

# **DESIGN STATEMENT**

Quickpark Car Park, Turnapin Great, Swords Road (Old Airport Road), Santry, Co. Dublin



Wilson Architecture have been engaged by Gerard Gannon to prepare a design appraisal to support the planning application for the continuation of use of an at-grade long term car park and construction of a new entrance building on lands known as the Quickpark Car Park, Turnapin Great, Swords Road (Old Airport Road), Santry, Co. Dublin.

## 1. DESIGN PROPOSAL

The proposed development includes the demolition of the existing single storey office and control building, canopy entrance structure, the relocation of the maintenance shed and the construction of a new part three storey car park entrance building comprising office space with new car park barriers and ticket machines together with premium car parking, elevational signage to new entrance building, green roof and associated revisions to the layout to accommodate the new building.

The entrance building will provide a quality entrance to both the existing carparking facility and any future development of the car park lands, involving the removal of the existing temporary aspect of the current carpark entrance and approach. The resultant design is for a barrier car access through a new 3 storey 'Pavilion' Building to the car park with ancillary staff facilities and offices for Quickpark operations.

#### SITE CONTEXT

Access to the carparking facility is via an existing signal-controlled junction from the R132. Vehicles approach an existing entrance canopy with automatic barriers that serves as the entrance to the Quickpark carpark grounds with an existing single storey structure, a former bungalow, which has been converted to office use for the management of the facility located alongside the canopy barrier structure.







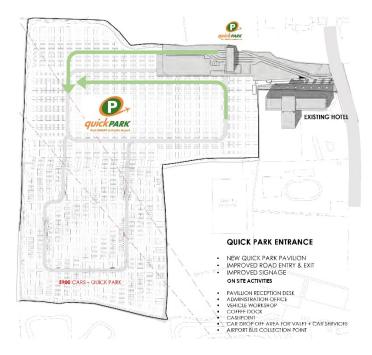
Image 1: Panoramic view of the current entrance road and canopied barrier entrance. Image by Modelworks





Image 2: Panoramic views of the existing Carpark facility.

#### DESIGN OPPORTUNITIES AND DESIGN ISSUES



The proposal for a new entrance building arises from a site requirement to both continue the carpark vehicular access and introduce a separate route for the airport terminal shuttle bus service including emergency and larger vehicles if required. The building has been positioned approximately 65 metres further into the site from the existing canopy location.



This site strategy allows for the existing road junction with the R132 to be retained and include for a high-quality landscape space at the entrance to the development along the existing road frontage. The landscape extends from the road junction and creates a setting for the new barrier car access through a new 3 storey 'Pavilion' Building, including the provision of appropriate pedestrian access, extensive planting, set down car spaces and a parking drop-off zone for the premium carparking service, while also allowing those waiting for shuttle bus to avail of an indoor reception area.



#### **BUILDING PROPOSAL**

The new 3 storey carpark barrier and entrance building is 10.330 metres in height with a building footprint of  $46.2 \times 5.4$  metres with an overall floor area of 1,043m<sup>2</sup>. The building is envisaged as 'pavilion' in nature due to its freestanding site context and its 'use' relationship to the adjacent and expansive carpark facility.

It is intended as a steel frame structure, allowing for mobile crane frame erection, clad in panelised cement-fibre cladding system along the ground floor perimeter with full height glazing onto reception area. Above ground floor level the building façade is to be clad in translucent polycarbonate panels, allowing a translucent layered quality to the main elevation which can achieve impactful light diffusion and strong thermal performance. The façade is combined with aluminium glazing window system running along the length of the second floor office level.

The facilities and offices are ancillary to the car park with ground staff, bus drivers etc utilising the building with office operations of Quickpark (i.e. administration, finance, marketing etc.) utilising the office space. The proposed building has been designed to be accessible, sustainable and to comply with all statutory requirements.

A green roof is proposed at 75% of roof area. Remaining roof is allocated for roof level plant requirements.



Image 3: Panoramic view of the proposed entrance building and road entrance. Image by Modelworks

## BUILDING APPROACH AND CIRCULATION

The building is approached from the proposed modified access road with improved pedestrian access. The public/ carpark user have access through the vehicular barrier gates to the existing carparking facilities and pedestrian access through primary entrance into the ground floor reception area. Staff and carpark operatives have secondary access points to both office accommodation and staff facilities.

The introduction of the secondary road allows for shuttle bus movement at building perimeter rather than through the barrier access. This also allows for more efficient bus movement and pickup for the carpark users journeying to and from the airport terminals.



#### **BUILDING ACCOMMODATION**

The ground floor of the building will support accommodation for a Premium parking facility linked into a premium parking double height reception and seating area for those availing of the premium service, have dropped off car and are awaiting bus departure to airport terminal. Customer service provision to include small self-service beverage and snacks and toilet facilities.

At first floor level there is provision for meeting rooms and staff room facilities linked to the second floor office level accommodation.

Rational for Office use within the proposed new entrance building.

In addition to the ground floor Reception area and Public/ Carpark user facilities, it is proposed to use the second floor 'canopy level' of the proposed new entrance building for office use.

The current <u>operator</u> of the Long Stay Carpark and the associated transport shuttle bus link to airport requires headquarter office accommodation for both the administration and operation elements of the business. There is also a requirement to expand the Premium Parking offer within the business and the associated additional staff requirements. The staff number provision is calculated at 40 persons

The proposed office area will provide for the following departments within the organisation;

- Administration
- Financial Control
- Human Resources & Staff Management
- IT Department & Online support

In addition to the office floor requirements, the building proposal includes for a number of meeting rooms, staff training rooms and staff facilities.

The personnel on the ground managing and supervising the Carpark can number up to 20-30 persons on rotation over the 24hr operational period. They are provided with, Kitchen/dining facilities including changing/shower rooms at the first floor levels of the building.

#### SIGNAGE AND LIGHTING

It is intended that the proposed new building will be easily identifiable as the carpark entrance, replacing the canopied barrier, and that potential consumers will be aware of its presence and guided towards it by means of the building design, form and materials. The translucent panels will allow a controlled level of light transmission allowing for impactful light diffusion across the building during its 24hr operational cycle. The material cladding on the building is non-reflective and final agreement on materials can be sought with IAA.

In addition to the mandatory warning signs setting out the on-site traffic control arrangements and site lighting the on-site signage includes for the existing roadside signage to remain with new signage to proposed building only.

The building facade signage will consist of company lettering or logo and will be located at both high level on the building's front elevation and at ground level at reception entrance. All building perimeter lighting, including lighting to the carpark set down area will be designed so as not to interfere with the amenities of the area. The proposed signage is to be surface mounted internally lit signage panel. Each sign measures 1 metre height x = 1 metre width with an approximate area of x = 1 metre height x = 1 metre width with an approximate area of x = 1 metre height x = 1 metre width with an approximate area of x = 1 metre height x = 1 metre width with an approximate area of x = 1 metre height x = 1 metre heig



#### **MATERIALS**







Natural fibre cement panels

#### POLYCARBONATE CLADDING PANELS

Rodeca's 40mm PC 2540-4 wall panel was used as rainscreen and internal skin. The external skin is Rodeca's polycarbonate panels with an internal skin behind the main façade in opalised panels as an single-skin translucent wall, designed to demonstrate versatile, communicative, impactful building design and to unify the simplicity of panel construction with bold architectural statements.

#### **CEMENT FIBRE PANEL**

EQUITONE [natura] fibre cement material offers specifiers a sustainable and low maintenance exterior wall cladding facade that combines excellent aesthetics with durability and impact resistance: qualities that will enhance any new build project or equally, improve and upgrade an existing building as an overclad solution.

## 2. LANDSCAPE

A Landscape Plan has been developed by TBS for the proposed development lands to maintain and enhance the receiving environment's existing landscape character.

The landscape works have the following objectives:

To renew existing boundary hedgerow vegetation with planting suitable to the existing environment;

To provide a new landscape treatment in the form of ground modelling and tree planting to significantly enhance the main entrance from the R132.

The Landscape

# 3. SITE SERVICES + DRAINAGE

Reference Waterman Moylan Consulting Engineers Report Documents



#### 4. SUSTAINABILITY IN DESIGN

The energy strategy shall be approached using a holistic manner using the energy hierarchy "Be Lean, Be Clean, Be Green" in order to comply with Part L 2017 requirements for energy performance and greenhouse gas emissions. The new development will be designed and constructed to limit heat loss and where appropriate, limit heat gains through the fabric of the building. In order to limit the heat loss through the building fabric the thermal insulation for each of the plane elements of the development will meet or exceed the area weighted average elemental U-Values as specified in Part L, Table 1, Column 1.

Key features of the energy efficient design of the proposed building will include enhanced building fabric performance, high efficiency HVAC systems and high efficacy lighting with occupancy and daylight control where applicable.

The energy strategy shall be in accordance with Fingal Development Plan 2017-2023, Policy Objectives PM29 - Promote energy efficiency and conservation above Building Regulations standards in the design and development of all new buildings and residential schemes in particular and require designers to demonstrate that they have taken maximising energy efficiency and the use of renewable energy into account in their planning application.

- EU Energy Performance of Buildings Directive (2010/31/EU): This Directive aims to promote the energy performance of buildings and aims to strengthen the provisions of Directive 2009/91/EC which it revokes. Its provisions include energy needs for the heating of premises, the production of hot water, cooling, ventilation and lighting for new and existing buildings. This Directive also contains an objective that by 31st December 2020, all new buildings shall be nearly zero energy consumption buildings.
- EU Energy Efficiency Directive (2012/27/EU): This Directive was transposed into Irish Law as S.I. 426 of 2014 and sets out the policy roadmap up to 2020 and identifies measures that are required to be introduced by Member States in order for the EU to meet its binding energy efficiency and emissions targets.

Arising from the Recast of the European Performance of Buildings Directive 2010/30/EU, from 1 January 2019, every new public building will have to be designed to nearly zero energy building standards. Also, all other new buildings will have to comply with the new nearly zero energy buildings standards from 1 January 2021. The Council will have regard to the DoEHLG publication Towards Nearly Zero Energy Buildings in Ireland Planning for 2020 and Beyond and the EU Energy Performance of Buildings Directive (2010/31/EU) which promote the increase in nearly Zero Energy Buildings (nZEB). The Council promotes the development of low carbon buildings. Fingal aspires to becoming carbon neutral and will make every effort to increase energy efficiency.



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