



CIVIC
CENTRE

Haringey Civic Centre

6

Architecture

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Civic Centre

6.1.1

Repair and restoration of the civic centre

6.1.1.2

Existing pre-cast cladding / proposed GRC replacement

Solid walls - overview

The Civic Centre has two principle cladding materials - brickwork and pre-cast panels. In addition, there is an in-situ concrete cornice at the top of the second floor and in-situ / pre-cast window surrounds to the punched windows in the brickwork on east and west elevations.

Buro Happold carried out a condition survey in 2021 and PAYE were recently appointed by the council to carry out a further survey complete with a schedule of proposed repairs. At the time of writing this remains in-complete, although the initial verbal assessment is reported below.

Pre-cast panels: Existing Condition

The Buro Happold (BH) Facade System Condition Survey dated 15 June 2021 states:

Panel condition

“The precast concrete cladding condition is poor throughout the building, however there are some differences depending on level and location.”

The attic storey is of particular concern:

“..for both their appearance and structural integrity....many of the panels level are beyond the point where a concrete repair cycle could be effective in the long term.

At lower levels the cladding is in better condition, the BH report states *‘there might be scope for in-situ repairs as opposed to replacement.* But even at these levels (below the attic) there is inconsistency - BH reports specific problems of cracking on the East elevation, above the curtain walling at the main entrance and at the South East corner. They go on to state:

Panels....appear to have been refaced at some point with a thin layer of render, which is patchy and peeling off.’

Subsequent conversations with PAYE suggest the repair and cleaning of panels will be extremely challenging because of both the surface condition of the original panel and the thin layer of render - making a consistent, visually uniform appearance unachievable.

Fixing condition

The BH survey states *“The integrity of the fixings is also a cause of concern as the cast in channels to the concrete structure – where exposed – are heavily corroded and have*

possibly lost their restraint action.”

As there is only a very small cavity behind the panels (10-20mm), it will be impossible to access fixings to carry out any repair or maintenance without removing panels. Removal of the panels would inevitably lead to further damage.

At the time of writing PAYE have been instructed to carry out a further assessment of the condition of fixings.

Insulation

Panels are currently uninsulated.

Pre-cast panels: Recommendation

Full replacement of the pre-cast panels is recommended for the following reasons:

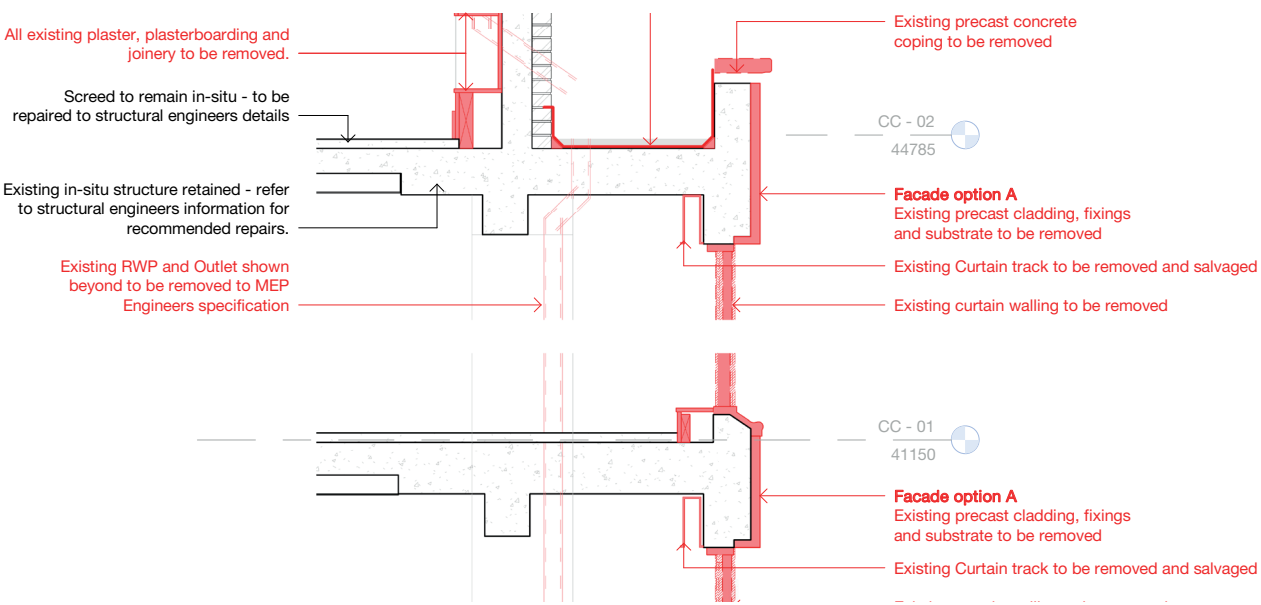
- The council require a safe and robust solution to the long term fixing of the panels.
- A large number of panels are deemed beyond repair. A hybrid repair and replacement strategy would not produce a uniform appearance.
- For any panels where repair may be technically possible, repairs are likely to be visually unacceptable. (A trial repair has been suggested to clarify this point, but is not currently instructed).
- Replacement with GRC will allow insulation in the wall build-up - helping to meet the council’s sustainability targets.

Replacement of Pre-cast panels with GRC cladding

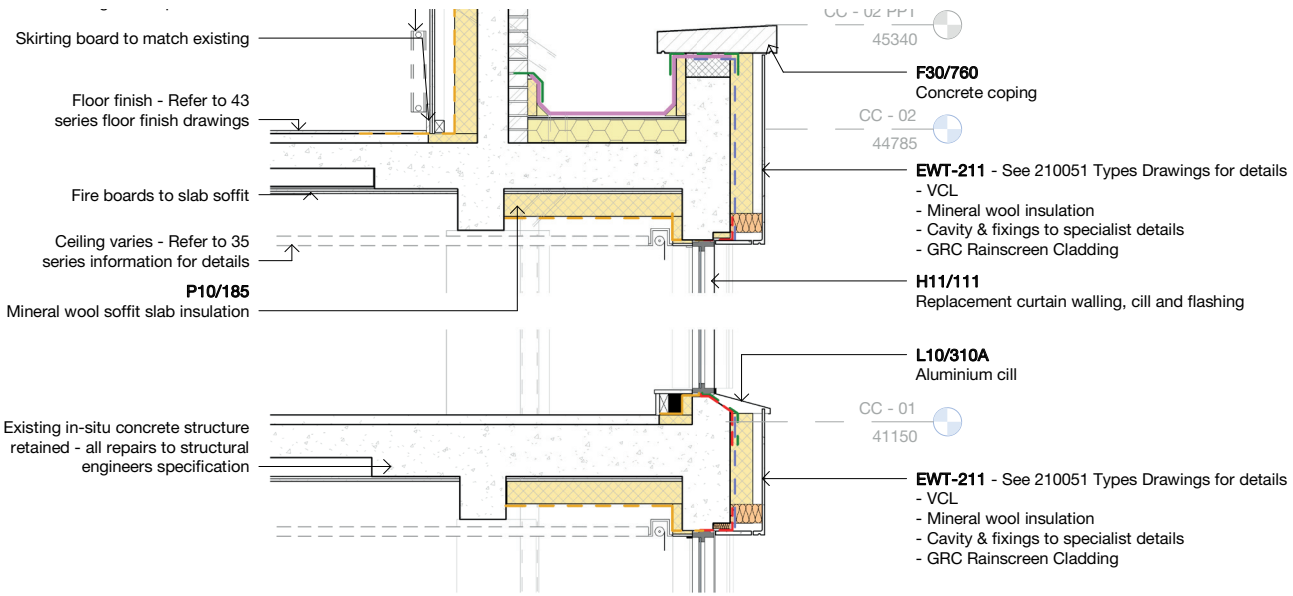
It is proposed to replace the pre-cast panels with insulated GRC (glass reinforced concrete). GRC is a lightweight product available in a colour and texture to match the existing pre-cast. Because it can be made in thinner panels than pre-cast, it provides an opportunity to insulate the building. The detail right illustrates the proposal to replicate the appearance of the existing pre-cast but integrate 100mm of mineral wool insulation. This will create a thicker overall build-up than the existing (approx 60mm thicker), but will not significantly change the appearance of the building. This will achieve the target U-value of 0.3W/m2/K

The extent of the pre-cast / GRC areas is highlighted on the elevations overleaf - different colours represent different substrates - all will adopt the same basic approach for the new cladding.

Section through West Elevation - Proposed demolition



Section through West Elevation - Proposal



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Civic Centre

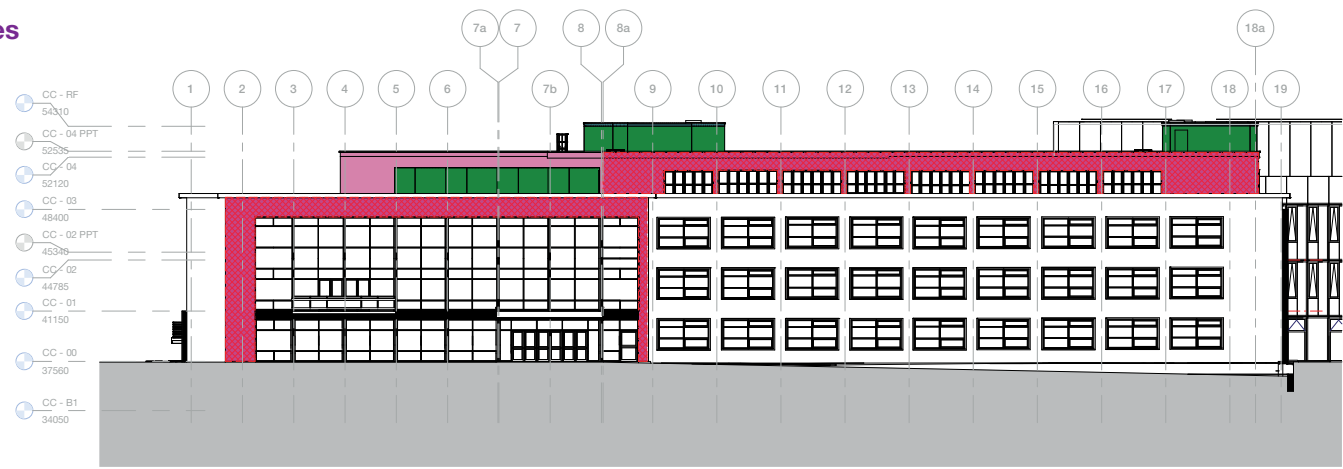
6.1.1

Repair and restoration of the civic centre

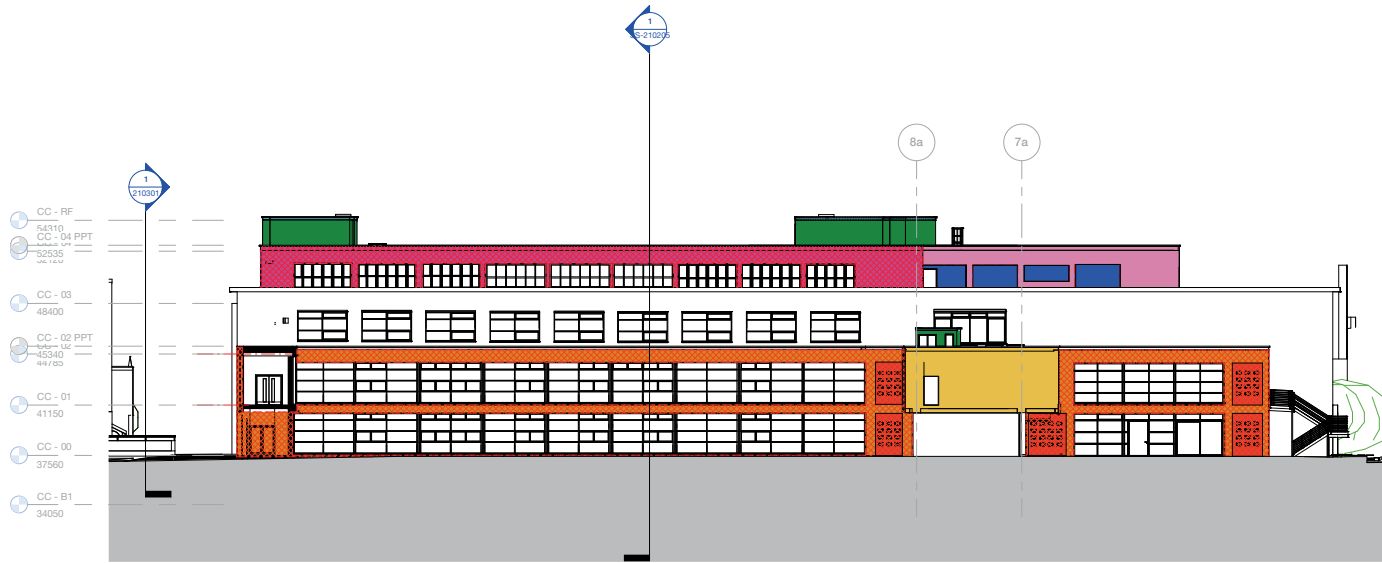
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Existing pre-cast cladding / proposed GRC replacement

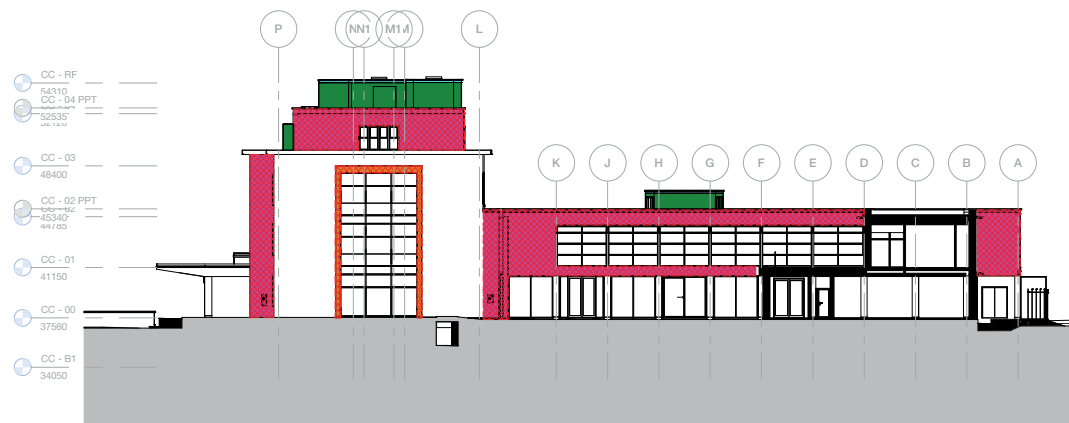
GRC Wall Types



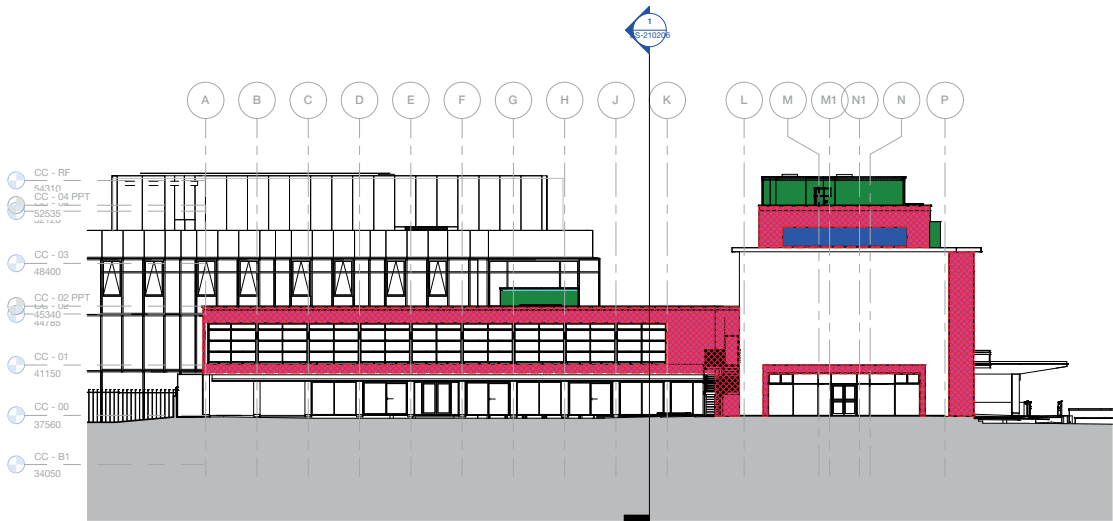
External Concrete & Render Wall Types - East Elevation
1 : 200



External Concrete & Render Wall Types - West Elevation
1 : 200



External Concrete & Render Wall Types - North Elevation
1 : 200



External Concrete & Render Wall Types - South Elevation
1 : 200

WALL TYPES KEY:	
Precast/GRC panel Systems - Refer to DWG 210051	
	EWI-201 Concrete Panels on Solid Brick - Insulated
	EWI-202 Concrete Panels on Solid Brick - Uninsulated
	EWI-211 Concrete Panels on Concrete upstand - Insulated
	EWI-301 Concrete Panels infill walls - Uninsulated
Miscellaneous - Refer to DWG 210052	
	EWI-302 Render Solid Brickwork - Insulated
	EWI-311 Feature Wall - Precast with integrated glazing
	EWI-312 Reinforced Concrete Wall

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6.1.1 Repair and restoration of the civic centre

6.1.1.3 Brickwork

Brickwork

The existing brickwork is in relatively good condition and requires only minor repair work.

To enhance thermal performance of the brick faced walls it is proposed to insulate internally.

The extent of the brickwork areas is illustrated in the diagrams overleaf. The different colour coding represents conditions / wall types as described below.

Wall Type EWT-111 East and west walls of north wing

Existing condition: brickwork on concrete substrate (minimal cavity) with uninsulated plastered lining.

Proposal: the uninsulated plastered lining is to be removed and replaced with an insulated plasterboard lining.

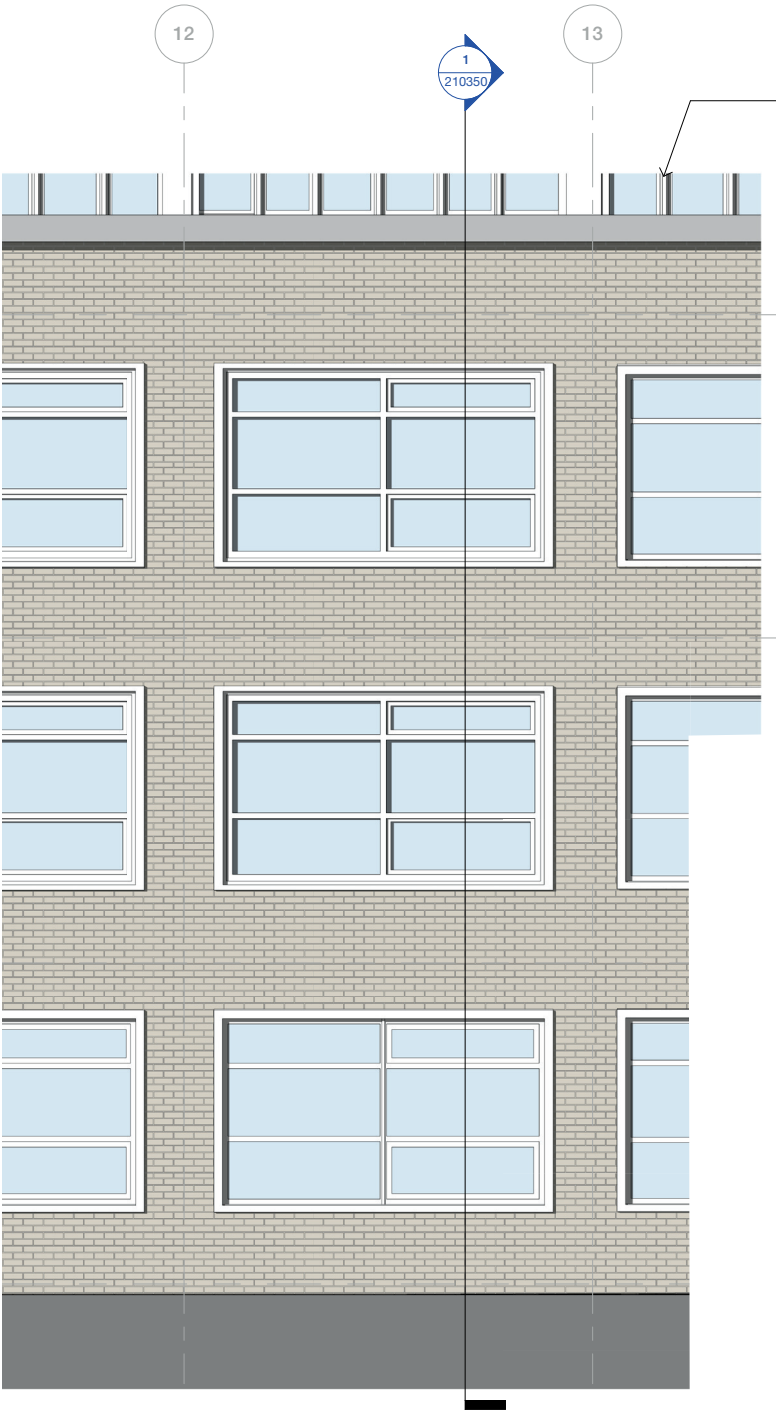
Internal floor structures and retained internal walls create cold bridges where they meet the external wall. These will be minimized through insulation of the structures at the perimeter.

Air tightness and vapour permeability and condensation risks will be considered and addressed through the use of vapour barriers and air tightness membranes. These details will be developed at the next stage.

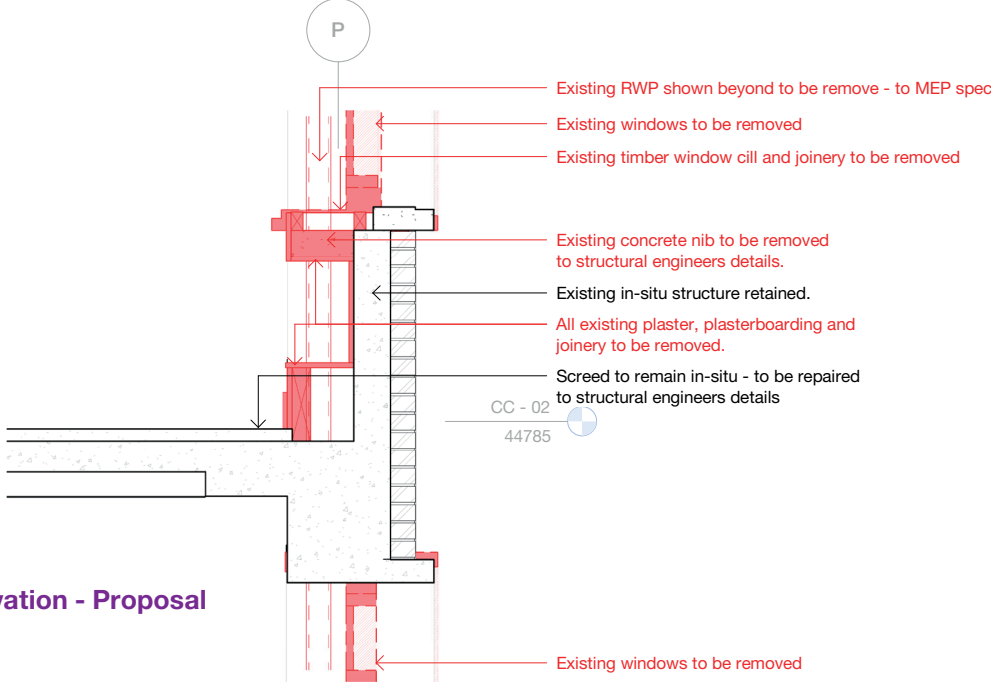
Proposed demolition of internal finishes



North Wing - East Elevation



Section through East Elevation - Proposed demolition



Section through East Elevation - Proposal

