

STUDIO 3A – Swansea Docks Master Plan

ARCHITECTURE YEAR 3 - 2020

Introduction

This studio gives you the opportunity to investigate the urban development of an area of Swansea, master plan an area of Swansea Docks, identify a building type you would like to design in Studio 3B, prepare a precedent study and compile a brief for a building of your choice.

This is the first of three linked modules that form the design studio for the third year.

The modules are linked in the following way:

Studio 3A – An Urban Study of Swansea in general and the docks in particular. A master plan of an area of the docks. The production of a brief for a project of your choice. A precedent study which relates to the project of your choice. A concept design.

Studio 3B – The Design of your chosen project along with a technical report emphasising the design aims of the project and how it responds to your detailed brief.

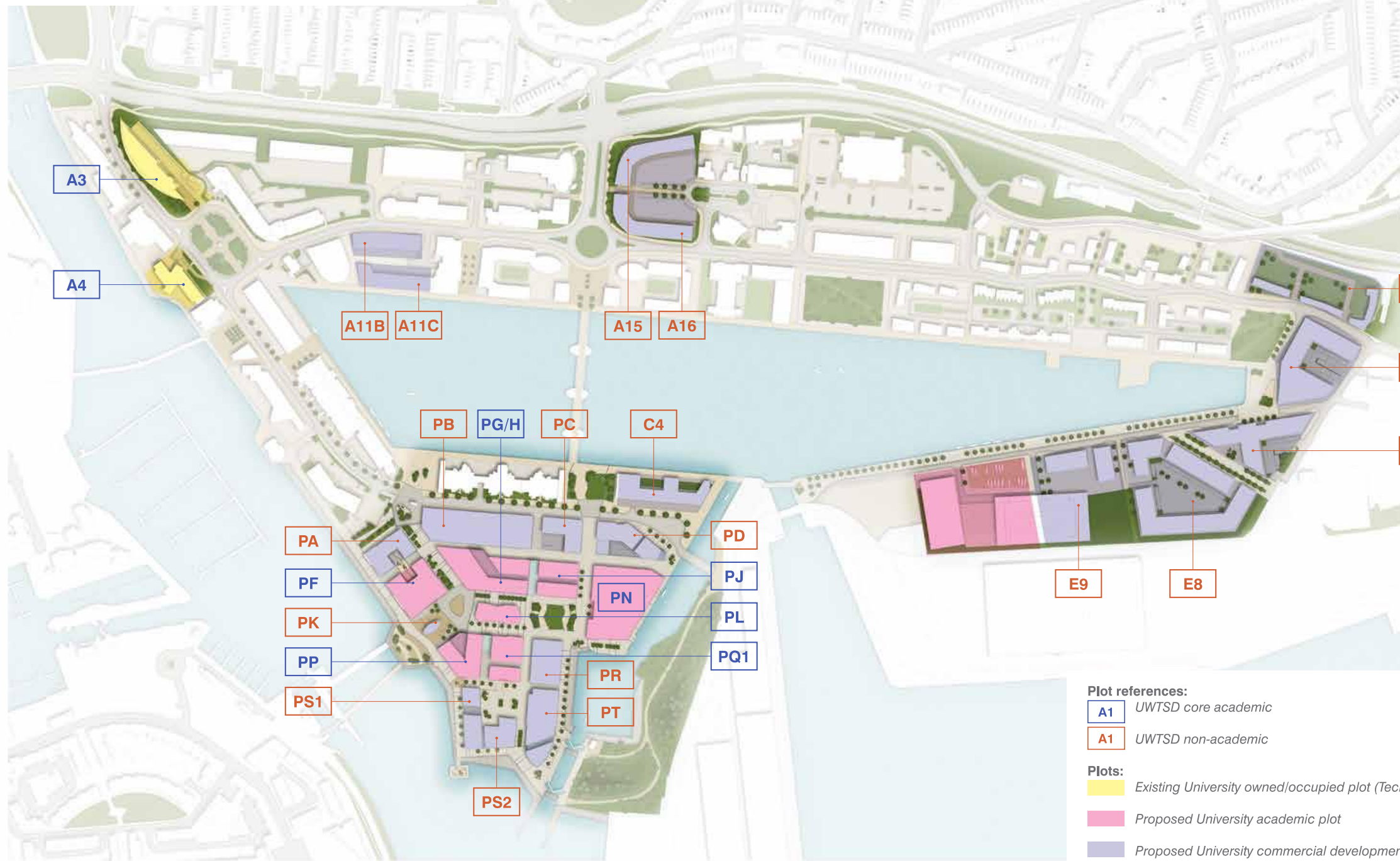
Studio 3C – The technical resolution of your design. Including construction drawings, models and a technical design report explaining the structure, materials, construction, environmental strategies.

If students are unable to decide on a project there will be two default briefs offered – A primary School and a New Build Art Museum.

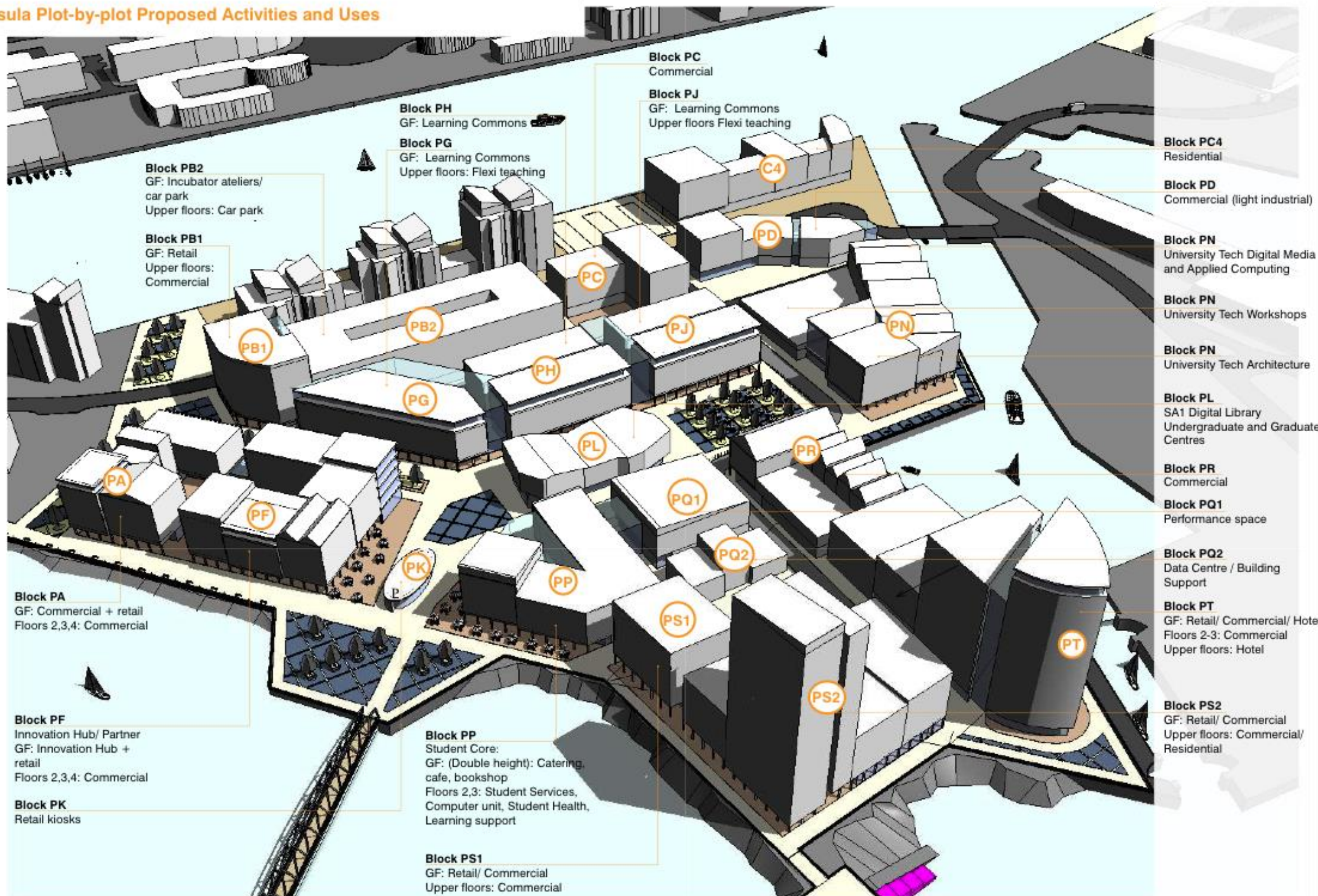








Peninsula Plot-by-plot Proposed Activities and Uses









This programme affords the opportunity to create something with a real sense of place – it is a ‘Place making project’. In masterplanning the buildings define the external spaces – so the essence of good place making is to create positive external space – at this point in the process the precise nature of the buildings is secondary – it is what lies between the buildings that is of importance.

This affords you the opportunity to not only respond to the context, but also to define the context. Particular attention should be focused on how buildings connect to the existing landscape, where they sit in relation to the dockside, what happens between buildings and any defined site edges

Studio 3A

This first Studio is concerned, above all, with the idea of place making.

Having moved into our new faculty building in SA1 we find ourselves in a unique position. Other than the existing faculty buildings we are on a peninsular of open undeveloped land. Surrounded by water a flat slice of land facing out to sea.

A masterplan already exists – but what would you do if you were asked to prepare an alternative plan? What buildings would you imagine could be grouped into this area? A new school for the expanding residential developments? New student accommodation (how would this look – similar to the student housing currently being built by Swansea University?), how about a new art museum? A care home? More apartments? A vertical farm or an aquaponics farm – to grow food in the city? What is the appropriate height for these buildings in this urban context?

Are there over-riding ideas that apply to all of them? Should they have accessible green roofs?

Parks in the air as well as on the ground, or maybe food production on the rooftops?

A new market and market place?

How do they relate to the edge of the docks and what sort of spaces are created in between them?

And – most importantly – how can all of this be done employing the principles of sustainability you have investigated over the past two years?

How do you turn this open space into a place?

Before you embark on the master planning you need to find out more about the site and the city. So initially you will undertake a study of the designated masterplan area and how this relates to the city context in particular.

Swansea, like many other post industrial cities is seeking a new identity. Employment is shifting towards a service based, as opposed to manufacturing based economy, it is becoming a city based on financial, cultural and educational services. Your study needs inform your site analysis, what are the possibilities that the social and economic context brings to this potential development. What opportunities are there to integrate local economies?

You can undertake this research in two groups and pool the information. All information should be collated on A3 sheets and each student should produce a minimum of 4 no. A3 sheets. All sheets to be in landscape format – overall sheet design to be agreed as a year group.

As a year group you will also construct a large scale site model – showing any existing buildings in block form. This model is for all to use in developing the masterplan.

You can continue to work as year group on the masterplan if you wish, or in smaller groups. However, at the end of the design process everyone will need to produce their own masterplan. Which should be presented on one A1 sheet in colour, this should be accompanied by a further 4 no. A3 sheets which illustrate a site analysis and diagrammatically the ideas that underlie the masterplan.

These will be supplemented by 3D work, models and photographs of models plus your sketch books.

At the end of this process it is hoped that you will have identified a building type that you would like to take forward for your final project (you may even have invented a building type?).

You will need to select an appropriate site on your masterplan. There is also the possibility of re-using some of the existing building close to the defined site if you prefer to work with an existing structure or feel it is more appropriate for your chosen project.

Then you need to write a brief – this will comprise a statement which describes the proposal along with an accommodation schedule. As mentioned above there are default projects – and there will be briefs available for these, although you will need to develop and particularise them.

You will also undertake a precedent study based on the building you have chosen to design (4. No. A3 sheets). The precedent study needs to be analytical – not just a montage of images and plans – you need to produce diagrams which illustrate the underlying ideas.

Aims

To consider broader issues of urban design and building in response to context and prepare a brief for the design of the final integrative design project that will form the basis of Studio 3B and 3C.

Objective

In the first instance you will produce a site study/analysis of the area designated for the masterplan in the context of Swansea as described above.

By now you should be familiar with this type of analysis - you have undertaken it on a number of projects including the Town study undertaken on studio 2A.

In developing your masterplan you need to consider the information gleaned from the study above analysis:

Site History/Historical Context.

Architectural Character of surrounding buildings.

Site constraints and orientation.

Possibilities of pedestrian and vehicle access/pick up point (to collect refuse/recycling for example).

Development opportunities – how to use the site most effectively, maximising views, orientation, points of arrival etc.

Local Climate

Assessment

Work will be weighted into the following:

Work will be weighted into the following:

Site Analysis/Study – 15% - Based quality of research and quality of graphics

Concept Diagrams and Masterplan – 70% - based on quality of design development, design resolution and presentation

Brief, Accommodation Schedule and Precedent Study – 15% - Based on quality of analysis and presentation

You will produce drawings that show the characteristics of the existing site indicating the above.

**You should submit the following drawings:
4 no. A3 sheets Site Study.**

Concept Diagrams – 4 no. A3 sheets

Location Plan (A3)

Site Plan as existing (A1),

Master Plan – 1 no. A1 Sheet – plus supplementary 3D drawings and photographs of your proposals set on the model.

Project Brief – 2 A3 sheets

Precedent Study. – 2 A3 sheets

Timetable

Week 1 – Commencing Monday 28th September – 10.00 a.m.
Studio Design briefing on Monday 28th September – 10.00 a.m.
This week will be focused on research into the site and it's context in the city of Swansea. The research for the can be undertaken as a year group activity – but it is essential that all students produce their own power point presentation for the following Monday.

The presentation should be by powerpoint and comprise all of the raw research material you are able to accumulate on the above.

Thursday 1st October –
Studio teaching with Mark Waghorn – In this first studio Mark will introduce ideas on how the development could respond to the local economy in a way which promotes sustainability.

The suggested areas of focus are as follows:

History of the site and surrounding area– Timeline

Urban history of the site – how has it developed over time.

Local Climate, global warming – future proofing.

Transport – Cars, cycles, bus stops

Demographics – who lives around this area?

Local economies.

Any future plans proposed for the site?

Week 2 – Commencing Monday 5th October – 10.00 a.m.

All site analysis to be presented on Monday by powerpoint. Following the presentation we will discuss possible ways in which this information can be graphically communicated.

During the rest of this week you will produce a series of graphic illustrations in A3 format communicating the raw data you have accumulated. Each student should produce 4 no. A4 sheets illustrating the area you are investigating.

In addition all students should produce a further A1 sheet showing a consolidated site analysis showing all of the existing buildings on the site, any site features, sunpath, views and direction of prevailing wind.

Thursday 8th October – Studio teaching with Mark Waghorn – please present your draft sheets to Mark who will assist you with the graphic layout.

Week 3 – Commencing Monday 12th October– 10.00 a.m.

FORMAL REVIEW

Everyone to present the above drawings on Powerpoint. This work to be formatted into 4 no. A3 sheets on pdf form and one A1 site analysis drawing. Pdf Copies and hard copies of work to be submitted before 5.00 p.m. on same day.

Commence masterplan exercise – 4.no Concept drawings.

These can illustrate different conceptual approaches to the development of the site or 4 sheets illustrating an integrated approach

Thursday 15th October – Studio teaching with Mark Waghorn

Week 4 – Commencing Monday 19th October – 10.00 a.m.
Presentation of last week's work, everyone to present their area of research on Powerpoint. This work to be formatted into 4 no. A3 sheets on pdf form. Pdf Copies and hard copies of work to be submitted before 5.00 p.m. on same day.

The above are to be developed into a draft masterplan for presentation next Monday.

The year group is also to construct a large scale model of the site including existing buildings.

Thursday 22nd October – Studio teaching with Mark Waghorn

Week 5 – Commencing Monday 26th October– 10.00 a.m.
FORMAL REVIEW - Formal Year Review – All work to be pinned up for Review.

At this review you should bring together all of your work to date. This includes your site analysis, concept studies and draft masterplan. You should be able to utilise the model to show your draft proposals in block form. You will need to set out your proposals and photograph them in turns so everyone has use of the model.

During the rest of the week you will develop your masterplan proposals. For presentation next Monday.

Thursday 29th October – Studio teaching with Mark Waghorn

**Week 6 – Commencing Monday 2nd November – 10.00 a.m.
Formal Review of Masterplan Proposals.**

Monday will start with a formal review of your masterplan proposal – this can be presented on powerpoint. The format is pdf A1 sheet size. Supplemented by photographs of the model along with any other 3D work you may have completed. Hard copies of proposal to be submitted at 5.00 p.m.

The rest of the week to be spent refining your master plan proposal, and developing 3D material to supplement the proposal.

Thursday 5th November – Studio teaching with Mark Waghorn

**Week 6 – Commencing Monday 2nd November – 10.00 a.m.
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Monday will start with a formal review of your masterplan proposal – this can be presented on powerpoint. The format is pdf A1 sheet size. Supplemented by photographs of the model along with any other 3D work you may have completed. Hard copies of proposal to be submitted at 5.00 p.m.

The rest of the week to be spent refining your master plan proposal, and developing 3D material to supplement the proposal.

Thursday 5th November – Studio teaching with Mark Waghorn

Week 7 – Commencing Monday 9th November – 10.00 a.m.
FORMAL REVIEW

Monday will start with a formal review of the masterplan proposals. At this stage your design should be well developed with clearly drawn material – it should represent the conclusion of your masterplan proposal.

For the rest of the week you should develop your proposed project brief and prepare a precedent study – analysing how a similar building has been designed.

Thursday 12th November – Studio teaching with Mark Waghorn

Week 8 – Commencing Monday 16th November – 10.00 a.m.
Presentation of proposed brief and precedent study on powerpoint. The brief should be presented on A4 sheets. The precedent study to be presented on 2 no. A3 sheets.

This week you will be focused on bringing together your submission on Thursday 19th November – .

Work to be submitted on Thursday 19th November at 9.00 a.m.
Please ensure your drawings are pinned up ready to commence the reviews at 10.00 a.m.

You should submit the following drawings:

4 no. A3 sheets Site Study.

Concept Diagrams – 4 no. A3 sheets

Location Plan (A3)

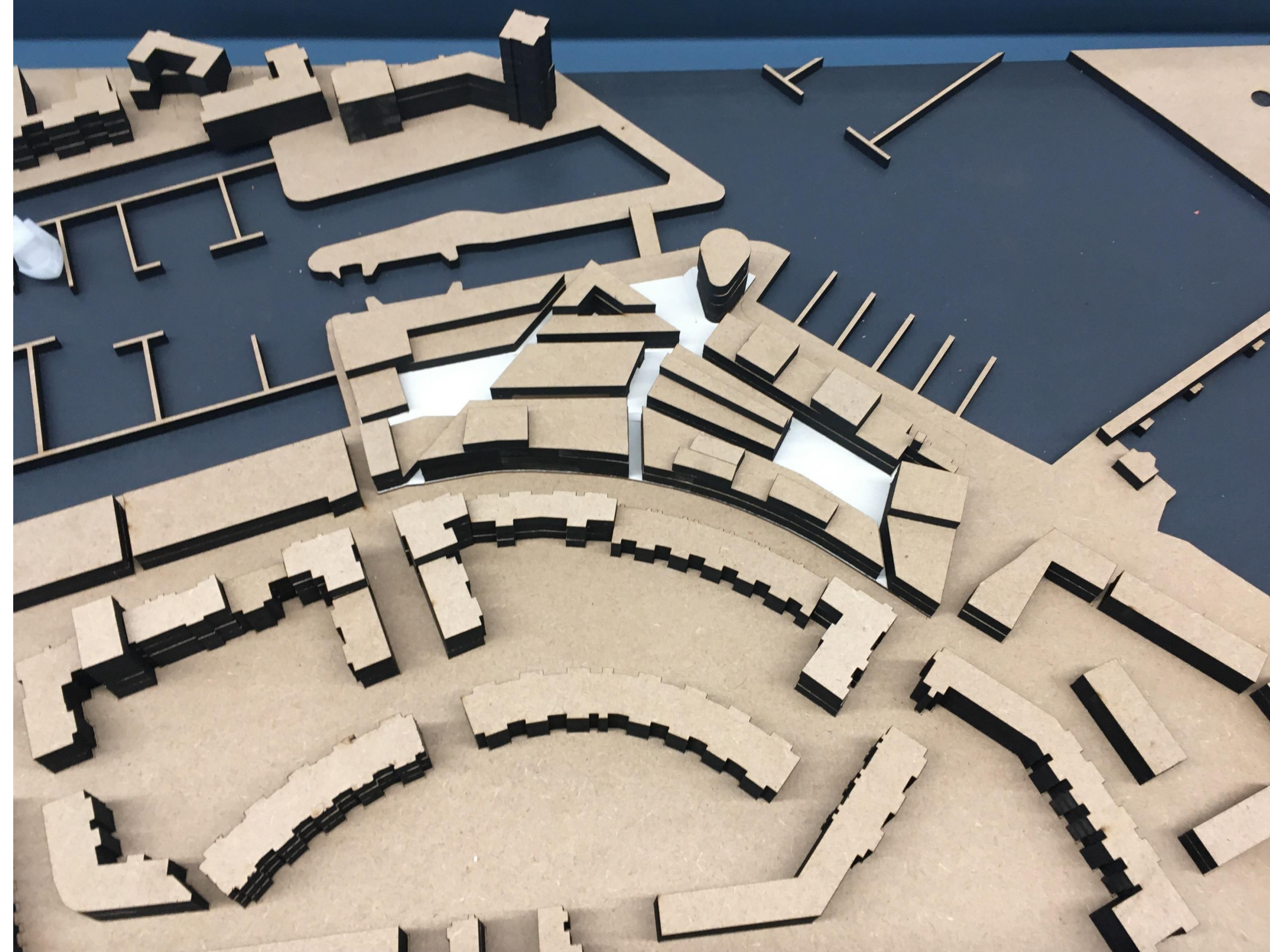
Site Plan as existing (A1)

Master Plan – 1 no. A1 Sheet – plus supplementary 3D drawings and photographs of your proposals set on the model.

Project Brief.

Precedent Study.

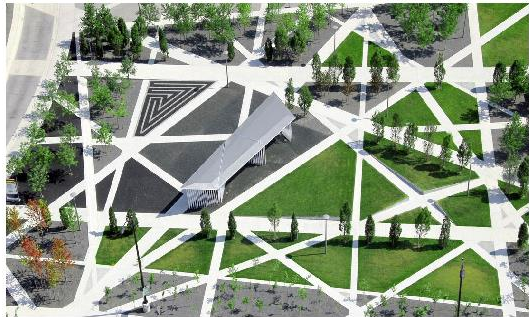
Reviews to take place Thursday 19th November commencing at 10.00 a.m.





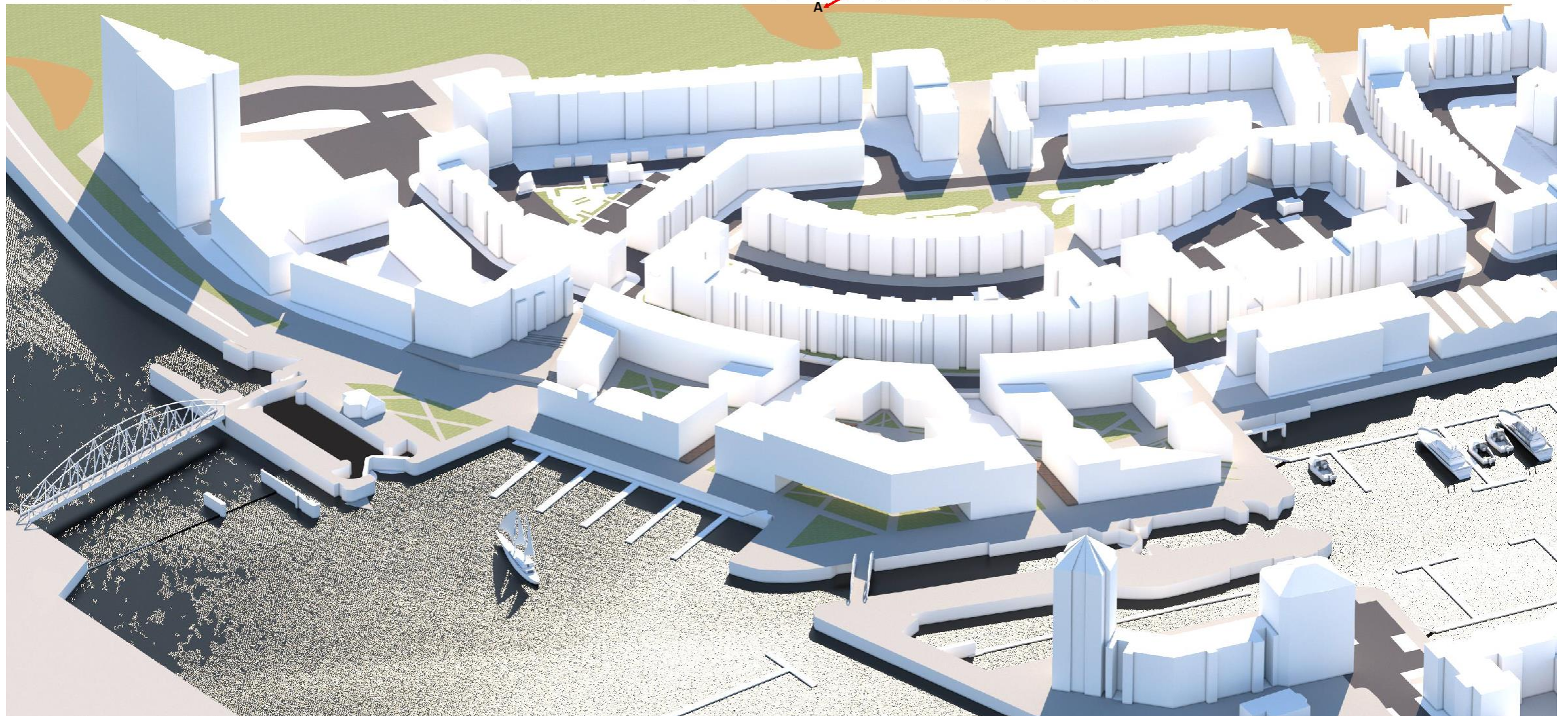
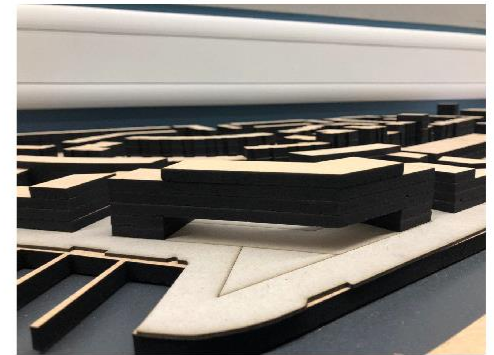
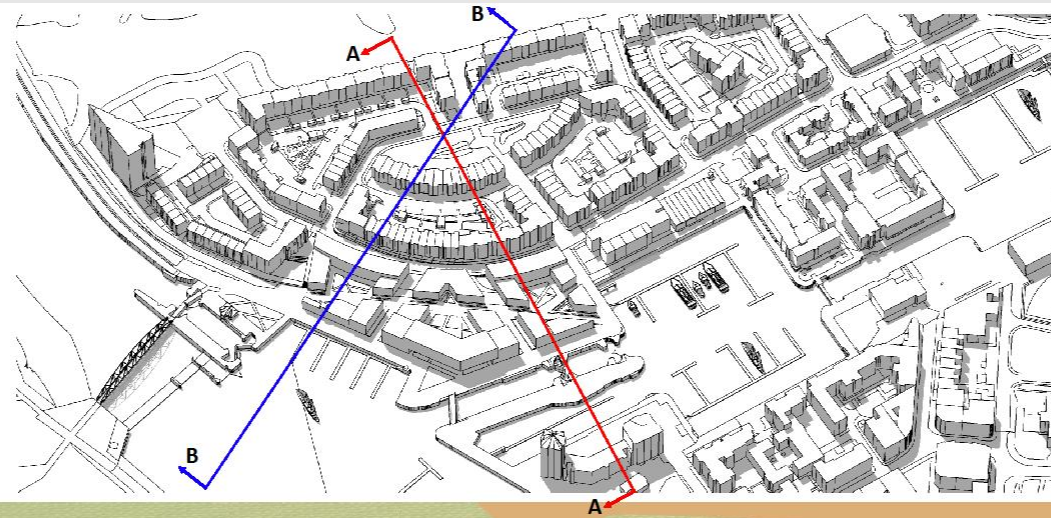


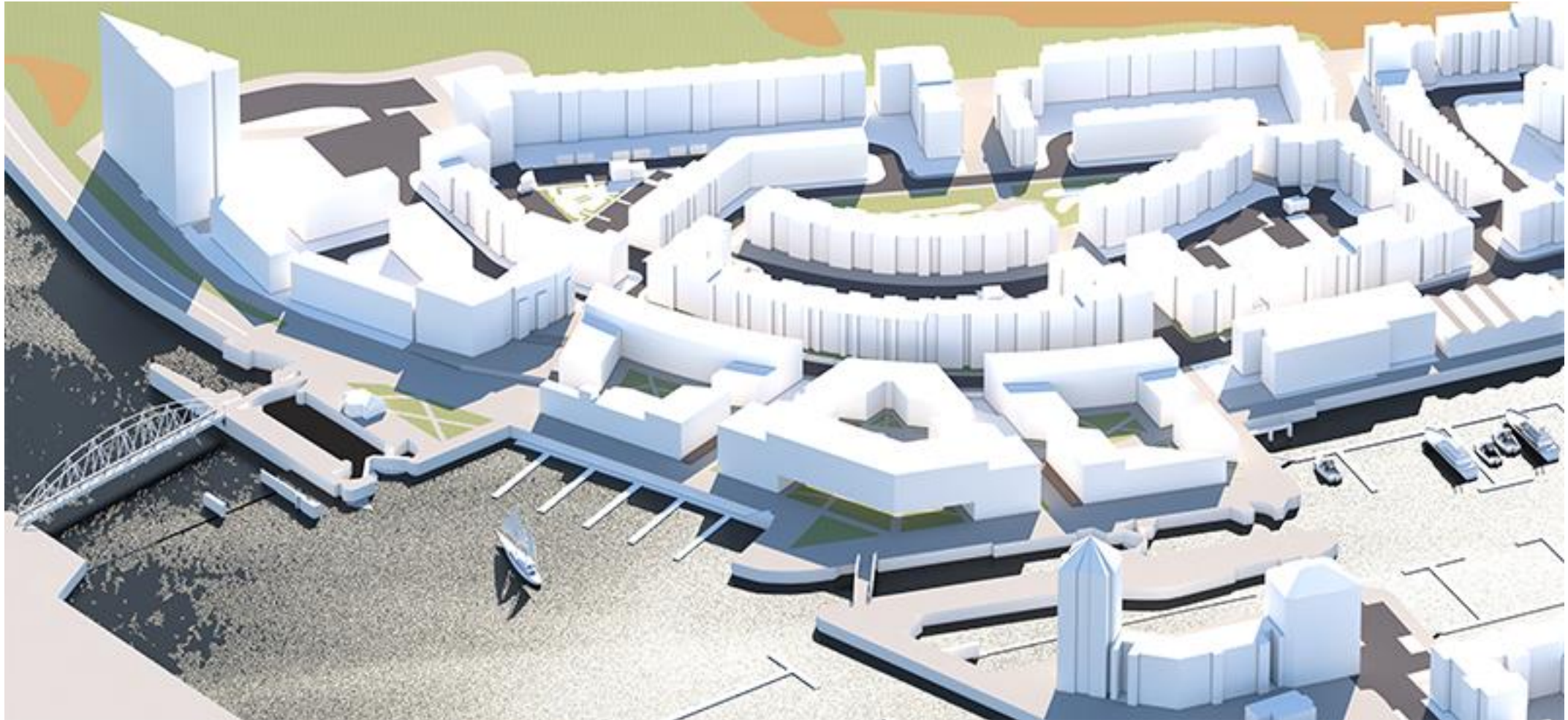
Landscape Strategy



Scholars' Green Park, Toronto, Canada

Studio 3A Masterplan



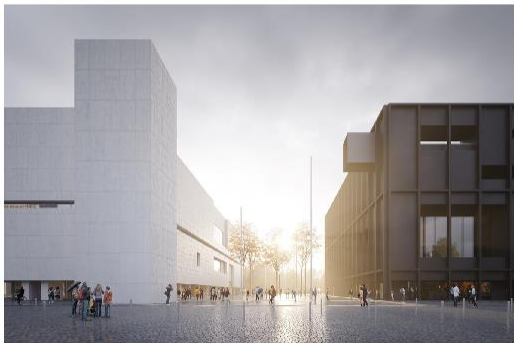


Precedent Study/Museum Of Modern Art

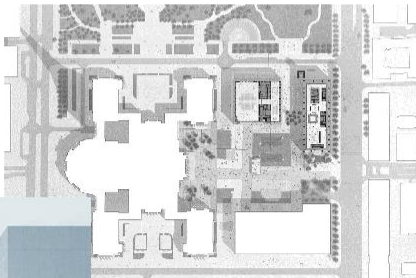
Architect: Thomas Phifer and Partners (New York)
Local Architect: APA Wojciechowski (Warsaw)



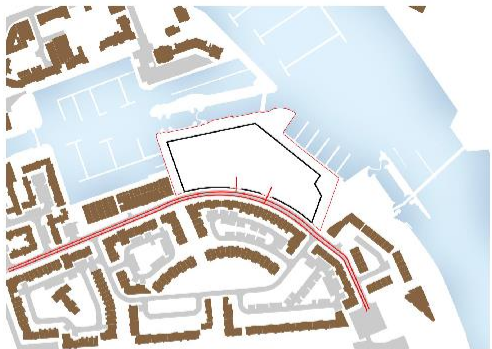
The TR Warszawa Theater accommodates over 900 seated guests across four stages. It also includes two large rehearsal rooms, administrative offices, costume and set shops, a restaurant, and a cafe. The interior space reflects the stage, “the heart of the theater”. In fact, “the Theatre wishes to project an image of openness that invites public participation”, therefore each performance space has windows to the exterior. Moreover, “the hangar”, the primary performance hall is a multi-directional space where the audience and the stage can have different configurations.



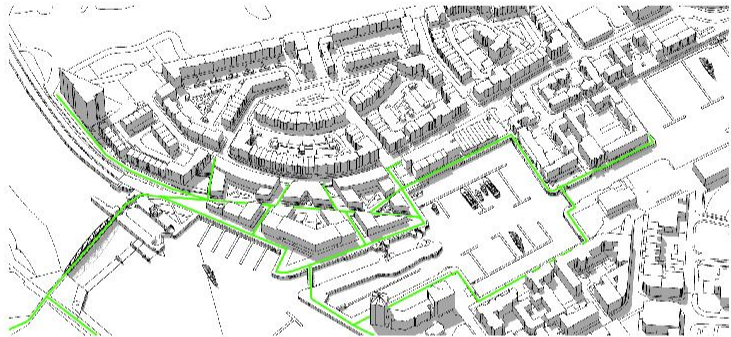
The Museum of Modern Art Warsaw was conceived to “promote the free exchange of ideas, conversation and dialog, accommodating both current and future programming, [...] It requested a wide variety of gallery and social interaction spaces to accommodate an engaged audience and its growing collection of contemporary art”. On the ground level, the open public space offers various activities like educational classrooms, lobby, auditorium space, reaction galleries even a café and a bookstore. On another hand, the two upper floors host the museum galleries



Vehicle, Pedestrian, Cycle access



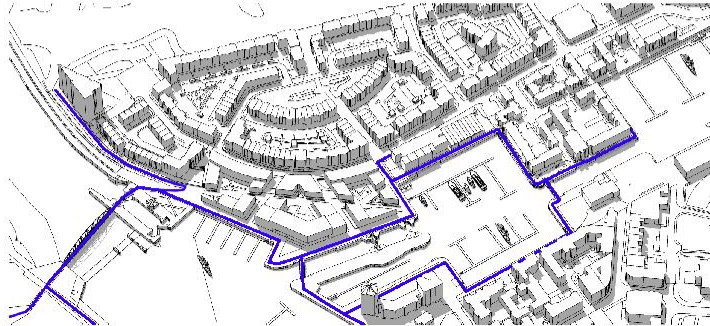
Bicycle & Car park
Vehicle access



Proposal Cycle Routes

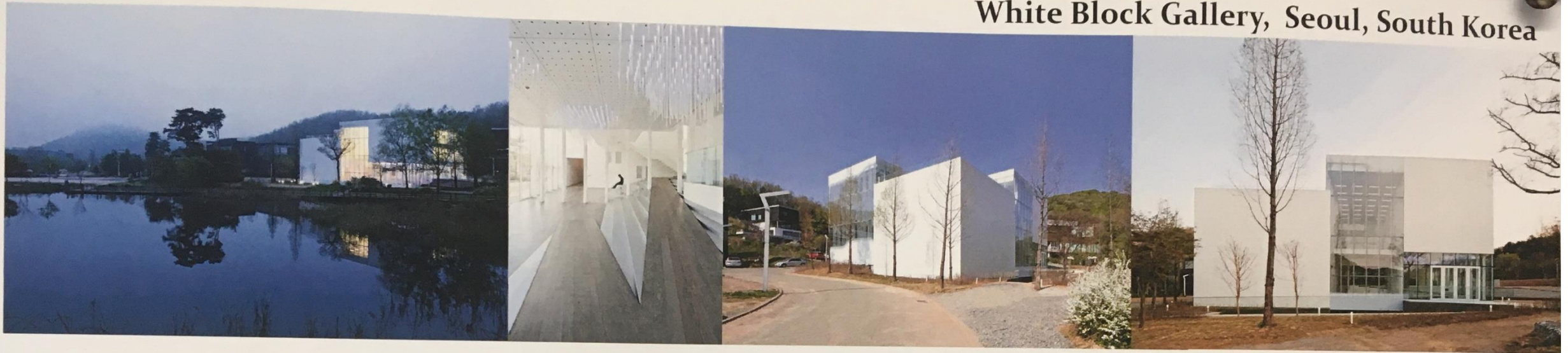


Proposal Pedestrian paths



Precedent

White Block Gallery, Seoul, South Korea



Strategy: The combination of three independent gallery spaces set on a radial plan which span from the circulation core. These spaces are then enveloped within a glass skin which floods the central atrium with natural light and gives views out over the lake and surrounding country side.

Finish: The exterior is finished in White Stucco and a series of shear glass curtain walls which have a unique fenestration applied.

Circulation: The architect has put a great deal of effort in to creating a journey through the three volumes with a series of bridges and ramps to encourage a circular path up and through the building they have also emphasised changes in level which take advantage of the sites original slope to add a great deal of character to the atrium which also doubles as an informal lecture space

Function: The display of contemporary korea art and sculpture, Presentation space and the delivery of lectures.

Scale: A three storey building set within the landscape, The surrounding buildings are of similar stature and due to the topography the gallery does not over dominate the surrounding structures

Proportion: The separation of the gallery cubes by the glass core helps to reduce the visual mass of the building and allows the visitors to read the masses functions.

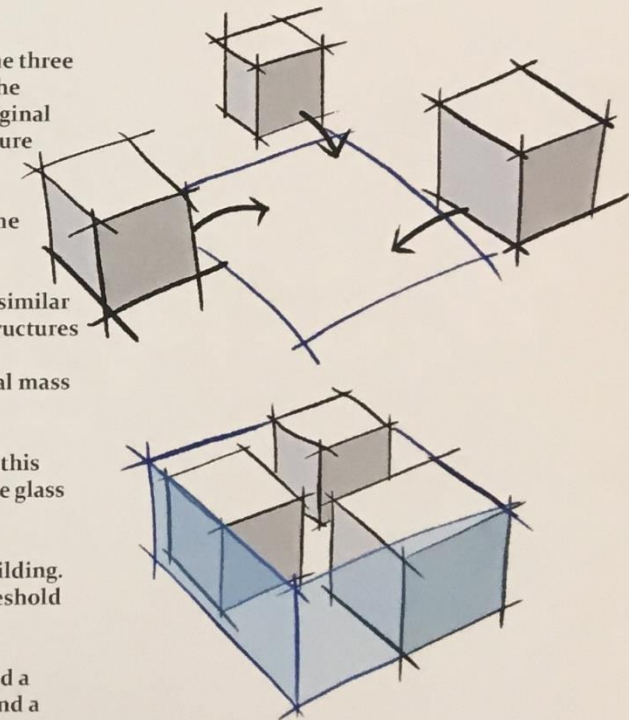
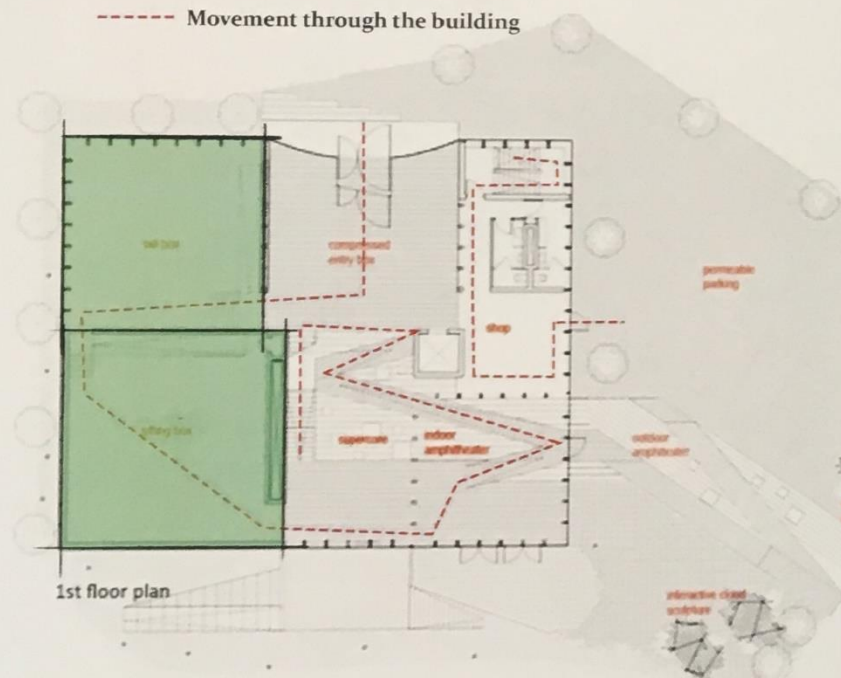
Light: The three primary exhibition spaces are closed boxes devoid of exterior appatures, this allows the internal enviroment to be controlled to suit the changing exhibitions whilst the glass atrium and circulation invites you in to the gallery

Access: The main point of access is along the only curved surface on the exterior of the building. It draws the visitor into the primary access point on the ground floor whilst the flush threshold allows for ambulant users.

Details: Great attention has been placed on the circulation core, the architect has designed a unique hybrid of a access ramp and staircase which is both a rigid architecural statment and a playful entity. glass has been

Context: Set within the Heyri Art Valley which was created by creatives to be a arts based community the surrounding buildings are a mix of Cafe's and Art galleries built in a mix of styles most of which are in a Korean take on modernism

--- Movement through the building



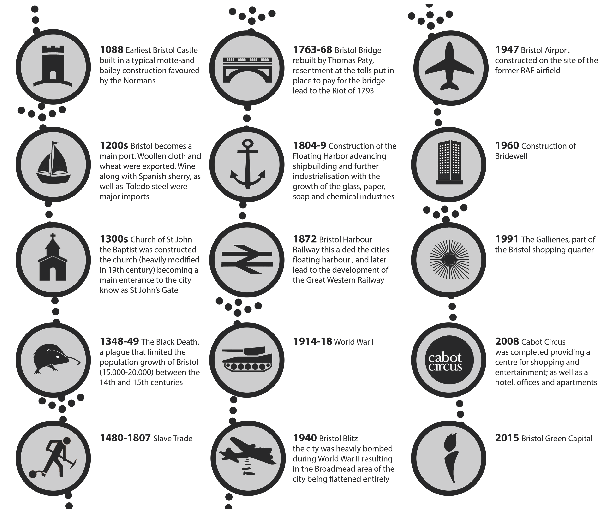
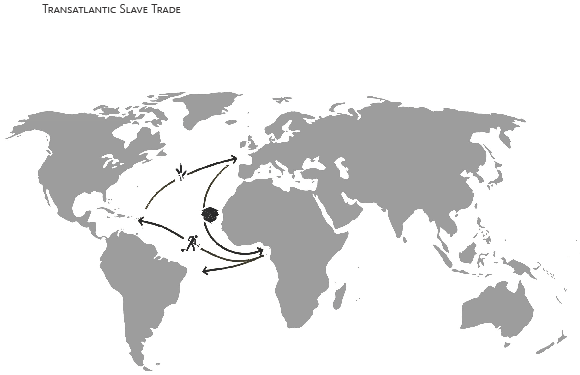
HISTORY

Bristol was a major port that facilitated the transatlantic slave trade, which started in 1480, where Africans taken for slavery in the Americas in exchange for manufactured goods. The slave trade and the consequent demand for cheap brass ware for export to Africa caused a boom in the copper and brass manufacturing industries of the Avon valley, which in turn encouraged the progress of the Industrial Revolution in the area. Glass, soap, sugar, paper and chemical industries also developed along the Avon valley.

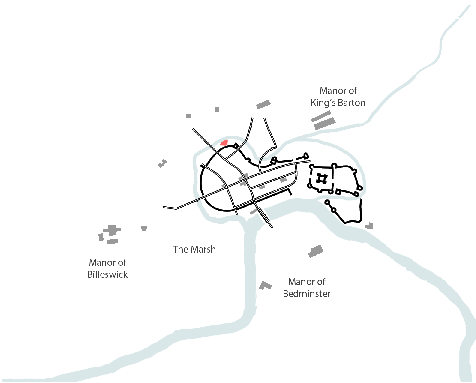
Over 2,000 slaving voyages were made by Bristol ships between the late 17th century and abolition in 1807, carrying an estimated half a million people from Africa to the Americas in brutal conditions.

The timeline, on the right, describes the narrative of Bristol's history, highlighting many of the major events from the 12th century up until the present day.

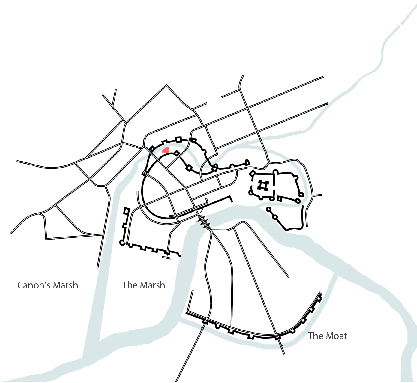
The following pages show the development of Bristol from the 12th century up until 1900. The very first map of Bristol was recorded in 1150, this map includes the site of the earliest know Bristol Castle as well as walls which define the outline of the city. These boundaries over time have grown but are still evident in Bristol today, in the area know as 'Old City' which include St Nicholas Market and the ruins of St Mary le Port church. The 1900 map is important as it documents Bristol on the eve of both World Wars, during which the city took a lot of damage due to intense bombardment from air strikes especially during late 1940. These maps also show how the River Frome was rerouted and eventually lead to the construction of the floating harbour, a strong beneficiary for the sea trade to and from Bristol.



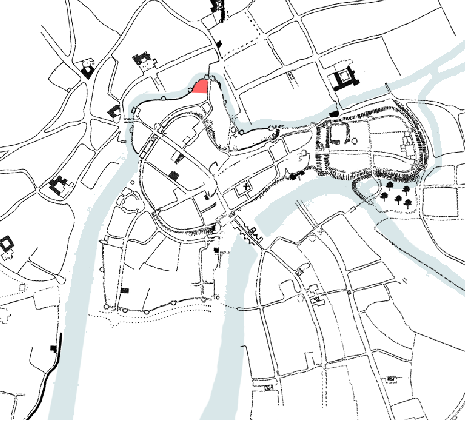
BRISTOL - 1150



BRISTOL - 1250

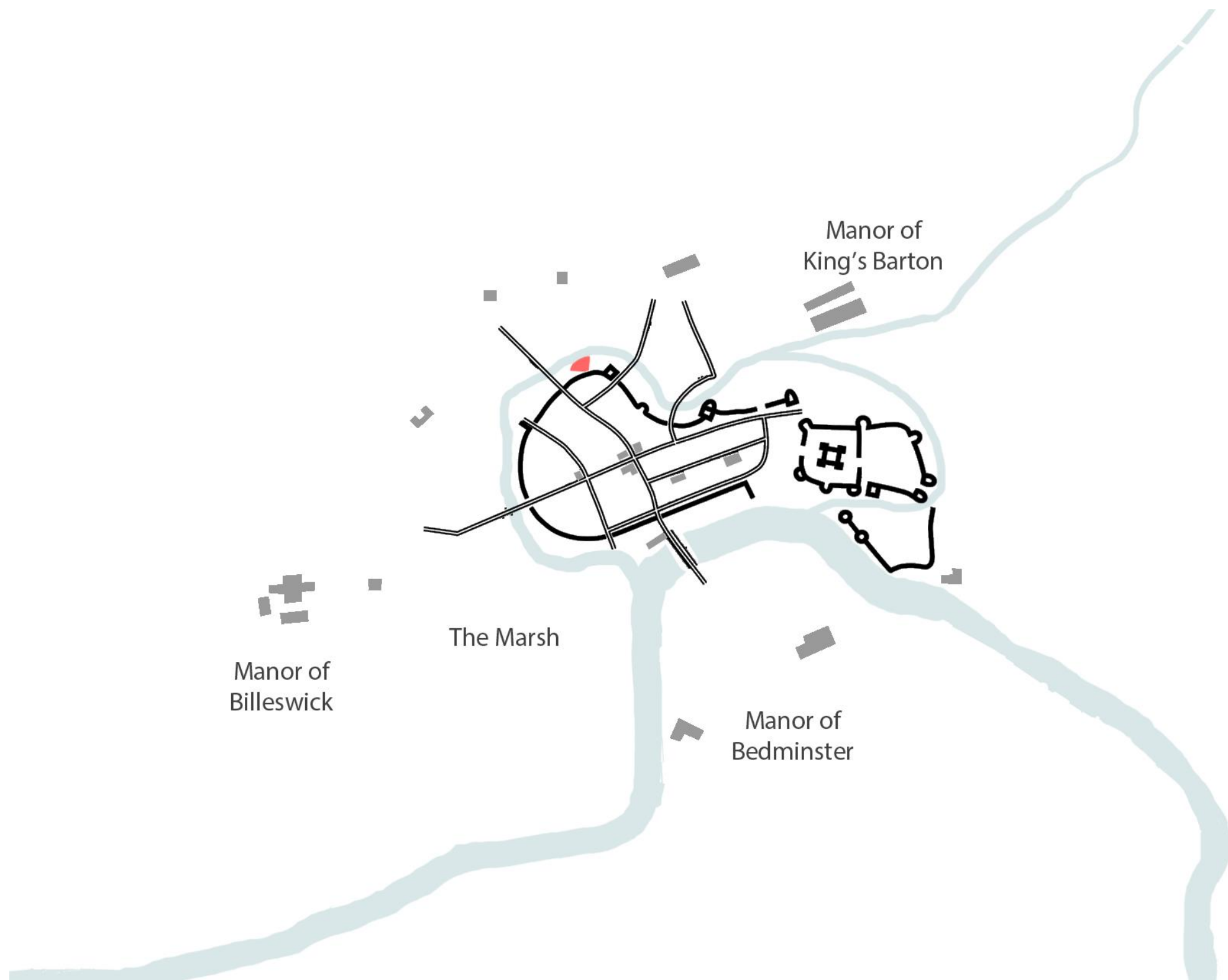


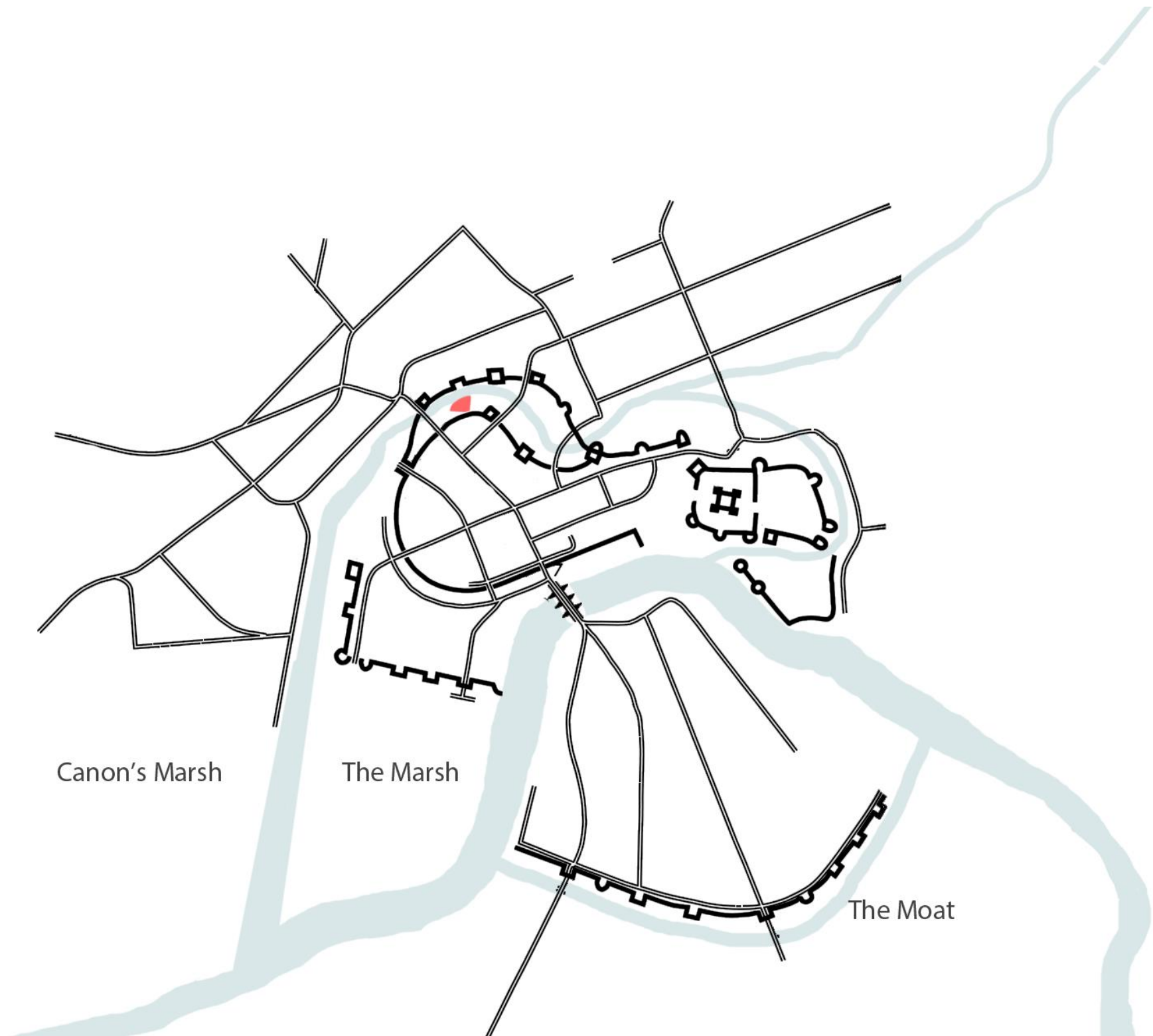
BRISTOL - 1450

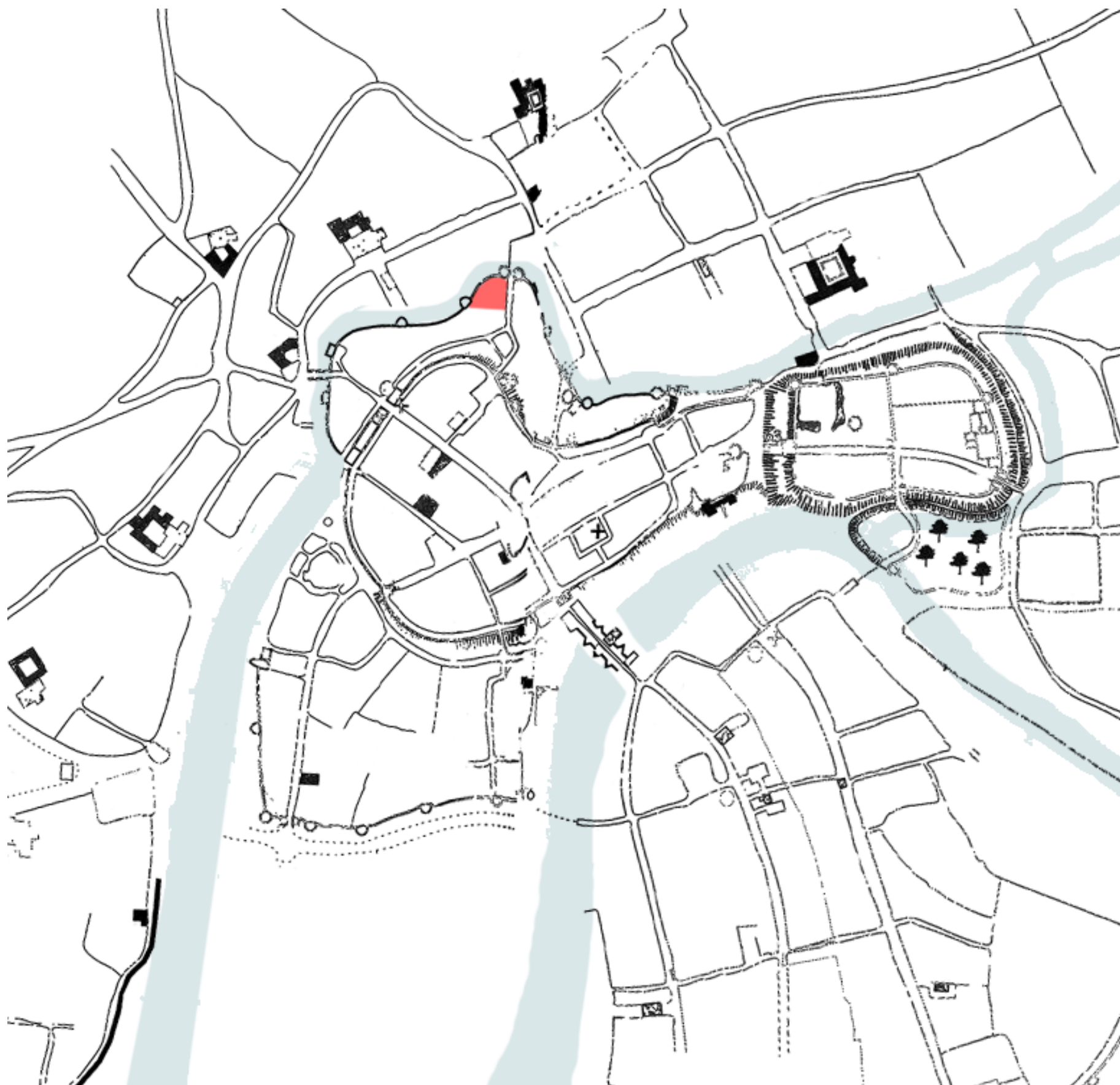


BRISTOL - 1900







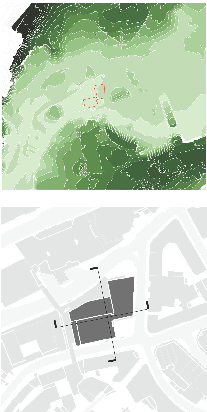
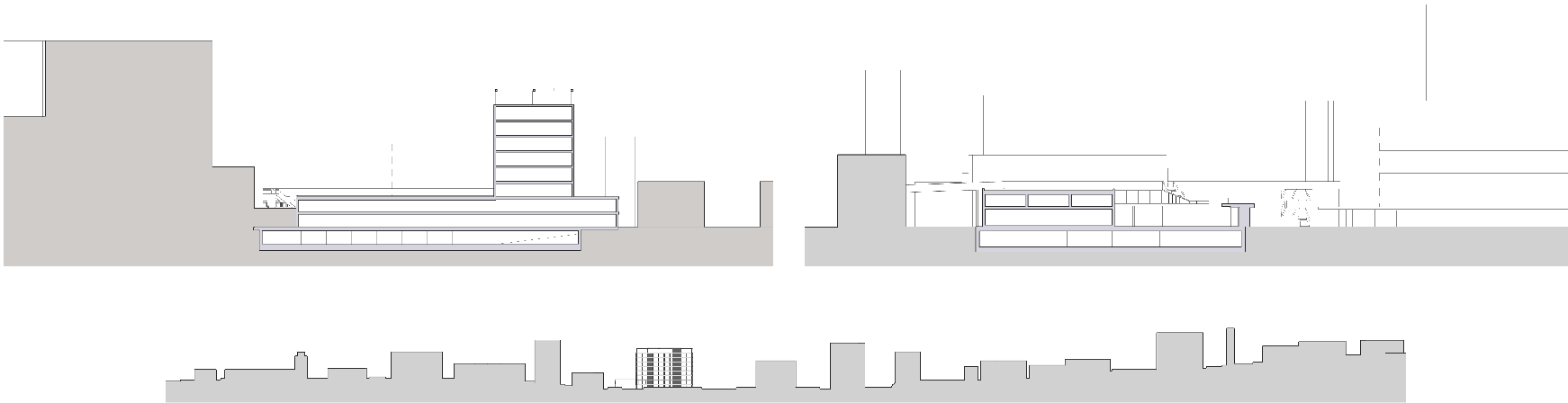




TOPOGRAPHY

The site is located in the remnants of the Froome Valley. The river Froome now runs beneath the road network and adjacent to the site. The North and South slopes of the valley begin and the Christmas Steps and at All Saints Street, respectively.

The lowest point of the site is 9m above sea level. The raised concrete walkway and the bridge network to the West of the site is 12.9m and 15.4m above sea level, respectively.



VIEWS

The site is exposed on three sides; North (Rupert Street), East (Bridewell Street) and South (Nelson Street).

All of the surrounding buildings can see the tower on the site, as well as buildings situated on the slopes of the Froome Valley due to the increased altitude of the buildings and the greater number of floors may buildings to the South have.

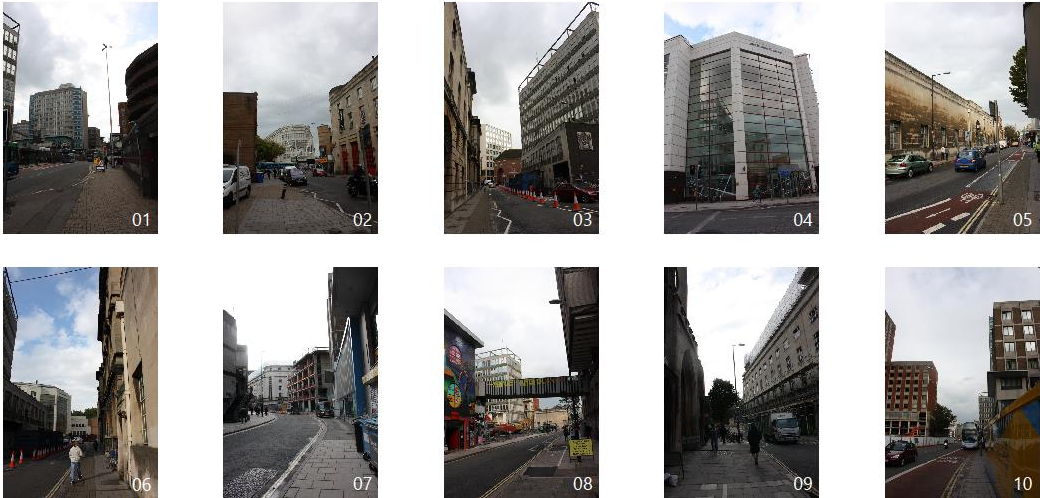
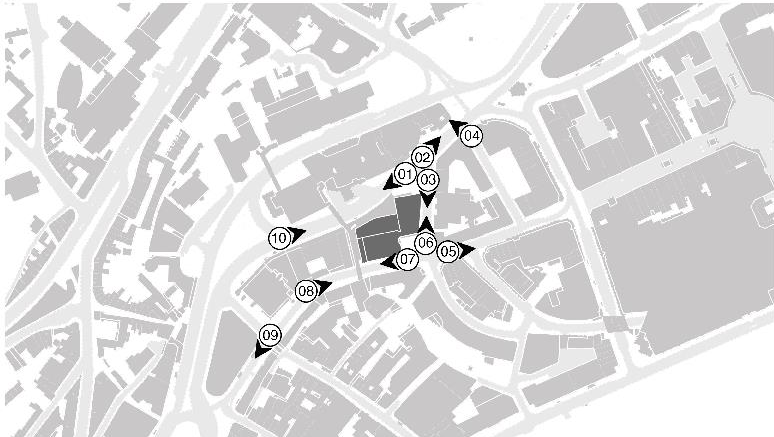
The site is relatively low compared with the buildings to the North, West and South.

The old fire station faces the site from Bridewell Street. A music store, car rental depot, Police Station and car park face the site from Rupert Street. The lanes and student accommodation/offices face the site from Nelson Street. The neighbouring buildings on the West of the site include student accommodation and a karaoke bar.

With the site being on the valley floor the views from it are not extensive and are not desirable or pleasant.

From afar the tower is the part of the site, which can be seen from a distance as the element that is associated with the site.

Views from the elevated walkways and bridges provide elevated, distant views between buildings towards; Primark, Broadmead and the fountains.



c. 1000 The Vikings are believed to have built a fort at Swansea

Early 12th Century The Normans conquer this part of Wales and they build a castle at Swansea. A town grows up in the shadow of the castle.

1158-84 At some point in this period Swansea is given a charter (a document giving the people certain rights)

1200 Swansea is a little town with a population of about 1,000

1402 Owain Glendower burns Swansea. However the little town recovers and it is known for its wool and leather industries.

1647 Swansea Castle is demolished by the Parliamentarians

1650 Swansea has a population of about 1,000. Coal and iron are exported from Swansea

1716 Copper is first smelted at Swansea

1750 Swansea has population of about 3,000

1764 A pottery plant is founded at Swansea

1771 Swansea gains its first bank

1777 Zinc is first made at Swansea

1785 Swansea gains its first theater

1801 The population of Swansea is 6,831

1809 A body of men are formed with powers to pave, clean and light the streets of Swansea

1821 Swansea gains gas street lighting

1832 Swansea is struck by cholera

1835 Swansea Museum is founded

1841 The population of Swansea reaches 16,000

1845 Tinsplate is made at Swansea

1849 Cholera strikes Swansea again

1852 North Dock is built

1859 South Dock is built

1864 A General Hospital is built in Swansea

1871 The first public library opens in Swansea

1881 Prince of Wales Dock is built

1887 Victoria Park opens

1901 The population of Swansea is 134,000

1906 The first Council Houses are built in Swansea

1909 Kings Dock opens

1911 Glynn Vivian Art Gallery opens

1920 Queens Dock opens

1934 A new Guildhall is built in Swansea

Second World War 387 people in Swansea are killed by German bombing

1969 South Dock closes. (It opens as a marina in 1982). A ferry service to Cork begins. Swansea is made a city.

1977 A Leisure Centre is built

1979 The Quadrant Shopping Centre opens

1984 County Hall is built

1990 Plantasia opens

1997 Parc Tawe Centre is extended

2005 National Waterfront Museum opens