Proposed Works

4.

4.1 Flood Resilience Measures

As a result of the New years Day 2025 flood event building is now uninsurable for flood damage, leaving the organisation at significant risk of business interruption and closure should a similar event occur again.

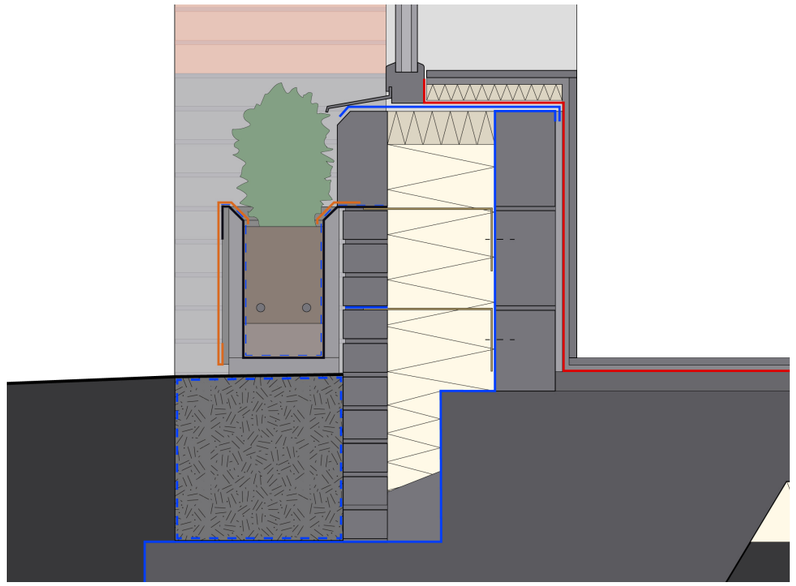
The proposal is to undertake a number of urgent flood resilience measures as quickly as possible, to protect the building and ensure Manchester YMCA are able to continue to serve their community in supporting health, wellbeing, and active lifestyles.

The four primary flood resilience measures proposed are illustrated over the following page, and can be summarised as a combination of:

- ***Flood resilient replacement curtain walling.***
- ***Flood resilient dwarf wall infills.***
- ***Flood resilient replacement window system.***
- ***Flood resilient replacement louvre system.***



Flood resilient replacement curtain walling.



Flood resilient dwarf wall infills.



Flood resilient replacement window system.

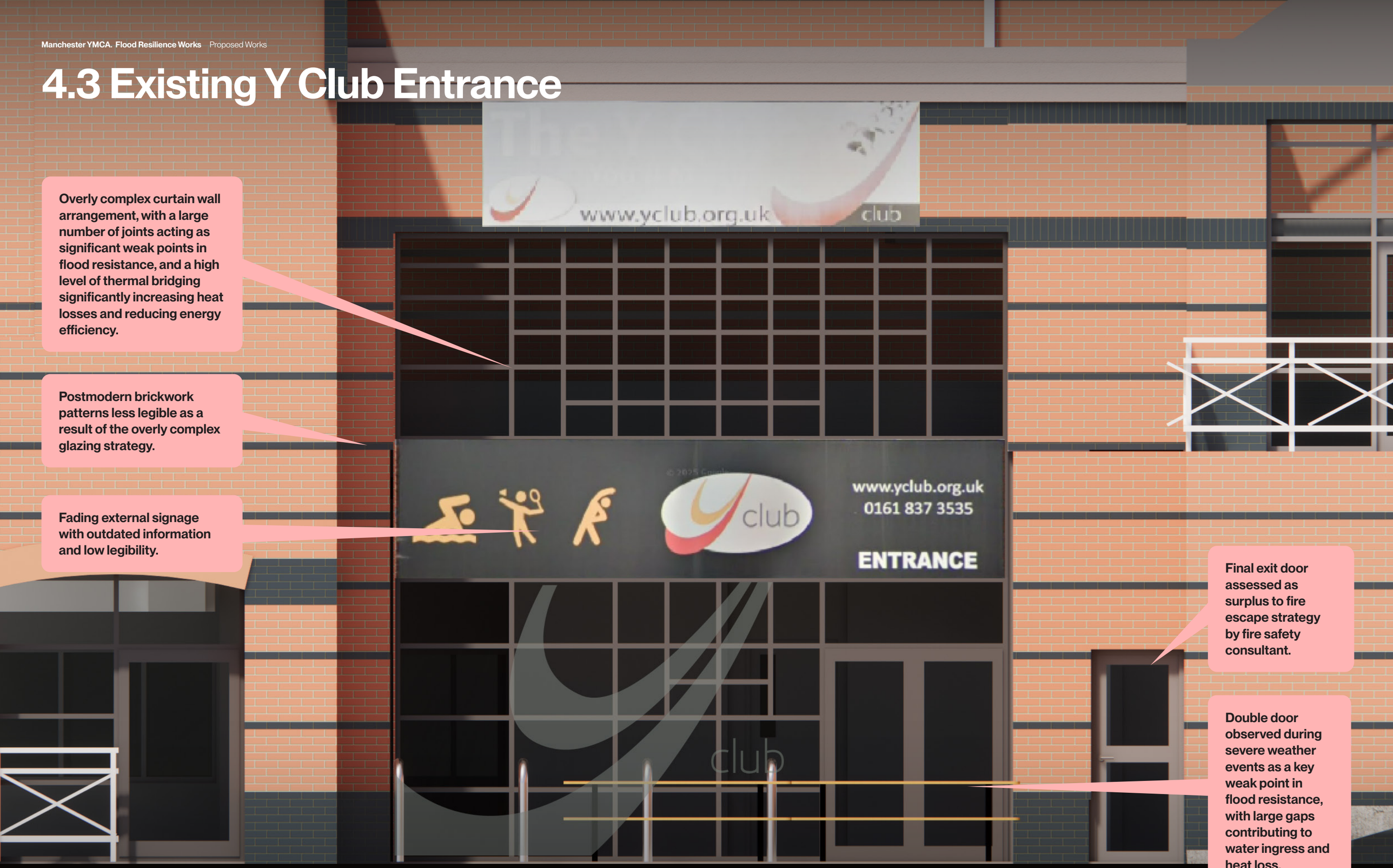


Flood resilient replacement louvre system.

4.2 Existing Y Club Entrance



4.3 Existing Y Club Entrance



Overly complex curtain wall arrangement, with a large number of joints acting as significant weak points in flood resistance, and a high level of thermal bridging significantly increasing heat losses and reducing energy efficiency.

Postmodern brickwork patterns less legible as a result of the overly complex glazing strategy.

Fading external signage with outdated information and low legibility.

Final exit door assessed as surplus to fire escape strategy by fire safety consultant.

Double door observed during severe weather events as a key weak point in flood resistance, with large gaps contributing to water ingress and heat loss.

4.4 Proposed Y Club Entrance



4.5 Proposed Y Club Entrance

New high performance curtain wall system to replace the existing system, which was observed as a key point of failure during the aforementioned flood events and is approaching the end of its usable life.

Optimised curtain wall arrangement with minimal framing, essential in improving flood resistance and thermal performance.

High quality illuminated Y Club signage fixed back to curtain wall system.

Postmodern brickwork patterns more prominent as a result of the simplified and complementary glazing strategy.

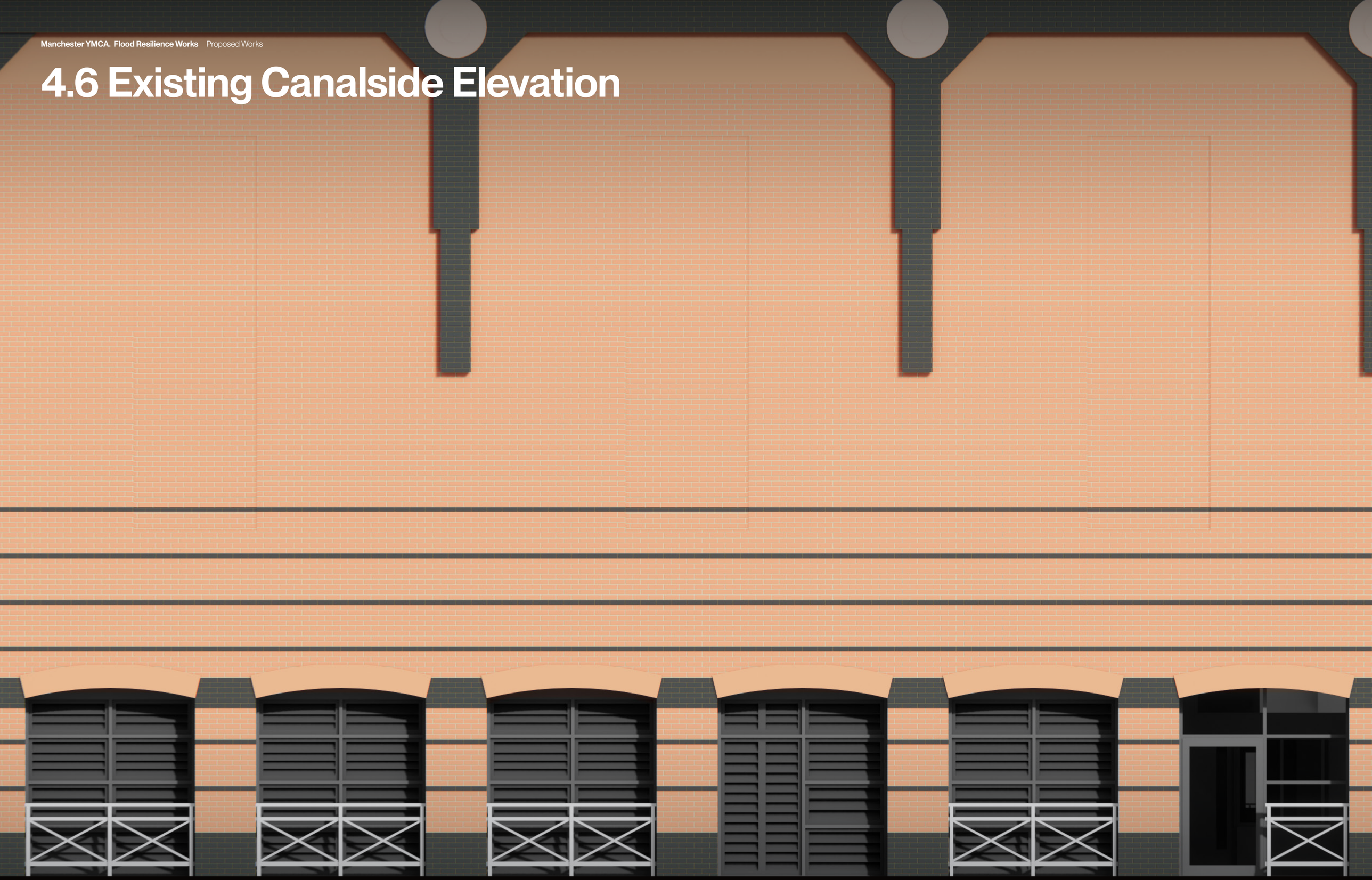


High quality metal canopy arch structure, providing external solar shading to mitigate risk of overheating, and shelter from the rain for those arriving or leaving the Y Club.

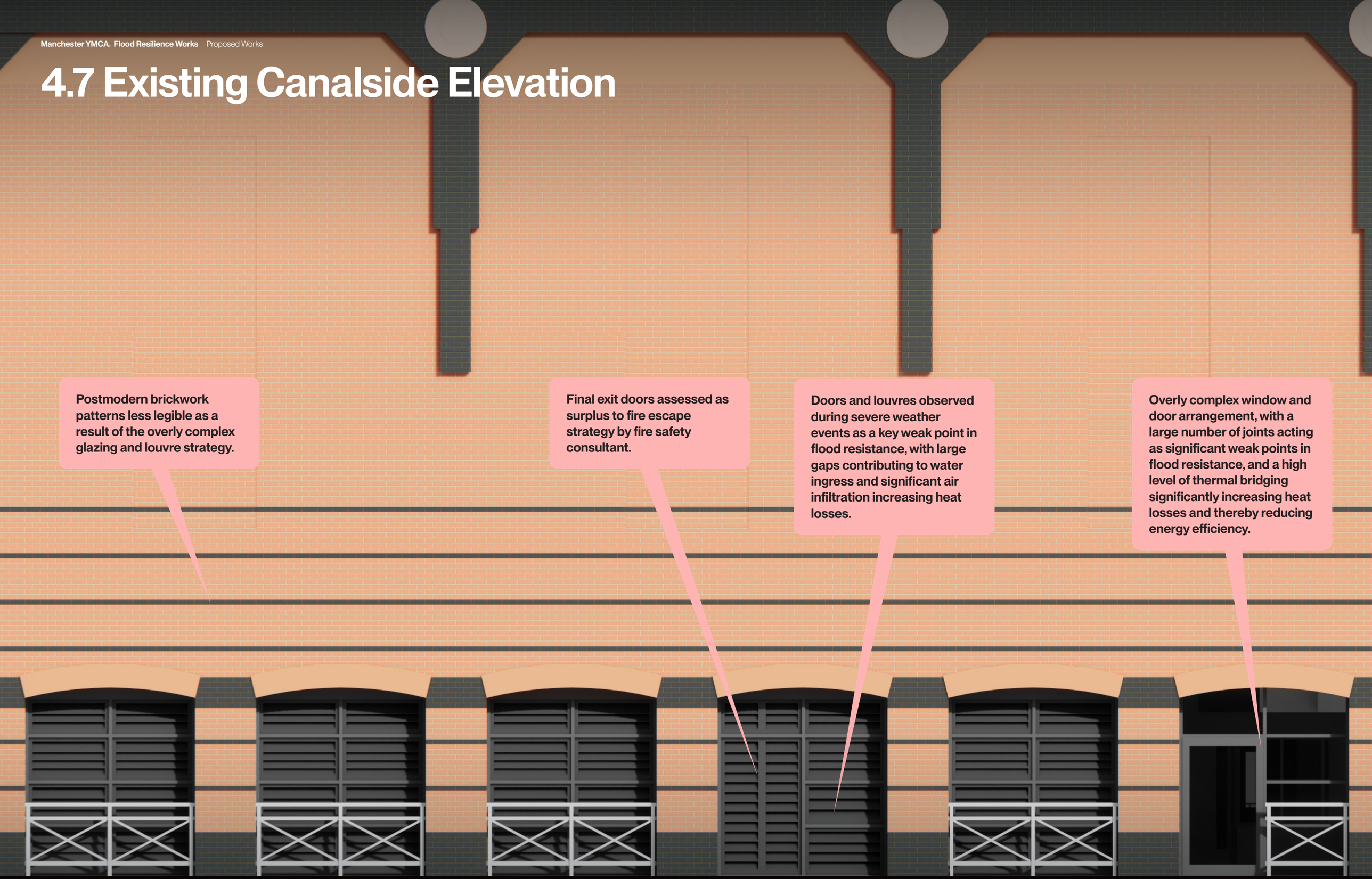
Decommissioned final exit door replaced with dwarf wall system, fixed glazing and planter.

Rationalised bike storage along retaining wall to minimise clutter in the landscape and improve circulation outside the building and into the Y Club.

4.6 Existing Canalside Elevation



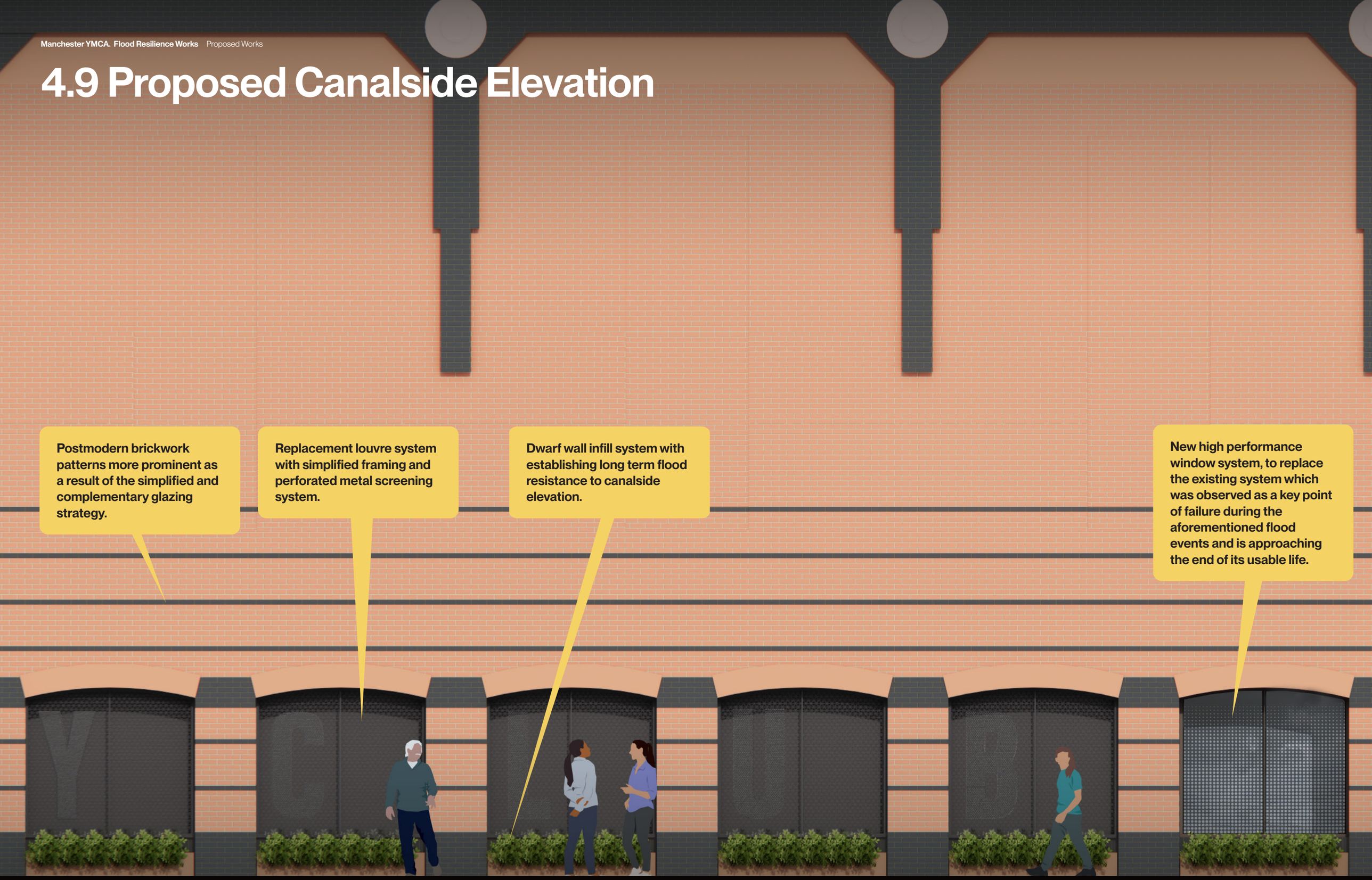
4.7 Existing Canalside Elevation



4.8 Proposed Canalside Elevation



4.9 Proposed Canalside Elevation



4.10 Flood Resilient Dwarf Wall

A key element of the proposed flood resilience measures is the introduction of a dwarf wall infill system along the canal side elevation.

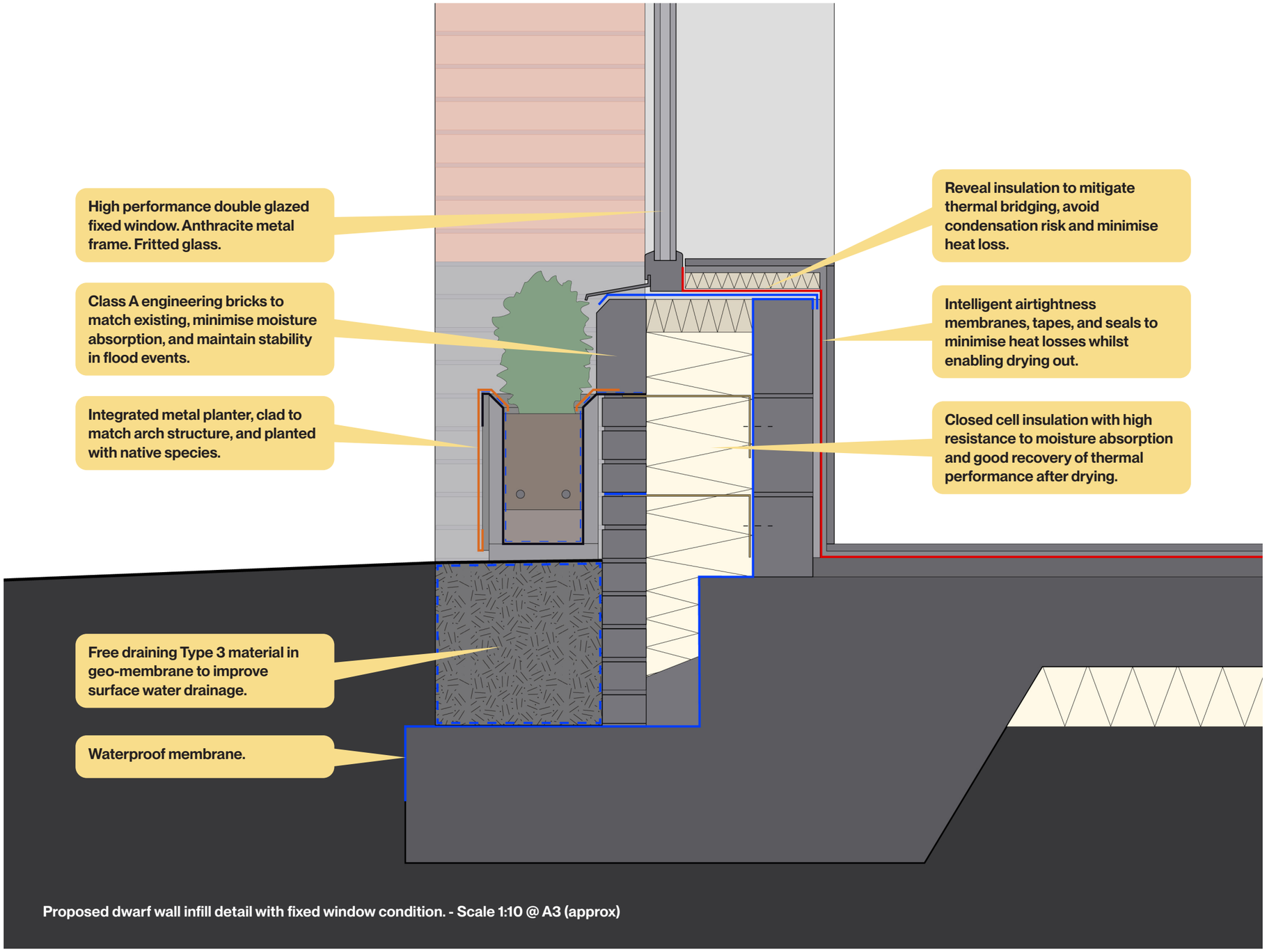
This will be located where windows and louvres currently extend down to finished floor level and present a key weak point for water ingress. This includes several final exit doors on escape routes that will be decomissioned, with alternative arrangements made based on fire safety assessments.

Long term flood resilience requires robust and passive measures. The proposedconstruction of this wall has therefore been developed based on the guidance of ***BS 85500:2025 'Flood resilient construction – Improving the flood performance of buildings',*** which states that the preferred method for keeping water out of a space, and preventing water getting into the fabric of the building itself, is a design which:

- ***avoids cavities***
- ***has limited junctions or joints***
- ***is constructed from robust, water resilient materials***

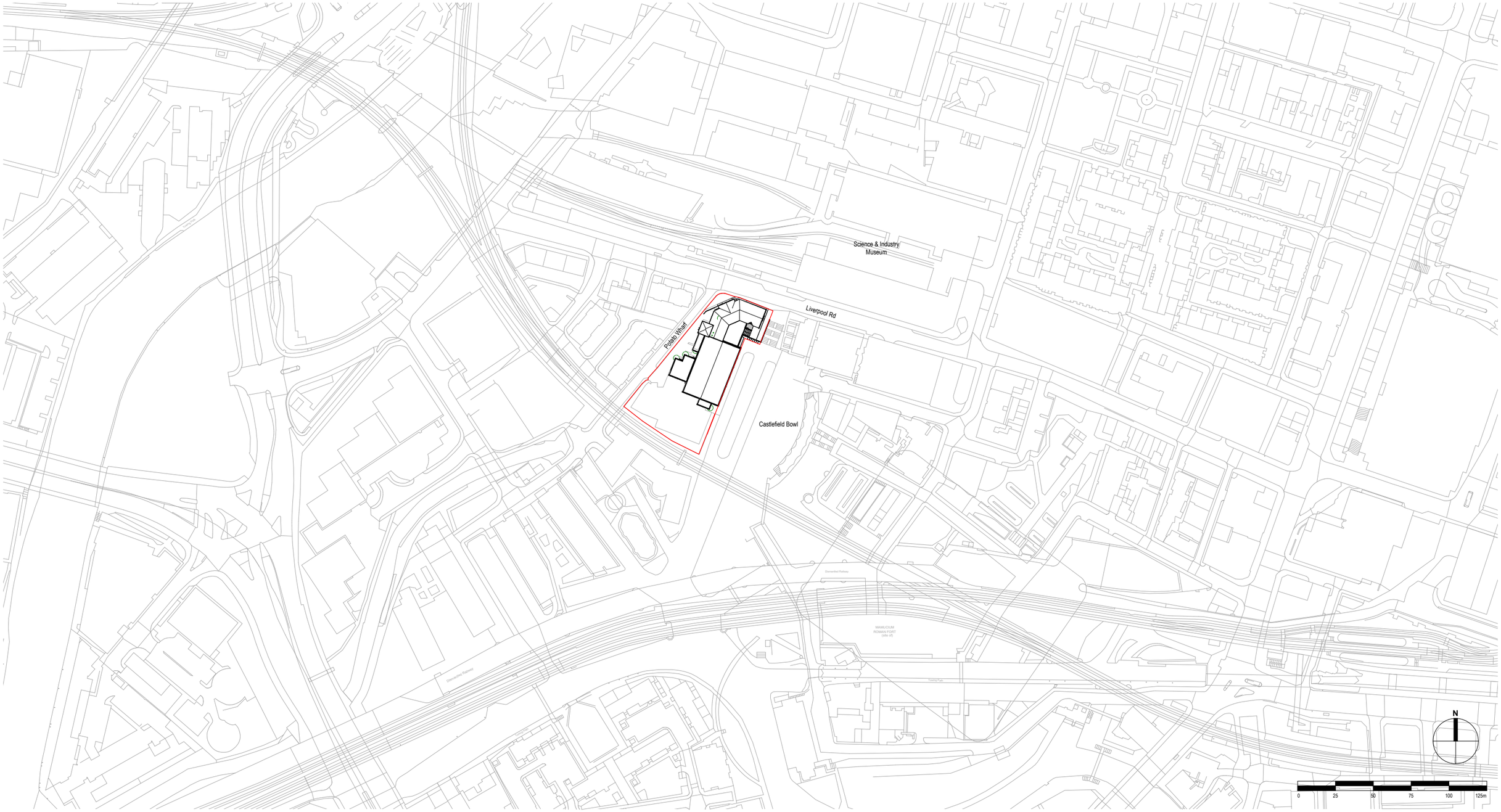
The proposed wall build-up responds directly to these principles, through a solid impermeable construction with minimal junction complexity and carefully detailed interfaces to adjacent elements. The selection and arrangement of materials will also allow for adequate vapour permeability, enabling any incidental moisture ingress to dry out following a flood event.

This approach reduces potential pathways for water ingress while allowing the building fabric to recover its thermal performance over time. As such, it provides a long-term, low-maintenance solution that significantly enhances the overall flood resilience of the building.

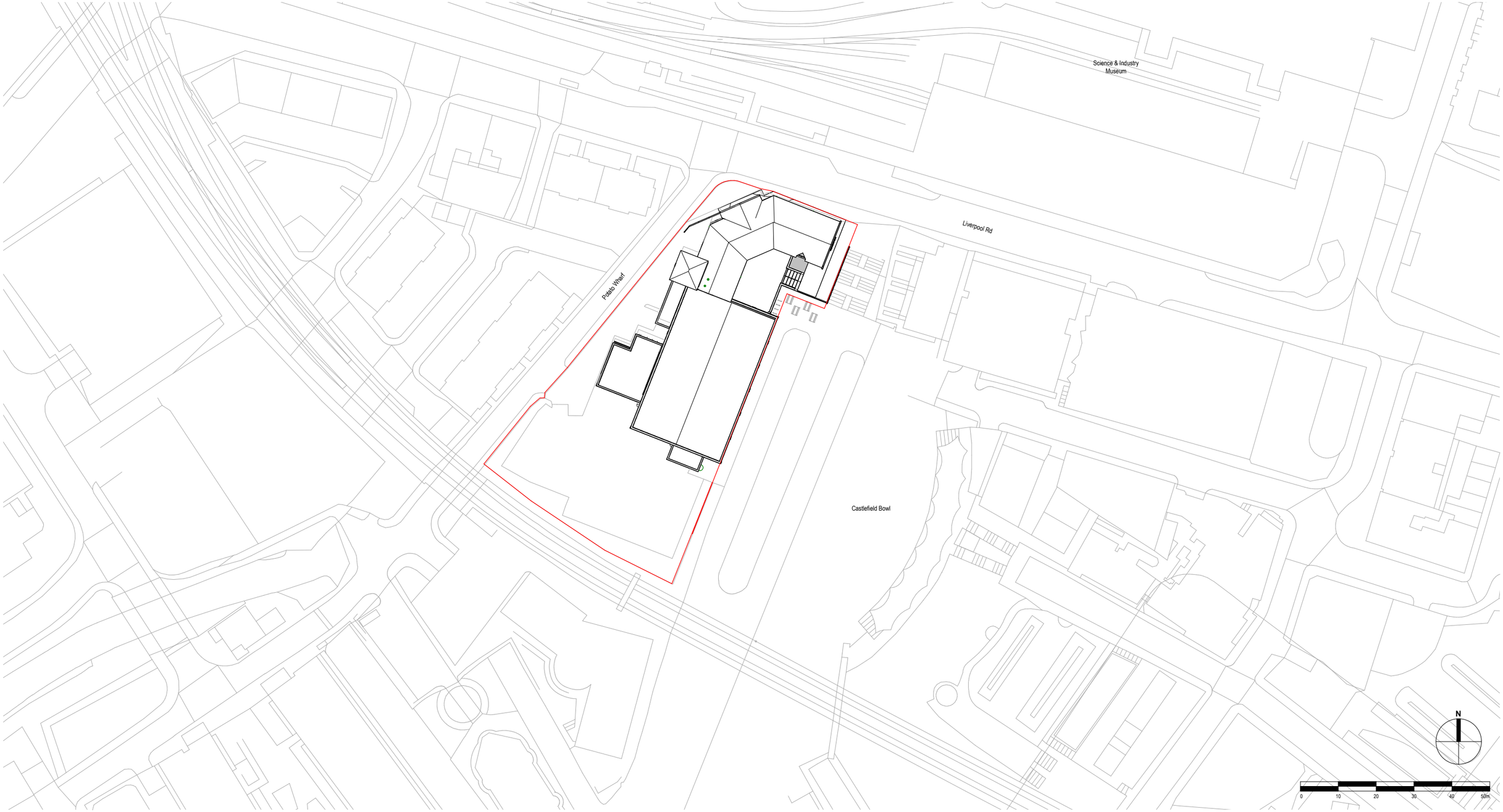


Proposed dwarf wall infill detail with fixed window condition. - Scale 1:10 @ A3 (approx)

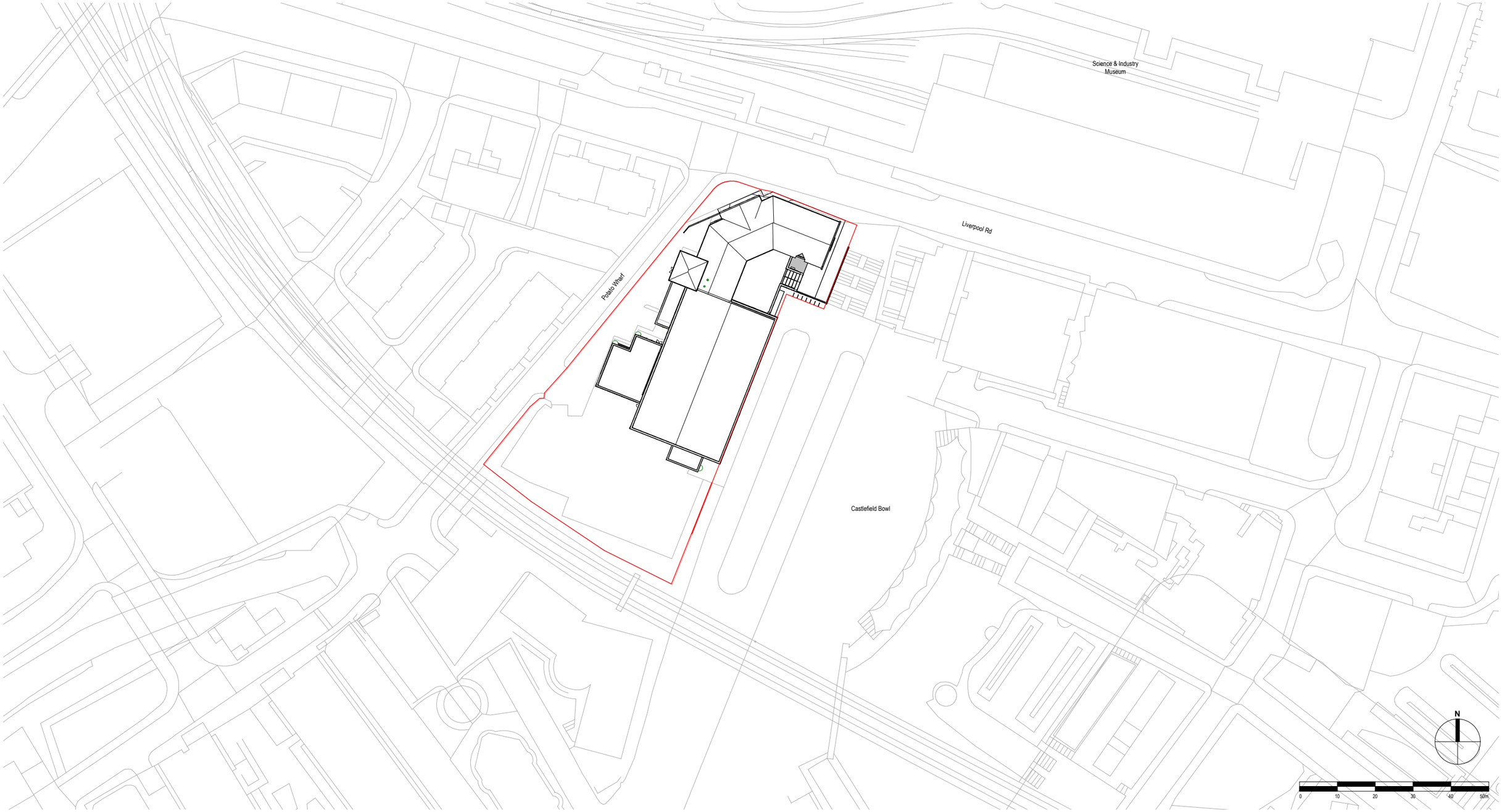
4.11 Site Location Plan



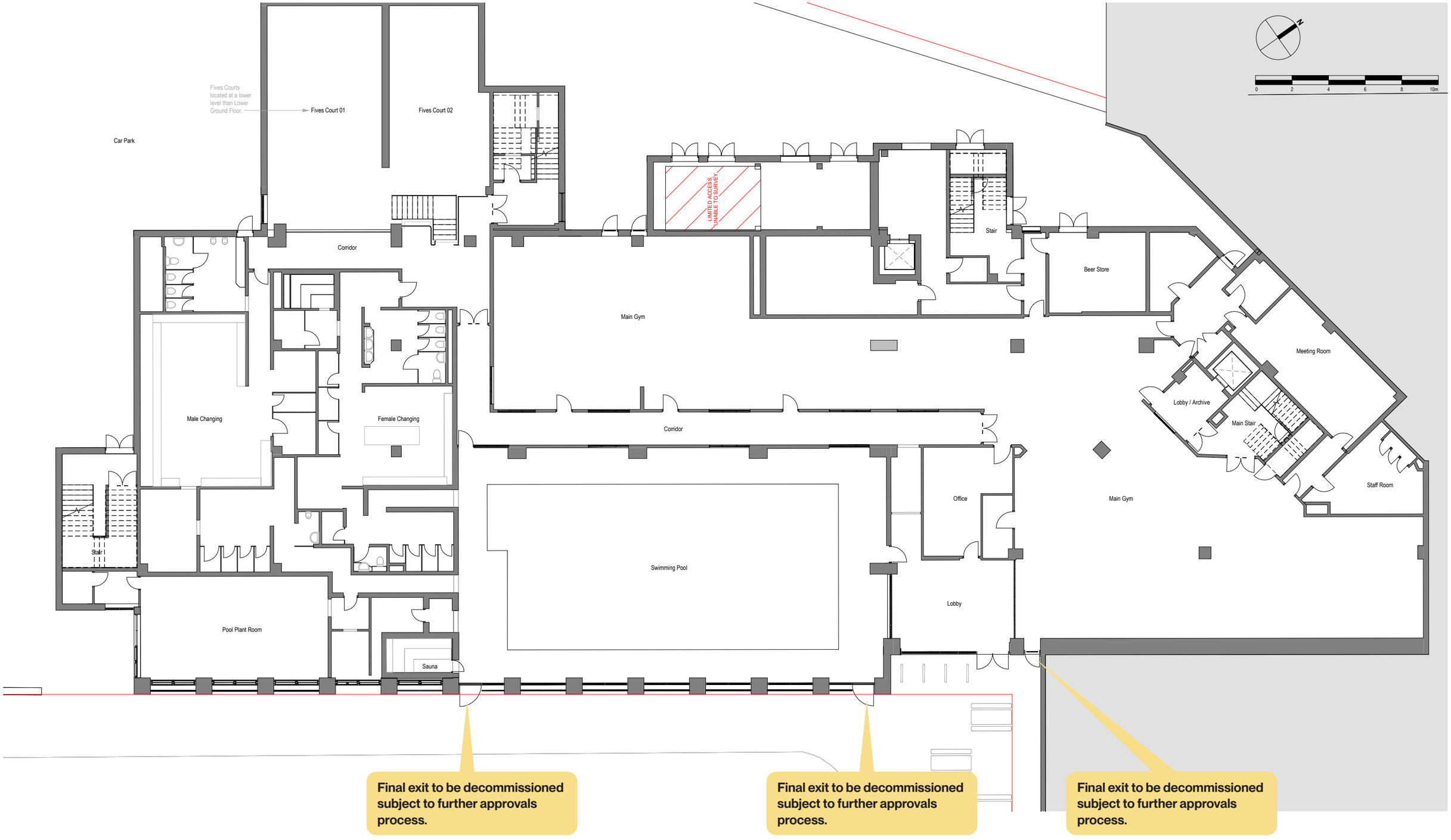
4.12 Existing Site Plan



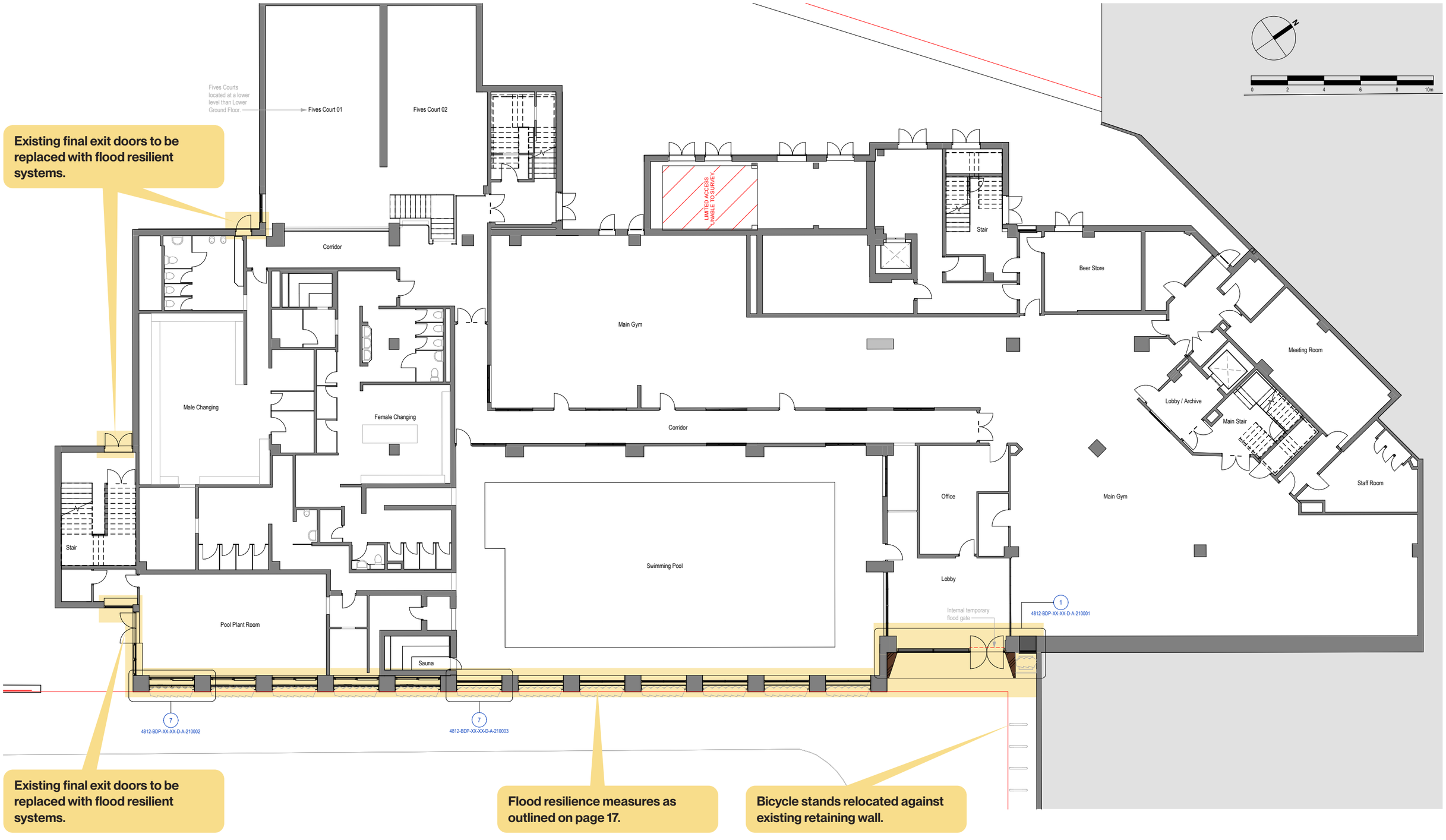
4.13 Proposed Site Plan



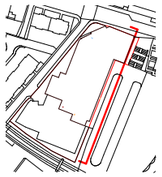
4.14 Lower Ground Floor Plan - Existing



4.15 Lower Ground Floor Plan - Proposed

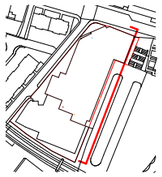


4.16 East Elevation - Existing





4.17 East Elevation - Proposed



Proposed Interventions

Materials Key

1. Flood resilient glazed curtain wall system
2. Glazed metal framed entrance doors
3. Entrance Sign - illuminated
4. Entrance Canopy - bronze metal surround
5. Engineering brick dwarf wall with bronze metal faced planter
6. Metal framed window system with fritted glass
7. Metal louvres with perforated metal screen
8. Stainless steel bike hoops
9. Insulated glass faced spandrel panel
10. Engineering brick dwarf wall
11. Perforated Metal Screen with steel flood proof doors (louvres towards top)
12. Engineering brick dwarf wall

50.285 m RF_Roof
42.860 m 05_GA Plan
39.720 m 04_GA Plan
36.740 m 03_Third
33.720 m 02_Second
29.740 m 01_Upper
25.780 m 00_Lower

the castlefield hotel & the yclub

Canal side Elevation | Y Club LG Entrance | Y Club UG Entrance | YMCA Hotel