

Tramore Water Activity Centre, Co. Waterford

Architects Report
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dhbarchitects





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Waterford City & County Council



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Introduction



Fig.1; 3D visualisation of Water Activity Centre, Tramore

scope

Fáilte Ireland has identified the need for Facility Centres for Water Based Activities to be developed throughout the country. Tramore has been selected as a location for one of these facilities. This report describes the design approach to

incorporate a new Water Activity Centre on the lower promenade in Tramore, the design challenges and constraints at this site and the immediate public realm.

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Design Brief

Basis for the design brief

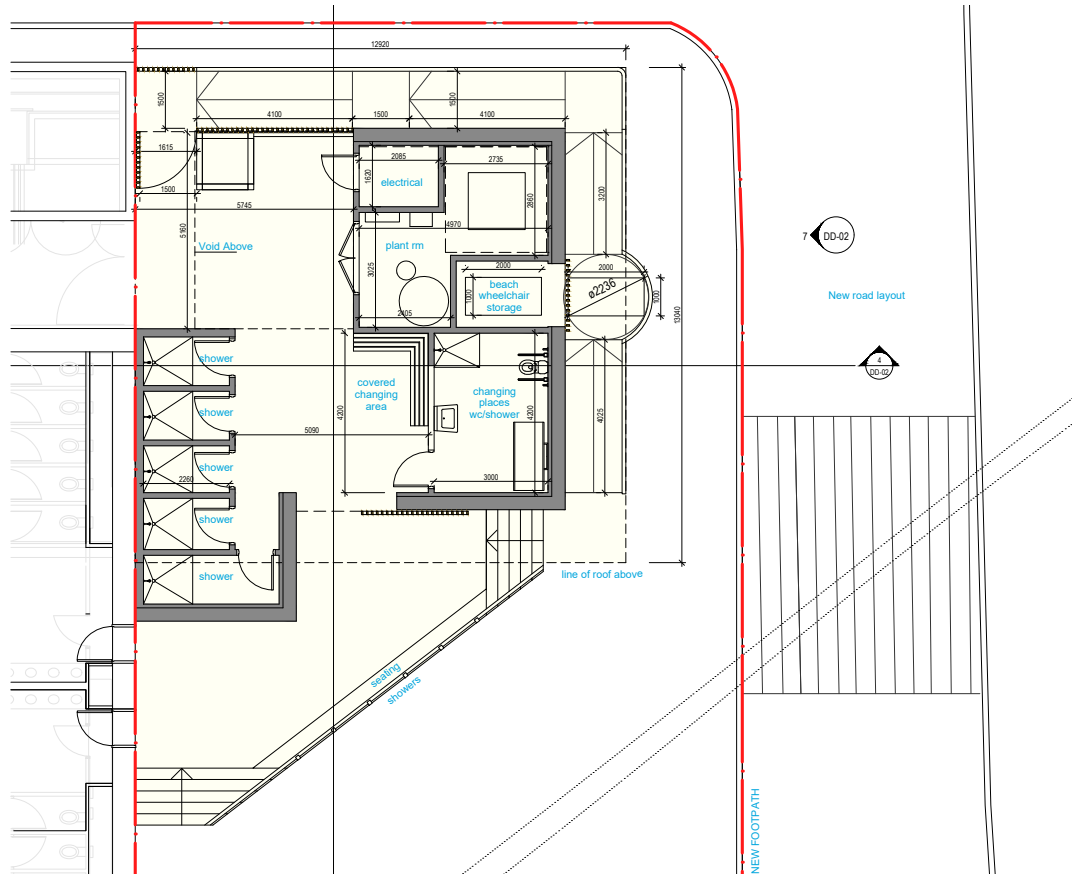


Fig.2; Water Activity Centre Plan

brief

The Water Activity Centre will service a basic need primarily for users of water activities, including surfing, sea kayaking, canoeing, coasteering, wind surfing, stand-up paddle boarding, snorkeling and diving.

The design project for the Water Activity Centre in Tramore involves the addition of a new building on the lower prome-

nade at the existing public toilets building. The briefs functional requirements include showers, covered change areas, beach wheelchair storage, an accessible changing places toilet & shower and gathering areas for users before / after water activities.

The primary intentions of this project are

to provide a durable and robust building that has a long-life span in this harsh coastal environment, whilst simultaneously meeting users' needs and adding to the architectural context and character of Tramore.

SITE

Existing Building



Fig.3; view of lower promenade and existing public toilets building

The chosen location for the new Water Activity Centre (WAC) is on the site immediately to the east of the existing public toilets building and Irish Water facility, on land belonging to the Council. The WAC will be able to benefit from the proximity of adjacent water and electrical services, including access to the public toilets via a new entrance through their eastern gable.

The new structure will address the roundabout to the north and the end of the

Promenade to the south, thus forming a new way-finding and entrance element at the eastern end of the seafront.

The WAC will be built at the same level as the adjacent toilets and this level will be accessed by means of a fully Part M accessible ramp and steps. It will incorporate a public showers area for beachgoers on its main elevation facing the beach. The footpath will be widened on the southern and eastern sides to better control traffic flows and to make

crossing the road between the beach and Prom safer for pedestrians.

DESIGN APPROACH

Existing context

The Water Activity Centre consists of 4 exterior showers on the West façade, 5 shower cubicles, covered changing areas with benches and gathering spaces for group inductions. It also provides accessible facilities and access so that the Water Activity Centre can be used by all.

The starting point for the design stemmed from the local context of Tramore and the coastal environment. The lifeguards' building at the end of the main Promenade provided an interesting local exemplar and therefore inspired the buildings choice of materials. It is constructed of local stone roughly shuttered in concrete, with sloped and profiled roof lines in the style of Frank Lloyd Wright's Arizona Taliesin. It was designed by Jack O'Hare a disciple of Wright's who worked in his office in the 1940s. It has stood the test of time remarkably well for a structure in such an exposed location and was an obvious precedent in the search for an appropriate architectural character.

MATERIALS

As this structure will be subject to extreme weather events such as storm surges, salt water and sand blasting and extremes of temperature, durability and longevity of materials are paramount. It is for this reason that masonry was selected as the building's primary structural material. The roof consists of a steel

frame, covered in a cladding material to protect it from the elements.

The most prominent exterior walls, south and west, are stone, referencing the existing lifeguard's building and creating a robust wind breaker for the prevailing winds. The interior walls of the building will be finished with tiles to 2m high to create a contrast from the rough stone exterior, bringing a splash of colour to the space and ease of maintenance.

Benches in the changing areas are simple timber lathed benches on cantilevered angles on the walls.

A tall and narrow tower structure forms a beacon for signage and lighting at night time, as well as a reference to the raised corner element of the Irish Water facility building, and will mark the presence of the building from the western approach along the Promenade.

An array of south facing solar panels will be installed on the roof and due to its form, the panels will be hidden from view at street level.

ROOF FORM

The form of the roof consists of an inverted curved insitu concrete roof, board marked to the underside, and supported by 4 concrete columns. This roof form, 15m x 15m, creates sufficient overhangs to provide protection to users from the sun, rain and wind while either using the Water Activity Centre, accessing the public toilets building or gathering for an

induction at the perimeter.

A large array of south facing solar panels will be installed on the roof and due to its form, the panels will be hidden from view at street level.

The roof naturally drains to the lowest point at the centre to a large down pipe. Below this there is a large sink for users to wash their water equipment.

SECURITY

There are frameless toughened glass panels between three of the main exterior walls and roof allowing light to enter the central space and the natural circulation of air to the building.

The building can be securely locked at nighttime and off-peak season by railed gates. Internal shower partitions and doors will be in durable materials.

The building's form brings a strong presence and identity to this peripheral urban space of Tramore and the choice of stone and concrete as a material reference to Jack O'Hare's lifeguard building on the prom, visually connects the main promenade with the lower promenade, rooting this building in its local context.

SUSTAINABILITY

Environmental Design Factors

Site

SITE

This site was selected to avoid breaking new ground at this coastal location and to use an existing hard surfaced space, also enabling ease of connection to existing services at close proximity.

by the large array of South facing solar panels on the roof and a heat pump.

Materials

Concrete is selected as it is a highly durable material at a coastal site with a long-life span. However, to reduce the environmental impact of concrete we are proposing the use of fly-ash concrete. The use of fly-ash, the byproduct of burning coal, reduces the amount of cement (a material that emits high levels of carbon dioxide into the atmosphere) required in the concrete mix. The result is concrete with a lower environmental impact but with the same durability standards as regular concrete. The stone being proposed is the local Waterford shale.

Recycling

The paving removed from the platform and path during construction will be reused for the extension of the platform and the diverted path. Similarly, the existing limestone steps that are to be demolished along with the handrails will be reused for the new steps to the East of the building.

PUBLIC REALM

The extension of the public areas to the south and east will provide enhanced pedestrian areas close to the seafront and to the public carparking areas. The extended footpath line thus established will set the precedent for future public realm enhancements westwards to the benefit of the adjacent facilities and businesses along this frontage.

Function

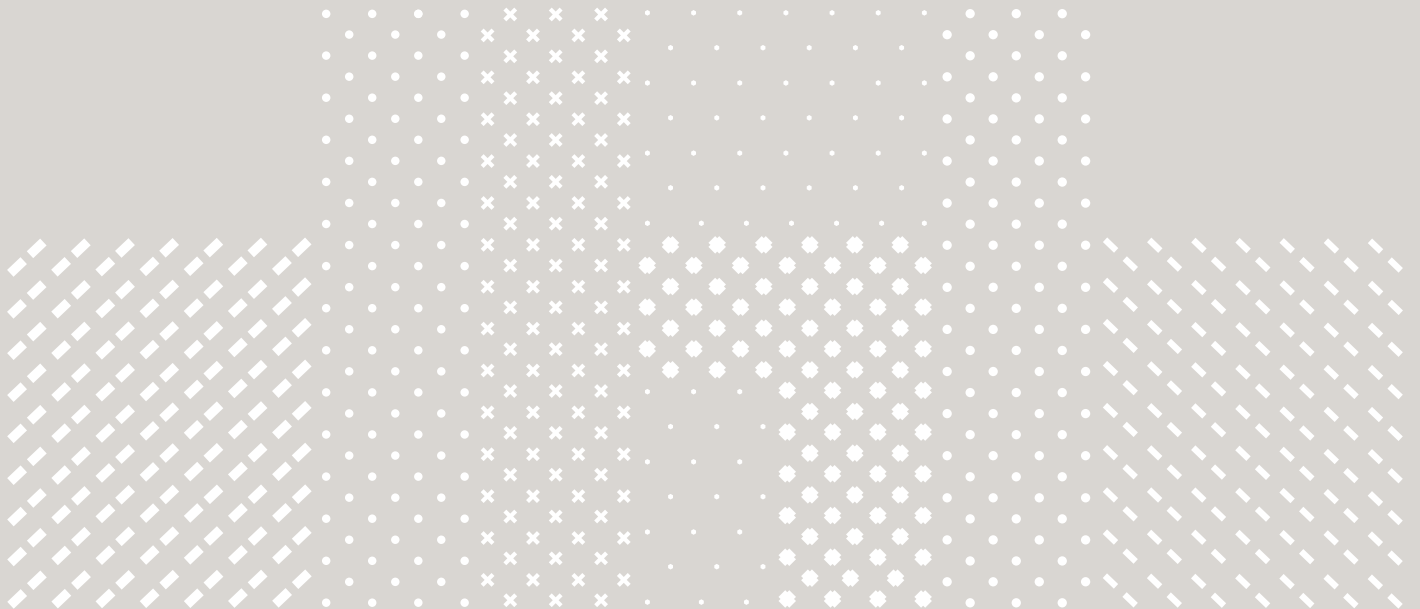
As this facility is for encouraging engagement with 'the great out-doors' it is not a building in the conventional sense. Users are sheltered from the sun, rain and wind but the building is unheated and naturally ventilated to reduce energy consumption.

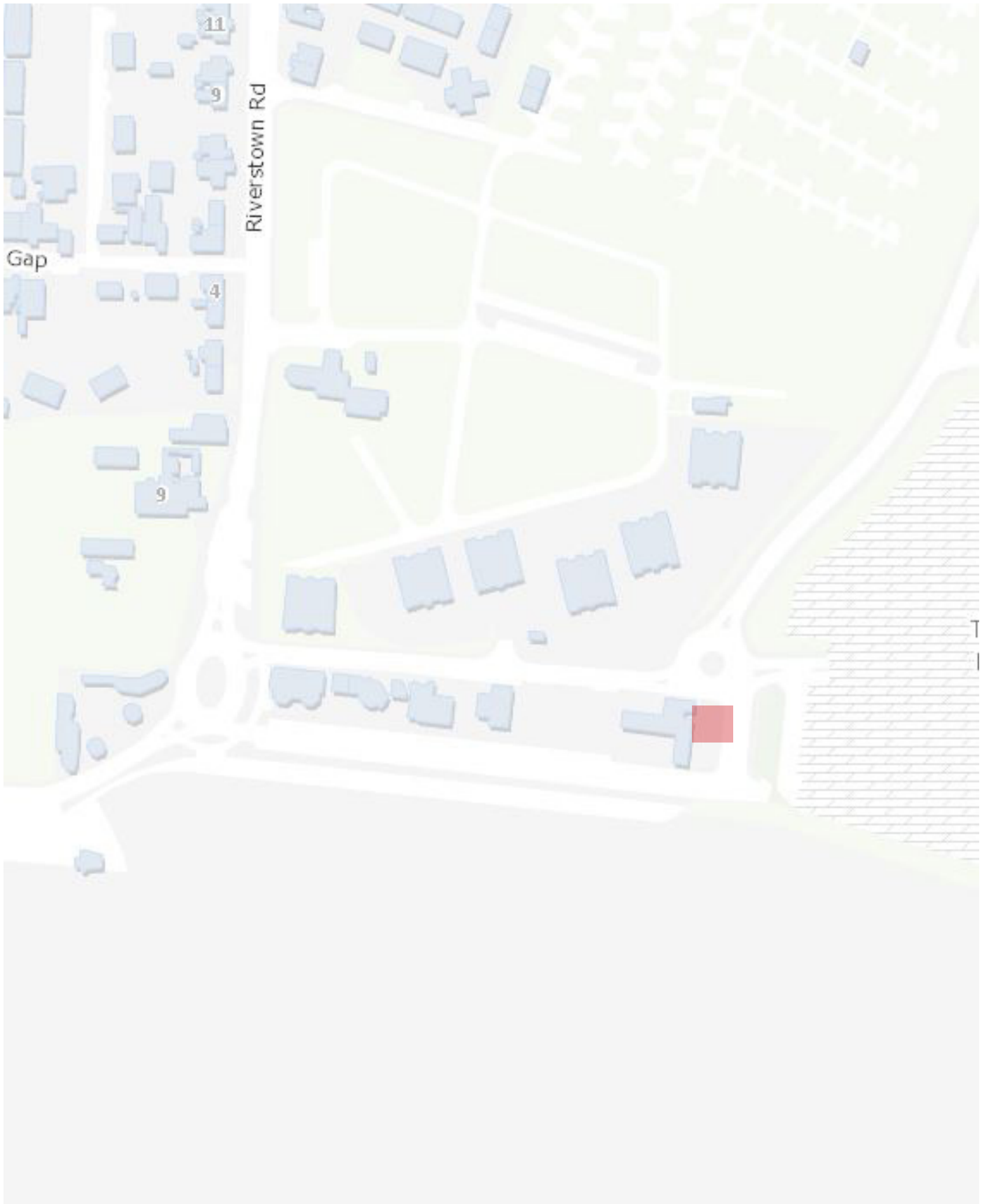
Energy

Water for the showers will be heated

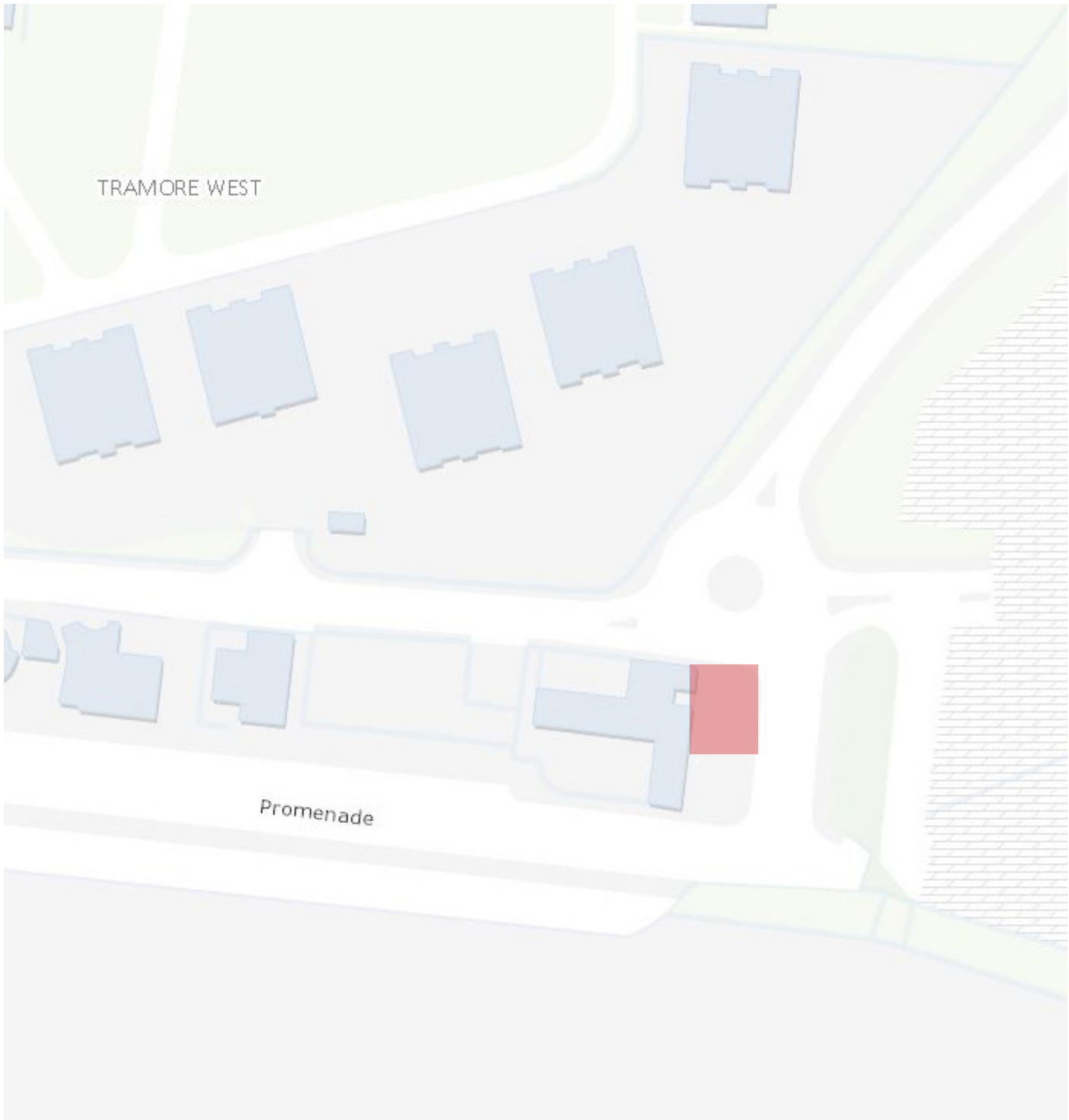
appendix A

osi Site Location Plan





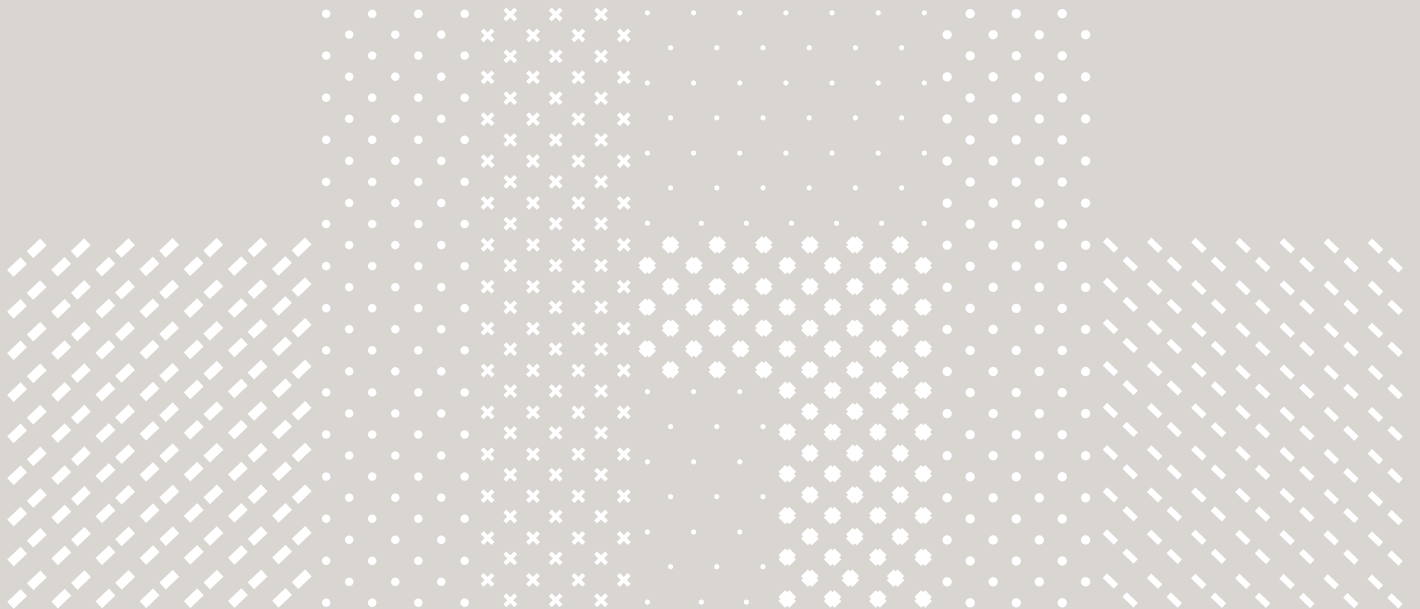
osi Map of Site Location. Scale 1:1,2500



osi Map of Site Location. Scale 1:1,000

appendix B

proposed drawings



Proposed Drawings (as included in Planning Application file)

ARCHITECTURAL

OSI Site Location Map	A-1.10	1:1000
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Proposed Site Plan	A-1.20	1:500
Proposed Floor & Roof Plan	A-1.20	1:100
Proposed Materials Plan	A-1.20	1:100
Proposed Sections	A-1.20	1:100
Proposed Elevations	A-1.20	1:100
3D Visualisations	A-1.20	nts

STRUCTURAL

Drain Plan	DP-01	1:100
Road Plan	RP-01	1:100