

ASC Region 8 International Student Competition 2023

Design-Build Track

INITIAL BRIEF & CLIENT REQUIREMENTS

Building Overview:

- The Henry Cotton building is a three-storey structure of red brickwork complemented by striking blue windows.
- Encompassing an approximate space of 7,750 sqm, the building primarily caters to the educational sector, offering teaching, research, and office spaces.
- A distinctive architectural feature is its tiled pitched roof with a central flat roof plant area.
- Surrounding landmarks provide a rich historical context, with the Castle Street Conservation Area, 135-139 Dale Street (grade II), and the illustrious World Museum (grade II*) in close vicinity.

Location and Significance:

- Perfectly nestled amidst Webster Street to the east, Primrose Hill to the north, Trueman Street to the west, and a contemporary 9-storey student accommodation to the south, its location is prime.
- The demolition of the Churchill Way flyover has accentuated the building's prominence, elevating it to a landmark status as a gateway to the University from the east.

Project's Vision and Context:

- This venture is not just another construction project. It is the trailblazing initiative of the University's ambitious masterplan, setting the gold standard for future projects.
- A focal point is its innovative approach, piloting fresh methodologies in working conditions, research modalities, and teaching techniques.

Sustainability & Environmental Commitment:

- The project is deeply aligned with the University's Climate Change Action Plan (CCAP), reflecting the institution's commitment to a greener future.
- The ambitious objective is to be operationally net zero carbon by 2035.
- It's noteworthy that the existing building infrastructure includes a gas-fired boiler and a central air handling plant situated on the third floor.

Feasibility and Purpose:

- Preliminary feasibility analysis indicates a clear directive: the building is primed for refurbishment, with a proposed dedication to the Faculty of Engineering and Technology (FET).

Project Objectives:

- **Identity Reinforcement:** The aim is to morph the Henry Cotton building into an iconic gateway for both the University and the city.
- **Architectural Excellence:** Crafting spaces that exude quality and functionality for staff, students, and research purposes is paramount.

- **Space Optimisation:** There's an objective to grow, specifically to expand office space capacity from 66 to 94 staff members on the second and third floors.
- **Architectural Expansion:** Explore opportunities within the architectural design to increase the building's floor area. This could be achieved either by integrating extensions to the current structure or considering the addition of new floors, ensuring they harmoniously blend with the structural integrity.
- **Sustainability at Forefront:** The architectural and operational modalities will be tailored to adhere strictly to the CCAP and Net Zero Carbon objectives.
- **Future-readiness:** The design will embed flexibility, ensuring the building can adapt to evolving teaching dynamics and departmental expansion needs.
- **Interior Excellence:** The décor focus will be on natural aesthetics — harnessing daylight, ensuring natural ventilation, and incorporating greenery — all directed towards enhancing user well-being.
- **Inclusivity:** An inclusive design strategy will ensure the building is accessible and welcoming to all, irrespective of individual needs.
- **User Experience:** The project seeks to uplift the experience for both students and staff, catalysing interactions and fostering a profound sense of belonging.
- **Maintenance Resolution:** Addressing and resolving recurrent issues, such as roof leaks, inefficient heating, and outmoded electrical/data systems, is vital.

Budgetary and Regulatory Framework:

- The project, earmarked as a capital venture, necessitates a detailed cost estimation.
- It is imperative to adhere to the local planning requirements, particularly in relation to the buildings location and conservation areas surrounding it.
- The electrical supply framework currently stands with SPEN, offering a 275kVA agreement.

Risk Management:

- **Operational Disruption:** Construction activities might impinge on teaching schedules, necessitating meticulous planning.
- **Teaching Disturbances:** The Faculty of Engineering and Technology's curriculum and its consequential National Student Survey scores might be susceptible to disruptions.
- **Neighbourhood Impact:** Construction activities adjacent to student residences require careful orchestration to minimise disturbances.
- **Security Considerations:** Ensuring rigorous site security both during and post-construction phases is of paramount importance.