15155 – 86 Cross Street, Manchester

Enabling Works / Basement Repair Works Indicative Method Statement



boothking

Doc. Ref.	15111-BKP-V1-XX-RP-S-002	**Status**	S2	**Date**	09/12/2024
Client	Individual Restaurants	**Revision**	P03	**Stage**	2
Prepared by	LSK	**Project No.**	15155		
Checked by	LSK	**Approved by**	LSK		

This document uses revision codes in accordance with ISO EN 19650:

P: Preliminary (non-contractual) - review, comment or approval.
C: Contractual - Approved for stage completion.

This document uses status codes in accordance with ISO EN 19650:

Work in progress
S0: WIP

Shared (non-contractual)
S1: Coordination
S2: Information
S3: Review
S4 & S5: Approval

Published (contractual)
A1, **An**, etc. (where "n" relates to the project stage)

This document uses project stages in accordance with the IStructE Structural Plan of Work 2020:

2: Concept
3: Coordination
4: Technical Design
4.5 Production Design
5: Construction
6: Handover

Existing Building Condition

Existing building condition survey has been carried out by Booth King Partnership and is recorded in BKP report 15155-BKP-V1-XX-RP-S-001 (dated May 2024).

BKP report notes a number of existing structural defects recorded within the existing basement area summarised as follows;

- Historic water ingress and related corrosion of ground floor level steelwork members noted in 3No. locations (locations of former pavement smoke vents, albeit these have been removed and replaced with concrete slab infill / paved footpath finishes over)
- Surface corrosion noted to a number of basement level steel column members part-embedded within basement walls (generally coinciding with water historic ingress at former smoke vents)



Figure 1 – 86 Cross Street Viewed From Cross Street

Enabling Works / Repair Works Proposals

Based on the above defects identified in BKP condition report, it is proposed that initial enabling works / repair works are carried out in order to repair / replace any corroded steelwork members (including provide new support to existing ground floor slab structures), along with installation of suitable localised waterproofing measures to minimise further water ingress and potential for future damage / corrosion of structural elements.

Proposals for repair works are detailed on BKP drawing 15155-BKP-V1-B1-S-112, summarised as follows;

- Further investigation works to determine cause of historic water ingress (including waterproofing specialist assessment) – subject to agreements with Manchester City Council Highways
- Installation of new localised waterproofing measures to minimise further water ingress (subject to specialist design and details)
- Careful removal of damaged / corroded steelwork support members in 3No. locations (former smoke vents), including suitable temporary works measures to ensure stability of existing ground floor structure
- Careful cutting back of ends of existing ground floor filler joist slab in close proximity to corroded steel members (anticipated that ends of secondary steel floor joist member are likely to have been subject to some degree of corrosion)
- Installation of new steelwork support members to provide support to existing ground floor structure / external masonry walls over
- Careful removal of temporary propping measures on completion of new steelwork installations
- Further investigations into extent of corrosion to embedded steel column members in close proximity to former smoke vents (including careful localised removal of glazed masonry units where necessary)
- Reinstatement of existing glazed masonry units on completion of works / replacement of damaged masonry units if required (subject to submission of suitable masonry samples and agreement with planners / conservation officer) and repointing works as required (see below specification details)

Note all further investigation works and repair works subject to approval by conservation officer and consultation with Manchester City Council Highways



Figure 2 – View on Corroded Steelwork (Former Smoke Vent)

Enabling Works / Repair Works Method Statement

The below represents initial outline method statement and intended sequence of work for proposed enabling works / repair works to existing building defects identified above. Method statement is designed to ensure that existing building fabric is protected at all times and that all works take due consideration for temporary and permanent stability of the existing structure.

Additional RAMS information is to be developed, including further input from specialist subcontractors (notably waterproofing specialist) and appointed temporary works specialist, however all specialist input is anticipated to be carried in accordance with the below outline method statement.

1. Initial Investigation Works

   Initial investigation works required to determine cause of historic water ingress and allow suitable specialist waterproofing measures to be designed. Works to consist of the following;

   - Formal 'Traffic Management Permit Application' to be submitted to Manchester City Council Highways relating to erection of temporary barriers / hoarding within highways footpaths to

Cross Street (2No. locations) and John Dalton Street (1No. location), removal of footpath finishes and reinstatement works

- Installation of temporary barriers / hoarding as described above on receipt of MCC permit; barriers / hoarding to be sufficient to allow safe working in areas of former smoke vents, temporary storage of paving flags (for reuse) and to ensure public safety during the works
- Locate existing services where necessary (from available record information and on-site CAT scanning); protect / isolate where necessary to ensure safe working
- Localised hand-removal of existing stone paving flags; flags to be suitable stacked and stored within barriers / hoarding for future reuse
- Localised hand-removal of subbase materials to expose existing concrete infill slabs (understood to have been installed to replace former smoke vent panels)
- Inspection of existing slab arrangement and possible water ingress issues by Structural Engineer / Architect / waterproofing specialist, to allow suitable localised waterproofing measures to be designed
- Install temporary road plates / temporary DPM waterproofing measures over open excavations within barriers / hoardings



Figure 3 – Indicative Outline of Basement Walls / Smoke Vent Location to Cross Street Elevation

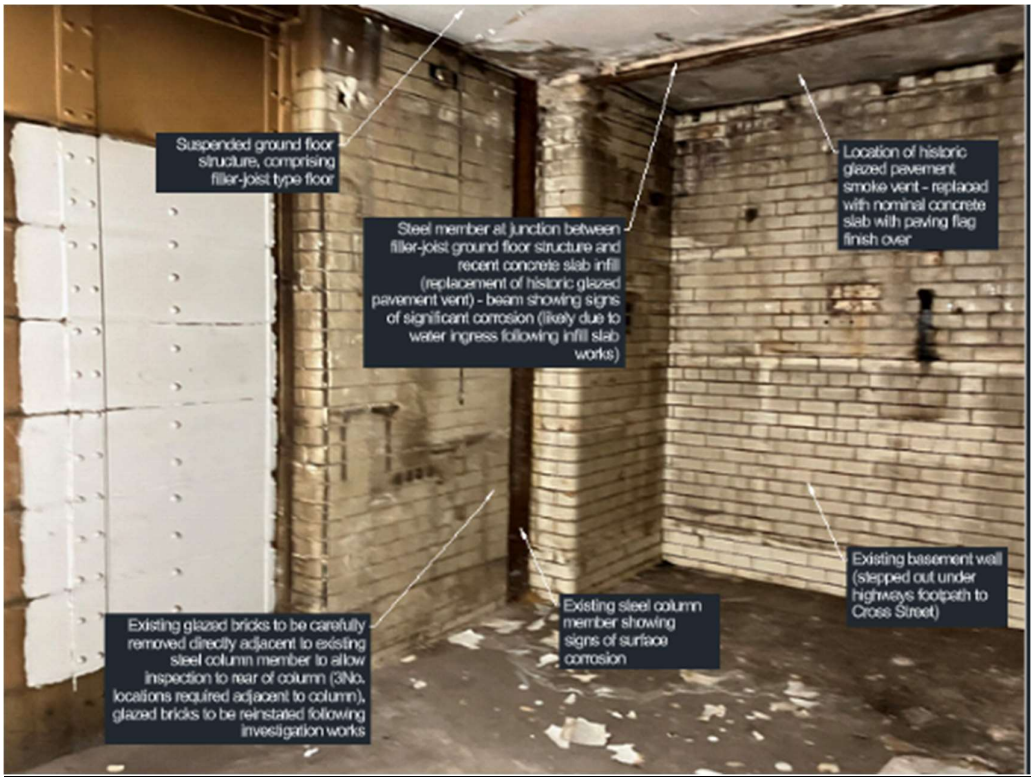


Figure 4 – Basement Level View on Historic Smoke Vent Location to Cross Street Elevation



Figure 5 - View on Corroded Steelwork Support to Historic Smoke Vent Location to Cross Street Elevation

2. Existing Steel Beam Replacement Works

Existing ground floor support beams in 3No. locations to be removed and replaced. Works to consist of the following;

- Install suitable temporary propping measures to existing ground floor filler-joist slab and adjacent former smoke vent infill slab; final details to be developed by temporary works specialist but understood to consist of timber scaffold board spreader installed onto existing basement slab, scaffold propping system / vertical 'strong-boy' type prop members installed at regular centres and timber head spreader member (to ensure no damage to existing basement floor slab / ground floor slab soffit). Refer to indicative detail extract from BKP drawing 15155-BKP-V1-B1-S-112
- Install suitable temporary propping measures to ensure stability of masonry cill above ground floor level; final details to be developed by temporary works specialist but understood to consist of timber scaffold board spreader installed onto ground floor slab, vertical 'strong-boy' type prop members (or similar) installed at regular centres. Refer to indicative detail extract from BKP drawing 15155-BKP-V1-B1-S-112

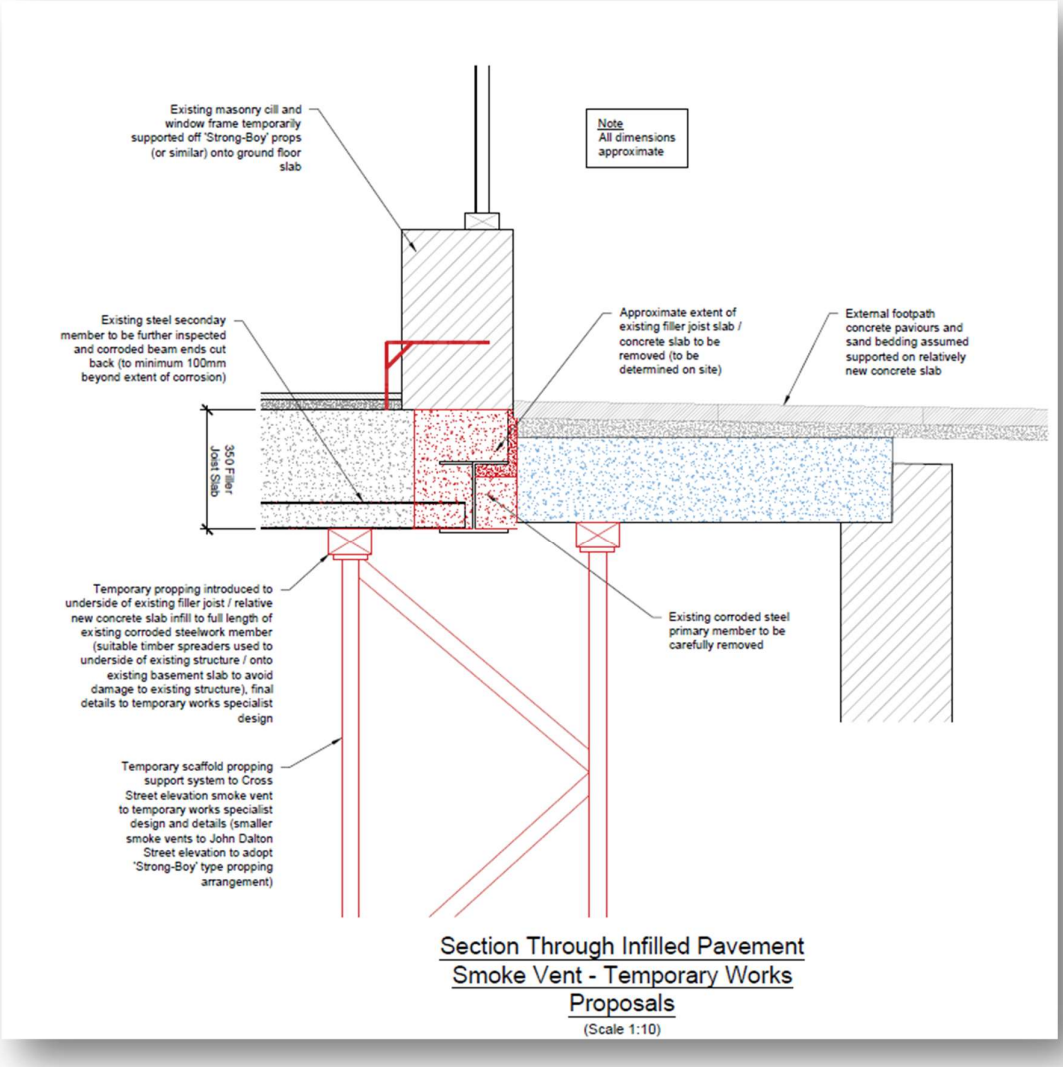


Figure 5 – Extract from BKP Drawing Information



Figure 6 – View on Ground Floor Cill / Glazing above Corroded Steelwork Member to Cross Street Elevation

- Careful cutting of exiting ground floor filler joist floor slab / former smoke vent concrete infill slab to allow removal of corroded steelwork members and further inspection of existing slabs. It is anticipated that concrete slabs / embedded secondary steel joist members in close proximity to corroded beams are likely to have been subject to some deterioration; any damaged / corroded structure to be carefully cut back and removed (extent to be verified following exposure of slab edges and further inspection)
- Careful removal of existing corroded steelwork members; works to avoid any damage to existing glazed brick basement walls (no changes to existing glazed brickwork arrangements is permitted).
- Where existing glazed masonry units are to be removed as part of steelwork repair works, these are to be carefully extracted and stored for reuse. Where existing glazed bricks are accidentally damaged, these are to be replaced with similar glazed bricks following submission of samples to the planners / conservation officer and formal agreement for use.
- Where new masonry pointing / repair pointing is required to basement glazed brickwork, all new mortar to be NHL3.5 lime mortar installed in accordance with manufacturer's recommendations and to the satisfaction of the conservation officer.

- Installation of new steelwork support members with welded bottom plates (where required) to provide support to existing ground floor slab; top of support plates to be dry packed with mortar to ensure full contact to underside of existing ground floor slabs; no changes to ground floor levels / details
- Concrete encasement of new steel beams; concrete encasement to be dry packed with mortar to underside of existing masonry cill walls above ground floor
- Careful release and removal of all temporary propping measures

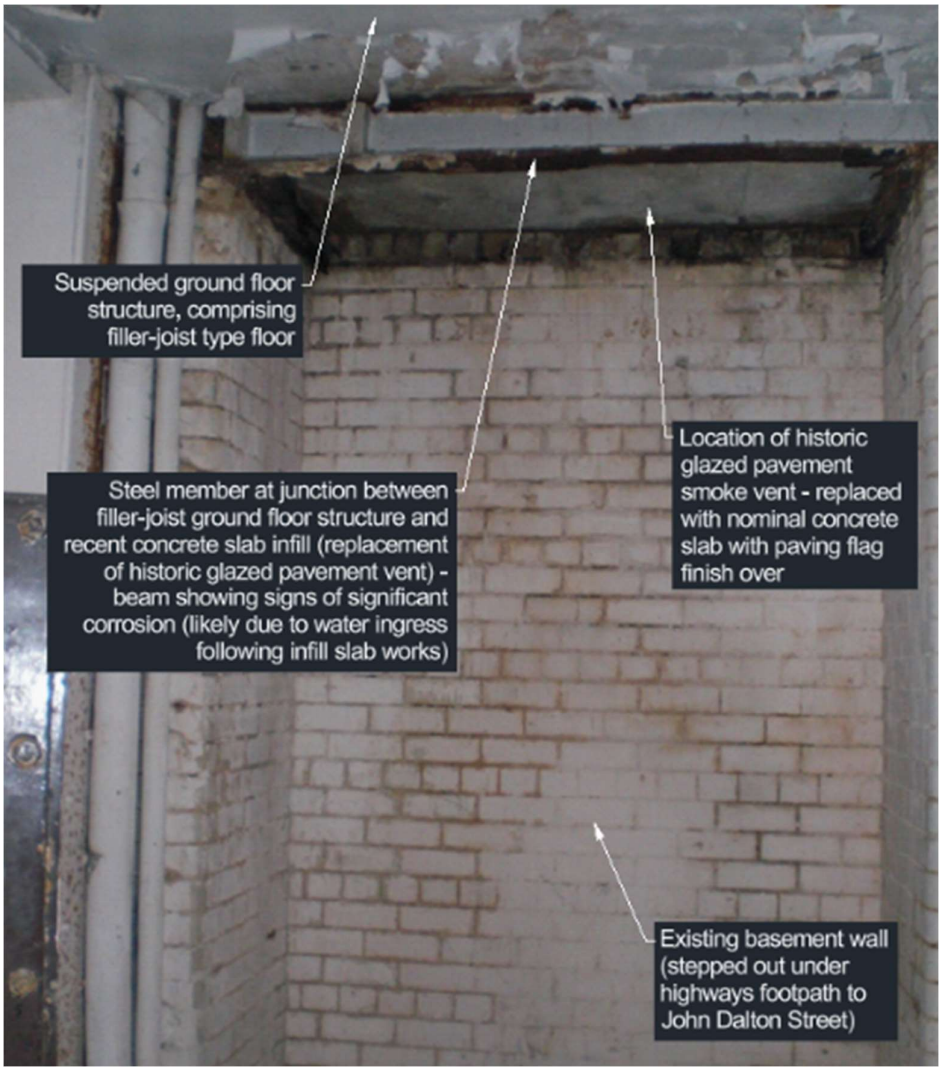


Figure 7 – Basement Level View on Historic Smoke Vent Location to John Dalton Street Elevation

3. Existing Column Investigation Works

Existing column members part-embedded within basement walls showing signs of surface corrosion; members to be further investigated as follows;

- Localised careful removal of brickwork directly adjacent to existing column members to allow inspection to sides / rear of posts
- Masonry joints to be carefully drilled at close centres and bricks carefully removed to avoid damage to allow inspection by Structural Engineer / Architect and determination of any further works
- Where existing glazed masonry units are to be removed as part of investigation works, these are to be carefully extracted and stored for reuse. Where existing glazed bricks are accidentally damaged, these are to be replaced with similar glazed bricks following submission of samples to the planners / conservation officer and formal agreement for use.
- Where new masonry pointing / repair pointing is required to basement glazed brickwork, all new mortar to be NHL3.5 lime mortar installed in accordance with manufacturer's recommendations and to the satisfaction of the conservation officer.
- Where no further works require, original bricks to be reinserted into walls and suitably mortared / pointed into position

4. Former Smoke Vent Waterproofing Works

Detailed development of localised waterproofing measures to be provided by waterproofing specialist to minimise future water ingress, following specialist inspection of investigation works described above to suit site specific requirements. Scope of works, installation method and any relevant testing of localised waterproofing system to be developed by specialist but anticipated to consist of the following;

- Localised hand-excavation to expose head of existing basement walls in 3No. locations (within previously installed barriers / hoarding) as agreed with Manchester City Council Highways
- Installation of localised waterproofing membrane over existing concrete infill slabs, with suitable lapping . sealing to existing basement walls. Waterproofing details to specialist contractor design – Wykamol designed system in accordance with BS8102:2002 Grade 3 Environment (Habitable)
- Careful reinstatement subbase materials
- Careful reinstatement of existing paving flags to match adjacent footpath levels as agreed with Manchester City Council Highways
- Removal of temporary barriers / hoarding

boothking

Booth King Partnership Ltd.
Company No. 06206269

Head Office (Ramsbottom)
Tollgate House 9C/D, Bridge Street, Ramsbottom BL0 9AB
01706 822 022
office@booth-king.co.uk

Manchester Office
First Floor, Calico, 55 Mosley Street, Manchester M2 3HQ
0161 694 7087
manchester@booth-king.co.uk

Edinburgh Office
54 Warrender Park Road, Edinburgh EH9 1HH
0131 229 1547
edinburgh@booth-king.co.uk

Approved Body for Certification of Design under the SER Ltd. Scheme

50 Years