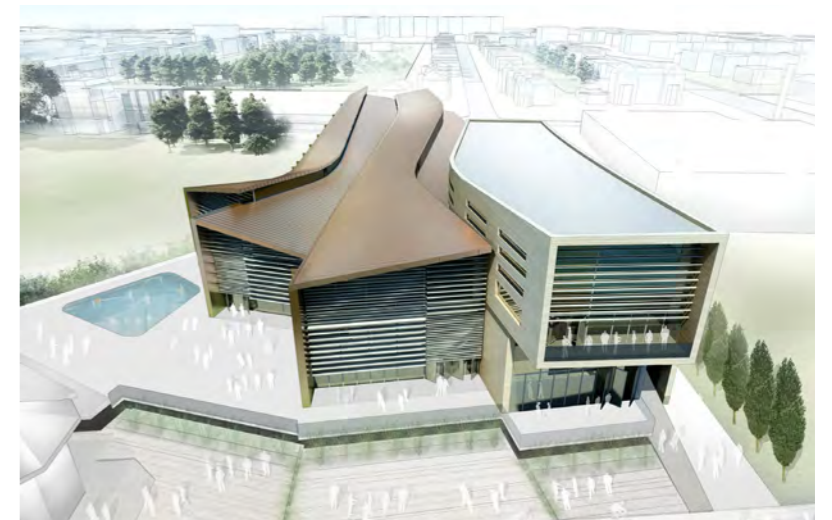




WilkinsonEyre.Architects



**Worthing Aquarena**

Planning Submission  
June 2010

**Worthing Aquarena**

## Worthing Aquarena

Report Title: Planning Submission

Job Name: Worthing Aquarena

Reason For Issue: Detailed Planning Submission

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| Rev No | Comments                  | Date       |
|--------|---------------------------|------------|
| P1     | Draft Planning Submission | 28/05/2010 |
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Worthing Aquarena



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1.0 Introduction

Worthing Aquarena

This design and access statement has been prepared to support the full planning application for the New Worthing Aquarena, on Brighton Road, Worthing, West Sussex, BN11 2EN and its associated public realm and landscaping works including a proposed extension to the current parking around the area known as the Beach House Grounds. The statement has been prepared by lead Consultant Wilkinson Eyre Architects with input from the wider design team. A full set of planning drawings are contained at the end of the design and access statement.







## 2.0 Background

## Worthing Aquarena



General view from the South - Competition Image

Wilkinson Eyre was appointed by Worthing Borough Council after winning an invited design competition in September 2009 to develop a scheme for the New Aquarena building. The building will house new swimming and health and fitness facilities for the public of Worthing. The facilities will include a café, competition pool, diving/learner pool, leisure pools with wet changing areas, a health and fitness suite with dry changing facilities, as well as flexible studio spaces and ancillary support spaces.

The intended opening date for the New Aquarena is February 2013.

## Worthing Aquarena

The project brief for the new Aquarena is to deliver a destination leisure facility that replaces the existing tired Aquarena and provide a new and exciting architecture to act as a eastern 'book-end' to the active beach zone of Worthing. It should be an exciting space that appeals to all age groups.

The facilities will include separate competition pools for diving and swimming; which should include a 3m diving, two 1m springboards and a 6 lane competition lap pool to comply with FINA & ASA standards. In addition to the competition facilities, leisure facilities include: pools, a flume, special water features, and steam & sauna rooms. Spectator seating for a minimum of 100 + people will overlook the competition pools. Ancillary support spaces include a wet changing village

The second major component to the brief is a Health and Fitness facilities; with a suite for 100 exercise stations, two multi use studio, three treatment rooms and ancillary staff/admin spaces.

An inviting lobby space including a reception and café should draw people into the facility from the landscaped entry piazza.

When the new facility is opened the existing Aquarena site will be redeveloped. As part of the brief for the site Wilkinson Eyre has been asked to investigate potential massing strategies to establish a masterplan framework for both sites.

Worthing's new pool will be a distinctive landmark, a 'destination', drawing in users from both the town and further afield and will be a sustainable development, responding appropriately to the natural environment of the seashore. The new pool will be an important anchor for the implementation of Worthing's Seafront Strategy, and help define the benchmark architectural quality for the new development proposed to replace the adjacent existing Aquarena site.

The principle objectives of the project are:

- Integration with the overall strategy for the seafront
- Regeneration within a seafront context
- The delivery of a complex programme of leisure facilities
- The creation of outstanding architecture
- Sustainability as a design driver
- Provide an affordable development for the Town of Worthing

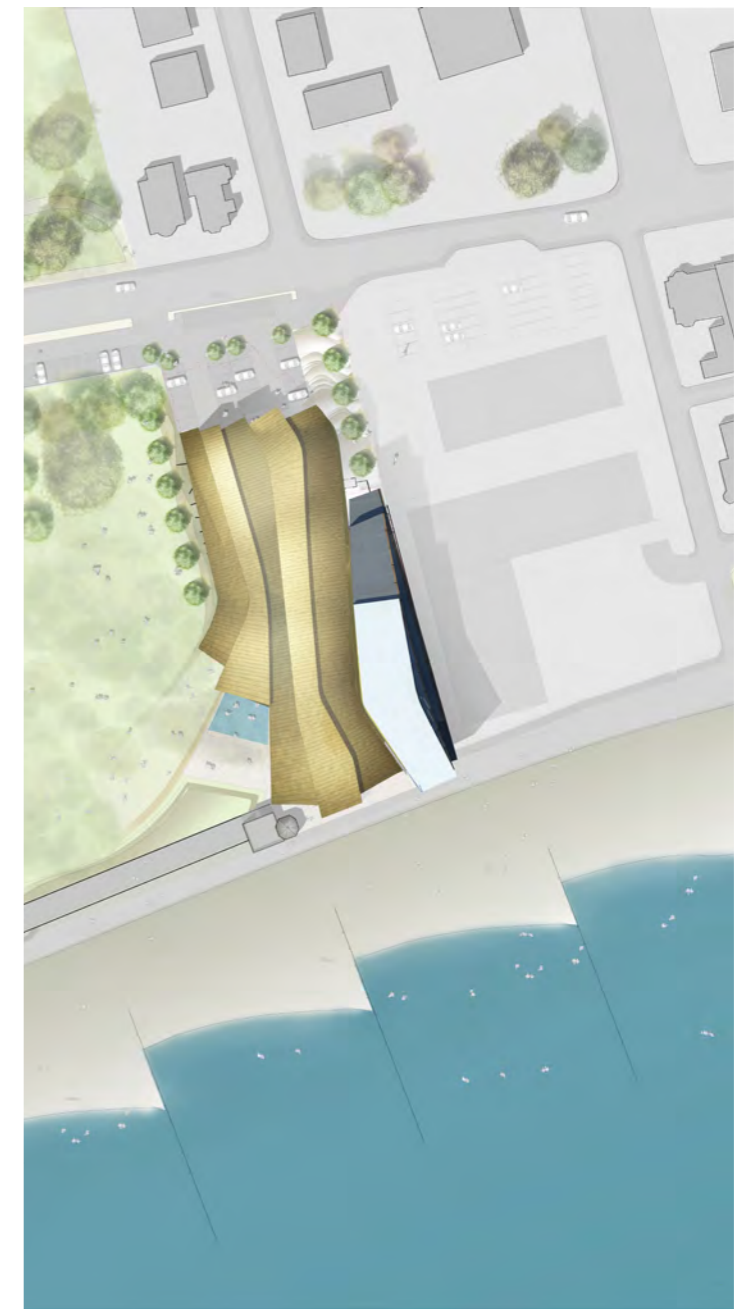
## 3.0 Brief and Objectives



Early Study of Leisure Pools overlooking the Sea



Early Study of Brighton Road Elevation



Early Roof Study

## 4.0 Planning Statement

## Worthing Aquarena

### 4.1 Planning Policy Statement

This statement sets out the planning assessment of the proposal. It assesses the proposal in the context of national, regional and local planning policy and guidance. A sequential assessment has been previously carried out for the Council in relation to PPS4, and a copy of this is retained by Worthing Borough Council and can be referred to if required.

The new Worthing Aquarena proposal is consistent with established local and national planning policy and guidance. These include:

#### National Guidance – Relevant Policies include:

PPS 1: Delivering Sustainable Development

PPS: Planning and Climate Change - Supplement to Planning Policy Statement 1

PPS 4: Planning for Sustainable Economic Growth

PPS 5: Planning for the Historic Environment

PPS 9: Biodiversity and Geological Conservation

PPS 10: Planning for Sustainable Waste Management

PPS 12: Local Spatial Planning

PPS 22: Renewable Energy

PPS 23: Planning and Pollution Control

PPS 25: Development and Flood Risk

PPS 25 Supplement: Development and Coastal Change

PPG 13: Transport

PPG 17: Planning for Open Space, Sport and Recreation

PPG 24: Planning and Noise

#### Regional Planning Guidance for the South East – Relevant Policies Include:

CH5 of the West Sussex Structure Plan

Worthing's Local Development Framework

Worthing Evolution

Worthing Seafront Masterplan Strategy

Sport England & the ASA

### 4.2 Statement of Community Involvement

The submission of the application for the proposal follows discussions with a wide range of stakeholders and statutory consultees, including:

Worthing Borough Council Planning Department  
English Heritage  
South East Regional Design Panel  
Members of Worthing Borough Council  
Worthing BC Design & Conservation Architect  
Members of the swimming and diving clubs  
Members of the public  
The client and end users

The proposal has been available for public viewing and feedback forms were provided on the Worthing Borough Council website, since September 2009, updated in March 2010. The scheme has also been on public exhibition at the Town Hall and the Existing Aquarena from 30 April 2010 until the end of May, where feedback forms have been provided. Comments from both of these sources are included in the appendix.

A design review was held with the South East Regional Design Panel on 11 November 2009, also in attendance were, English Heritage, Head of Design review and Design Advisor from Kent Architecture Centre, and Council Members of Worthing Borough Council.

A meeting took place with James Appleton, Executive Head of Planning, Regeneration & Wellbeing and with Richard Small the Design & Conservation Architect on 27 November 2009.

Consultation also took place with James Appleton, Executive Head of Planning, Regeneration & Wellbeing for Worthing Borough Council and with members of the Steering Committee on 27 November 2009, 16 March 2010, 26 March 2010, and 23 April 2010.

Worthing Borough Council have also consulted a number of existing users of the Aquarena, including the diving and swimming clubs (minutes of this meeting are included in the Appendix), the current Health and Fitness staff and other specific users groups.

The feedback arising from the on-going consultation was generally favourable and complimented comments made by the Client Group. As a result of the feedback obtained, the following changes occurred to the design:

Redesign of the west elevation to respond to comments with English Heritage regarding the buildings relationship with Beach House Grounds with the incorporation of a low level window and projected window elements at high level.

Simplification of the roof form by reducing the number of 'strips' from five to four in response to comments at the SERDP presentation.

The exercise studios were increased in size after the existing instructors identified the need for larger rooms to accommodate anticipated class numbers.

The Exercise Studio were increased in size after the existing instructors identified the need for larger rooms to accommodate anticipated class numbers.

Confirmation of the pool profile is still being reviewed with the swimming club.

The depth of the learner pool was established to accommodate 3m spring board diving, based largely on input from the centre's existing users to provide the same level of diving as the existing Aquarena.

The interface between the building and the promenade and Beach House Grounds, underwent extensive review with the planners and parks department. The planting strategy was altered to suit the Parks department's maintenance requirements and the planners influenced the boundary security provision.

The changing provision within the wet changing village increased due to the desire from many members of public and the pool users to provide more changing spaces.

The Client Group formally approved the proposals for the Worthing New Pools project, for the purpose of the submission of a Full Planning Application.

Details of public consultation can be found in the Appendix of this design and access statement.

### 5.1 Existing Site

The site is located along the seafront approximately 0.8km to the east of the town centre between Brighton Road and Beach Parade, is bound by Brighton Road to the north, Beach House Grounds to the west, Beach Parade to the south and the existing Aquarena building to the east.

The application site boundary for the new Aquarena consists of two distinct zones on either side of the Beach House; parking extension west, extension east and the new Aquarena site.

Parking extension west consists of 0.2558 hectare bound by Brighton Road to the north and South between the Beach House Grounds and the Denton Gardens.

Parking extension east and the new Aquarena site consists of 0.7142 hectare bound by Brighton Road to the north and Beach House Grounds and Beach Parade to the south and the existing Aquarena building to the east.

The site is under the ownership of Worthing Borough Council, and is currently part of the existing Aquarena outdoor leisure facilities and adjacent park: occupied by a public splash pool with single story kiosks, a backfilled boat lake which extends to the east beyond the site boundary.

The main site boundary also includes to the southeast of Beach House Ground, Peter Pan Playground.

Across Brighton Road to the north: are small scale 2-3 storey residences of mixed architectural styles and materials, the Farncombe Conservation Zone and Madiera Ave which terminates near the eastern edge of the site.

To the south of the site are 3m high beach chalet structures that extend west along Beach Parade acting as a barrier between the site and the beach. Made of brick, concrete and flint stone construction dating from 1938. These chalets are partly occupied during the year and are in need of modernisation.



Map of Site

## 5.0 Existing Site Analysis



Site Orientation

## Worthing Aquarena

The solar orientation is ideal for leisure activities with the opportunity for quality outdoor space along the southern edge of the site. The site's strong relationship to Beach Parade facilitates pedestrian access from Worthing town centre and reinforces Worthing Sea Front Masterplan Strategy.

Vehicular access to the site is exclusively from Brighton Road. The key predominant existing pedestrian movements are east/west along Beach Parade and along Brighton Road. Through the site, current pedestrian movement is restrained due to the miscellaneous structures of the Peter Pan playground, fences, kiosks and the enclosure of the splash pool.

This site is an ideal location for a new public facility with leisure functions; directly facing the sea, surrounded by public parks and very close to the town centre, it offers the catchment area needed for this type of activity, reducing the need to use cars but also creating a new 'leisure pole' to the East of the "Active Beach Zone", as defined in the town masterplan, bringing activities along the east side of Beach Promenade, beyond its current "busy zone".



Scale of buildings across Brighton Road

### 5.2 Worthing Sea Front Masterplan Strategy

Worthing Borough Council recognised that creating a new leisure facility on this site would require taking the larger context into consideration, studying the impact of the new development to its surroundings. They also acknowledged the importance of setting a standard and guidance for any future development in the area particularly on the site of the existing Aquarena site. Wilkinson Eyre Architects, beyond their commission for the design of the new swimming pool for Worthing, has been commissioned to prepare some early masterplanning studies for the adjacent site, illustrated in Section 15.

The site for the new Aquarena is on an 'opportunity site', at the eastern gateway of Worthing's Seafront Masterplan strategy. As a landmark destination, the building will visually provide a book-end to the active beach zone.

The special relationship of the site with Beach House Grounds and need to redevelop the current site of the existing Aquarena provides an opportunity to establish a Masterplan Framework that extends beyond the site boundary and ties into Worthing's larger aspirations.

With the eventual redevelopment of the adjacent site Worthing has the opportunity to influence the context outside the immediate site boundary. Through massing, quality of material and scale, a precedent can be set that provides a design framework for other future developments. By pulling the entrance deeper into the site for the new and current Aquarena site with a shared piazza for example, a public realm strategy would be established that enhances the quality of Brighton Road, and increases its appeal as a pedestrian route.



View towards Site From Brighton Road



View towards Site From Worthing

## 5.0 Existing Site Analysis

## Worthing Aquarena



View towards Site from West



View along Beach from East

The pools are expected to draw people from a larger catchment area than the existing facility does, it is therefore necessary to provide suitable access for the anticipated number of visitor as well as providing adequate parking facilities. Working with the Council, Wilkinson Eyre Architects has established a landscaped car park strategy that enhances the existing parking zone along Beach House Grounds, fronting on Brighton Road but also by redeveloping the disused tennis courts on the western edge of the park.

Working with the Aecom Transport consultants and Worthing Council, the new car parking arrangement will aim to enhance the boundaries of Beach House Grounds and improve the setting of this Listed Building.

One of the main reasons for this commission was the necessity to provide a coherent approach in transportation terms, i.e.: the current site area is too tight to provide the necessary car parking spaces to operate the new swimming pool. Therefore it was necessary to create additional car parking spaces to the neighbouring sites. Also, the town was keen to make this area a new seafront "pole of attraction", in other words to create a "seafront car park" rather than only a car park for the swimming pool.

Another key reason for the need to define a masterplan framework for this area is the close relationship of the new scheme with the adjacent existing Aquarena site. This site will be redeveloped when the new swimming pool is operational and therefore there is a need for this proposal to be coherent with the new pool building.

The new adjacent development, whether it will be of a residential, hotel or commercial nature, will have to relate in massing term with the new swimming pool but also will need to respond to the public realm strategy set-out by the new development. This site should offer the maximum development opportunities while respecting the architecture of the new public building; without overpowering any of the other adjacent existing residential properties.

Finally, the existing Aquarena is totally detached from its surroundings and does not take advantage of its exceptional location, with very limited views from the inside out and from outside in. There is an opportunity to set up a new masterplan principle to recreate an urban connection between the seafront and Beach House Grounds, by opening the new development and improving the visual connection/permeability between the park and the beach.

5.3 Listed Buildings: Beach House

Adjacent to the site within the Beach House Grounds is Beach House, a Grade II\* listed building built in 1820 designed by John Rebecca, originally known as the Marino Mansion a regency beach side villa. The Beach House Grounds were purchased in December 1927 and laid out in 1937-1938.

In 1917, playwright Edward Knoblock bought the house. His visitors included Arnold Bennett, J. B. Priestley, and Sir Compton Mackenzie. Knoblock refurbished the interior and forecourt of the property to the designs of Scottish architect Ormrod Maxwell Ayrton, while displaying furniture from the Thomas Hope collection he had bought from a sale at Deepdene in Dorking, Surrey.

This historic building is characteristic by its imposing architecture: sober, well proportioned, using only one visual material and color which gives its presence and have made it a local landmark. Any new development, to respect its setting will have to respond to its height, building alignment and volumetric proportion.

But the architectural significance of the building also relates to its curtilage: care and attention needs to be given to the entrance and surrounding pillars/piers, Beach House Grounds itself (which by its simplicity emphasizes the dominant aspect of the building) as well as Beach House Park on the other side of Brighton Road, which is a flamboyant park surrounded by historic metal fences. The frontage of the Beach House along Brighton Road needs the appropriate degree of enclosure through landscaping or walling, detail of this will need to be agreed with the Council.

The proposal for the new swimming pool development which will be detailed in the next section of this document will describe a set of architectural principles to respects the surroundings of the historic building by developing:

- A landscaping strategy for Beach House Grounds,
- Mediating the massing of the building in height and scale,
- Setting back the new development from Brighton Road.
- Redefining the edge of the Beach House Grounds with the west elevation of the new building

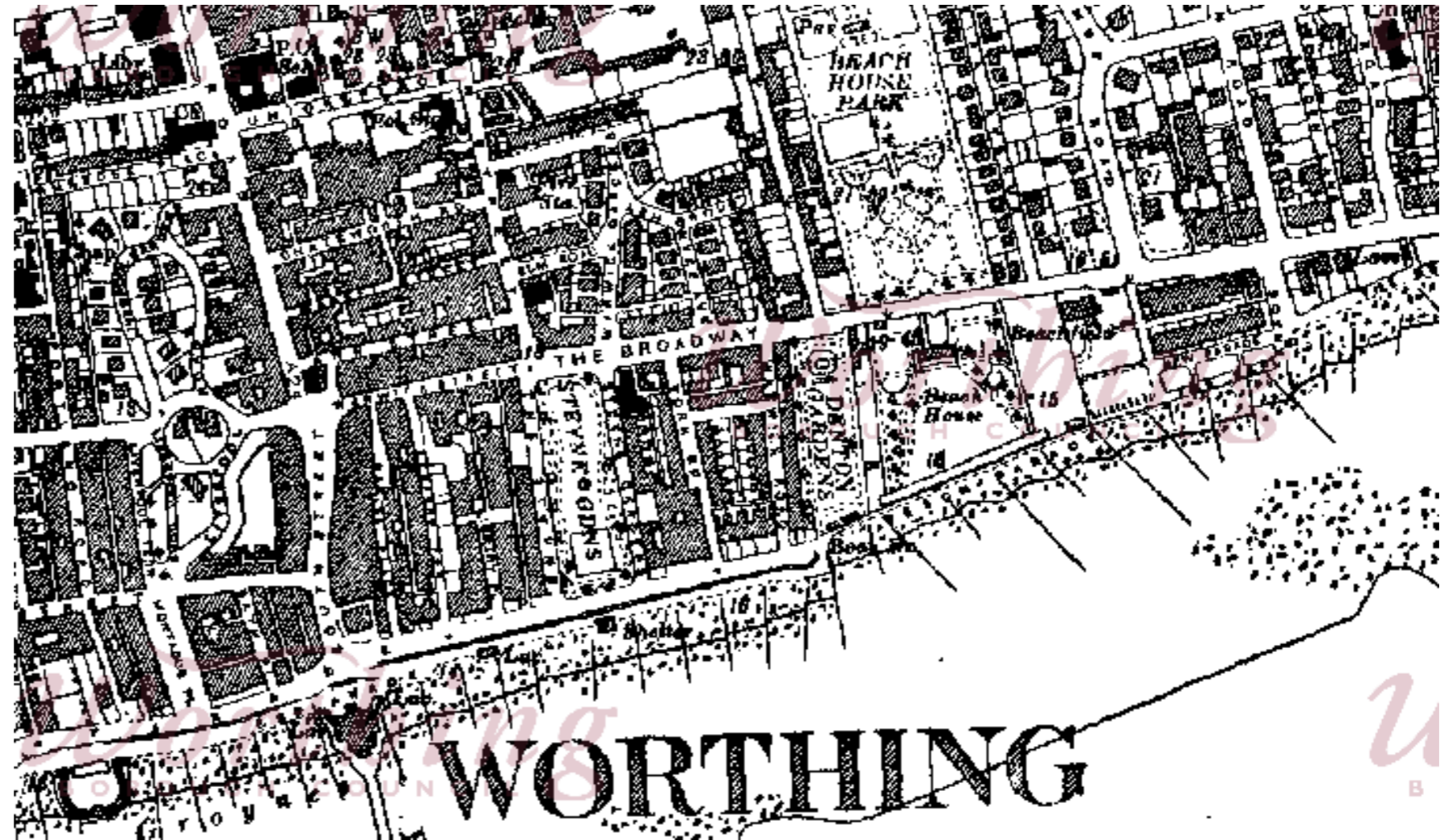
The history of the Beach House and the surrounding Beach House Grounds is detailed in the Heritage Statement.



Beach House Grade II \*



Beach House from Brighton Road



1932 Map of Beach House Grounds



## 5.0 Existing Site Analysis



View of Beach House Grounds - Peter Pan Playground



The beach chalets that is adjacent to this eastern most seafront kiosk will be removed to allow for the proposed development. The kiosk walkthrough is anticipated to be converted for cafe use.



Beach Chalets to be Demolished

## Worthing Aquarena

### 5.4 Farncombe Conservation Area

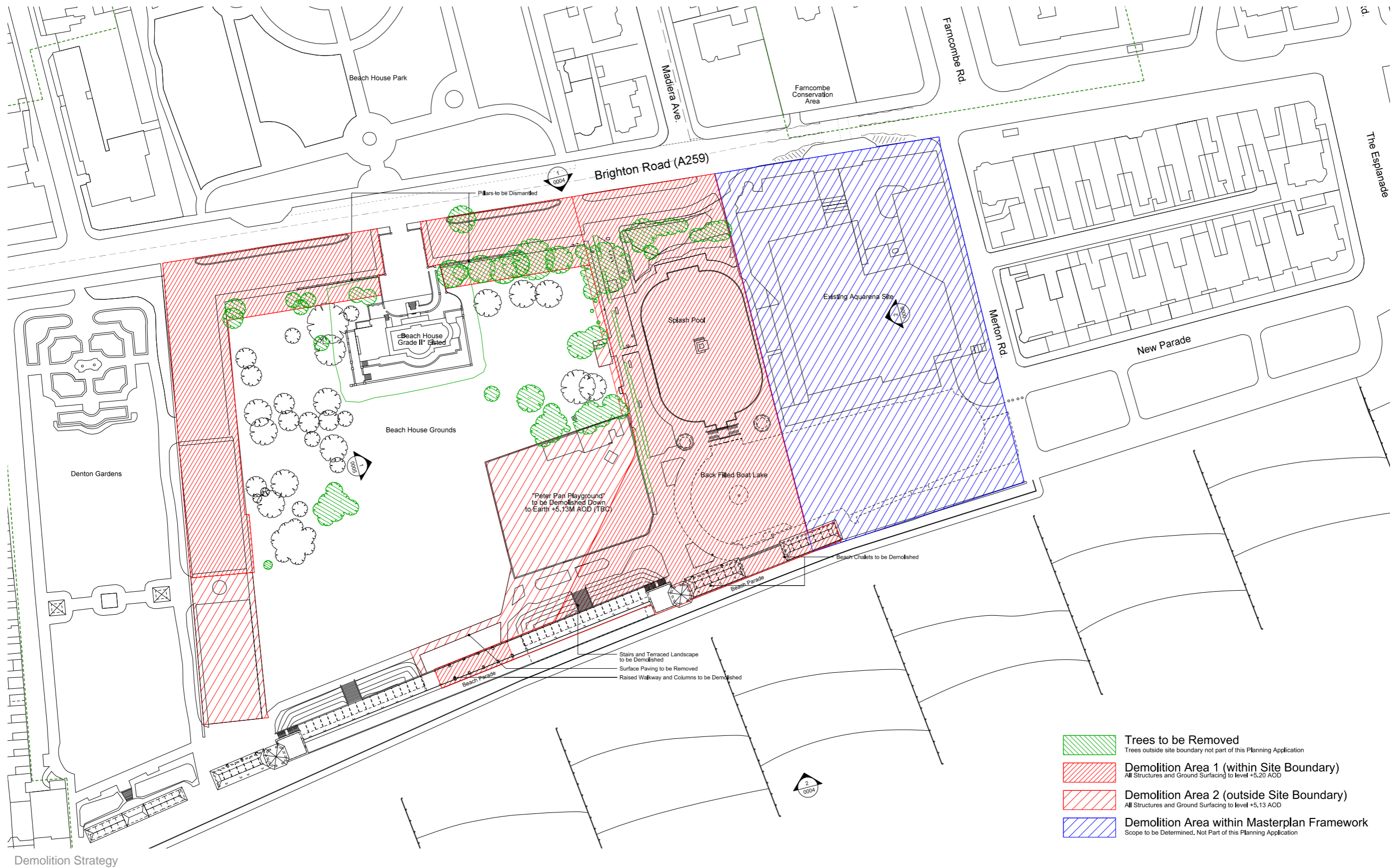
To the northeast of the site is the Farncombe Conservation Area, this area is mainly composed of residential properties, full of characters of two to three storey heights, with well proportioned front gardens and the main streets are planted with mature trees. The roofscape is also important as it create a set of fragmented semi detached or detached volumes which forms the “grain of the urban fabric” of the residential area of East Worthing.

The new development will need, by its architectural response, to relate again in scale, height and volume to this immediate surrounding typology.

### 5.5 Existing Buildings / Demolition within Site Boundary

To accommodate the new Aquarena construction, it is anticipated that all the existing structures within the site boundary will need to be demolished. The onsite constructions are: three kiosks, two beach hut/chalet pavilions and two toilet facilities all single storey, the back filled boat lake under a layer of lawn, and the paddling pool structures, a fountain and pedestrian bridge all made of concrete.

Outside the site boundary is the ‘Peter Pan Playground’ with various removable structures and concrete ground covering which will require removal as part of the extended landscaping strategy. It is anticipated that none of these structures are of specific significance; we have been advised by Worthing Borough Council that the demolition of them is non-contentious. It is understood that none of the removals of structures would impact the surrounds of the listed building.



## 5.0 Existing Site Analysis

## Worthing Aquarena



There are three kiosks within the site boundary that will be part of the demolition strategy.



One male and one female toilet facilities within the site boundary will be part of the demolition strategy.



The existing splash pool and pedestrian bridge within the site boundary will be part of the demolition strategy.



The centre portion of the raised walkway is proposed to be removed to allow increased connectivity to the beach and security for the raised terraces.



The existing landscape mound and stair access to the eastern raised walkway will be removed and incorporated into the raised terrace strategy for the proposed development.

## Worthing Aquarena

The initial conceptual site strategy was to respond to the unique conditions of being between a busy road of small scaled buildings and the spectacular seafront, with open green space defining the western edge.

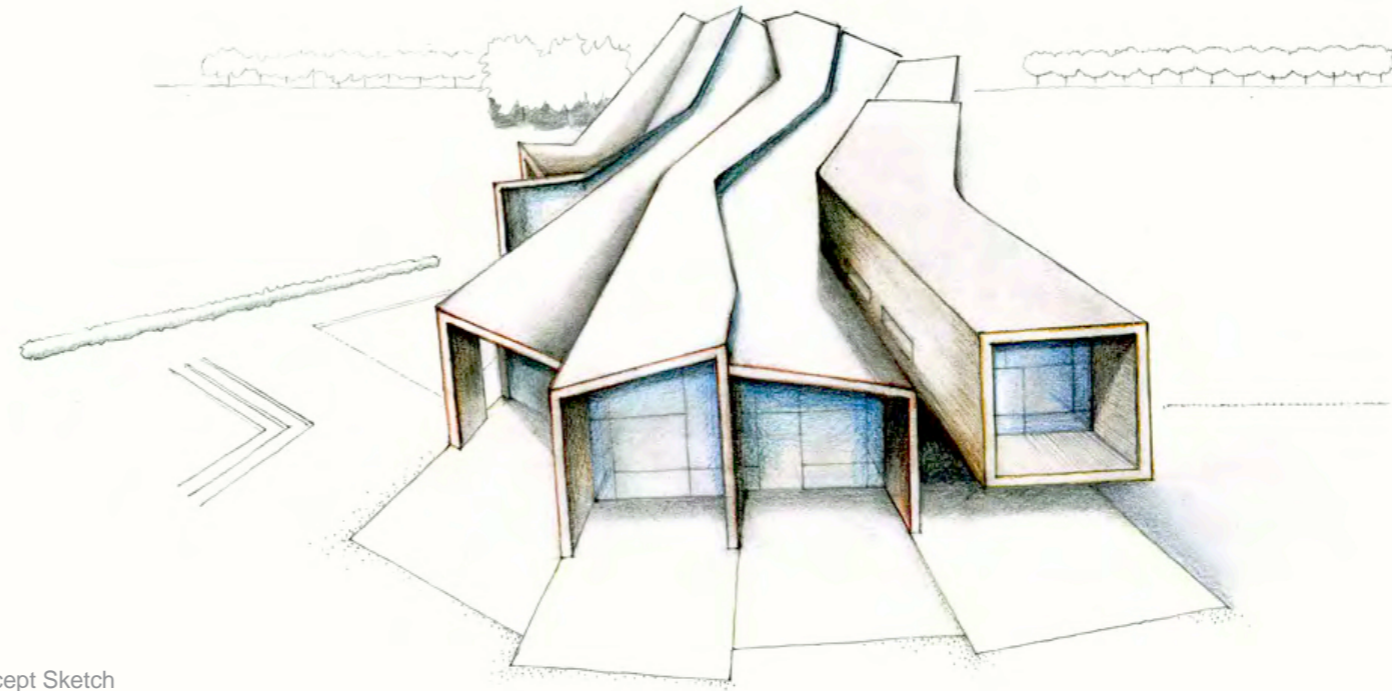
Our approach is to connect Brighton Road to the sea, fragmenting the building mass into a series of smaller forms that run north to south:

Responding on one side to the fragmenting scale of the residential properties along Brighton Road, practically rectilinear to reflect the competition pool geometry and on the other end, opening up towards the sea, offering maximum views and allowing a “free” and exciting geometry for the leisure pool.

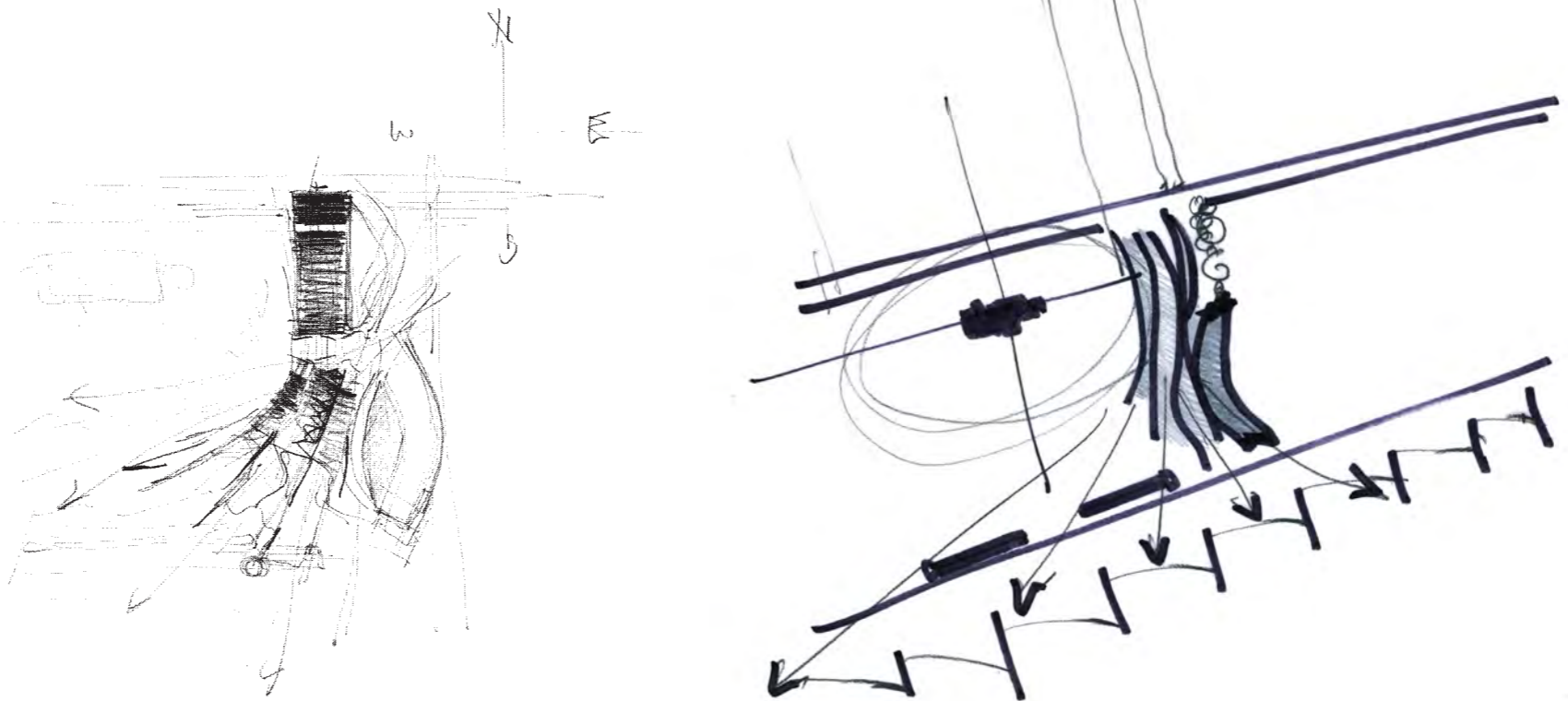
These sinuous parallel curving lines echo the wind swept lines in the sand and extend towards the sea like the defensive groynes that run perpendicular to the seafront. These lines provide the primary spatial and structural spines of the pool hall roof form which fold down to form open ‘tubes’ of space that direct the occupants view. The roof forms curve around the park to accentuate the landscape setting and provide a sheltered zone to the Beach House Grounds. The Health & Fitness building mediates these geometries back into the orthogonal east edge of the site, providing a building line that is more urban.

The fragmented shapes created help to reduce the overall scale of the building, relating it to the massing of the surrounding developments, getting away from the non contextual “municipal swimming pool shed” typology.

## 6.0 Concept/Site Response



Concept Sketch



Early Concept Sketches

## 6.0 Concept/Site Response

## Worthing Aquarena



Site Set-Backs

The roof forms fold down to create open ended tube like structures that reinforce the north/south directionality of the site, revealing the leisure activities within, and providing high level light into the pool hall. To the north along Brighton Road the diving facilities are on display to entice visitors to take part in the activities of the Aquarena. At the south the open ended forms create a strong relationship to the seafront linking the pool activities with the activities of the beach.

At the south end, raised terraces extend beyond the volume of the building creating an artificial raised beach area that connects the building with the beach. The raising of the ground floor by approx 1.5 meters allows for improved views of the beach over the existing beach chalets. The extension of the leisure waters to the external terraces reunites the internal pools to the seafront.



Breaking Down the Facade Along Brighton Road

## Worthing Aquarena

We have set back the building facade from Brighton Road, aligned with the Beach House north elevation in order to respect the setting of the Listed Building and to provide a comfortable drop off area/ vehicle access zone and public piazza needed for a new civic facility.

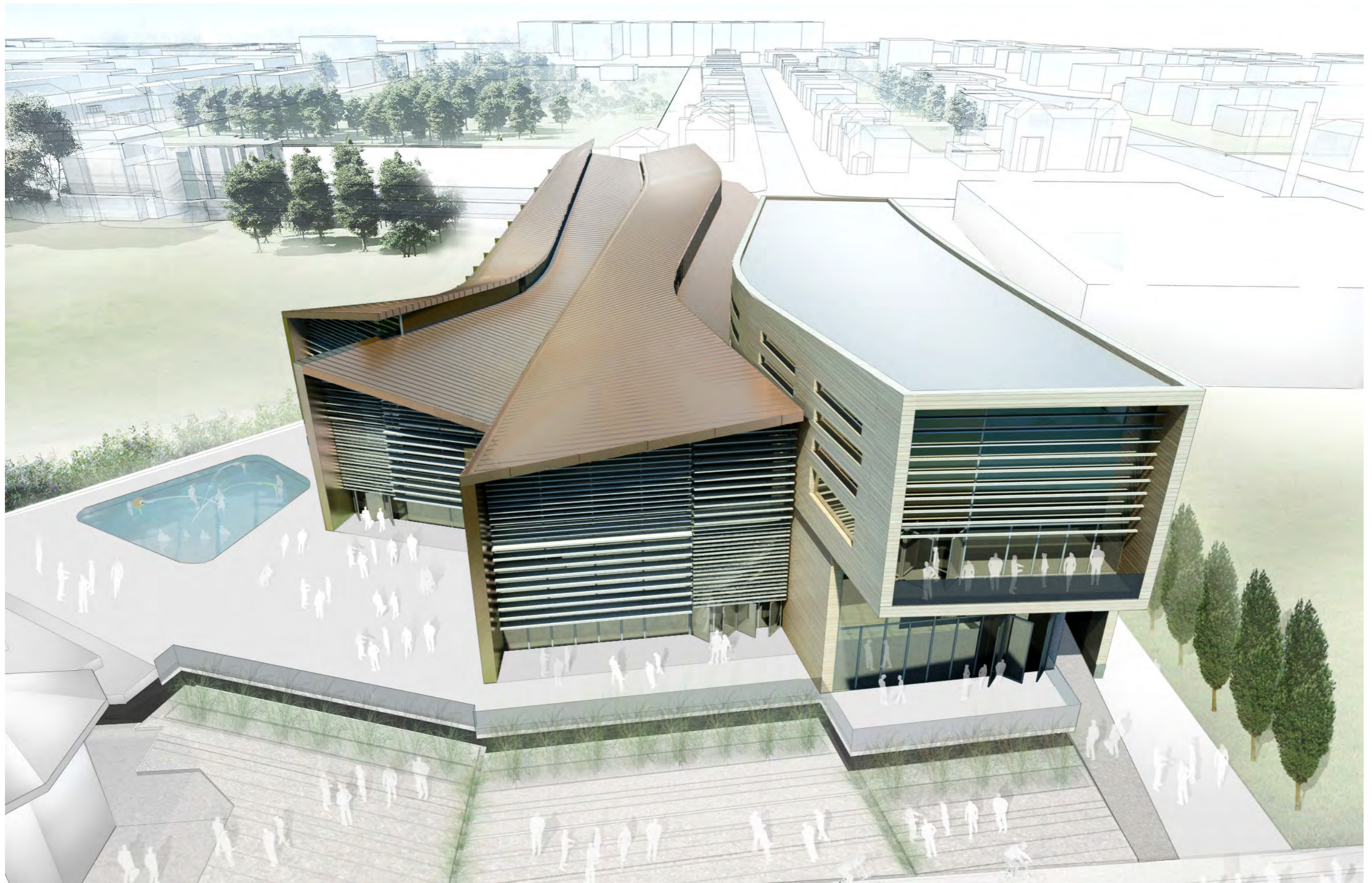
The western façade of the building pays respect to Beach House Grounds by helping to redefine the eastern boundary of the park. The roof profile dips down at its mid point and rises up at the north and south to reflect the diving and leisure pool volumes; this profile provides variation in the profile of the façade and is reinforced by the varying spacing in the window modulation. A low window strip at pool side allows visitors to catch glimpses of the activities within and provides a visual connection between the competition pool and Beach House Grounds.

In addition to the main building concept, we are proposing to open the centre portion of the beach chalet high level walkway, this will allow for the eastern half of the raised walkway to remain accessible from the park and the western portion to be secured within the raised terraces of the development. The primary purpose is to open up views to the sea from the park, restoring the visual relationship of the Beach House with the seafront, improving the setting of the listed building.

## 6.0 Concept/Site Response



View of the Proposal from the Raised Walkway



The overall form and massing of the building responds to the uses of the leisure activities. The building can be seen as two parts; the pool hall form of the curvilinear lines and the more geometric form of the reception, changing facilities and health and fitness wing. The two forms complement each other by their material differences; one as a copper form complemented by the other timber clad form, both open ended tube forms relating to the site conditions.

The pool hall form is created by the diving and competition pool's rectangular form which is encased by the predominantly rectangular plan form of the building which expands out towards the sea responding to the free flowing forms of the leisure pools. The roof profile dips down to create a volume that opens up to Brighton Road and the sea while creating generous internal spaces for the two separate pool halls. The roof height along Brighton Road is dependent on the plummet height requirements for a 3m high spring board diving pool, while still respecting the height of the adjacent Beach House.

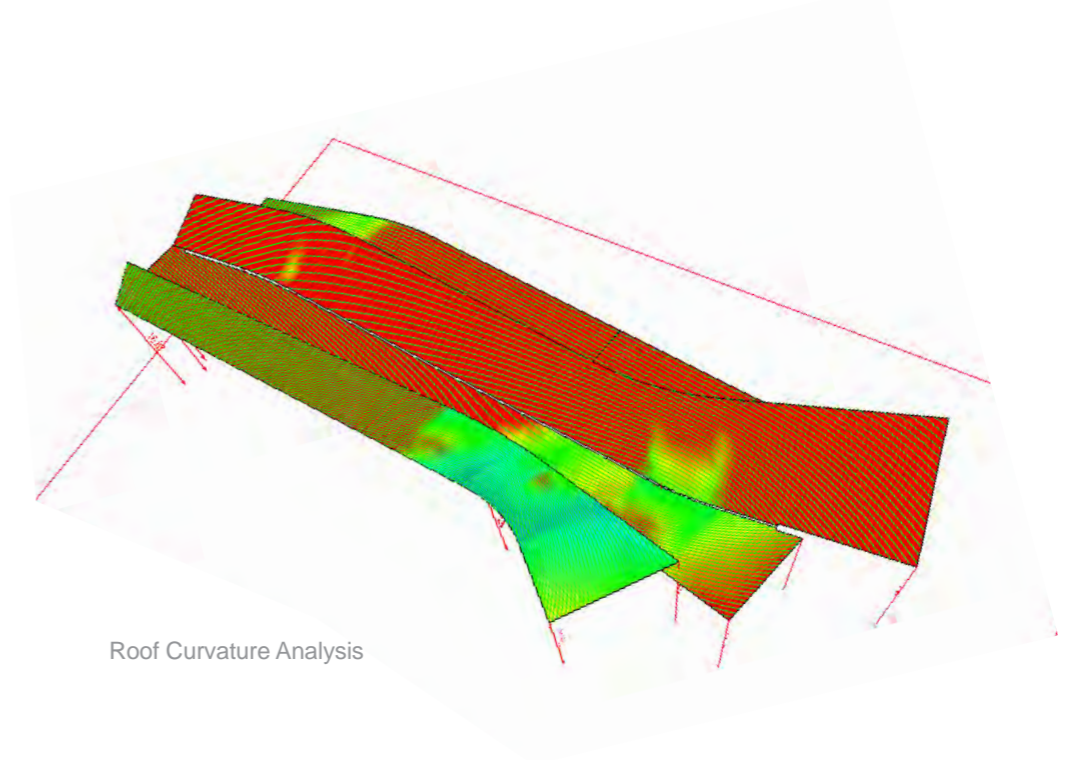
The health and fitness wing mediates between the straight line of the east site boundary edge and the curvilinear pool form, through a series of geometrically determined curved forms of radius' and straight lines. It is set back from Brighton Road to provide generous entrance piazza. This form efficiently contains the various programmatic uses within of entrance, reception, changing facilities, health and fitness suite and studios. The overall mass steps up vertically as it rises towards the sea, providing a 'book end' to the development when seen from the western beach approach of Worthing.

The whole of the ground floor is raised above the natural ground level by approx 1.5m to take advantage of views to the sea, and to maximize the efficiency of the pool and basement construction. Elevating the ground plane also addresses potential long term flood risks.

The average width of the pool hall roof is 20m at the north end, made of four 4 copper strips 4-7m wide which undulate 88m towards the sea and flare out to a 30m wide capturing the spectacular views of the sea with the fully glazed 10m wide glazed walls. These strips, 14m tall at Brighton Road sloping down to 10m at the mid point then back up to 13m at the sea, run parallel to the 15m wide timber form that steps up from 8.5m at the lobby steps and slopes to 15m towards the sea and cantilevers up towards the sky in a picture frame volume, a dramatic architectural gesture reaching towards the sea. The timber clad volume has thin window compositions that take advantage of views of the sky along the eastern façade and panoramic views of Worthing on the west façade.

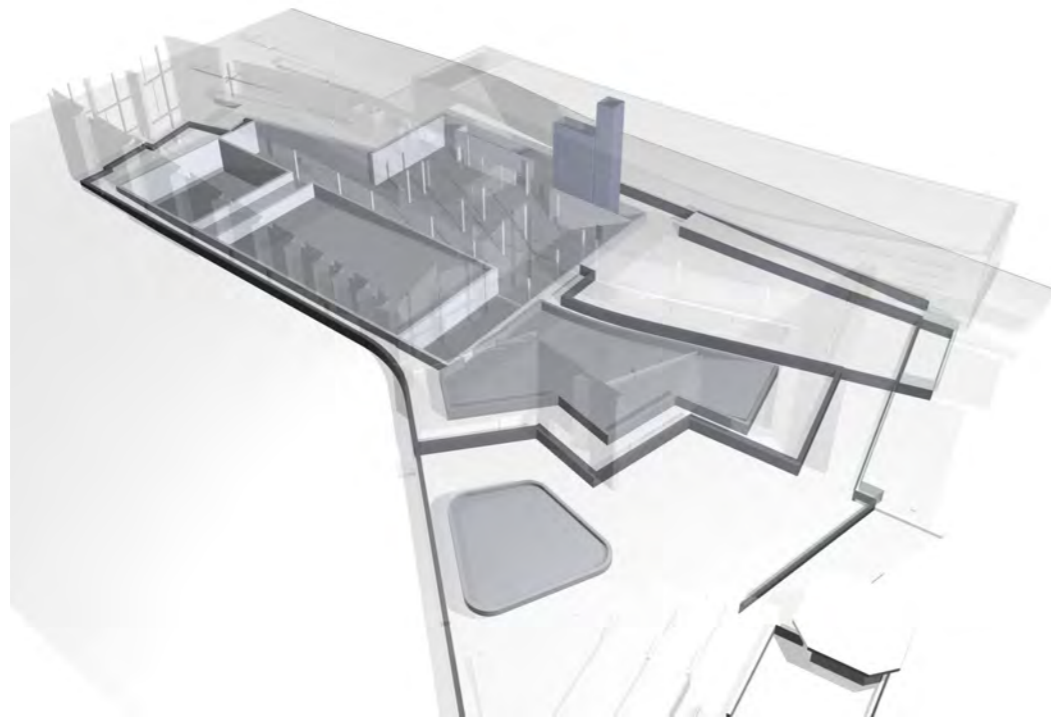


Conceptual Model

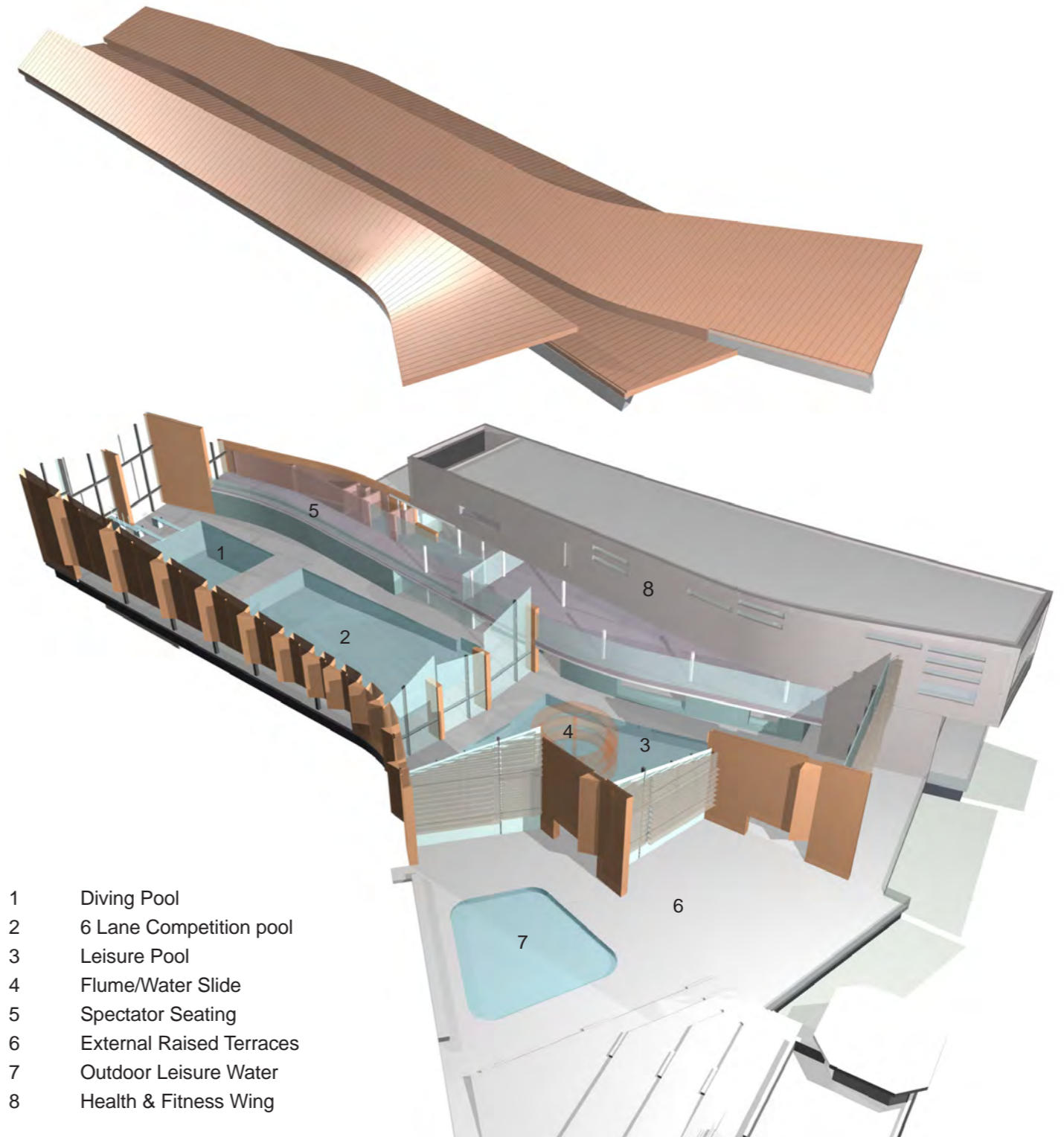


Roof Curvature Analysis





Basement Axonometric



- 1 Diving Pool
- 2 6 Lane Competition pool
- 3 Leisure Pool
- 4 Flume/Water Slide
- 5 Spectator Seating
- 6 External Raised Terraces
- 7 Outdoor Leisure Water
- 8 Health & Fitness Wing

Exploded Axonometric

# Worthing Aquarena

## 7.0 Building Form and Massing

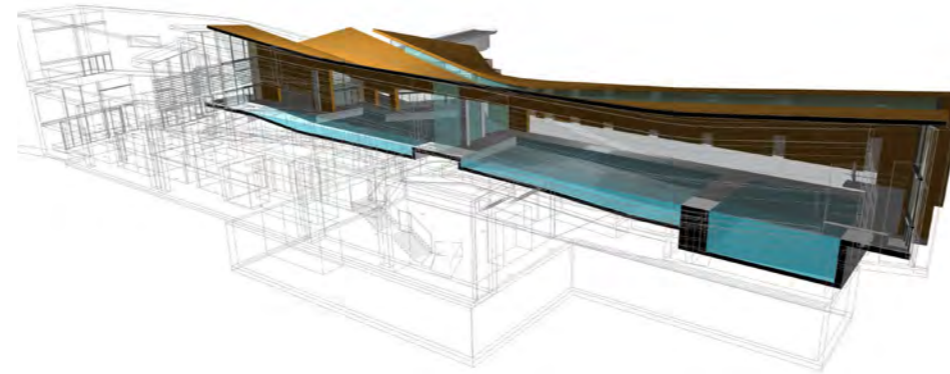
Since the competition we have been working closely with the client and the design team to develop a technical brief that meets the aspirations of the new Aquarena. The aim has always been to retain the conceptual excitement held within the competition scheme.

Changes to the scheme have focused on refining the overall size and shape of the building, concentrating on one end to firm up the pool hall roof form and respond to the developing brief of accommodation. Originally the roof was composed of five 'strips' over an eight lane pool, as the ultimate size of the pool has been reduced down to 6 lanes the roof form has been reduced down to 3 'strips' with spectator seating defining a final fourth 'strip'.

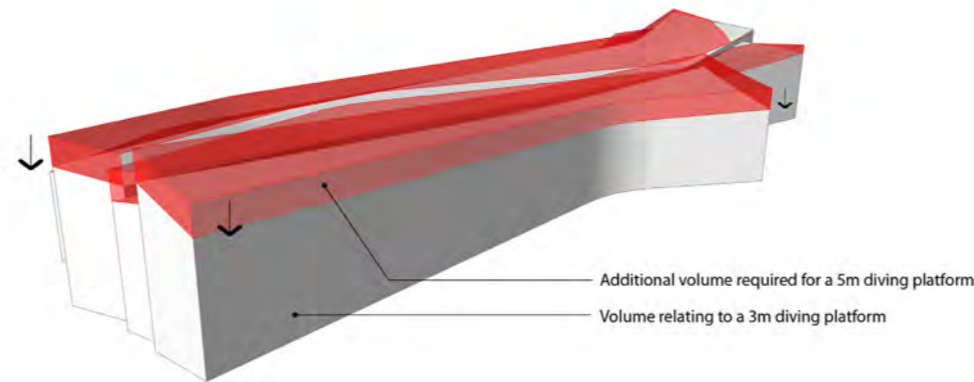
The confirmation of the diving pool size, the height of diving boards, and the leisure pool shape and components, have all contributed to finalise the overall shape of the copper clad set of volumes.

The same form refinement was applied to the Health and Fitness timber clad volume, with the analyses of the detailed client needs for this activity as well as the requirement for the main "changing village".

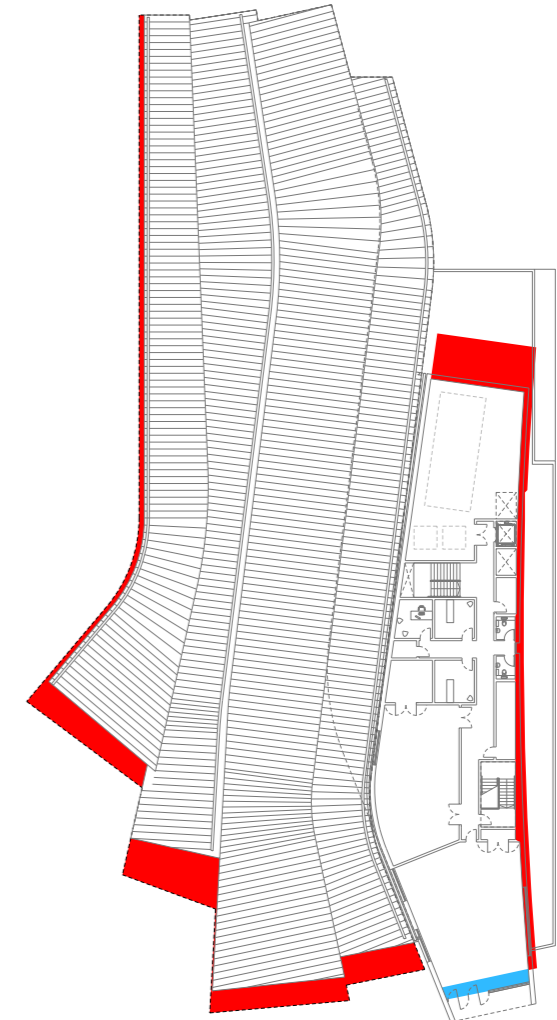
Through that process, the building footprint has been reduced to better sit on site, creating friendly and necessary external usable spaces.



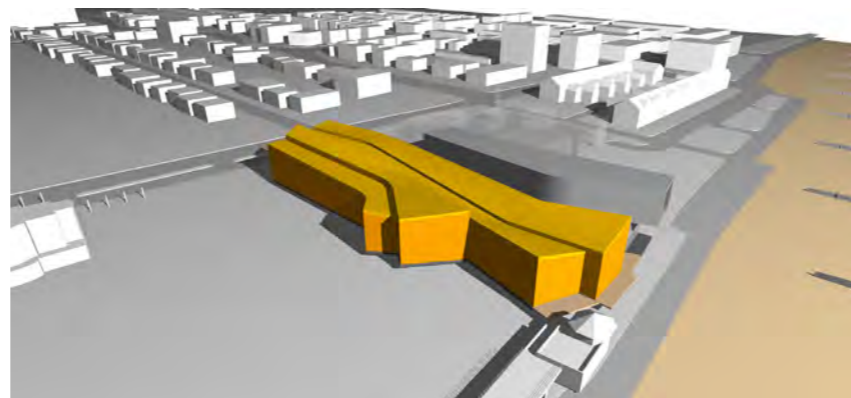
Early Volume Study: Roof to Pool Relationship



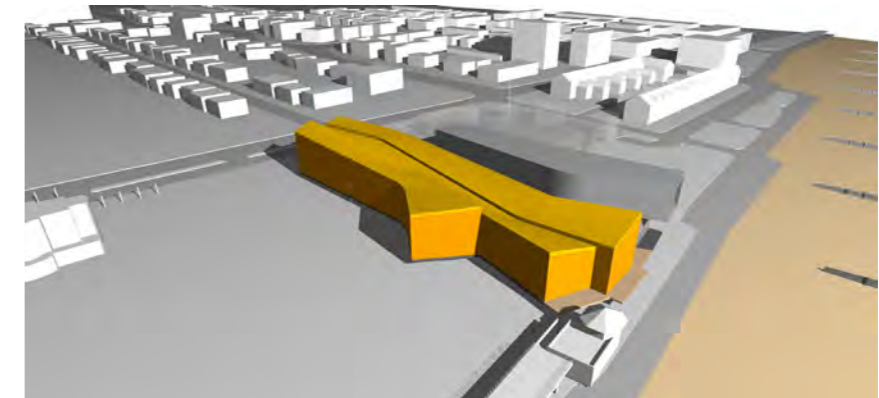
Height Reduction Study



Plan Area Reductions



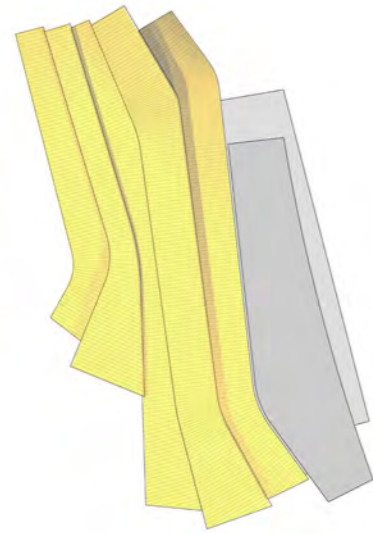
Five 'Strip' Massing Study



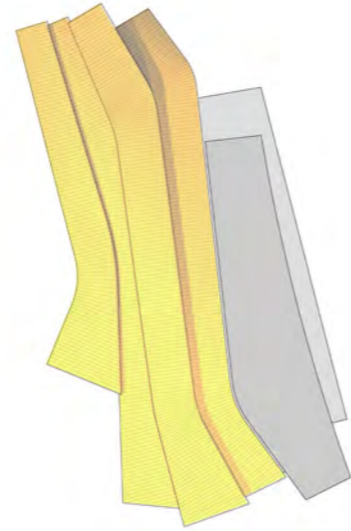
Four 'Strip' Massing Study

## 7.0 Building Form and Massing

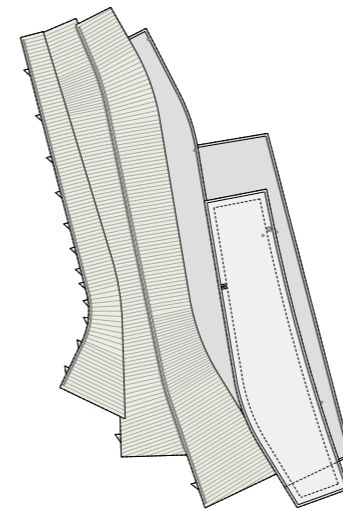
## Worthing Aquarena



Five 'Strip' Roof Geometry Study



Four 'Strip' Roof Geometry Study



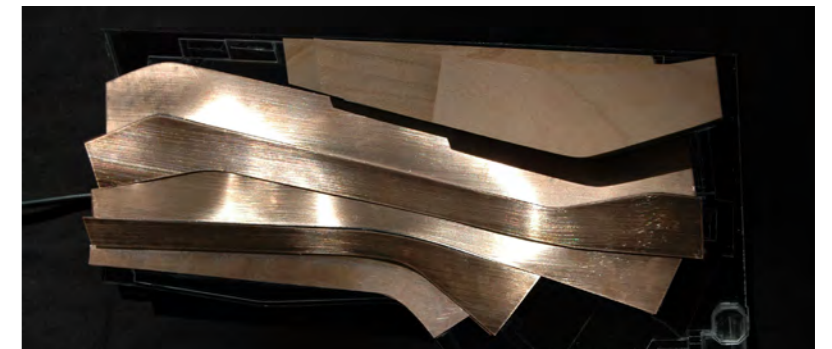
Current Roof Geometry Study



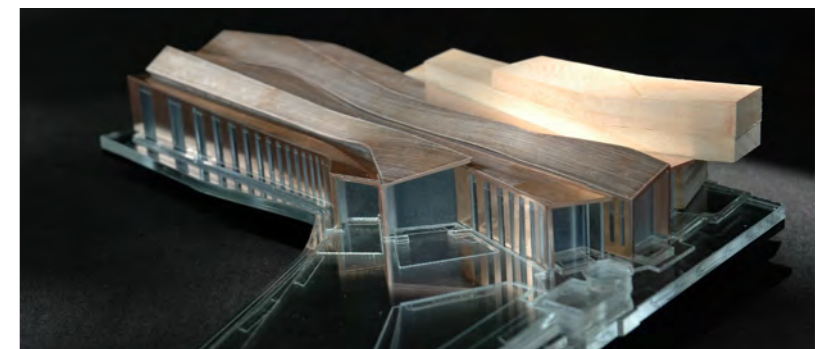
Conceptual Model South Facade



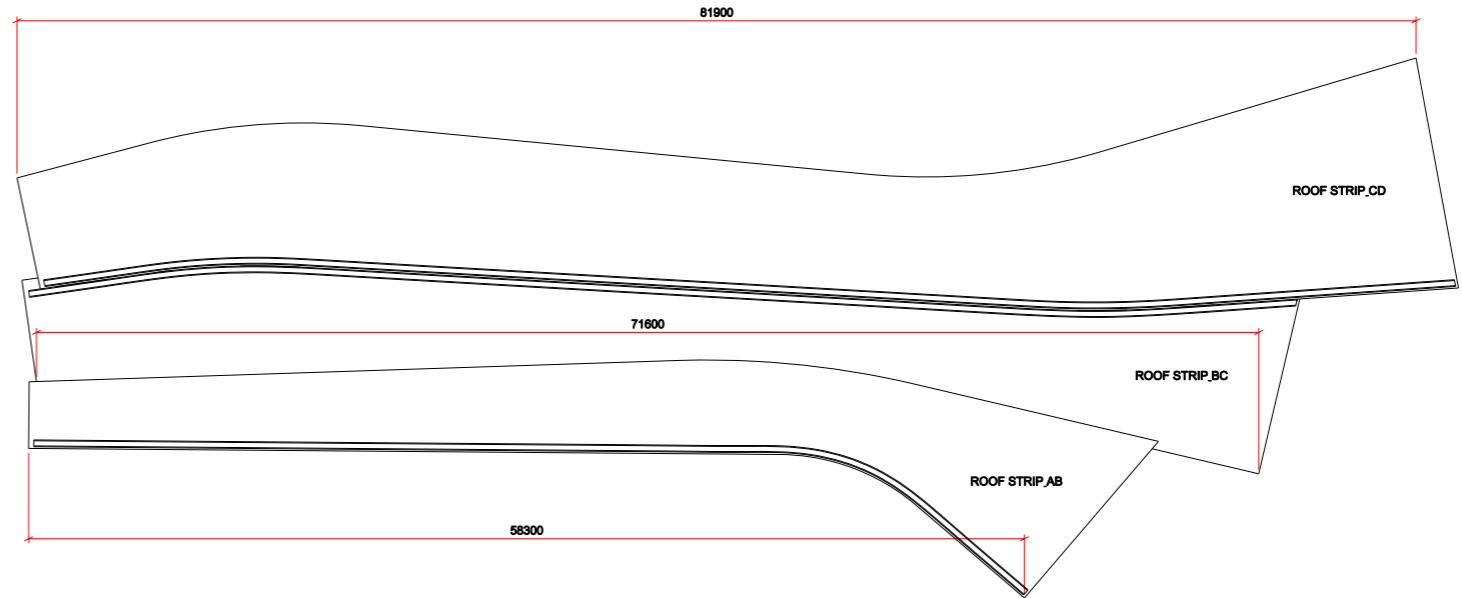
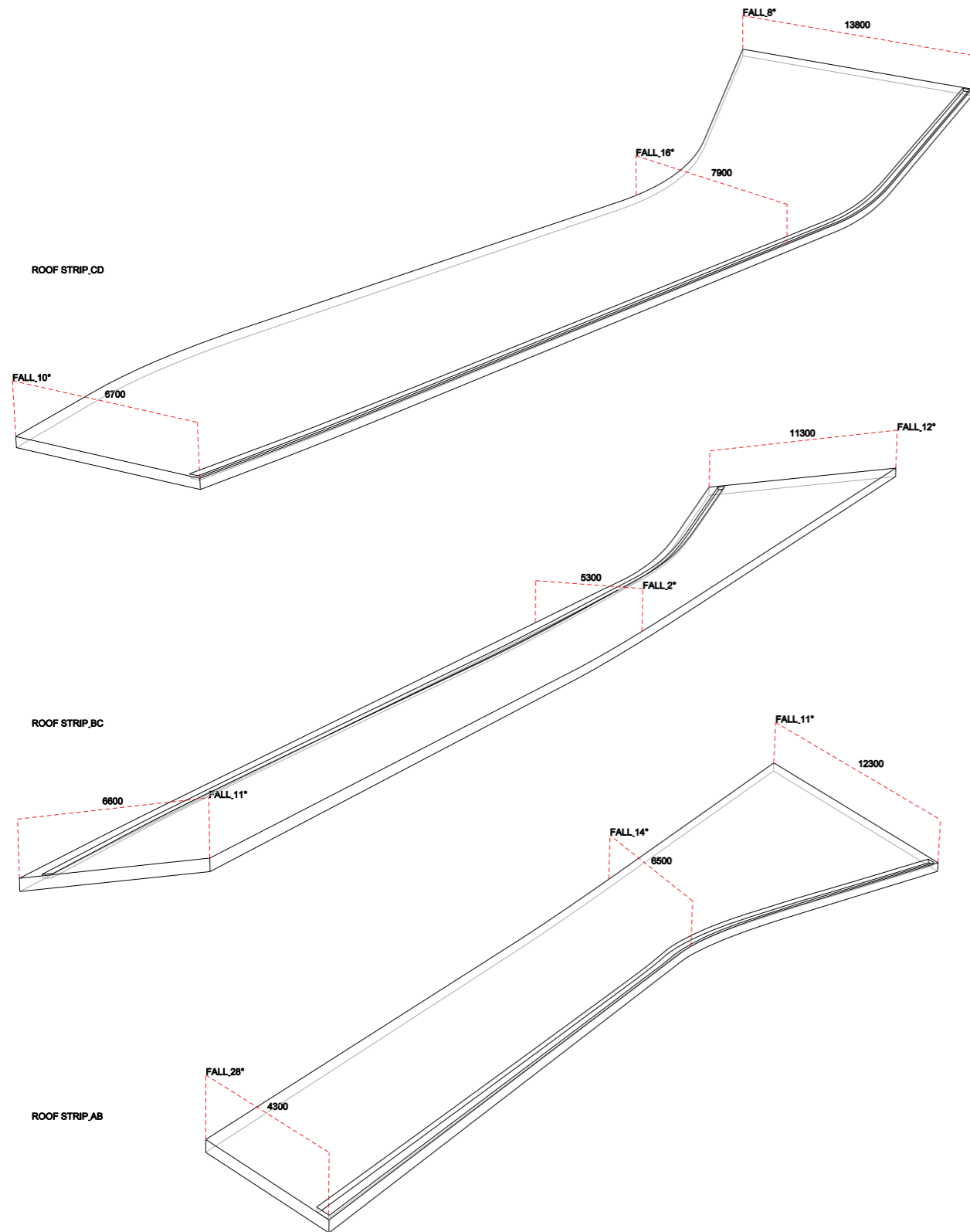
Conceptual Model Roof Form



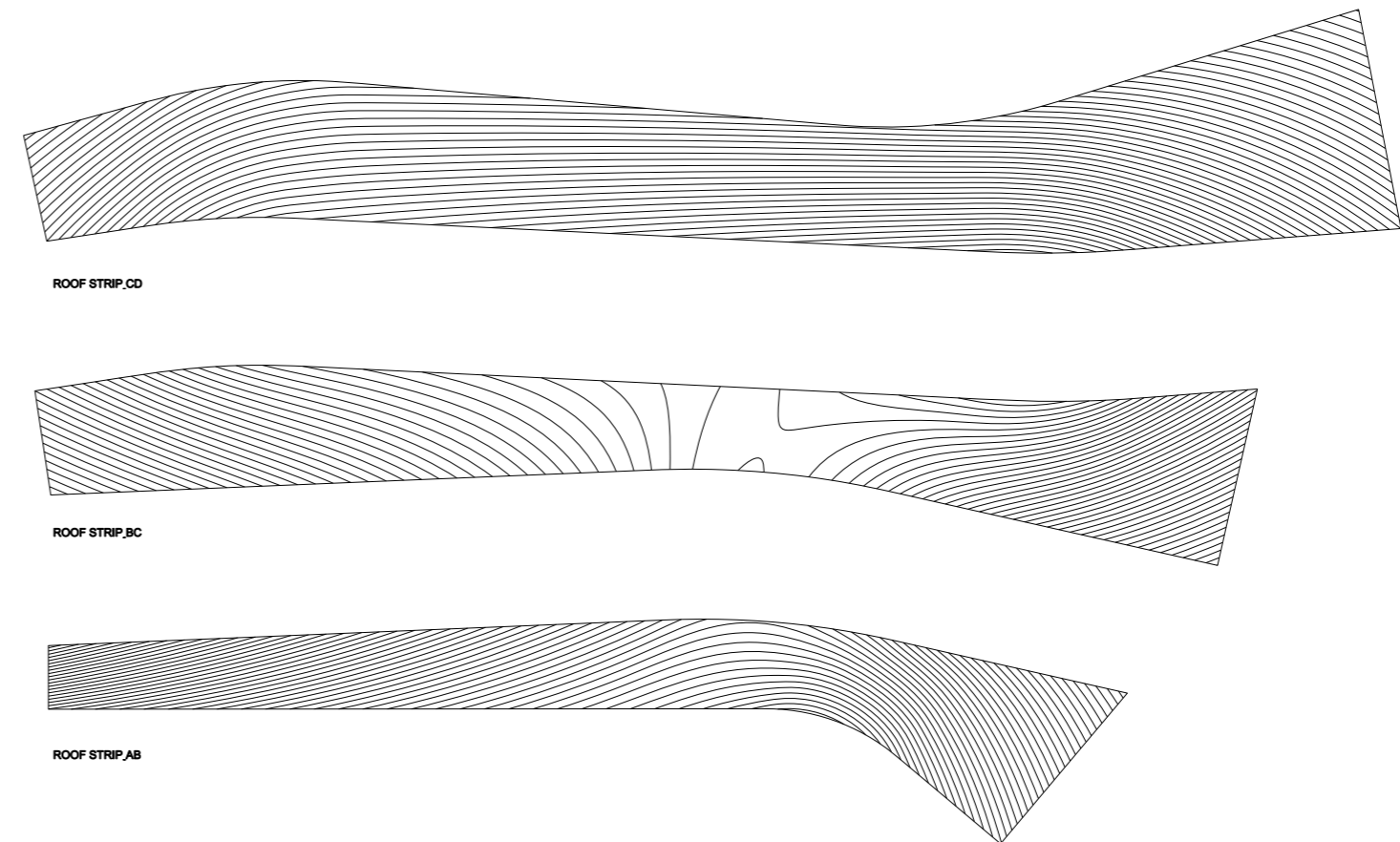
Early Roof Explorations



Early Massing Explorations

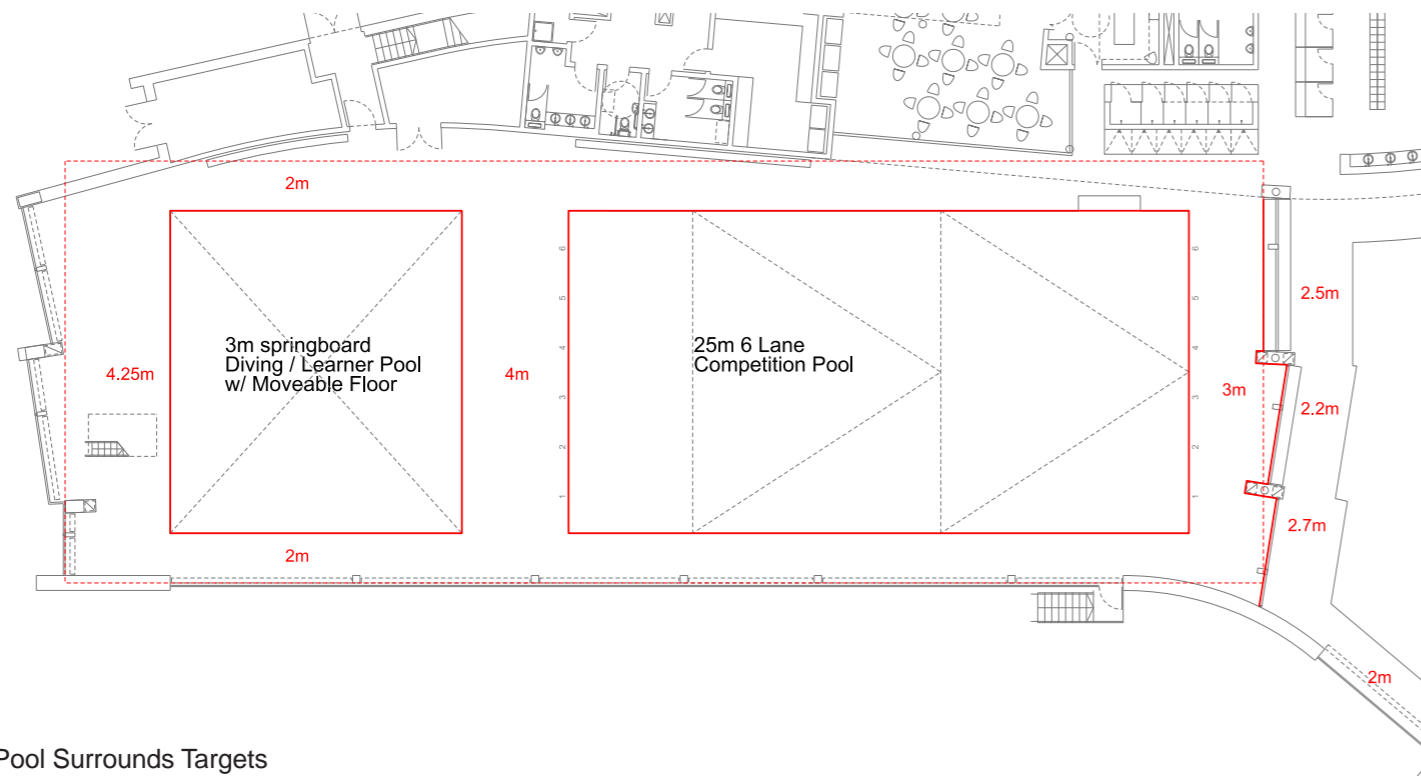


02 STRIP ALIGNMENT  
SCALE 1:200@A1

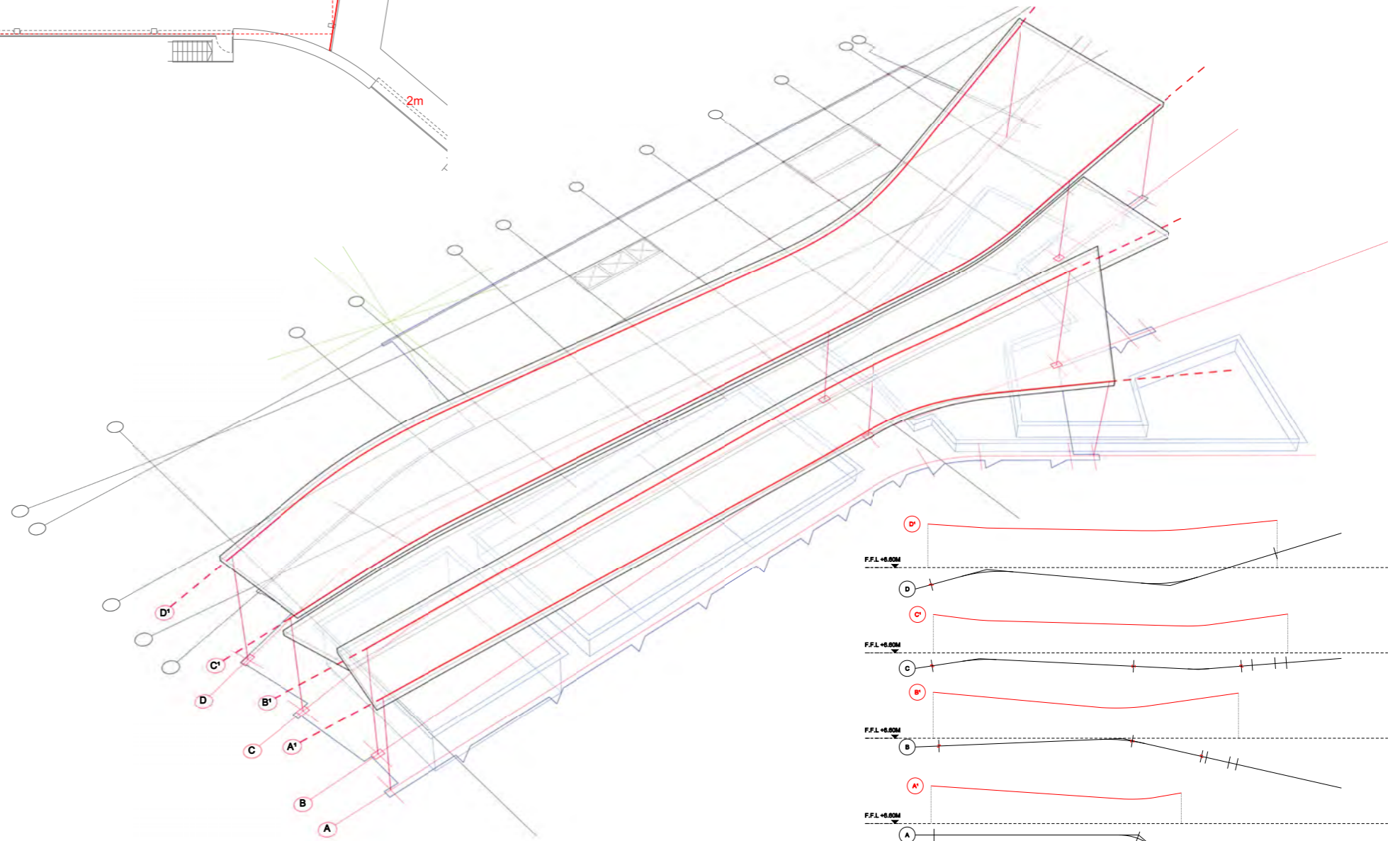


03 CONTOUR MAP\_100mm VERTICAL SPACING  
SCALE 1:200@A1

01 TRUE SPAN DIMENSIONS  
NTS



Pool Surrounds Targets



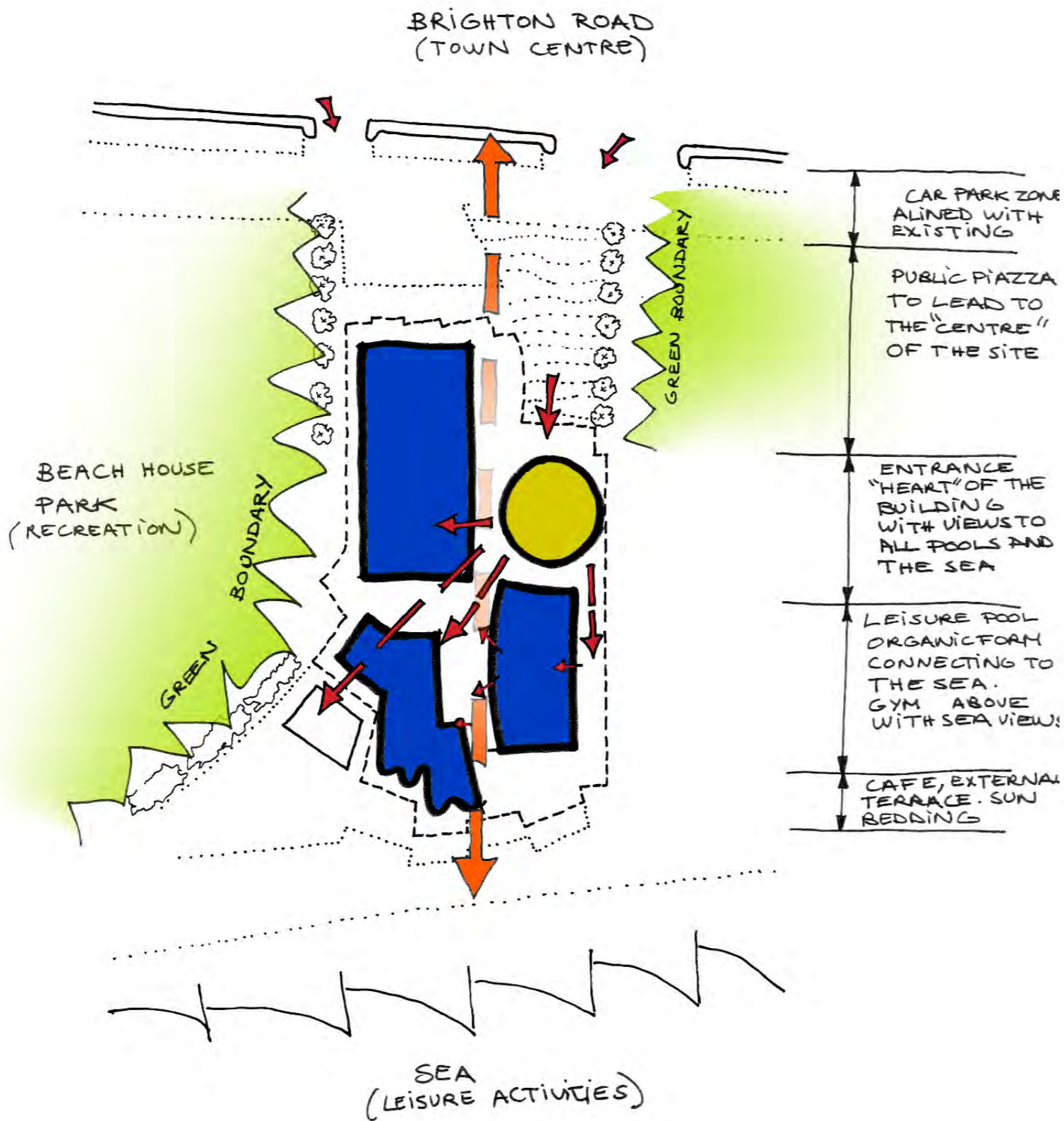
01 3D EXPLANATION OF STRUCTURAL GRID  
NTS

02 ELEVATIONS OF GRID LINES  
SCALE 1:400@A1



# 8.0 Building Organisation & Layout

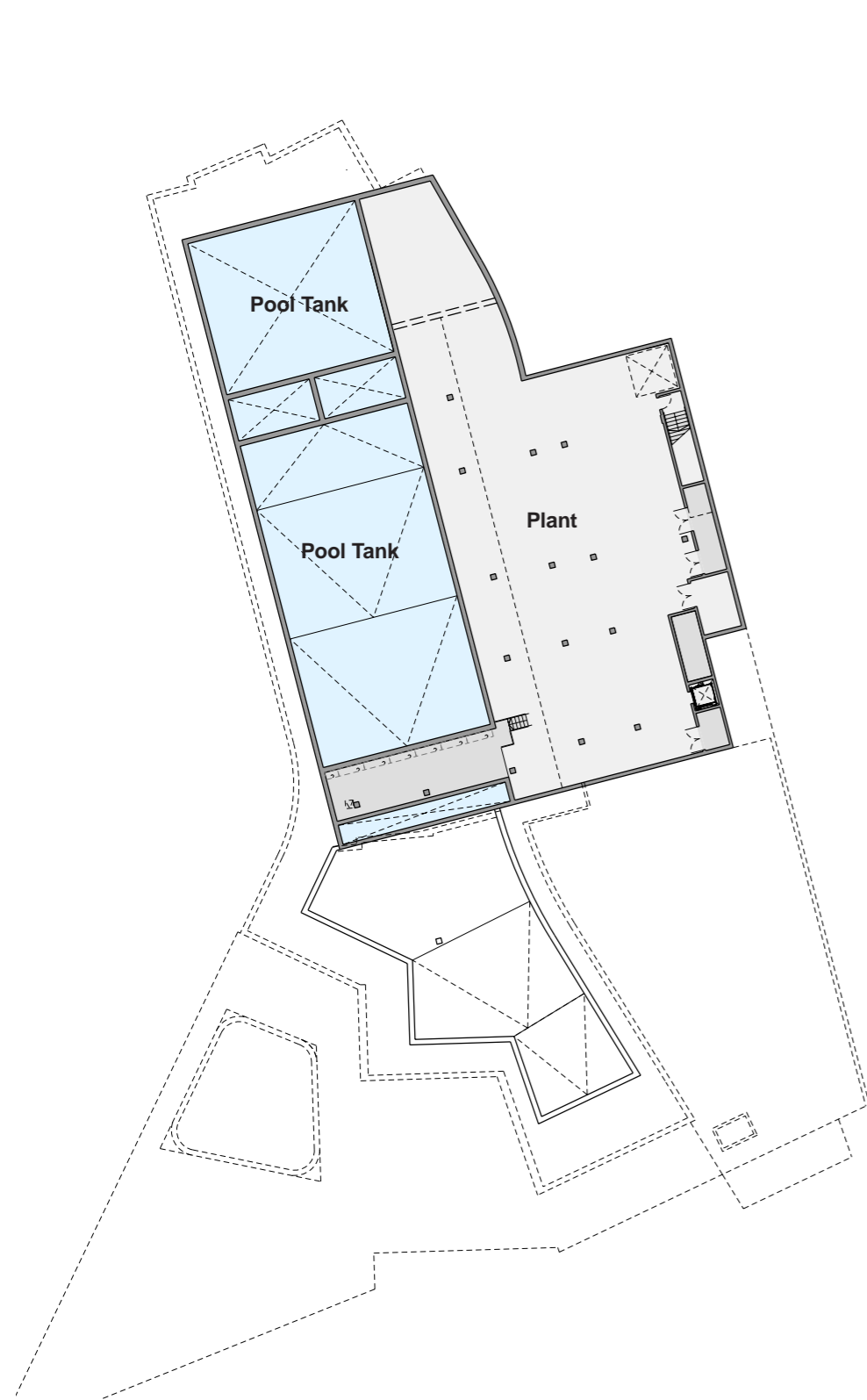
# Worthing Aquarena



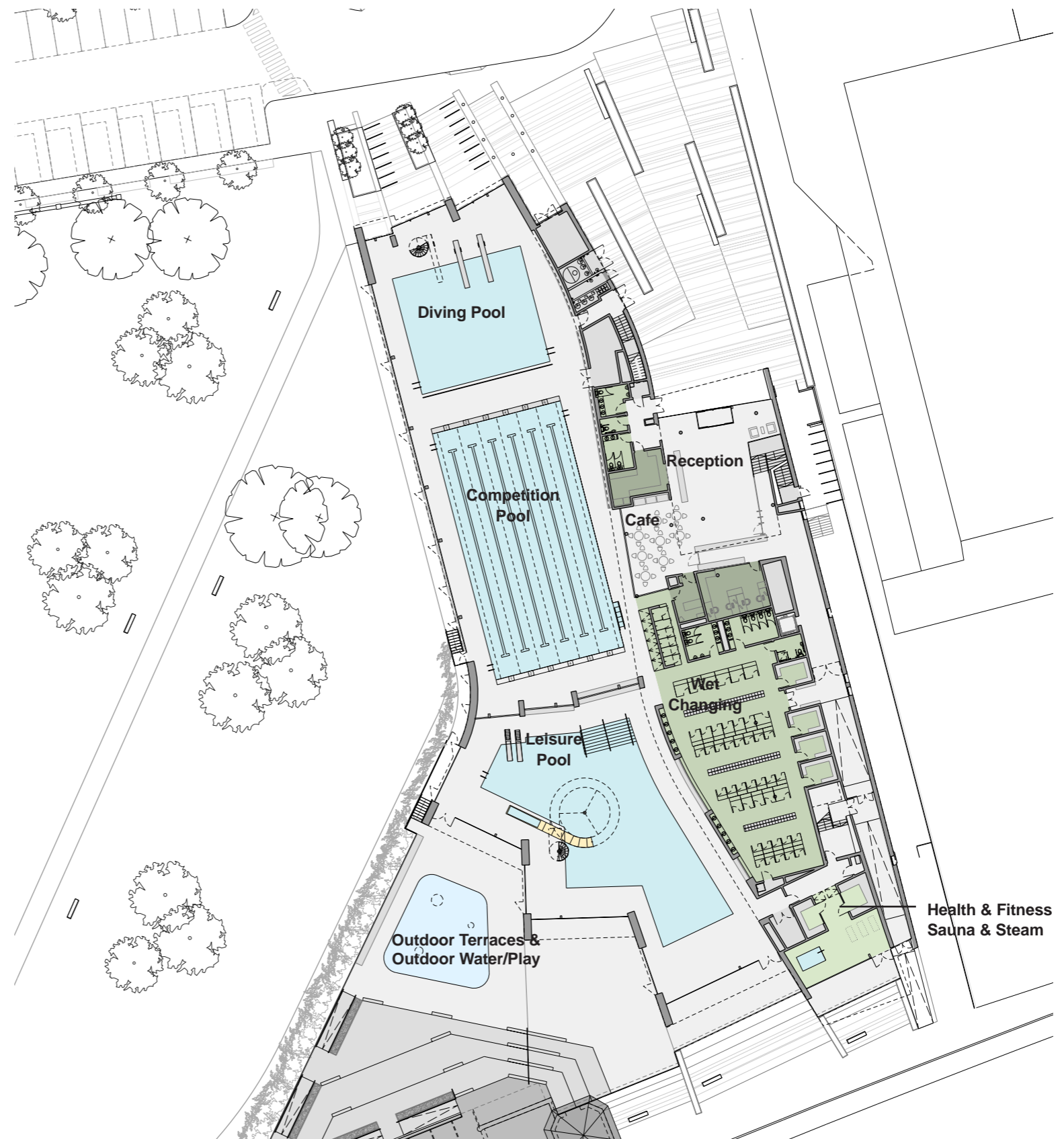
The key aim of the architectural design is to deliver a building which will provide quality sports and leisure facilities for Worthing. The development of the building brief and the design of the internal spaces of the building have informed the overall building form and external appearance.

The central concept of the scheme has been to create a public entrance to the building, at the "heart of the site": offering an immediate overview of the key activities within the building, with direct views to the pools, the sea, the café, the health and fitness entrance at first floor and the spectator seating area.

This spatial arrangement and circulation diagram reduces the number and length of corridors, allowing the various activities taking place within the building to flow together, organising the spaces along a series of linear routes from the entry to the pools, or the entry to the health and fitness suite, following the flowing lines of the geometry. Visitors move from the outdoor entry piazza to a welcoming entrance lobby, cafe, reception, changing village to poolside.



Basement Plan +2.20 m AOD



Ground Floor Plan +6.60 m AOD



# 8.0 Building Organisation & Layout

# Worthing Aquarena

The entrance lobby and cafe will have views to the main pool hall and further to the seafront, a double height space with clear circulation routes to upper levels.

The ground floor is designed to be as efficient as possible, with administration and reception overlooking the entrance lobby, a large village changing facility with views and access to the pool hall. A member's sauna and steam area is located at the south end of the building with views of the sea.

The first floor level comprises of spectator seating for competition pool hall, administration offices, health and fitness changing and fitness suite overlooking the leisure pool hall.

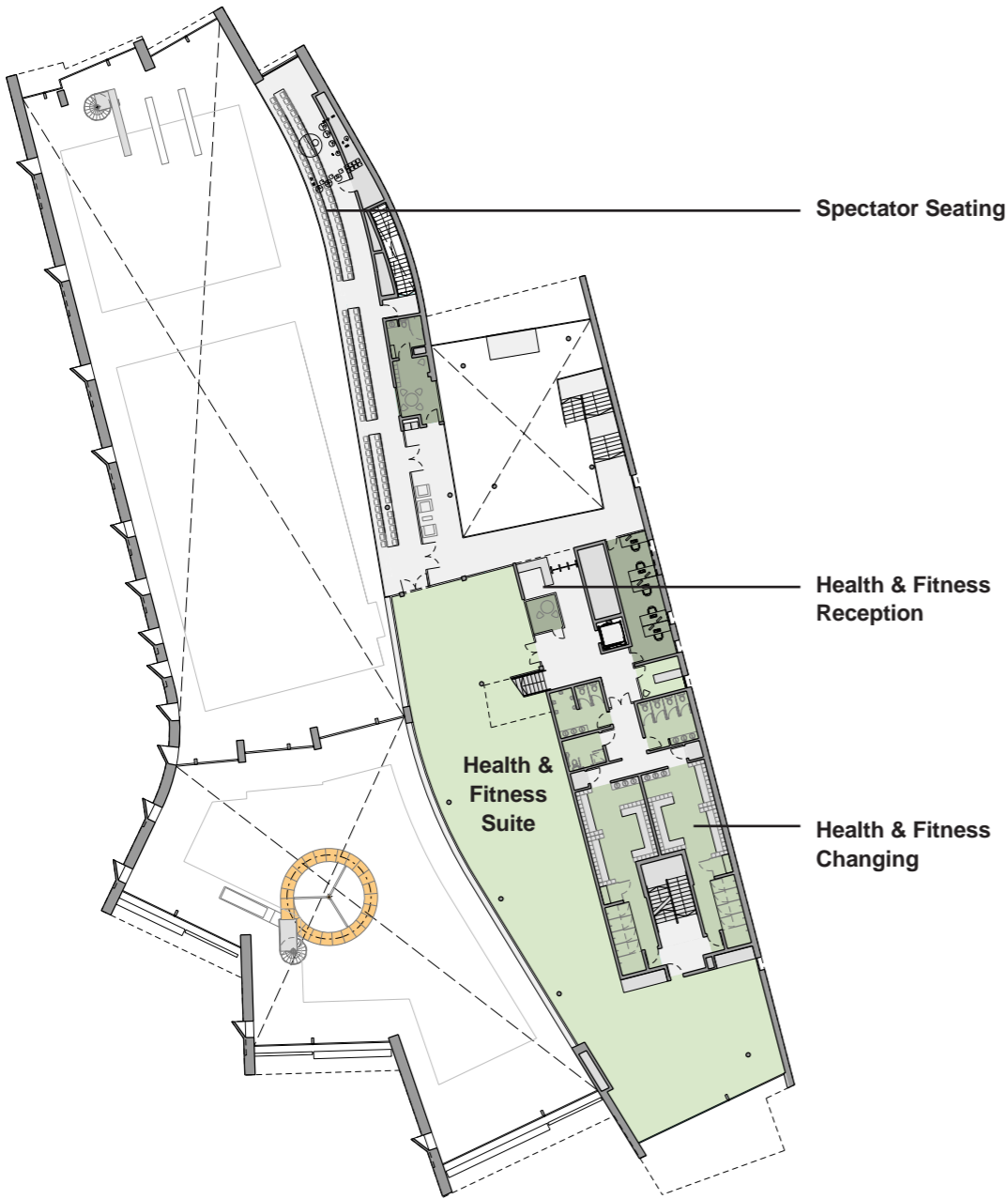
The second floor is primarily occupied by the health and fitness flexible studio spaces and additional administration offices.

Two stairs cores are located in the building to provide well spread means of escape in addition to the general circulation through the main lobby stair and the passenger lift adjacent to the main lobby stair (doubling as a goods lift).

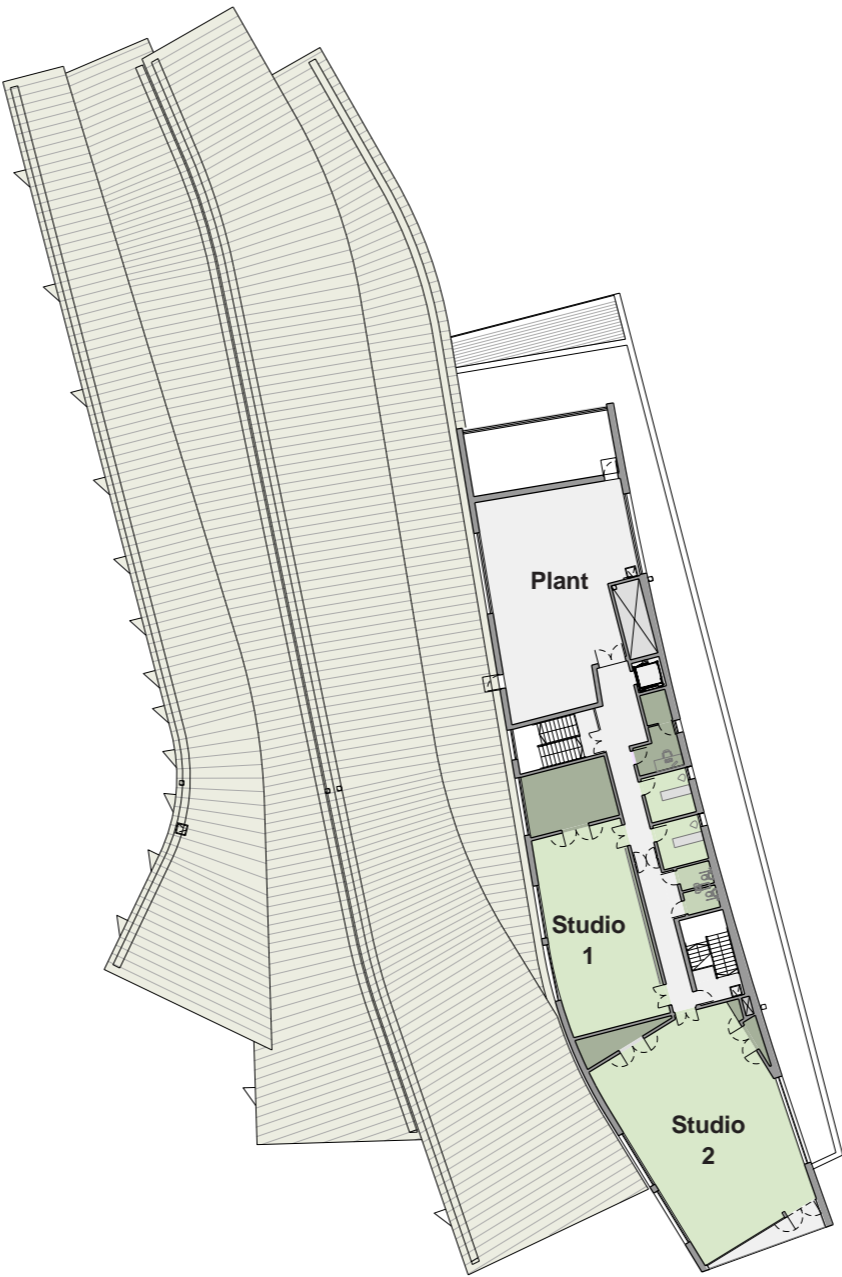
Plant rooms are in two locations to ensure the efficient service distribution for the two primary uses of the building. The raised ground floor level allows for a cost effective basement plantroom construction, housing the pool tanks and the associated water filtration equipment. An additional escape stair is provided along the eastern façade that provides access from the basement.

The second plant room is at the second floor servicing the health and fitness club.

The EDF substation and chemical store are located at ground floor, to the side of the entrance piazza to guaranty vehicular access with direct external access.



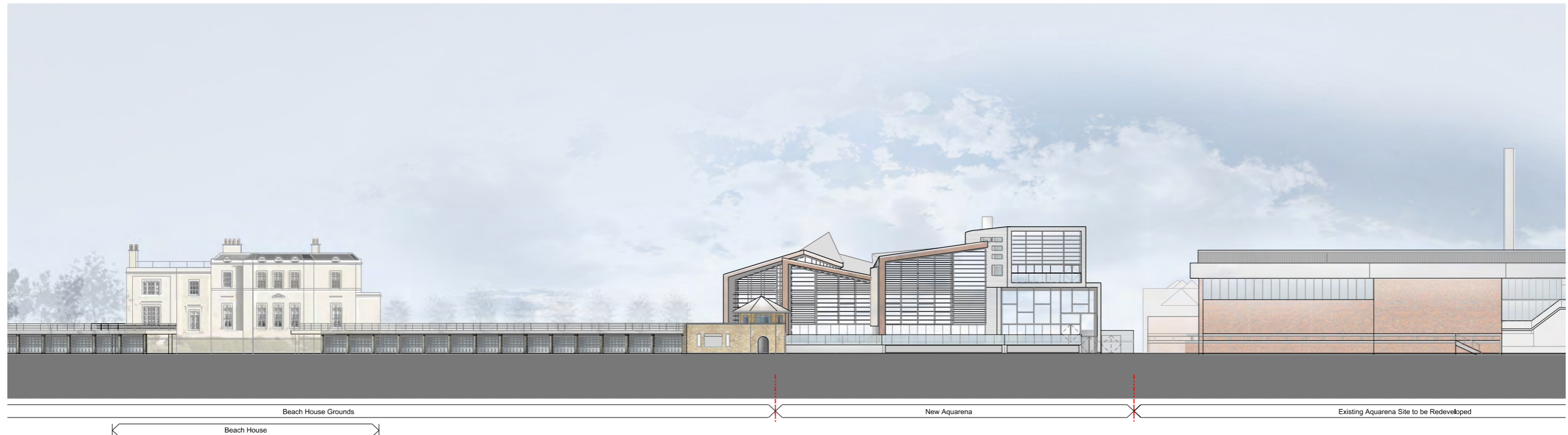
First Floor Plan +10.10 m AOD



Second Floor Plan +13.60 m AOD



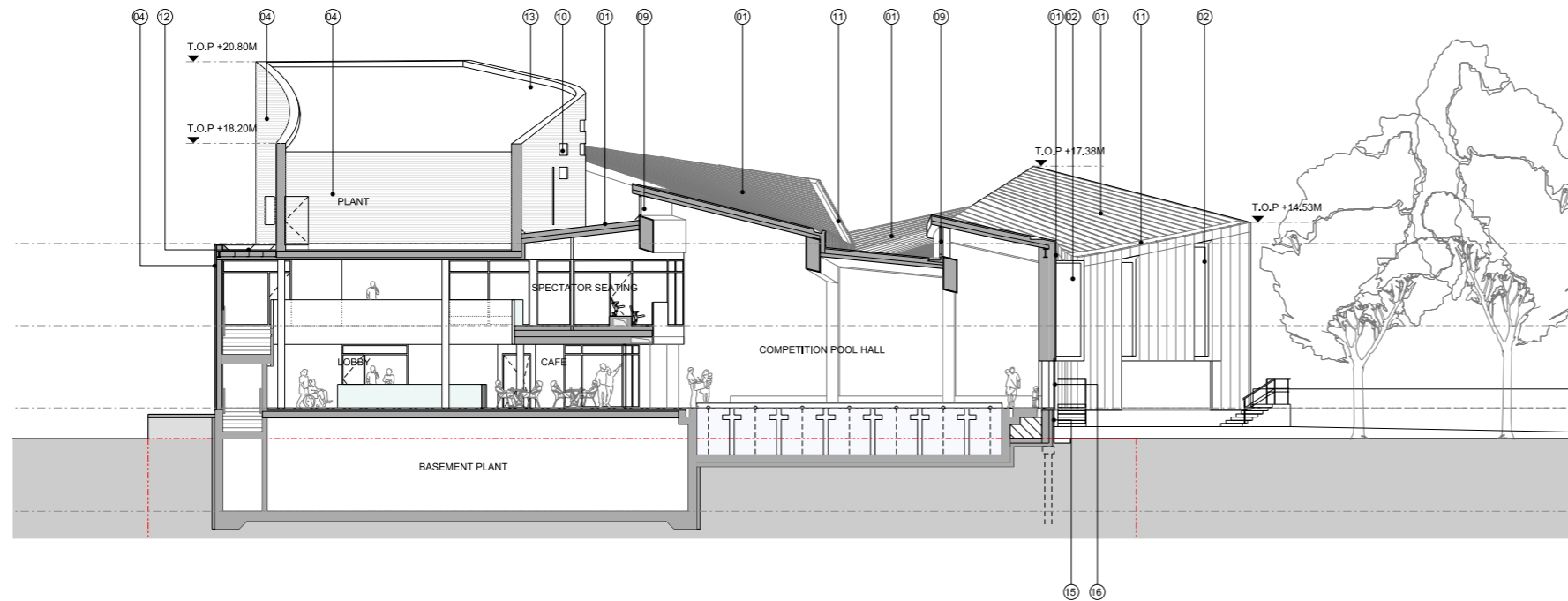
West Elevation



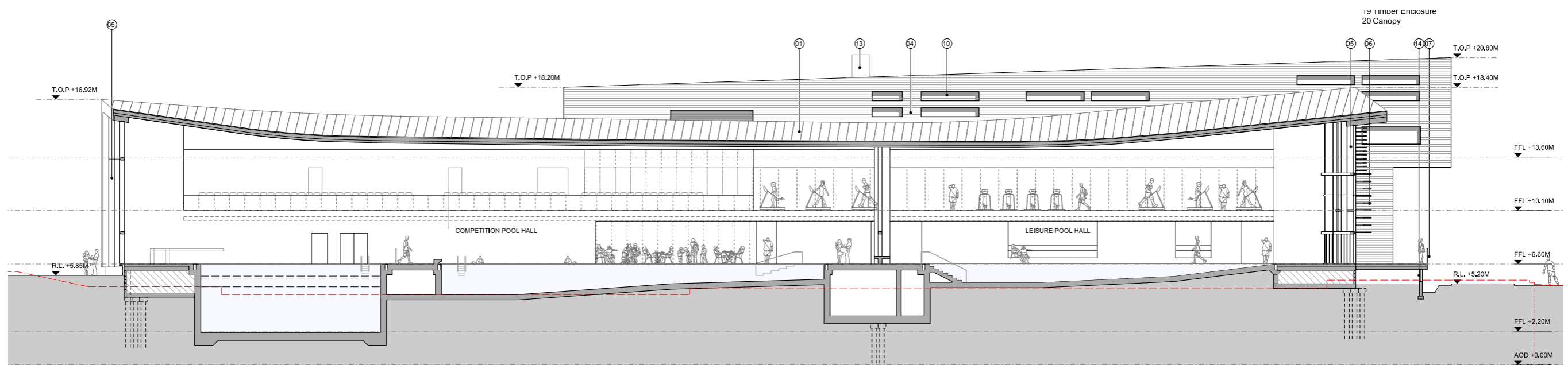
South Elevation

## 8.0 Building Organisation & Layout

## Worthing Aquarena



Cross Section through Lobby



Long Section through Pools

Security is a key consideration for the design of any leisure facility. In the case of the new Aquarena, the seaside location brings particular issues that the design as proposed seeks to address. The raising of the building from ground level deters intruders from gaining access to the outdoor terraces with the use of high level balustrading (1.4m) from the terrace level and landscaping.

The building will be secured at its perimeter out of hours and balustrades will protect the raised terraces. The primary entrance will be past a manned reception desk. CCTV will be provided and positions of cameras will be located on drawings by AECOM. A secured door will be provided directly off Beach Parade, but it will be used as an exit, and separate security arrangements will be put in place.

The redevelopment of the site will lead to a generally higher level of activity through out the day as will the introduction of new routes through the adjacent park. The general level of transparency of the building will also ensure that outdoor spaces are overlooked throughout the day.

### 9.1 External Materials Palette

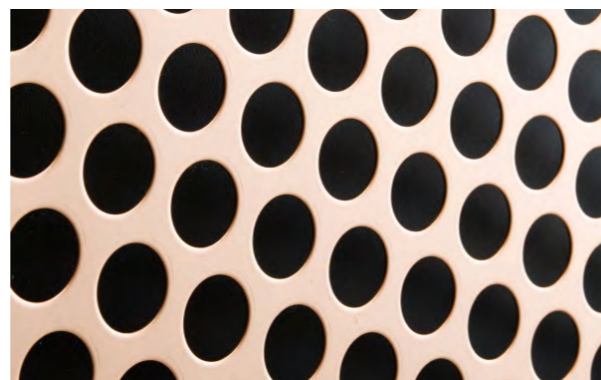
In our view, one of the most important aspects of high quality architectural design is buildability within the context of a given budget and programme. Integral to this process is constructive, ongoing collaboration with engineers and contractors, who are an essential and involved component of the design team.

The obvious primary functional issues informing external material selection are the exposed marine environment and south facing aspect of the site. The challenges of preventing saline accelerated deterioration are accompanied by the impact of sustainable design with particular respect to the potential for heat gain.

Wilkinson Eyre has explored materials that are hard and 'sea-side' materials that look good when weathered and do not rely on maintenance of a painted or varnish finish to provide a protective layer. It is even more critical that an exceptionally robust palette is selected given the particularly aggressive micro climate of swimming pools.

The internal environment of a modern pool is necessarily hot and humid and exerts water pressure on the outside walls. Masonry walls with their mortar joints and porous texture are prone to vapour penetration with a resultant pattern of dampness on the exterior face. The ideal containment is with panels containing inbuilt vapour barriers.

We have settled on a palette of naturally finished copper, and timber for the envelope of the building combined with integrated substantial glazed panels, creating the effect of "picture frames" to the windows and roof-lights. These finishes will require minimal maintenance and complement each other aesthetically.



Material Studies



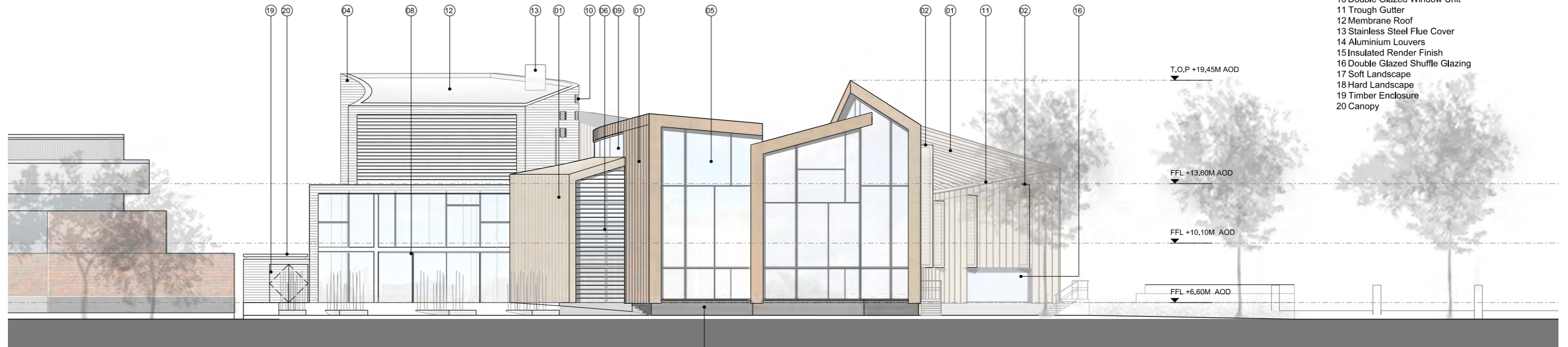
Material Study West Elevation

# 9.0 Materials and Construction

# Worthing Aquarena

### MATERIAL KEY

- 01 Standing-Seam Copper Roof / Rain Screen Cladding
- 02 Bay Windows with Copper Rain Screen Cladding
- 03 Copper Rain Screen Cladding
- 04 Horizontal Timber Slat Rain Screen Cladding
- 05 Double Glazed System
- 06 Fixed Louvers
- 07 Glazed Balustrade
- 08 Glazed Windlobby with Sliding Doors
- 09 Clerestory Glazing
- 10 Double Glazed Window Unit
- 11 Trough Gutter
- 12 Membrane Roof
- 13 Stainless Steel Flue Cover
- 14 Aluminium Louvers
- 15 Insulated Render Finish
- 16 Double Glazed Shuffle Glazing
- 17 Soft Landscape
- 18 Hard Landscape
- 19 Timber Enclosure
- 20 Canopy



Brighton Road Elevation



Copper 1-4 years Patina



Copper 4-8 years Patina



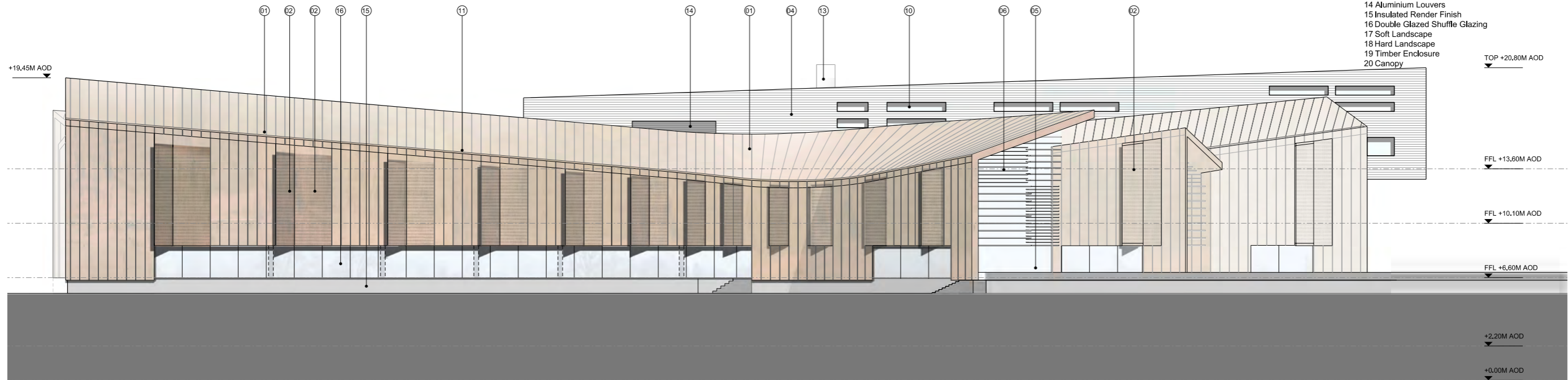
Copper 8-20 years Patina



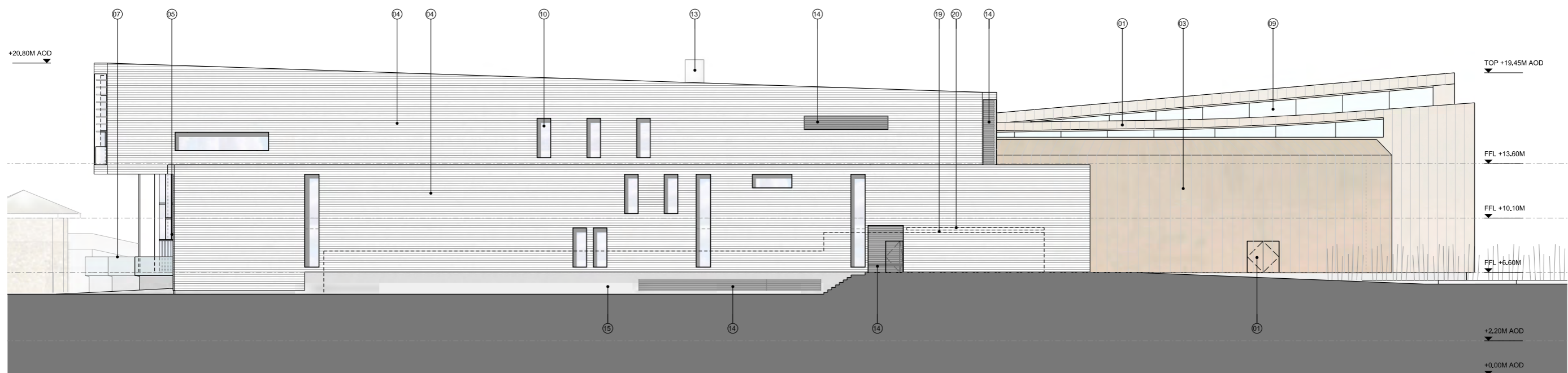
Copper 20+ years Patina

MATERIAL KEY

- 01 Standing-Seam Copper Roof / Rain Screen Cladding
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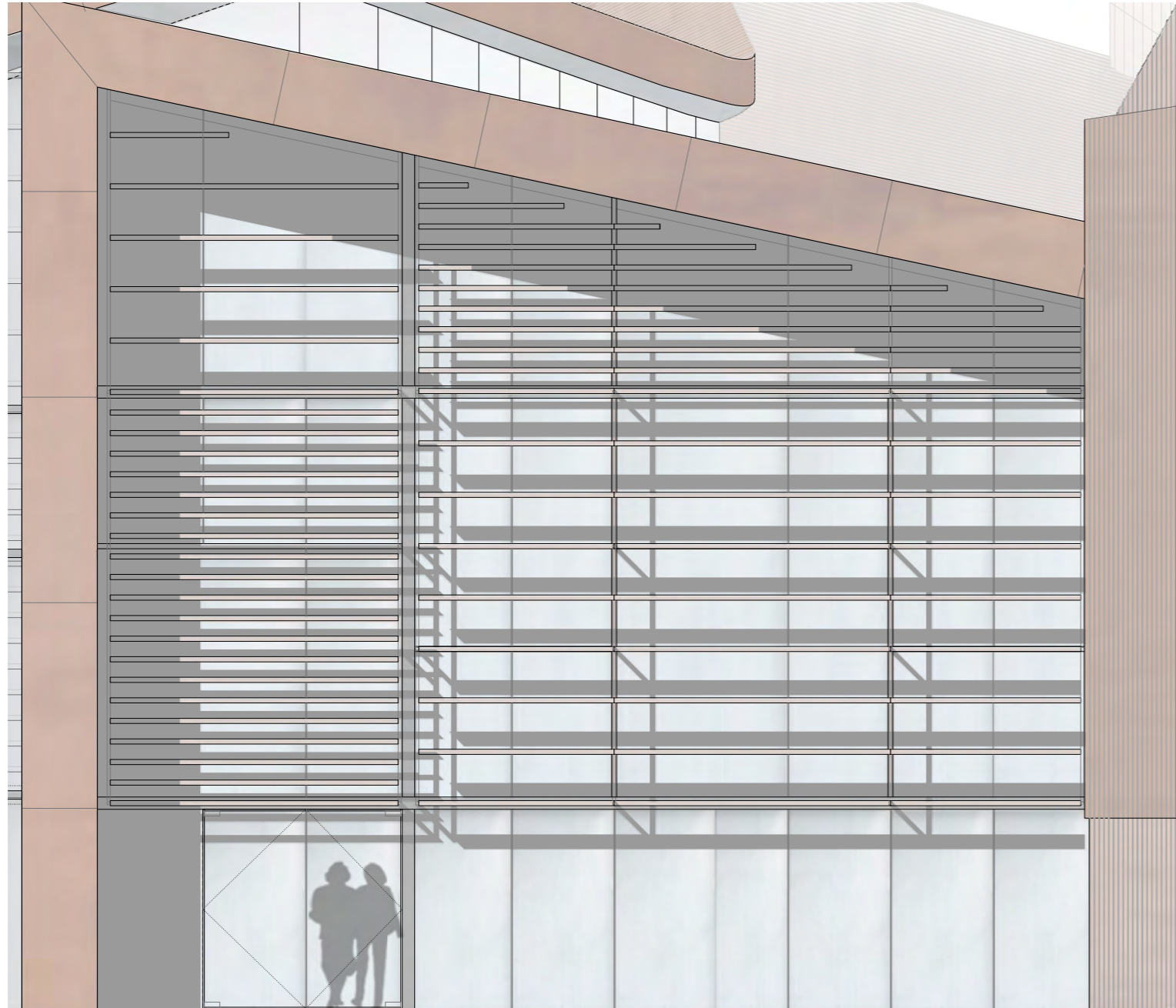


01 WEST ELEVATION



02 EAST ELEVATION

## Worthing Aquarena

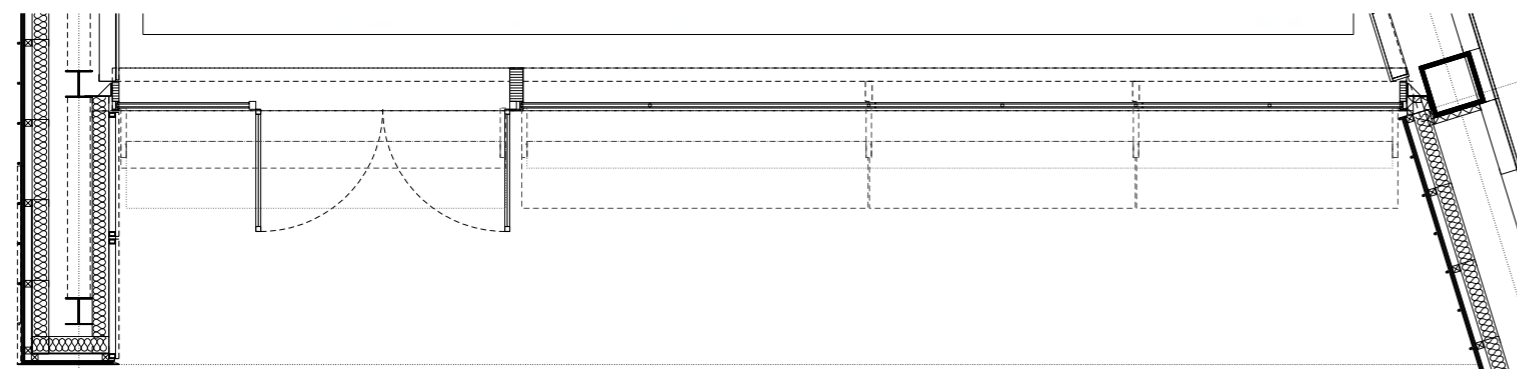


Copper is a material that truly 'roots' itself to its site; the material metamorphosing from its traditional rich, reflective copper red through to the dull dark browns and further to the vibrant green patinated finish. We intend to use copper in two different forms; the primary wall and roof surfaces using flat cladding panels and the projected windows using a perforated rain screen system. The two different finishes will create variation along the length of the western façade, while applied within the same 600mm vertical module.

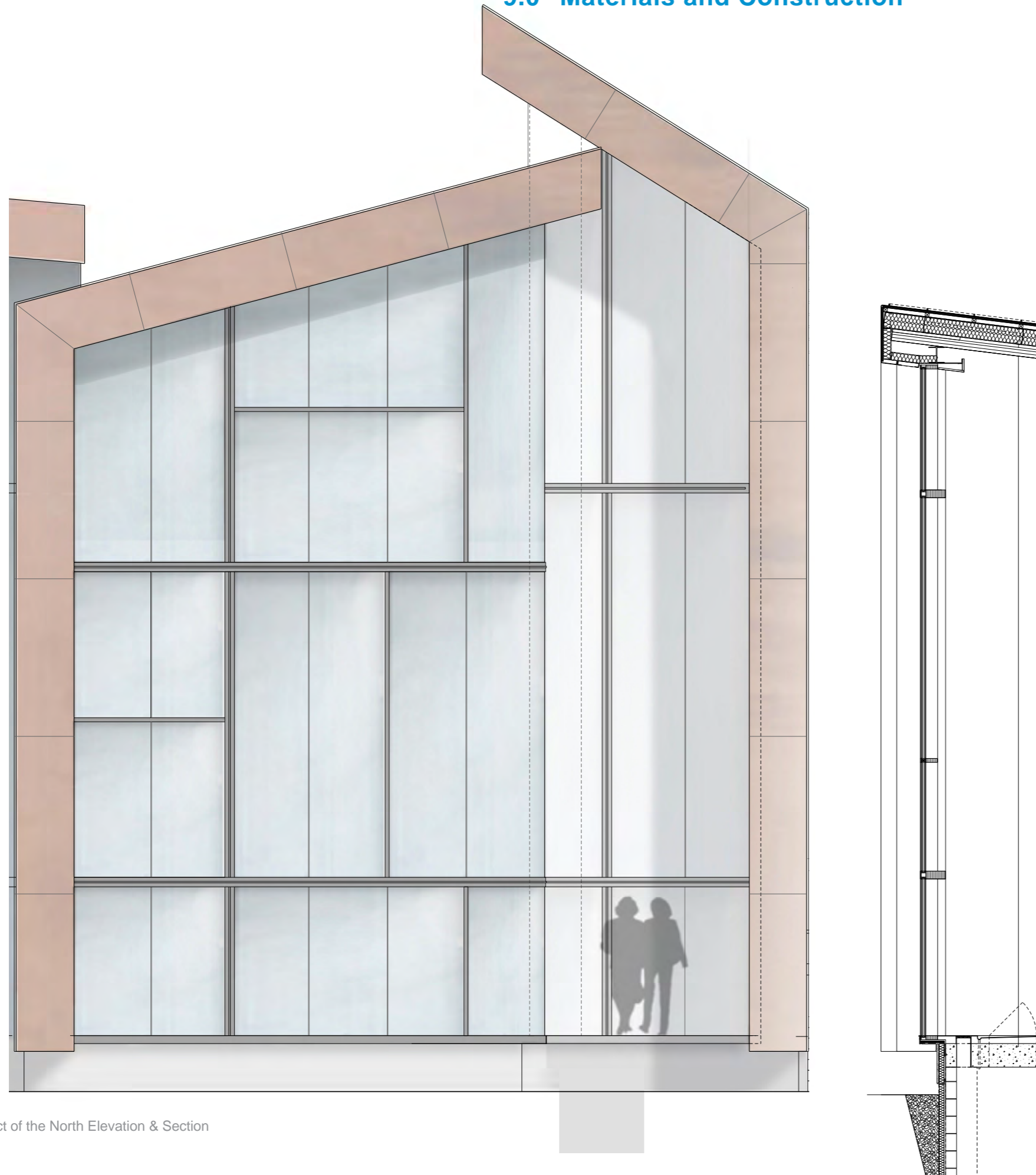
Timber construction in coastal resorts has rich metaphors, from boat construction through to the rich candy colours of the changing chalets. We believe a lighter coloured material is appropriate for the health and fitness wing, Western Red Cedar wood being a material that ages back to a beautiful neutral silver finish. The timber cladding is composed of horizontal planks with the punched windows inserted within the timber module.

To reduce solar glare and heat gain to the south mainly glazed elevation, we are proposing the use of a series of external fixed horizontal louvres. We envisage an anodized aluminium set of rectangular sections, attached to the glazing mullions behind by vertical brackets. These louvres will vary in thickness, depth and spacing ratio to complement the 'Mondrian' effect already created by the glazing modules.

Additional materials include the painted render along the exposed foundation walls creating a shadow gap between the building and the landscaped ground plane.



Detail Extract of the South Elevation & Section



Detail Extract of the North Elevation & Section