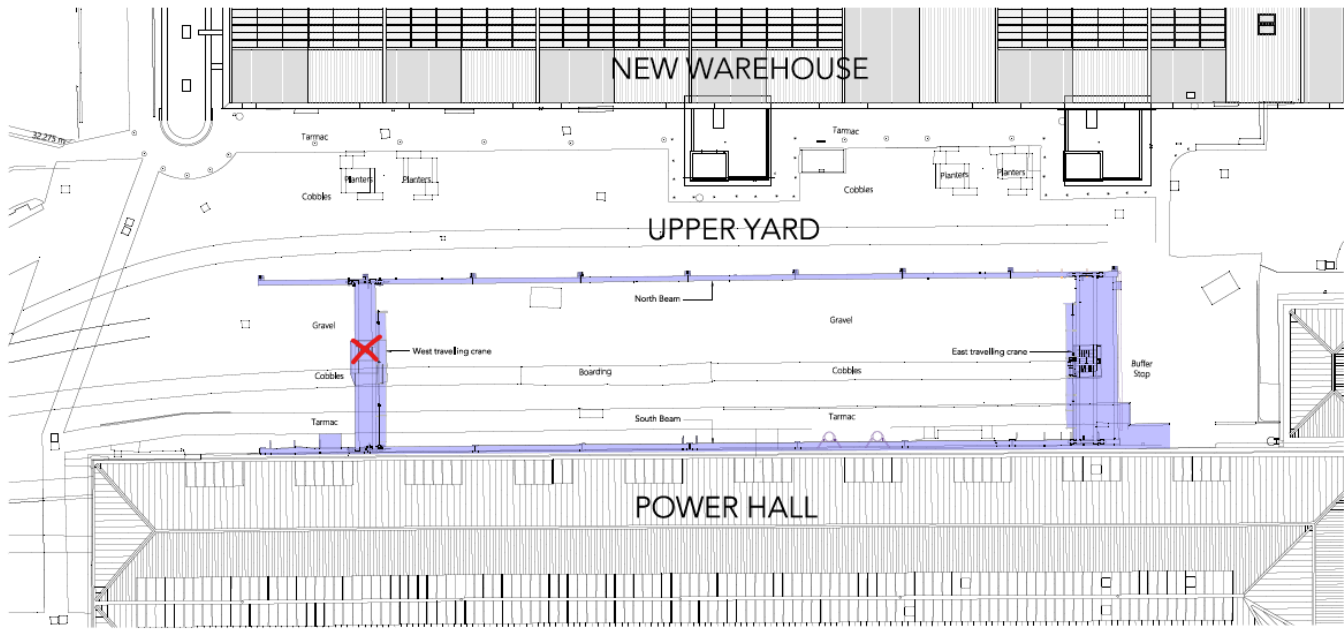


SIM, Combined Projects – Gantry Crane Hook Methodology – Rev A 17.04.25

For structural design please refer to Buro Happold Drawing **SIM- BHE-GA-XX-SK-S-0009**.

Location:

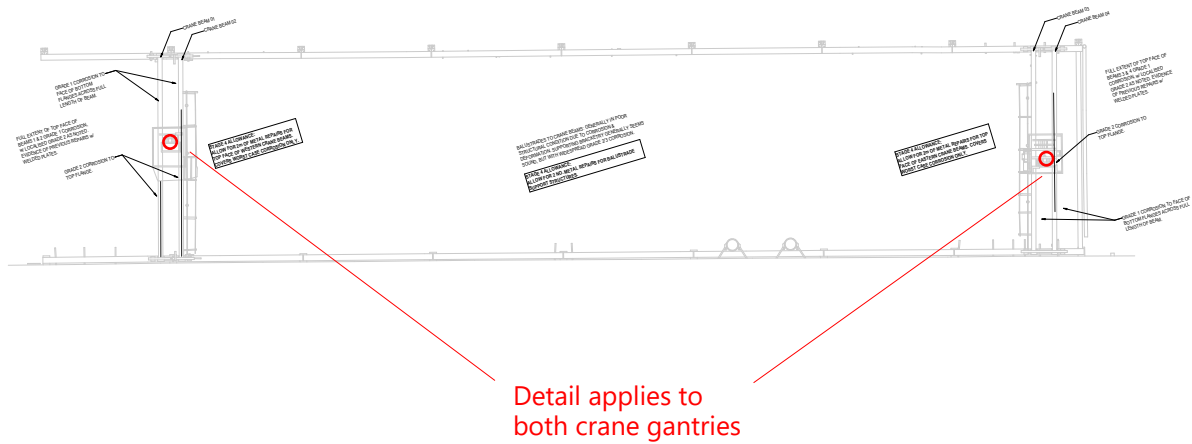
Only the west gantry crane requires the below works to be completed to it as there is no crane hook installed to the east gantry crane.



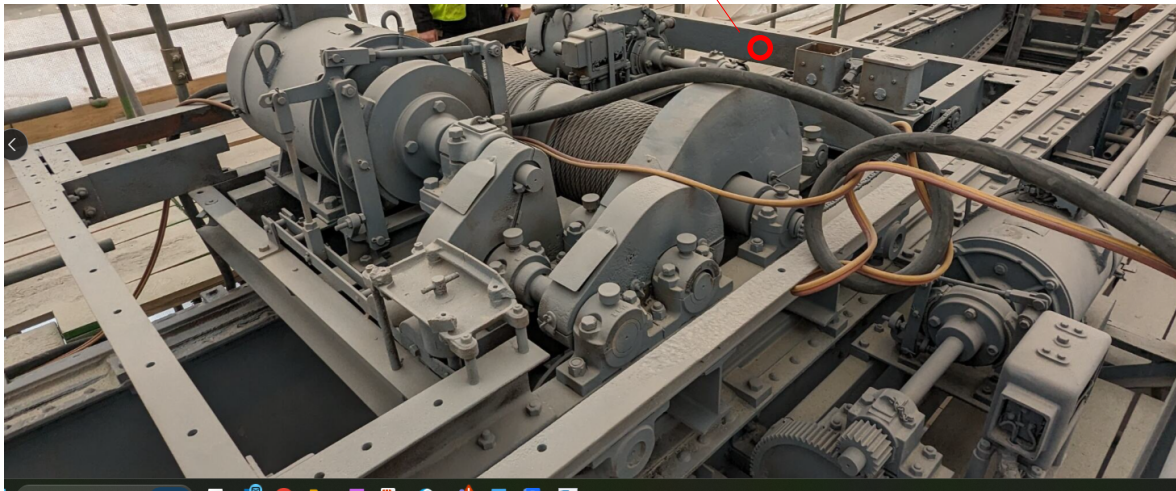
Methodology:

1. Install access scaffold to underside of the crane hook.
2. From working scaffold deck a podium will be installed to the position of the crane hook which will take the weight of the crane hook.
3. Hook disconnected from the existing cable.
4. Existing cable removed from the barrel.
5. Barrel inspected for damage. BHE to attend at this point and advise of any work required.
6. At this meeting an agreed location for the new anchor point will be agreed with BHE. For now indicative location is shown on BHE Drawing **SIM- BHE-GA-XX-SK-S-0009**.
7. New anchor point to consist of 150mm high x 100mm wide 15mm thick S275 steel plate. This will be welded to the existing crane body with 8mm CFW both sides of the plate. The plate will have a pre-fabricated 50mm diameter hole in the centre of the plate which will allow for the fixing of the cable.
8. New cable which will match the same size as the existing cable removed to be fixed to new anchor point.
9. Cable then reinstalled around the barrel.
10. Hook connected to the new cable.
11. Cable terminated by fixing to the new anchor point.

Location Plan



Indicative location for new anchor point



Required Works:

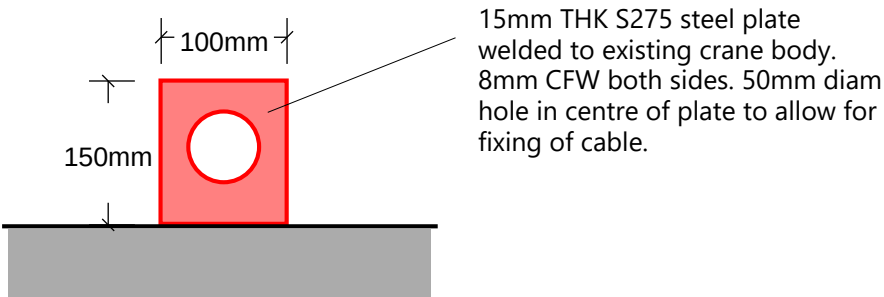
Introduction

Existing lifting gear for both cranes includes stainless lifting cable with mounted hook. Cable appears to be in good condition, but it is unknown whether the crane and hook are passively or actively held in position, i.e. whether a failure within the lifting gear would lead to the hook and cable falling. Cable has been external and remaining design lift is unknown. To prevent any future movement, the cable and hook are to be re-mounted, attached to a fixed anchor point on the crane body.

Required works

1. Remove existing cable and any suspended hook / craneage. This may require temporary support of lifting gear, contractor to review.
2. Contractor to inspect winch barrel and ensure this is sound, for cable to be later re-mounted.
3. Form new welded anchor point onto main body of crane. Contractor to inspect crane body and determine appropriate location for new anchor point to be provided. To be agreed with engineer. Proposed anchor point detail as below.
4. Re-install hook and new cable to match existing detail, but with cable connected to new anchor point. New cable and all fixings / termination details to be determined by supplier. Cable is to be galvanised / stainless to achieve 25yr design life in external environment. Cable to be specified with diameter to match existing, with minimum capacity of 10kN.

Proposed anchor point detail



Indicative fixing detail

