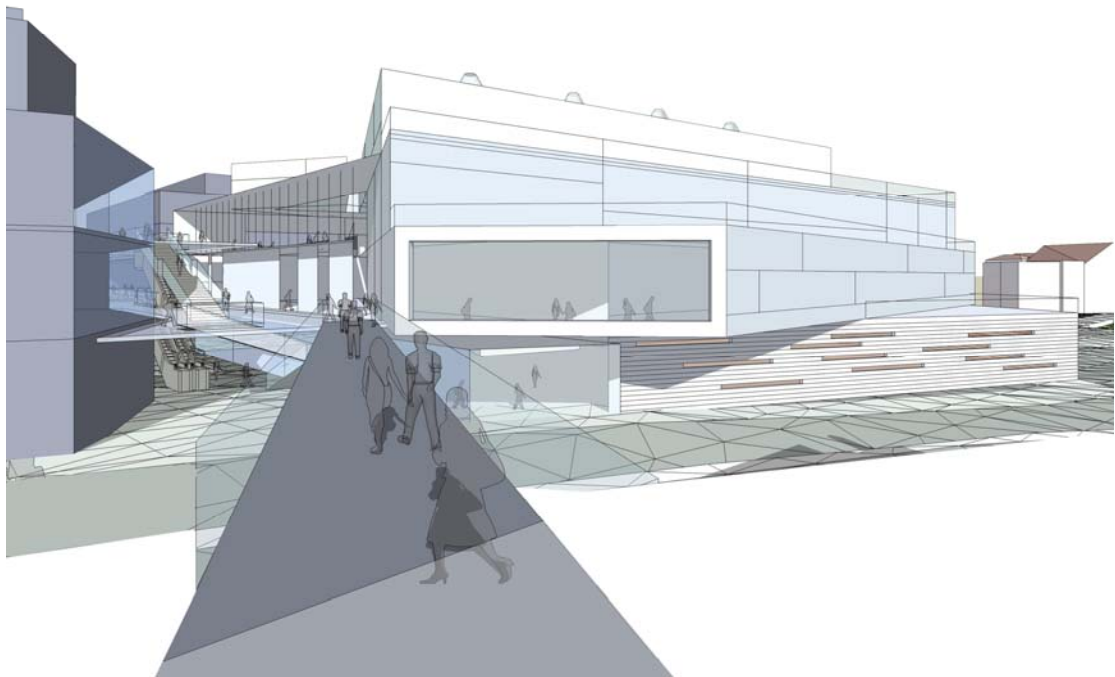


Colchester
Competition 2: Department Store

Design Report



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1. Character, Form and Materials

The character of Colchester is paramount to informing the design of any significant new building in the town. Its history and nature is recorded in the layering and texture of the buildings that line its streets. These layers have built up over many years of new construction and repairs, a characteristic relevant even to the Normans as they built on Roman foundations reusing the Roman stone.¹

A founding principle of architecture is that a building should be informed by its location and surroundings with the aim of designing a structure that is site specific. This means considering orientation to the sun and prevailing wind and the direct relationship to adjacent existing buildings through materials, scale, texture, colour and style.

Our analysis of the site and its history revealed a rich urban fabric with a great history dating back hundreds of years. Material layering is a strong characteristic of buildings throughout Colchester. Horizontal bands of juxtaposed materials such as brick and timber sit directly upon one another due to swift repair.

In direct response to these horizontal bands of materials the department store is composed of ribbons layered upon one another that stretch and elongate towards views of historic importance. The application of materials creates both a horizontal and vertical articulation of layering. The tight banding at street level becomes looser as one moves up the building. In addition the vertical use of the layers allows the façade to function by heating, cooling and ventilating the building

It is hoped that this approach to location and the environment will create a responsible building that respects its surroundings whilst adding to the significant buildings of Colchester.

¹ Ibeji, Mike, www.bbc.co.uk/history/ancient/romans/colchester_03.shtml, 2001.10.01

2. Urban Response

The urban response at ground floor took on the task of creating a relationship with pedestrians via street lighting and advertising set within the textured stone base of the building. Alongside this the protruding glazed shop front addressing Southway wraps its way around the internal street and waiting area and then folds neatly into the car park on St Boltoph's Street. The glazed ribbon sits neatly within the solid stone base creating an opportunity for shop displays which can then double as night lighting along the internal streets.

At First and Second floor the department store further accentuates the new pedestrian links. The line of the pedestrian bridge is drawn into the building and framed by a folding plane which creates a double-height entry to the south of the store. The plane continues along the western elevation horizontally at second floor ceiling level then folds down vertically making a diagonal link with the curving path up to Lion Walk.

Direct links to historical views have been punctuated at first, second and third level. The geometry of the department store orients framed views towards;

- Abbey Gate
- St John's Green
- St Giles Church
- St Boltoph's Church and Priory
- The new Visual Arts Centre
- Bastion
- Vineyard Gate
- Colchester Castle

The building fabric of the department store is therefore manipulated by its surrounding urban conditions, not just the immediate context but also the more distant relationships to historic views.

3. Performance

The proposed layering of the building allows for the ground level of the scheme to be more robust, with lighter and more delicate levels above.

The solid stone and polycarbonate base provides protection at street level whilst also aesthetically grounding the building. Glazed elements at the street level are restricted to areas with greater public activity and natural surveillance which are less likely to be prone to anti-social behaviour. Areas along the South Way are more solid, using stone, brick and strip windows of polycarbonate. The use of grey and other similar colours are used as they have been proved to be less desirable to graffiti vandals. These materials can also withstand high-pressure cleaning and aggressive cleaning solutions.

The use of polycarbonates is restricted to strips to minimise any UV fading from sunlight. Brick, and stone are proven materials and with the correct detailing will weather well and enhance their appearance.

Timber and metal detailing will be dealt with correctly to avoid any staining and corrosion and will be used to accent certain other elements.

The department store sits close to the rest of the proposed scheme on two sides with walkways at three levels. It is therefore important that natural daylight and light from the building is able to percolate down to the lowest level. Glass and other translucent materials can be more intense on these sides as there is also less effect from solar gain due to the shading of the pedestrian walkways

The internal environment is influenced by the external façade as the feature windows allow views out towards significant buildings of Colchester. Strip windows around the base of the building also provide glimpses in and out. Typically department stores minimise the use of external windows as this reduces display areas and flexibility of the layout. The use of a central atrium space allows natural light to enter the middle of the floor levels reducing the need for artificial lighting. The partnership between the internal design and the external façade will be integral in producing a building that can perform to its true potential.

4. Engineering

The orientation of the building and the solidness of the façade, at key southern points, is aimed at reducing solar gain and provide thermal mass to absorb the heat of the sun. Feature windows with views of significant buildings with low E glass are deeply recessed to provide shading without obscuring the view.

The use of a central atrium space and ventilation inlets around the façade provides a natural flow of air across the levels of the building and up through outlets in the roof of the atrium using convection currents. Thermal exhaust chimneys on the roof provide greater control over the internal environment roof whilst acknowledging the spires of the surrounding buildings.

The effectiveness of natural heating, cooling and ventilation will be very dependant upon the internal design of the building and the use and layout of its spaces. The proposed plan of the building allows for flexibility as well as compartmentalisation to assist in isolated areas that require more specific environments. This way, systems can be more efficient and effective in dealing with individual requirements.

It is proposed to incorporate a 'green' roof for the building to reduce water run-off which is a cause of localised flooding and maintain more consistent internal temperatures through its thermal mass. This will also allow for the storage of grey water to be used in the servicing of the building.

The M & E strategy is crucial to the efficient running and maintenance of the building to ensure a comfortable internal environment and to reduce the impact of the building on the external environment.