



CABAT Glyndŵr Development Design & Access Statement (D&A)

1.1 Introduction

The University of Wales Trinity Saint David (UWTSD) has appointed CABAT Consultancy LTD to coordinate a multi-disciplinary team and provide Town Planning and Design services in respect to the first phase of development of the “Swansea Waterfront Innovation Quarter”. This Design and Access Statement is prepared in support of a reserved matters planning submission.

Project Overview

The University of Wales Trinity Saint David is submitting a planning application to City and County of Swansea Council to develop a private educational facility at Plot C5 at the SA1 Waterfront, as illustrated on **Figure 1**. The redevelopment and regeneration of the SA1 waterfront is seen as an opportunity to deliver positive and lasting impacts across a wide range of academic and development sectors, consistent with the Welsh Government’s priorities, and the City and County of Swansea’s emerging regeneration plans for the City. The first phase of the development focused on part of the Peninsula where the construction of the Library and the Faculty of Architecture, Computing and Engineering (FACE) and associated central teaching and faculty space is proposed. FACE is contained in the Dockside, which forms the eastern face of Trinity Quarter bounded by Prince’s Street.

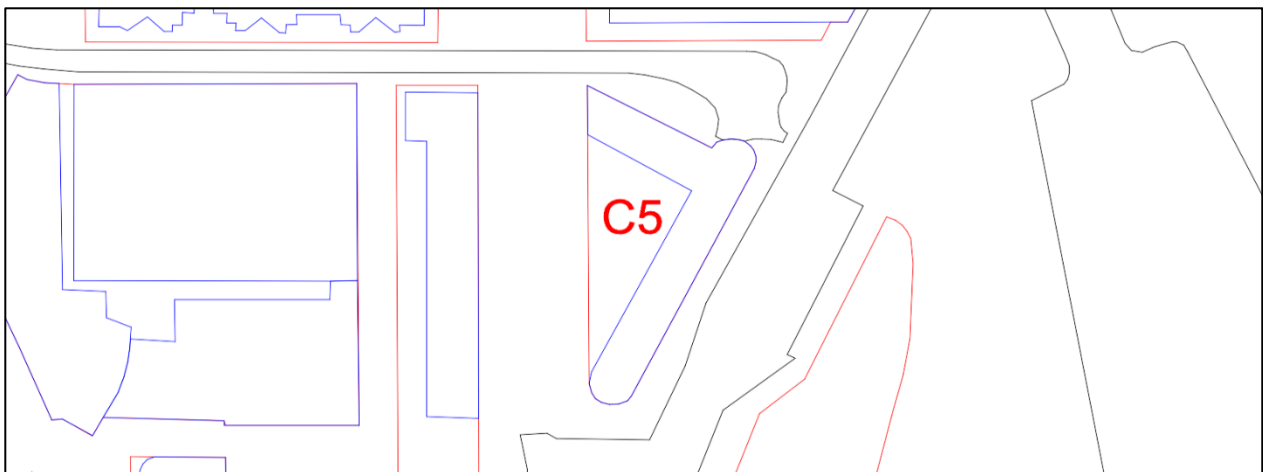


Figure 1: Site location plan.

The Glyndwr site measures approximately 0.85 hectares (2.1 acres approximately), whilst its North side fronts onto Langdon Road and its eastern side faces onto the former dry dock forming part of the existing tidal basin. The proposed new development is for a high quality two/ three storey building which would provide a flagship 300 capacity main lecture theatre as well as 10 x 30 capacity classrooms and 4 x 80 capacity lecture theatres. Student union facilities, a café and a restaurant will complete this state-of-the-art facility.

1.1.1 Urban Grain of SA1 Waterfront

By analysing the figure ground plan of SA1 and its surrounding neighbourhoods, patterns and arrangements of buildings and their sizes reveal the type of urban grain present. The working docklands, with their large, linear building footprints stand in stark contrast to the fine, regular grid forms of Saint Thomas and Port Tennant. This fine grain is present in the north east of SA1, with clustered townhouses overlooking the Prince of Wales Dock.

SA1 includes a mix of urban grains which filter through from the surrounding neighbourhoods. The Technium Square area consists of irregular, medium sized building developments clustered around an existing square. The arrangement of buildings is primarily informed by the waterfront on the western side of SA1, with buildings taking advantage of the views to the water. The southern side of SA1 is largely empty of development.

1.1.2 Movement

The freedom of movement of individuals during the construction phase and post completion is vital to the success of this project. Below, main travel routes to the facility have been assessed.

Bus

Public transport will serve the wider site in several ways. A bus route will be extended down from Langdon Road along Kings Road, with a bus stop at Trinity Saint David Square. In addition, the Fabian Way Park and Ride will be promoted to reduce private vehicular traffic at SA1 and increase traffic on local public transport instead.

Road

The City & County of Swansea Council (CCSC) are in the process of modelling current and future demands on the local highway network with the view of presenting a business case to the Welsh Government for funding for the trunking of Fabian Way and improvements to associated highways. The site is located at the Eastern termination of Kings Road. The main access to the site is from the SA1 access/gateway off Fabian Way or A4067 Roundabout from Swansea City Centre. The site has recently been laid out (by Welsh Government) as a temporary car park.

Cycle

Cycling forms an important part of the wider context at SA1. With the National Cycle Network Route 04 running through the site to the north and west, there is scope to further increase the usable cycle routes elsewhere. City and County of Swansea's aspiration to create an innovation corridor along Fabian Way will increase cycle movement to and from the east. Cycling facilities are provided at key locations throughout SA1, which consist of secure cycle storage and showering facilities.

Rail

Swansea Railway Station is situated less than a mile to the west.

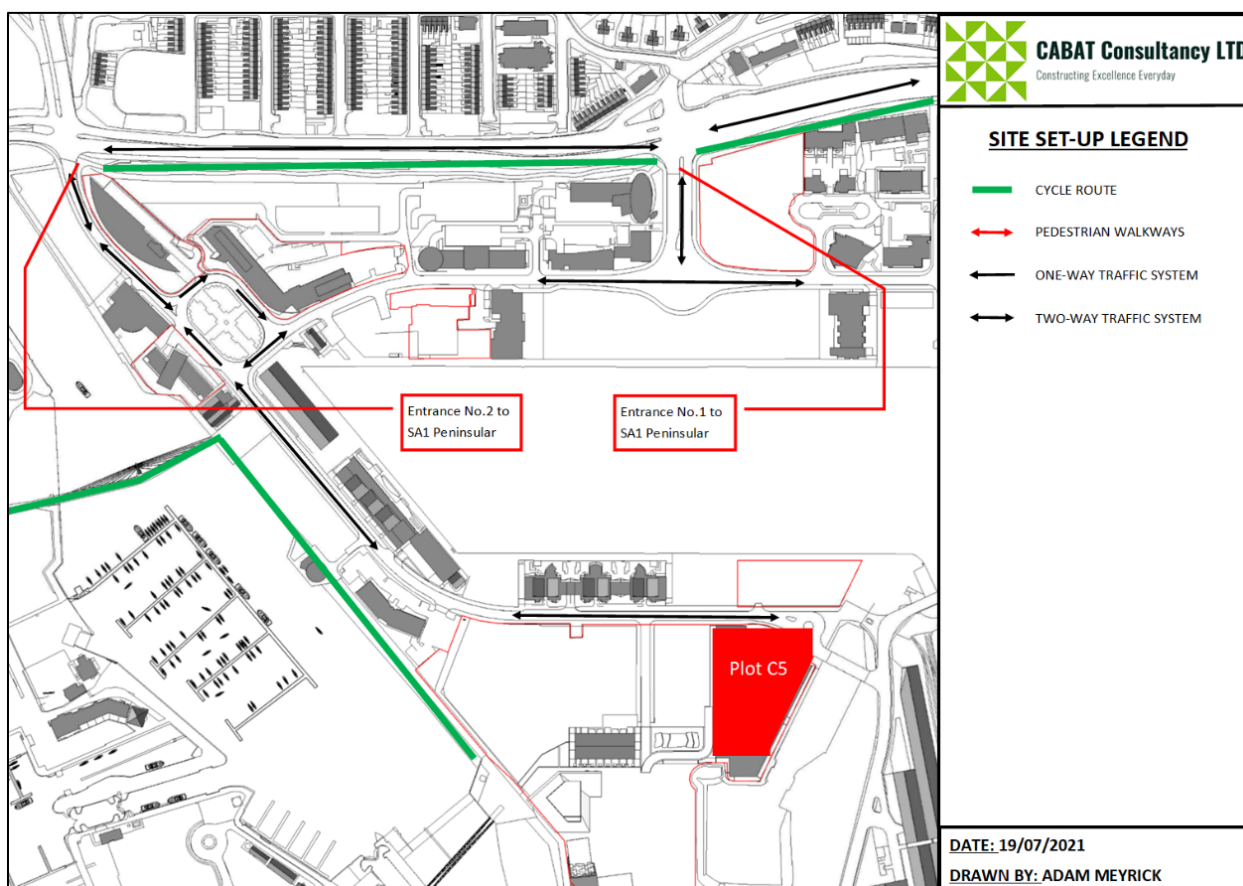


Figure 2: Existing vehicle, pedestrian and cyclist routes.

The graphic in *Figure 2* presents a visual aid of the access to site; it has been assessed that entry to the site is adequate and requires no special council permits, closures or alterations.

1.1.3 Topography

Site contours are level within the site boundary with no discernible features of interest or known issue to construction.

1.1.4 Surrounding Landscape and Ecology

The existing vegetation within the SA1 Development is a mix of the typical vegetation to be found on a derelict dockland site and the more recent ornamental landscape associated with the new roads, developments and the public open space areas. The site location provides a challenge to the introduction of soft landscape elements. Plant species need to be chosen to withstand strong onshore winds and salt spray. There are no existing trees on site.

1.2 Design

The design segment of this DAS supports the planning application, providing a framework for CABAT to explain how the proposed development is a suitable response to the site and its setting, demonstrating that it can be adequately accessed by prospective users.

1.2.1 SA1 Design Code

The SA1 Swansea Waterfront Innovation Quarter Design and Development Framework has a Design Code that sets out principles and components with guidance in order to generate the physical development of the site. The design code therefore provides clarity over what constitutes acceptable design quality. The general principles of urban coding developed for the University of Wales Trinity St David's estate on the SA1 Peninsula also applies to the University's overall landholding throughout the Waterfront Innovation Quarter including Plot C5. The code sets out what materials, architectural detail and composition is permitted, this is aimed at delivering better quality places and include requirements for streets, blocks and massing, to architectural form composition and materials.

1.2.2 Proposed Design

Layout

The primary public entrance is aligned with the vehicular approach to the site. This aims to give prominence and clarity on approach in navigation. This is further enhanced in site layout and landscaping arrangements. The public entrance is also approached by pedestrians on the west façade where a formal entrance is proposed.

Appearance

The proposed design utilises a combination of brick, timber and metal cladding. In order to achieve a more tactile and softer contrasting material palette timber cladding has been employed strategically throughout the elevation to break up the massing. This is particularly prominent within the West block where vertical elements in line with the masterplan strategy have been employed to break up the horizontal nature of the building. Metal cladding is used mainly at roof level to provide definition at the junction and to complement the solar shading elements.

Sustainability

The aspiration for any development within the SA1 Waterfront development area is to achieve a BREEAM "Very Good" rating, however, this project looks to encapsulate an improved "Excellent" rating (see *BREEAM Checklist Client Handout document*). In support of the Building Regulations requirements for the site, renewable energy in the form of photovoltaic panels are proposed. This has been designed at roof level to not impact the elevations and cannot be seen from ground level. In addition, the incorporation of a Modular Living Wall System (MLWS) will improve the health and wellbeing of passers-by and occupants whilst increasing biodiversity elements (see *Living Wall Life Cycle Cost Analysis document*). The building utilises solar shading to elements of the south, east and west elevations to protect against the effects of solar gain and providing a comfortable internal atmosphere.

Natural Ventilation

The building layout accommodates natural ventilation to appropriate areas of the building, particularly in the bedroom and consultant areas where mechanical ventilation is not a clinical requirement. Student comfort is achieved with sustainable building design.

Natural Daylight

The facilities orientation combined with appropriate window sizing strategy allows a significant portion of the building to benefit from natural daylight. Where appropriate solar shading has been provided and employed strategically within the elevations to mitigate the effects of solar gain.

Ease of Maintenance

Through the selection of a simple palette of materials and design strategy the requirement for maintenance has been limited. Where maintenance is required appropriate access has been provided in the interests of health and safety requirements.

Views

The building has been positioned and designed accordingly to take advantage of this in combination with the peninsular. All users can benefit from access to external views from most of the building.

Cyclist Facilities

In line with BREEAM requirements, cyclist storage facilities have been provided for both staff and public. Changing and shower facilities are provided for staff use promoting a sustainable approach to commuting by bicycle.

Minimising Watercourse Pollution

Storm water treatment and attenuation will be achieved through a combination of Sustainable Urban Drainage Systems (SUDS) and hard engineering solutions. Additionally, the MLWS will help prevent pluvial surface water for formulating.

1.3 Client Critical Success Factors for the Project

The client's key objectives are as follows:

- Commencement of construction in May 2020.
- Completion of the new facility by August 2021.
- Adherence to a budget.
- A minimum BREEAM rating of Very Good achieved for the new building.
- Develop a robust programme to deliver high quality standards expected of a modern educational institution (*see CABAT Glyndŵr Project Programme*).
- Soft landings principal for commissioning and handover.
- Target Recruitment and Training (TR&T) targets achieved through local engagement, 50% of SEWSCAP targets (*see Glyndŵr Development Social Aspects Assessment document*).
- Control of site won material on site by the development of Materials Management Plan (MMP).
- Early involvement with Client Facilities manager from existing facility.
- Efficient and safe site layout (*see Integrated Project Site Set-ups document*).
- Innovative means of construction supplemented by effective communication across all parties (*see BIM Execution Plan (BEP) document*).