ARROWSMITH GROUP

Brunswick Mill – Roofing



Method Statements & Specifications – Roof Works (Trigger Item 14)

Project Details

- Site: Brunswick Mill Development, Phase 1
- Roofs Covered by This Submission:
    1. Bradford Road Roof (drawing ref. attached)
    2. Waste House Roof (drawing ref. attached)
    3. Concierge Roof
    4. Engine House Roof
- Prepared By: Jason Dones
- Date: 25/09/25

General Statement on Roof Conditions

- The **Bradford Road Roof** and **Waste House Roof** were significantly deteriorated with collapsed areas and had to be removed on the advice of the Structural Engineer.
- The **Concierge Roof** and **Engine House Roof** have been retained; works will focus on salvaging and making good the existing fabric to maintain heritage character.

All works will be carried out with strict protection of existing heritage fabric and fixings. No new fixings into historic material will be made without Conservation Officer approval.

---

1. Bradford Road Roof

Scope of Works:

- Install new composite metal deck roof using TATA Comflor 60 system.
- Provide 130mm lightweight concrete deck with A193 mesh at the bottom.
- Install 200mm wide x 12mm thick plates to all existing members for Comflor bearing with 6mm continuous fillet weld (CFW) to existing steel.
- Provide 19x95mm shear studs centred on existing beams (1 per trough).
- Velux/Glazed Conservation Panels (formerly Vitral) rooflight system installed only on Bradford Road Roof (not on other roofs).
- Finishes and infill between rooflights to architect's details.

Specification:

- Decking: TATA Comflor 60 steel composite deck, minimum thickness 1.0mm, galvanised to BS EN 10346.
- Concrete: 130mm lightweight concrete with density ≤ 1900 kg/m^3, 30N/mm^2 strength, reinforced with A193 steel mesh at the bottom.
- Plates: 200mm wide x 12mm thick mild steel bearing plates welded to existing beams.
- Shear Studs: 19x95mm headed studs, one per trough.
- Rooflights:
    - 3-panel Velux/Glazed Conservation Panel system: two fixed panels, one central opening panel (approx. 682mm each).
    - Frames powder-coated or galvanised steel to architect's specification.
    - Insulated weathered upstand with liquid-applied warm roof system.
    - Performance: U-value 1.4 W/m^2K, g-value 0.49.
    - Central opening light automated to specialist detail, with conduit provision coordinated with M&E.
- Protection: Heritage masonry adjacent to the roof to be fully protected with sheeting and foam guards.

---

2. Waste House Roof

Scope of Works:

- Install new composite metal deck roof using TATA Comflor 60 system.
- Provide 130mm lightweight concrete deck with A193 mesh at the bottom.
- Install 200mm wide x 12mm thick plates to all existing members for Comflor bearing with 6mm CFW to existing steel.
- Provide 19x95mm shear studs centred on existing beams (1 per trough).

Specification:

- Decking: TATA Comflor 60 steel composite deck, minimum thickness 1.0mm, galvanised to BS EN 10346.
- Concrete: 130mm lightweight concrete with density ≤ 1900 kg/m^3, 30N/mm^2 strength, reinforced with A193 steel mesh at the bottom.
- Plates: 200mm wide x 12mm thick mild steel bearing plates welded to existing beams.
- Shear Studs: 19x95mm headed studs, one per trough.
- Protection: All adjacent heritage masonry, parapets, and internal finishes protected using plywood hoardings and sheeting during works.

---

3. Concierge Roof

Scope of Works:

- Existing roof structure to be retained.
- Roof to be stripped and re-slated with existing and matching heritage slate to maintain existing appearance.
- Repair or replace damaged battens, underlay and leadwork as required.

Specification:

- Slate: Natural heritage slate to match existing size, colour and thickness.
- Fixings: Non-ferrous nails to prevent corrosion.
- Leadwork: New Code 5 BS EN 12588 lead flashings and soakers.
- Protection: All heritage fabric around the roof, including cornices and masonry, to be physically protected during works.

---

4. Engine House Roof

Scope of Works:

- Existing roof and masonry to be salvaged and made good wherever possible.

- Install new roof surface (new coverings and flashings) while retaining and repairing the existing structure.
- Rooflights or openings reinstated to architect's details if applicable.

Specification:

- Covering: Salvage and re-use sound existing materials where possible. Replace defective areas with matching materials as instructed by the Conservation Officer.
- Structure: Retain existing roof structure and masonry; make good joints and fixings to minimise intervention.
- Leadwork: Renew flashings, valleys and soakers to Code 5 BS EN 12588 lead.
- Protection: All heritage masonry, fixings and features to be carefully protected and isolated from construction activities using sheeting and hoardings. No new fixings into historic fabric without prior approval.

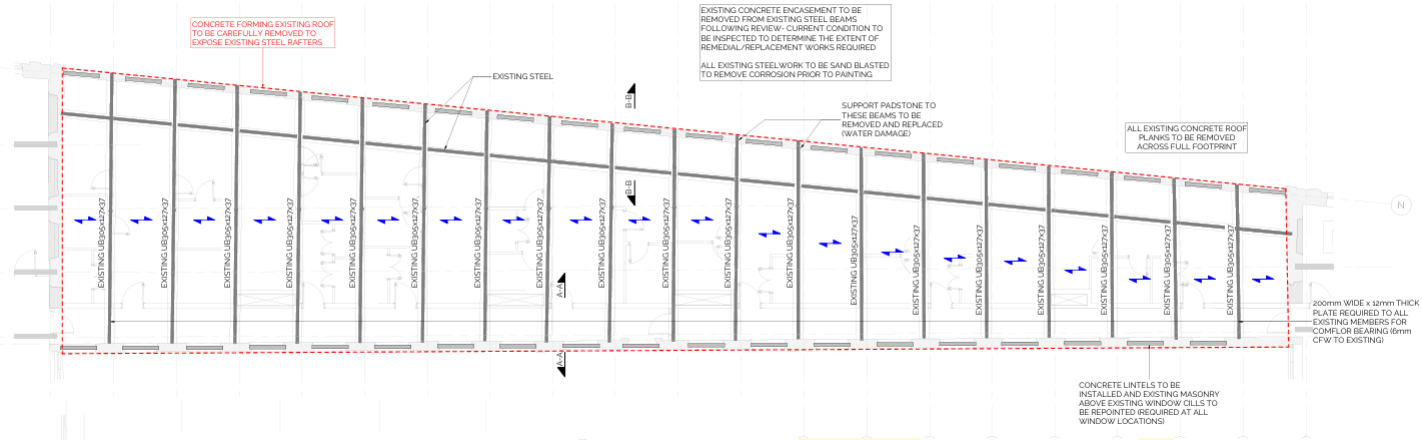
Protection of Heritage Elements (applies to all roofs)

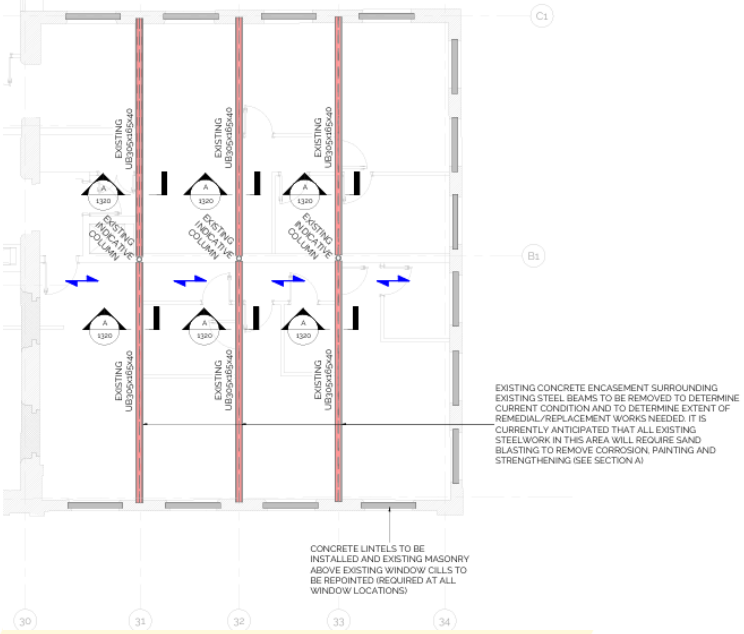
- Physical protection (plywood hoardings, foam padding, sheeting) to all vulnerable areas adjacent to works.
- No fixings or alterations to original fabric without prior approval from the Conservation Officer.
- Dust and debris control to prevent contamination of historic interiors.
- All operatives trained in working with heritage buildings.

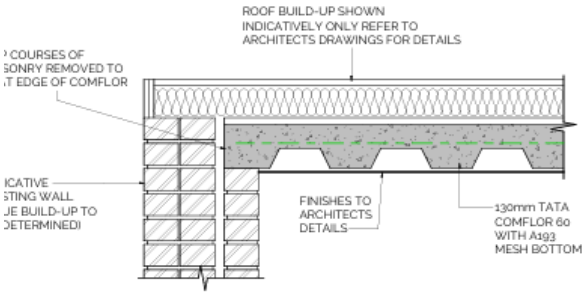
Health & Safety

- Works under CDM Regulations.
- All operatives trained in handling heritage fabric and working on listed buildings.

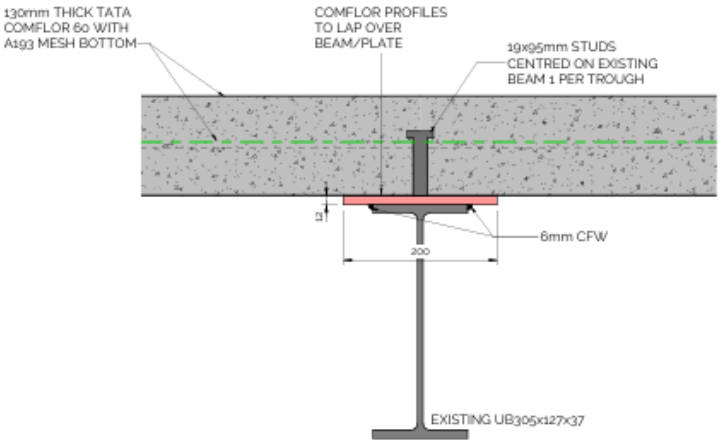
Signed: Jason Dones
Name: Jason Dones
Position: Project Director
Date: 25/09/2025



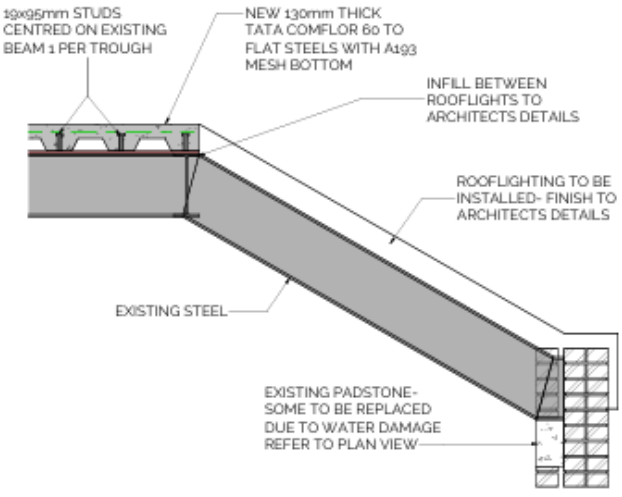




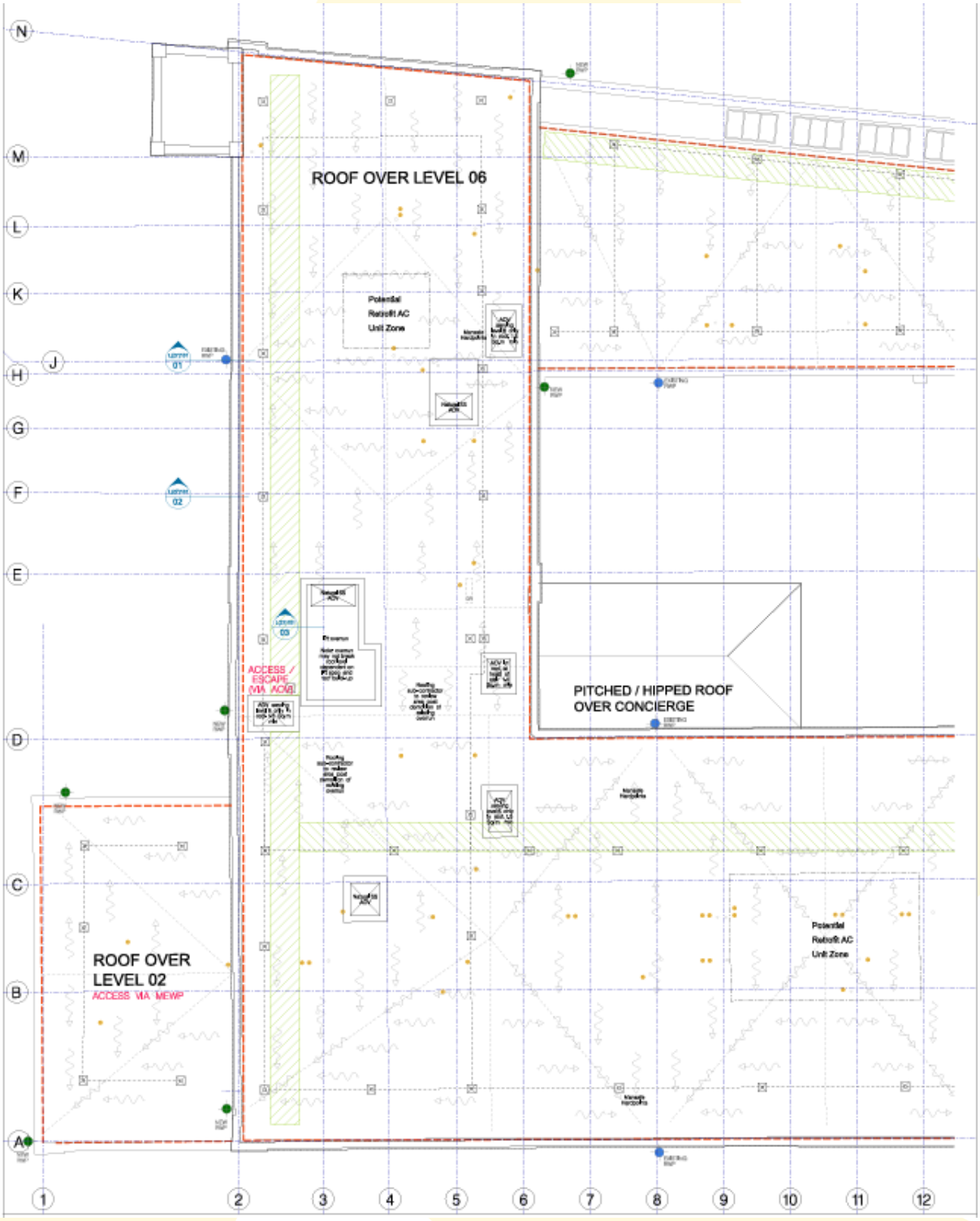
TYPICAL ROOF SECTION A-A
1 : 10

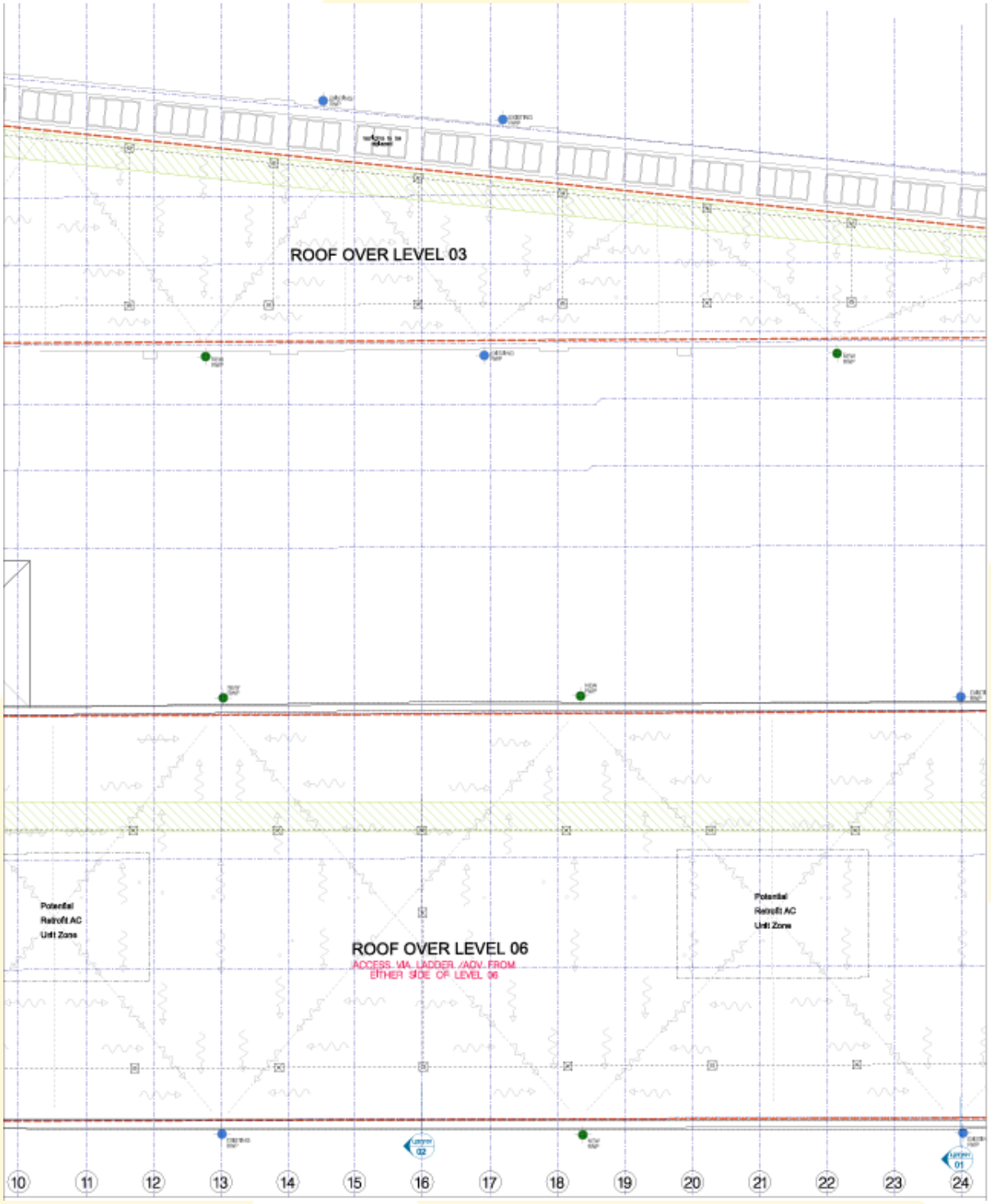


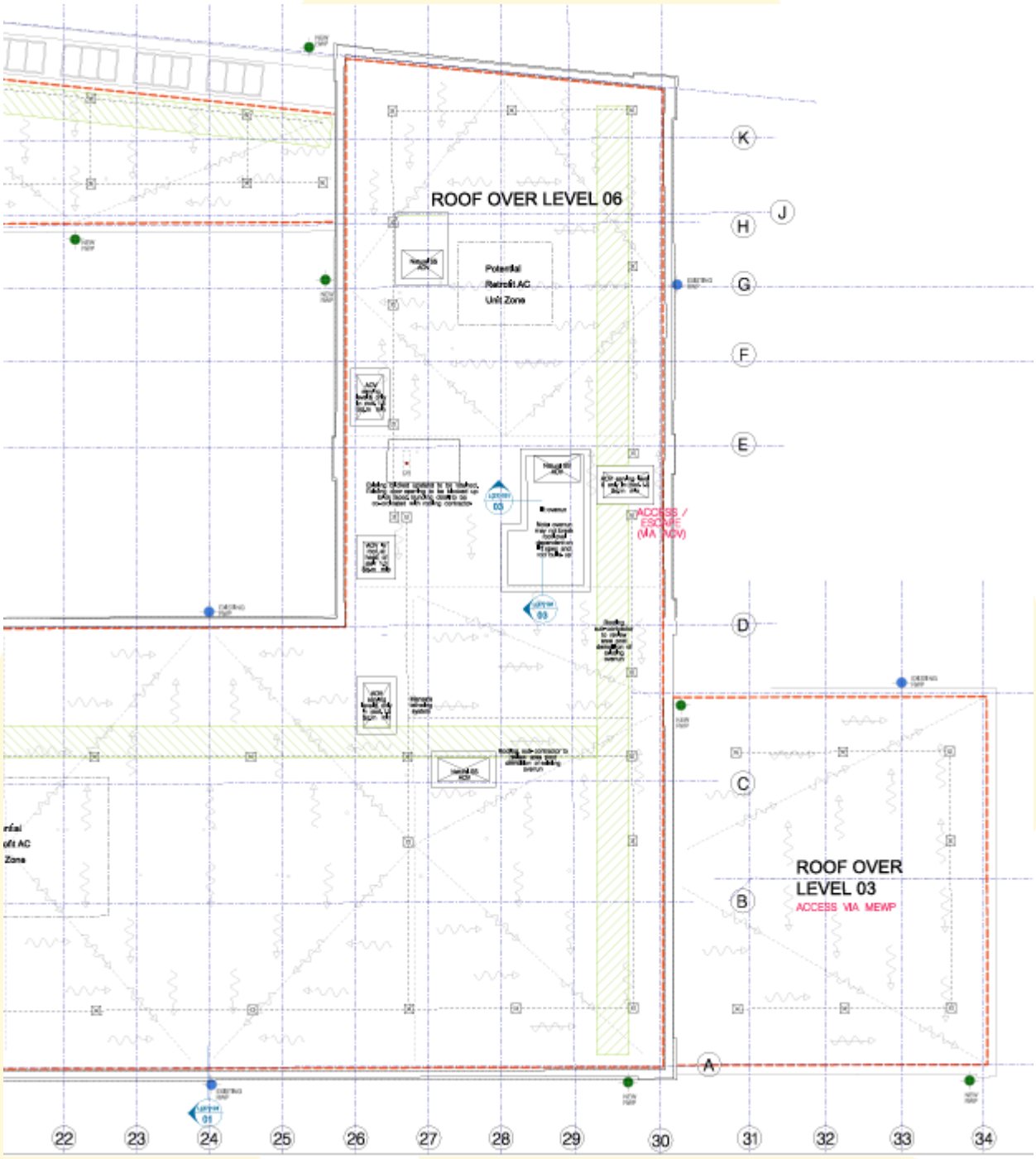
TYPICAL ROOF SECTION DETAIL C-C
1 : 5

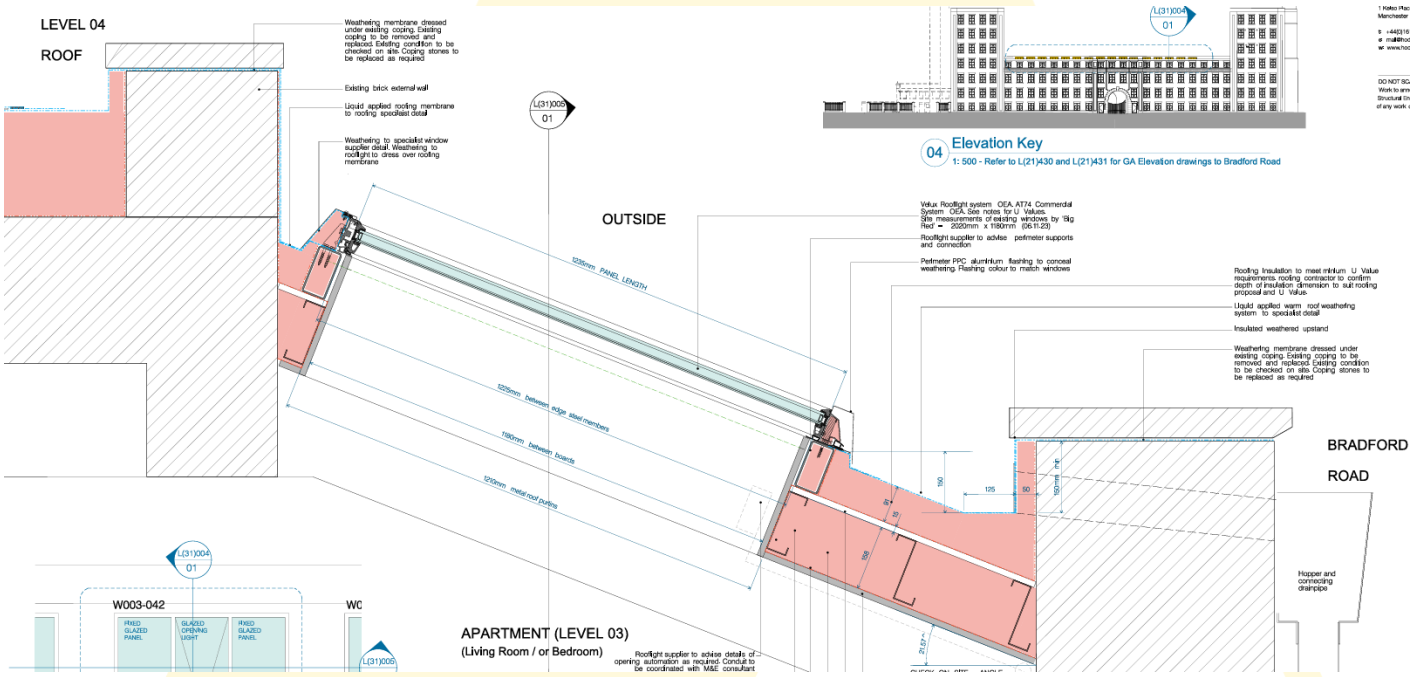


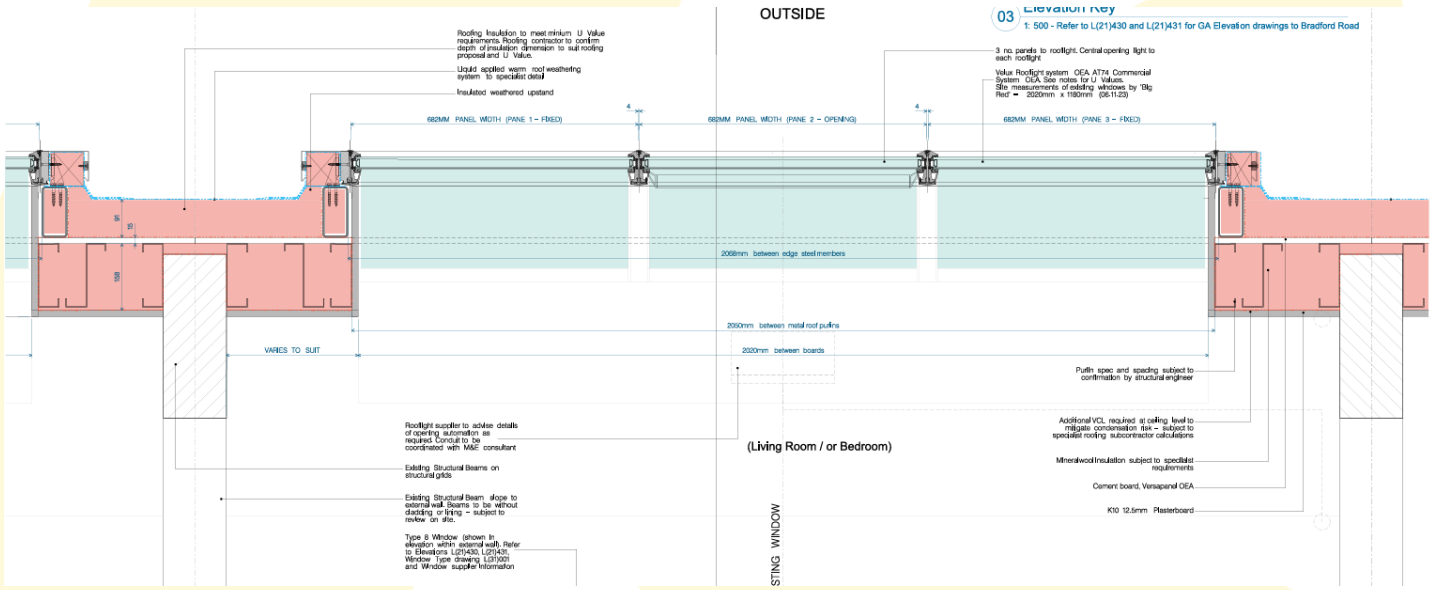
TYPICAL ROOF SECTION B-B
1 : 20


ROOF OVER LEVEL 06
Potential
Retrofit AC
Unit Zone
ACCESS /
ESCAPE
VIA AOV
PITCHED / HIPPED ROOF
OVER CONCIERGE
ROOF OVER
LEVEL 02
ACCESS VIA MEWP
Potential
Retrofit AC
Unit Zone
N
M
L
K
J
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12


ROOF OVER LEVEL 03
Potential
Retrofit AC
Unit Zone
ROOF OVER LEVEL 06
ACCESS VIA LADDER /ADV. FROM
EITHER SIDE OF LEVEL 06
Potential
Retrofit AC
Unit Zone
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24


ROOF OVER LEVEL 06
Potential
Retrofit AC
Unit Zone
ACCESS /
EGRESS
(MA, ACV)
ROOF OVER
LEVEL 03
ACCESS VIA MEWP
K
J
H
G
F
E
D
C
B
A
22
23
24
25
26
27
28
29
30
31
32
33
34


LEVEL 04
ROOF
Weathering membrane dressed under existing coping. Existing coping to be removed and replaced. Existing condition to be checked on site. Coping stones to be replaced as required
Existing brick external wall
Liquid applied roofing membrane to roofing specialist detail
Weathering to specialist window supplier detail. Weathering to rooflight to dress over roofing membrane
L(31)005
01
OUTSIDE
1235mm PANEL LENGTH
1225mm between edge steel members
1180mm between boards
1250mm metal roof purlins
Velux Rooflight system OEA AT74 Commercial System OEA. See notes for U Values. Site measurements of existing windows by 'Big Red' – 2020mm x 1180mm (06.11.23)
Rooflight supplier to advise perimeter supports and connection
Perimeter PPC aluminium flashing to conceal weathering. Flashing colour to match windows
Roofing Insulation to meet minimum U Value requirements. roofing contractor to confirm depth of insulation dimension to suit roofing proposal and U Value.
Liquid applied warm roof weathering system to specialist detail
Insulated weathered upstand
Weathering membrane dressed under existing coping. Existing coping to be removed and replaced. Existing condition to be checked on site. Coping stones to be replaced as required
BRADFORD
ROAD
Hopper and connecting drainpipe
L(31)004
01
W003-042
FIXED GLAZED PANEL
GLAZED OPENING LIGHT
FIXED GLAZED PANEL
L(31)005
APARTMENT (LEVEL 03)
(Living Room / or Bedroom)
Rooflight supplier to advise details of opening automation as required. Conduit to be coordinated with M&E consultant
L(31)004
01
04 Elevation Key
1: 500 - Refer to L(21)430 and L(21)431 for GA Elevation drawings to Bradford Road


OUTSIDE
03 Elevation Key
1: 500 - Refer to L(21)430 and L(21)431 for GA Elevation drawings to Bradford Road
Roofing Insulation to meet minimum U Value requirements. Roofing contractor to confirm depth of insulation dimension to suit roofing proposal and U Value.
Liquid applied warm roof weathering system to specialist detail
Insulated weathered upstand
3 no. panels to rooflight. Central opening light to each rooflight
Velux Rooflight system OEA AT74 Commercial System OEA. See notes for U Values. Site measurements of existing windows by 'Big Red' – 2020mm x 1180mm (06.11.23)
682MM PANEL WIDTH (PANE 1 – FIXED)
682MM PANEL WIDTH (PANE 2 – OPENING)
682MM PANEL WIDTH (PANE 3 – FIXED)
2068mm between edge steel members
2050mm between metal roof purlins
2020mm between boards
VARIES TO SUIT
Purlin spec and spacing subject to confirmation by structural engineer
Additional VCL required at ceiling level to mitigate condensation risk – subject to specialist roofing subcontractor calculations
Mineralwool insulation subject to specialist requirements
Cement board, Versapanel OEA
K10 12.5mm Plasterboard
Rooflight supplier to advise details of opening automation as required. Conduit to be coordinated with M&E consultant
Existing Structural Beams on structural grids
Existing Structural Beam slope to external wall. Beams to be without cladding or lining – subject to review on site.
Type S Window (shown in elevation within external wall). Refer to Elevations L(21)430, L(21)431, Window Type drawing L(31)001 and Window supplier information
(Living Room / or Bedroom)
STING WINDOW