A3

W24 W23 W22 W21 W20

Continuation on drg. WRB-CSP-0032

WE
WF
WG
WH
WJ

Key: Area in relation to Western Range Buidling

Contractor to check setting out of openings using "Check Dimension" of central masonry column.
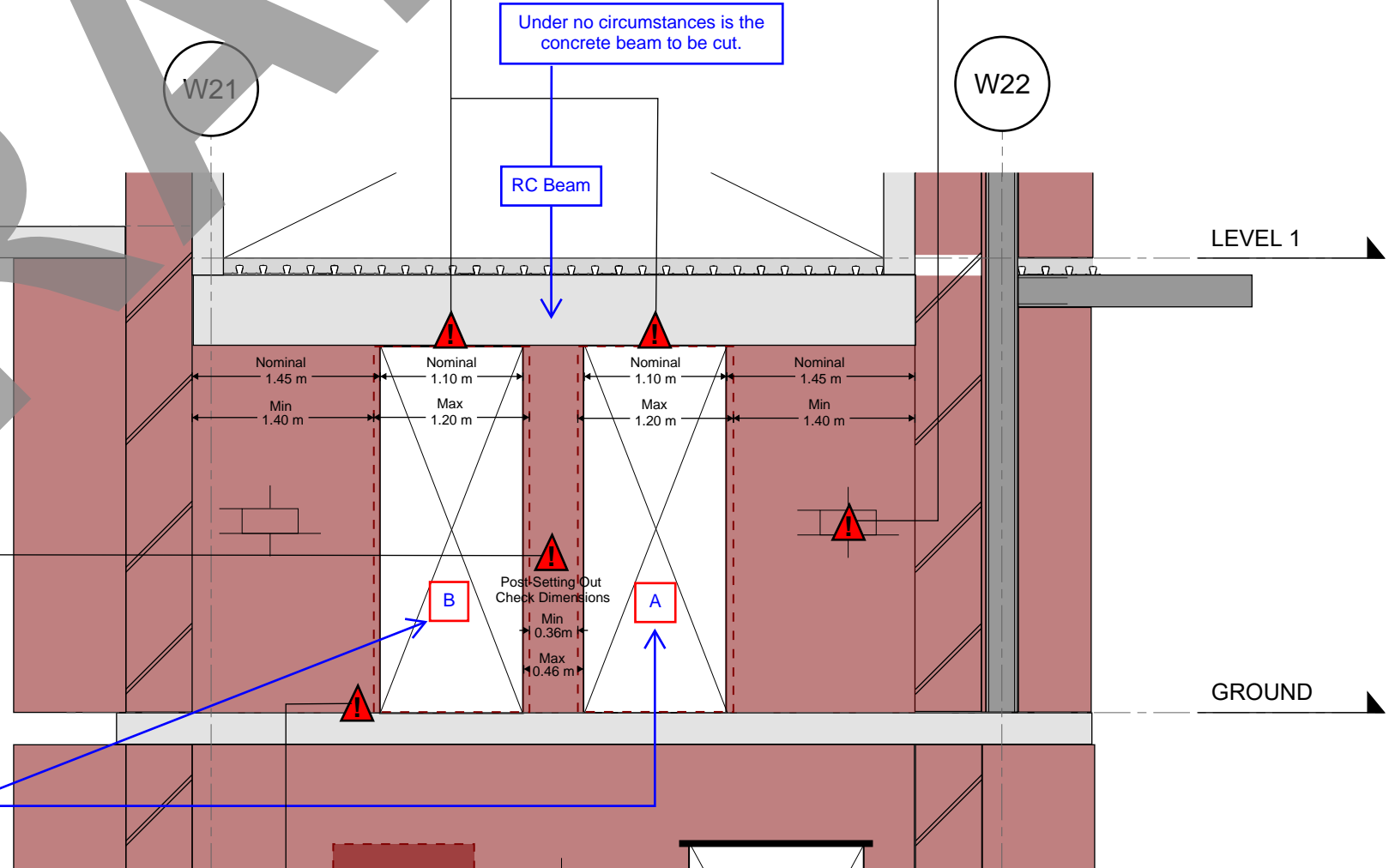
If check dimension outside of specified range, engineer to be consulted before works commence.

If maximum dimensions are exceeded further Arup analysis will be required with resubmission. Opening would be required to be integrally in-filled and a new opening cut.

Reference: OA-15
Likelihood: Unlikely
Severity: High
Owner: Contractor
Description: Opening location is not the same location defined in the analysis.
Mitigation: Contractor to check setting out using "Check Dimension".

Reference: OA-11
Likelihood: Unlikely
Severity: Moderate
Owner: NR/Contractor
Description: Damage to RC beam from opening up works.
Mitigation: Contractor to provide method statement to avoid cutting concrete beam.

Reference: OA-6
Likelihood: Unlikely
Severity: Major injury
Owner: Contractor
Description: Risk of the uncovered existing masonry found to be in poor condition
Mitigation: Contractor should assess the condition of the bricks prior to commencing work to ensure they are satisfied the existing structure is sound.

Under no circumstances is the concrete beam to be cut.

RC Beam

W21   W22

LEVEL 1

Nominal 1.45 m   Nominal 1.10 m   Nominal 1.10 m   Nominal 1.45 m
Min 1.40 m   Max 1.20 m   Max 1.20 m   Min 1.40 m

Post Setting Out Check Dimensions
Min 0.36m
Max 0.46 m

B   A

GROUND

Section A-A - Wall A Opening (Not to scale)

Ground Floor Plan View (Not to Scale)

W22   W21

Train Shed

WE

Back of House Side

Wall to set out Opening A from

Wall to set out Opening B from

A   A

Nominal 1.10 m   Nominal 1.10 m
Nominal 1.45 m   Nominal 1.45 m

WF

A   B

New openings to be formed in masonry to the soffit of the RC beam. Refer to general notes for breakout methodology.

Shop Side

Reference: OA-13
Likelihood: Unlikely
Severity: Major injury
Owner: NR/Contractor
Description: At basement and ground level the return walls are needed to support the new openings
Mitigation: No damage or attempt to demolish these walls should be made.

Reference: OA-12
Likelihood: Likely
Severity: Low
Owner: Contractor
Description: Damage to masonry either side of the opening up works
Mitigation: Contractor to prepare suitable method statement

Setting out instructions for Wall A opening
Kings Cross Station, London

Harry Potter Kings Cross (285805)

23 August 2023 | For Information | KF, CD

OA-SK-S-20221215-001

ARUP

Forming the Wall A opening:

Setting Out

The setting out to construct the openings should be performed on the staff room side.

Setting out dimensions have been provided based on nominal distance from the adjacent masonry walls on GL W21 & W22 (See Ground Floor Plan View).
The nominal distances should be taken off the face of the masonry walls for the left and right opening respectively, which has allowed for a +/- 100mm tolerance. Any wall finishes e.g. plaster should be removed to achieve accurate setting out.

Opening Up Tolerances

The setting out and opening dimensions are nominal, which has allowed for a +/- 50mm on either side of the opening. The contactor shall use the nominal dimensions to set and form the openings.

The specified tolerances may be reduced, allowing for a larger nominal opening size, if the contactor is able to show that their construction methodology justifies the use of tighter tolerances. The method statement detailing this methodology should be submitted to the engineer for review prior to commencement of the works.

Construction

A diamond tipped saw should be used to construct the opening with a vertical guide for precision.

Any loose or damaged masonry next to the saw cut to be made good.

The contractor should produce a construction methodology statement to be reviewed by NR before construction commences.

Nominal Opening
Maximum Opening
50mm
<25mm

Cut Line: 3 2 1
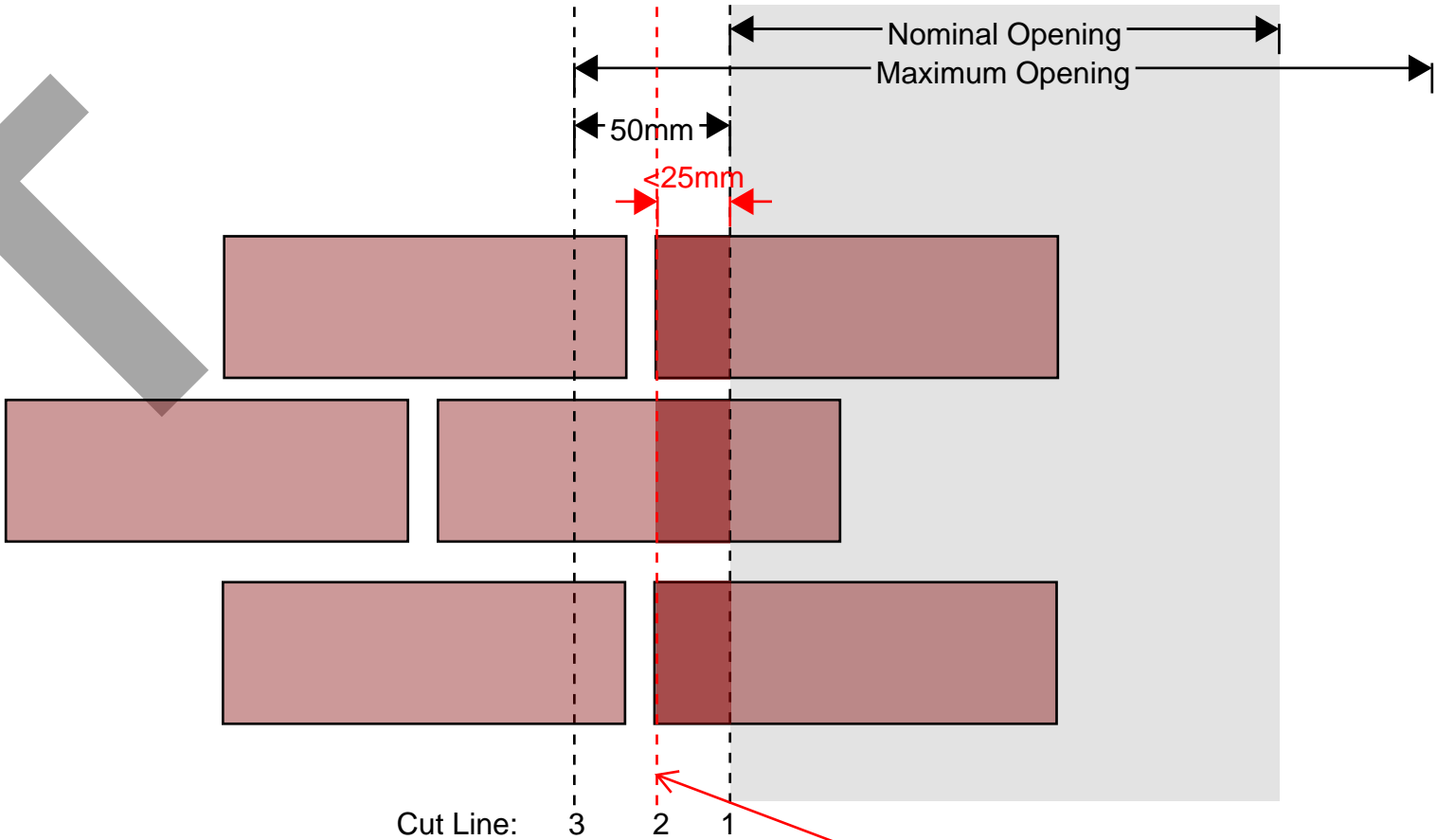
Detail: Brick Edge Allowance (Not to Scale)
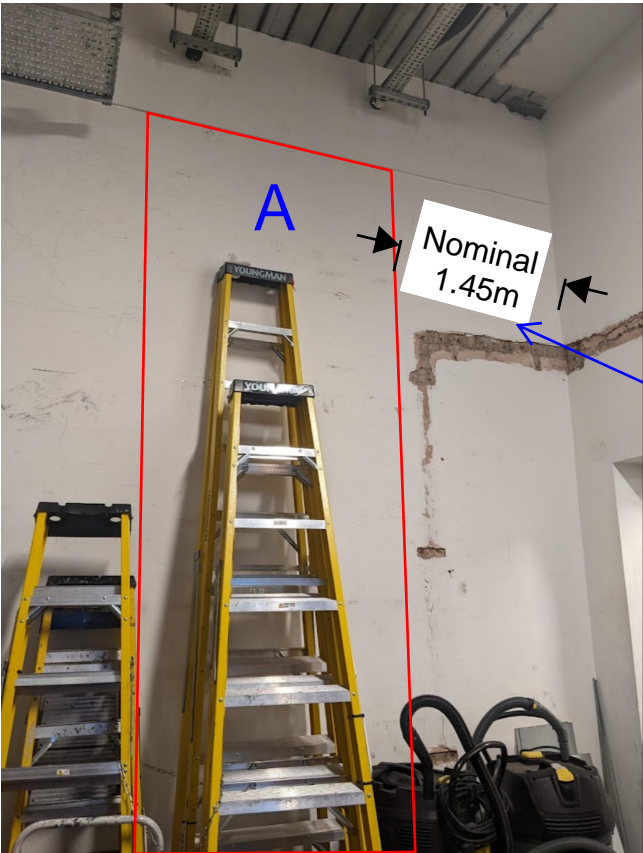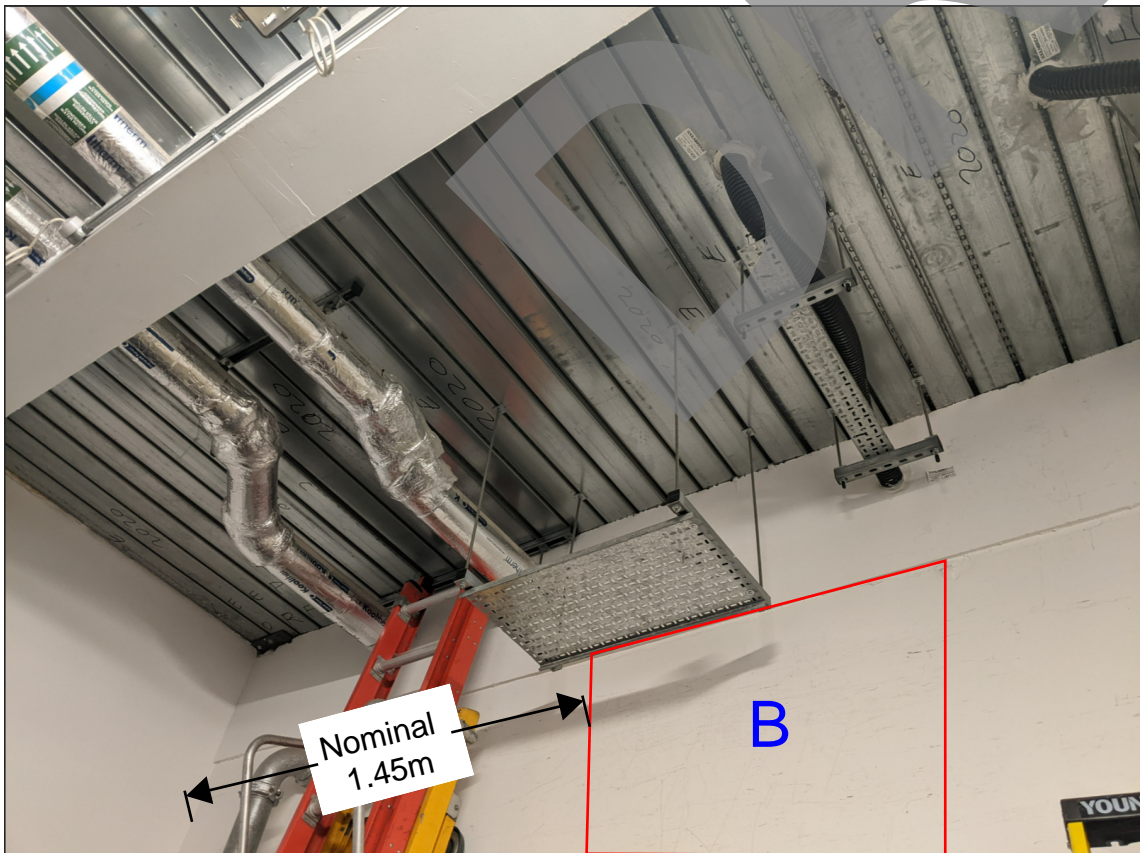
Tidy Brick Edge Allowance:

Set out to Cut Line 1 using nominal opening dimensions.
If remaining brick length > 25mm use nominal opening dimensions.
If remaining brick length < 25mm move cut line to Cut Line 2 (shown in red) to avoid short lengths of brick beyond the cut line.
In all cases opening dimension not to exceed maximum at Cut Line 3.

Nominal 1.45m

A

Measure nominal distance from the brickwork (not plaster)

Nominal 1.45m

B

Section: Photo Overlay of Setting Out (Not to Scale)

ARUP