

5.6 Building Circulation



5.7 General Arrangement Building Sections



1 Planning - GA Section Looking North



2 Planning - GA Section Looking West

5.8 Design Intent - Appearance & Elevations

This section illustrates the development and refinement of the elevational design, including appearance and materiality for the new building to suit the context and the vision set out in the brief. The proposals will be subject to further development and refinement at the next stage in respect of technical coordination and buildability as well as budget considerations.

The proposed building has been designed to respond to its city-centre context, while also addressing functional, environmental, and aesthetic considerations, whilst responding to some challenging urban edge constraints. The design takes inspiration from the industrial heritage of Newport, the dynamic qualities of the riverfront, and the need for contemporary, resilient architecture.

Contextual Response and Materiality

The building is grounded by a robust brickwork plinth, which visually anchors the structure and responds to the local architectural language, referencing the masonry traditions prevalent in Newport’s past. This base creates a sense of permanence and durability appropriate for a busy urban site, while also providing a tactile, human-scale interface at street level. The brickwork will be in a lighter tone, of grey/white/ warm blends, to complement the cladding above, and bring some brightness to the public realm around the building. Texture and relief will be added with protruding vertical strips to reference the cladding fins, as well as some panels of brickwork with alternative coursing and patterning, as noted in section 5.14 we are indicating areas where this can be applied and the detail will follow at a later date.

As noted on section 4.2 of the TVIA report, there are numerous examples of brick in the immediate vicinity which include 4-5 kingsway Tower building, Dolman Theatre, River Front Theatre and the terraced housing is also brick (rendered) with brick walls.

Above the plinth, the upper storeys are articulated in lightweight cladding, providing a contrasting visual expression. The shift from solid masonry to cladding reflects the transition from the permanence of the ground to the lightness of the upper volumes. For this cladding, we are exploring the use of vertically arranged planks with shadow

gaps, finished in a specialist metallic finish in copper colour and effect. This produces a more textured finish to the panels, which is preferred by the planning authority, over the flat appearance of a PPC finish. Glint/ Glare levels will come down to the gloss specification. This will be duly considered and developed during RIBA stage 04.

A defining feature of the massing strategy is the articulation and projection of the West wing, which is angled upwards and oriented to engage with the primary approach and sight lines from the North. The enhanced visual interest provided by the overhang and its supporting structure clearly signals the location of the building’s main entrance. This culminates in a large picture window, which is the dominant feature of the North facade. This is broken up by deep reveals and fins, displaying a different Architectural language to the rest of the facade, to differentiate itself whilst maintaining the colour palette and vertical banding.

Vertical Fins and Façade Rhythm

Vertical fins are employed on the upper storeys to provide both solar shading and a distinct architectural rhythm. These fins create a dynamic façade that changes appearance throughout the day as light conditions shift.

At the entrance, there is a triple-height section of curtain wall glazing, where we have incorporated vertical fins along the framing on 1st and 2nd floor levels, to break up the glazing and tie it back into the rest of the design language. This also helps create a clear feature at the entrance to draw the eye in, whilst adding some screening to the upper floor spaces.

Ventilation and Environmental Strategy

To support natural ventilation and reduce reliance on mechanical systems, openable casement units behind barrier louvres are integrated into the windows and façades. These allow air to flow into teaching spaces while maintaining visual continuity across the building envelope.

Service Yard

From the start, we have had to consider the rear service yard as a part of the overall elevational design, given its prominence and proximity to residential dwellings. To that end we have tied in characteristics from the main building facades to blend them through, but with a few adjustments to give the yard wall it’s own language. The main outer walls are in the same, light brickwork of the main building, introducing some angled heads to provide variety, with some areas of copper-coloured extruded mesh above where we need to provide visual screening to the plant that extends above the brickwork. The brickwork will feature some alternative brick coursing panels to create visual interest, as well as some vertical protrusions again to mirror the projected fins on the cladding. There will also be a recessed brick panel to two corners, where it has been proposed to fix building signage, the final design of which is TBC. See section 5.14 for elaboration on brick work detailing. Within the yard the walls will be clad in block work, a similar colour to the brick.

Stairs

The cladding treatment of the southern stair has been successfully integrated into the rest of the façade. The same approach (i.e. louvred fins in front of the glazing) is proposed for the stair cores on the west and east façades and this has been welcomed by the planning department as a successful device to break up the façade. This unique element which serves as direct access to the roof is required to pop up in order to ensure a consistent 1100mm parapet- to ensure optimum safety for all roof areas.

5.9 Design Precedents - Cladding / Fins



5.9 Design Precedents - Brick Detailing



5.10 Detailed Elevations - North



Elevation Key	
No.	Description
01	Metal plank profiled cladding system with projecting vertical fins, finished in metallic copper colour PPC coating (RAL TBC)
02	Facing clay brickwork, pale yellow/grey colour cavity wall construction with feature bands and panels
03	Facing weather resistant Masonry Block, colour to match clay brickwork
04	Aluminium frames windows consisting of fixed glazing, opening vents, solid panels, weather louvres and inward opening panels with barrier louvres externally. Finished in metallic copper colour PPC coating (RAL TBC)
05	Aluminium framed curtain walling system with minimal external face profile to key feature areas, consisting of fixed glazing, opening vents, solid panels, weather louvres. Finished in warm grey colour PPC coating (RAL TBC)
06	Curtain wall system, with externally capped back-boxes finished in warm grey PPC coating (RAL TBC).
07	Expanded metal mesh screening fixed back to supporting steel, to screen plant and services with increased heights such as sprinkler tanks and dust extractors Colour and finish to match main building metal facade finish

08	Facing clay brickwork to service yard boundary walls, pale yellow/grey colour with feature bands and panels
09	Horizontal profiled cladding to provide variance to key facade areas, finished in metallic copper colour PPC coating (RAL TBC)
10	Large digital screen, surrounded with projected fins to provide relief and integration with the facade
11	Picture window surround, with deep reveals and angle profiles, finished in metallic copper colour PPC coating (RAL TBC)
12	Angled glazed rooflights providing daylight to central atrium
13	Integrated Swift nest box, colour to closely match brickwork
14	Integrated bat box, colour to closely match brickwork
15	Semi-open framing, with perforated/mesh panels dispersed throughout, finished in metallic copper colour PPC coating (RAL TBC)
16	Horizontal aluminium brise soleil over curtain walling, finished in metallic copper colour PPC coating (RAL TBC)
17	Aluminium framed curtain walling system consisting of fixed glazing, opening vents, solid panels, weather louvres. Finished in metallic copper colour PPC coating (RAL TBC)
18	Expanded metal mesh screening fixed in front of curtain walling, finished in metallic copper colour PPC coating (RAL TBC)

Red line on elevation denotes change of angle/elevation from primary

5.10 Detailed Elevations - East & West



Red line on elevation denotes change of angle/elevation from primary

5.10 Detailed Elevations - South & South-West

South Elevation

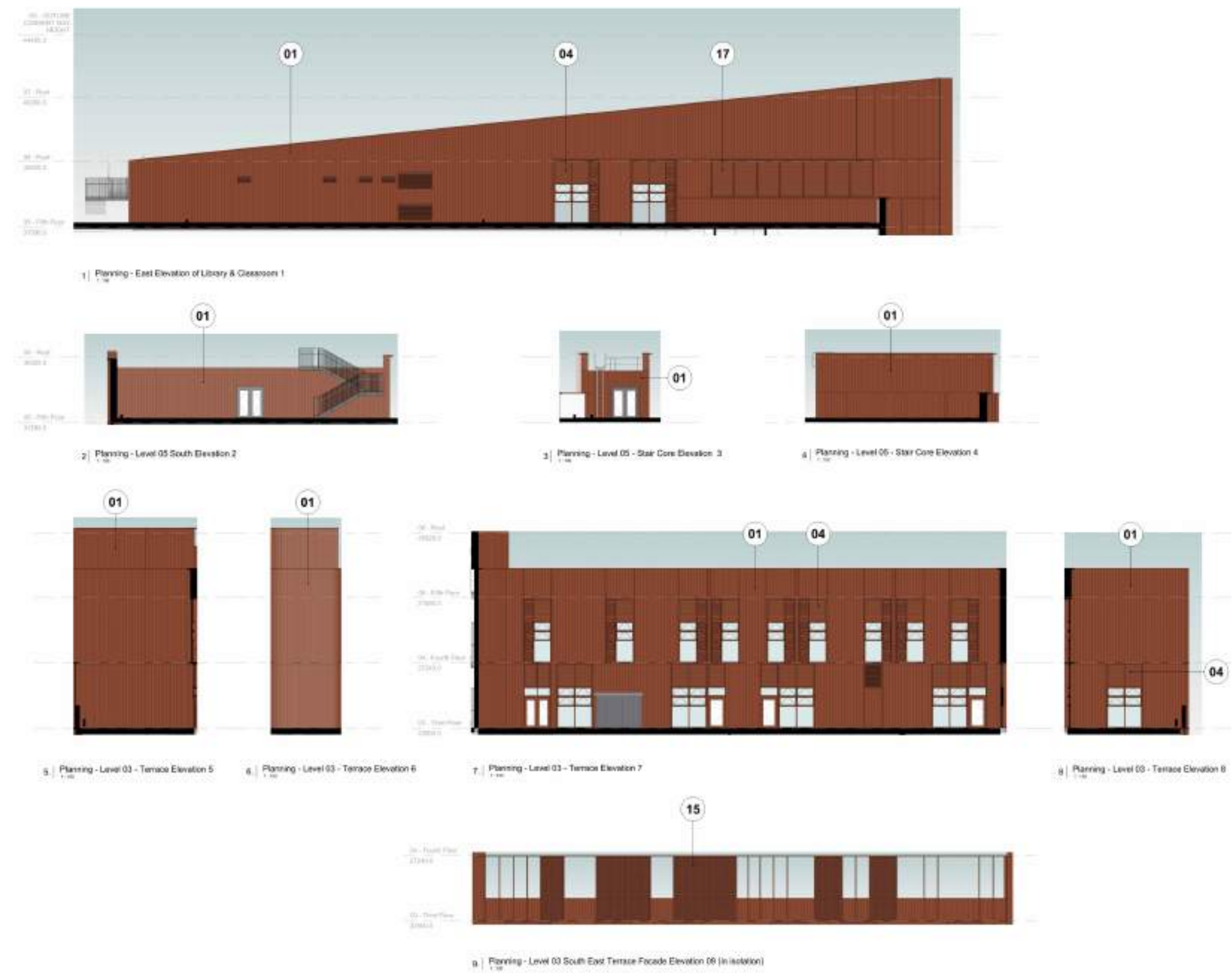


South-West Elevation



Red line on elevation denotes change of angle/elevation from primary

5.10 Detailed Elevations - Upper Levels



Red line on elevation denotes change of angle/elevation from primary

5.11 Elevations - Bay Study & Materiality

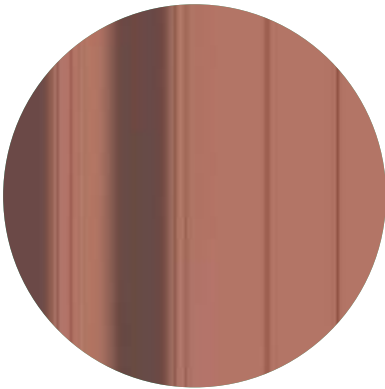
An options study was carried out at RIBA 2 to explore a range of brick and cladding colour combinations, and alongside feedback from pre-app meetings, the preferred option of a warmer, copper-effect cladding on brick was taken forward.

The brick base will be a 'warm white/grey', to provide some contrast to the cladding above, but maintaining the tonal warmth. This also creates a brighter palette at the street level, especially around the West public realm, as a darker brick would darken the space. Areas of brickwork will be punctuated by brick detailing to provide some relief and visual interest, such as projected 'fins' to reference the cladding fins, and panels of differing coursing.

Above this, the main cladding will be a panelised rainscreen, laid vertically, to create subtle shadow gaps between each panel. The design is then predicated on breaking up the facade horizontally with projected fins, and introducing vertical fins at window openings and at moments around the building to disrupt large panels. These panels and fins will be coated in a specialist copper effect metallic finish, to avoid the 'flatness' of standard PPC coating.

The window frames within the cladding areas will be coated in the same copper finish, and feature slim rectangular-profiled barrier-loading louvre screens in front of internally-opening vents and the weather louvres at the head, to give a refined look to the ventilation features.

Curtain wall panels that span from ground up into the cladding will generally be frameless, glass-to-glass in appearance, with any framing and backboxes in a warm light grey RAL to give a more subtle, understated appearance.



Cladding



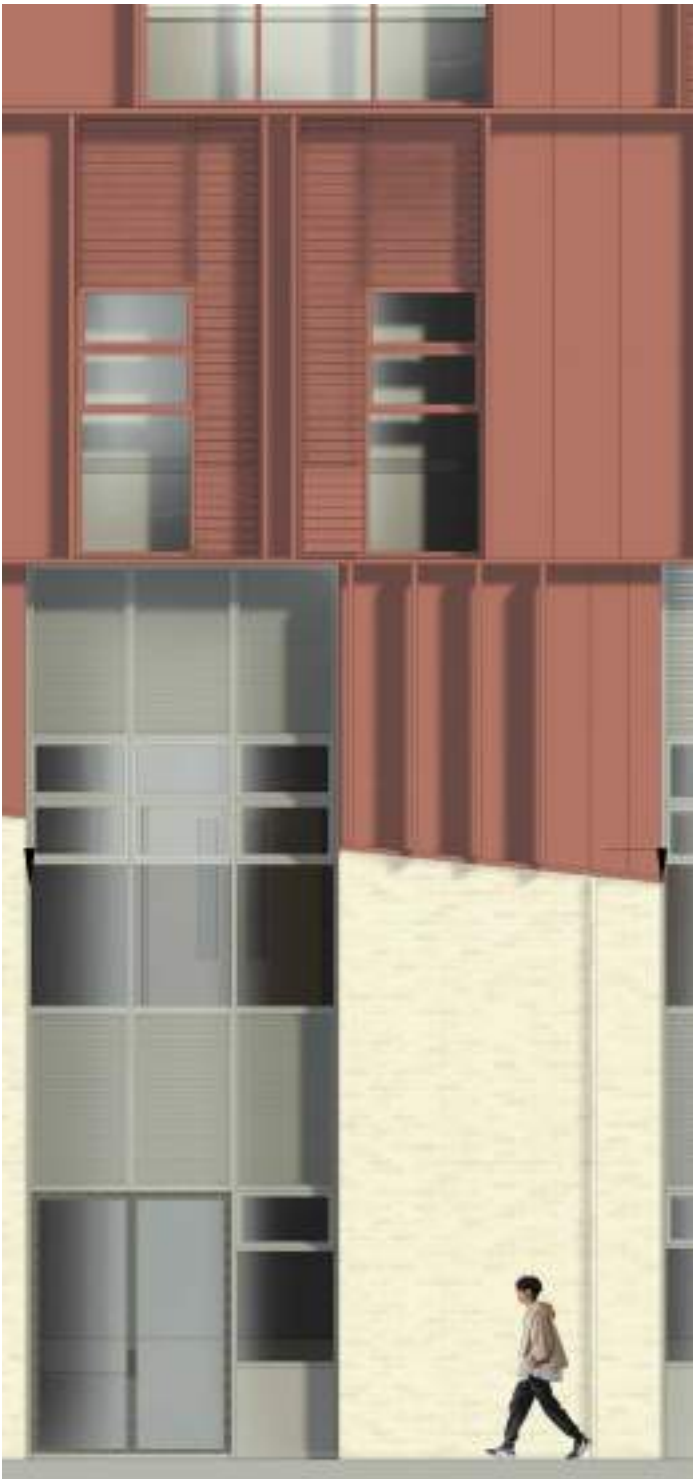
Window Frames



Curtain Walling



Brick Plinth



5.12 Brickwork Detailing

One aspect of the pre-application comments was to look at the brick detailing for the large expanses of brickwork, and utilising this to highlight specific areas and create more texture to the facades. At this stage, we are indicating areas where this can be applied and we have included some initial details of how this would work (as shown on this sheet), with the final detail to be fully determined at a later date.

Generally, we have introduced vertical brick 'fins' at intervals along the facade to break it up, and to mirror the fin language used in the cladding. There are also areas and panels of alternative coursing or patterning where appropriate.

The main areas we are looking at for more specific treatment include around the hall along Usk Way, and the service yard walls.

Along Usk Way we are increasing the density of the fins, at the brickwork level and first floor cladding level, to add depth and texture to this area. This helps to differentiate/ pick out the hall as a significant space, in addition to the larger curtain wall elements, which will shift in appearance as the light changes.

The service yard wall has been treated as an edge to Emyln street. The need to break up the panels of brickwork to reflect the more residential character on the Southern side of the site has been incorporated by introducing slightly thicker brick piers. This retains some familiarity with the fins elsewhere, but expands the proportions to a more traditional scale, the spacing referencing the terraced dwellings across the way in Emyln street. Within each bay, we will apply some variance to brick coursing, making a subtle reference to the old foundry courthouse and foundry lodge, in conjunction with areas of vertical climbing vegetation to create interest and soften aspects of the wall with greenery. We also have a panel of recessed brickwork applied to the key corners of the yard, visible from Emyln Street and Usk Way, where signage might be applied. A expanded mesh has been proposed above the yard wall, effectively screening plant equipment whilst providing visual interest, with the colour matching the main cladding.



5.13 External Digital Screen

During the RIBA 3 design discussions, the College noted their desire to incorporate an external Digital Screen, and work this into the elevations. Whilst these discussions are still ongoing, we have identified a potential location for the screen, which may form part of the scheme.

The final decision on size and positioning is still to be confirmed, but the proposed position shown here has been worked out to find balance between the visibility of the screen from a functional perspective, and an appropriate incorporation of the screen into the facade design itself.

Other locations have been considered but dismissed on various grounds. The South facade for example, was a potential location, but dismissed given this would face out onto the Conservation area to the South, as well as towards residential properties.

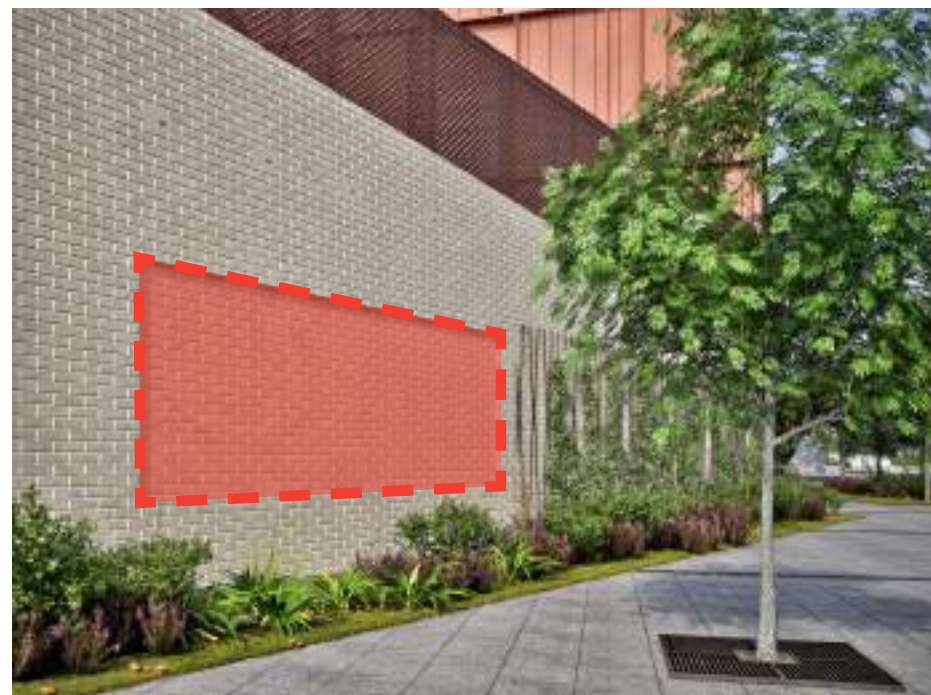


5.14 Signage and College Branding

There is a requirement for the building to present itself as a Coleg Gwent facility, and so the branding and signage will be a key aspect in achieving this. Currently we have indicative strategies, of which the final design is still in discussion.

We have however identified some key areas that have been identified as likely locations for different types of signage, which will be developed.

1. Perforated metal panel, depicting the college logo to the top corner of the picture window - creates a subtle branding that signposts the building from a distance
2. Surface-mounted signage to the rear service yard walls - providing signposting of the building on approach from the South
3. Film-applied to glazing at the main entrance, providing longer-range visibility of the entrance
4. Totem signage near the front entrance, in the public realm



5.15 Concept 3D Views



Birdseye view of the site



View of main entrance



View from Emlyn Street looking north



View towards the main entrance looking south