible to create smaller angles in the equalised legs:

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