In 2017 the Isle of Wight development department invited Portsmouth School of Architectures’ Master of Architecture programme to contribute to its regeneration strategy through a research engagement investigating the island’s economic, social and environmental spatial design. A research study programme developed, drafted and co-ordinated by Walter Menteth and Francis Graves, lecturers at the school architecture, was subsequently launched in 2017.

The study has through physical research and spatial analysis developed, tested and posited social, environmental and economic development, through architectural design strategies that deliver long term regeneration, improvement and betterment. An aim has been to extend knowledge and thinking, identify and seek potential and opportunities, and raise public and stakeholder awareness to support and promote qualitative improvement.

Three waterfront towns, Newport, Ryde and Shanklin, each at risk from climate change induced rises in sea level, where initially selected for investigation. Each town was then explored by separate teams working in collaboration. In 2018 the research extended to encompass Cowes while also seeking to address fluvial flooding in Newport.

This leading Newport Quays Masterplan Report contains overall summary findings from the study of Newport collaboratively undertaken by the team comprising Anthony Hoskins, Kristine Karlsen, Zoe Rees and Jeremy Watson.

The findings show how better integrated forward economic, spatial and architectural planning can open opportunities for all and enhance the town’s economy and release potential.

Securing the town against impeding climate change impacts and sea level rise along the Medina, addressing the towns bifurcation by the A3020 Medina way and releasing development potential into the future have been key objectives.

A tidal barrage providing boating access and combined with a new river crossing across the Medina north of the town, provides over the long term is thought to offer the best means of achieving these objectives. This both protects the town and releases pressure on the urban bypass, whilst opening up sites to the north west of the town, in proximity to the prisons.

It is to be hoped that this research may contribute through analysis, designs, benchmarking and discourse, to raising public and stakeholder knowledge of the sustainable, qualitative and practical developmental potential of Newport.

A public exhibition of the design research was held in Newport, from 19 - 30 July 2018, at the kind invitation of the Isle of Wight development department.

Each of the architectural researchers then developed areas of study in further detail, and these are recorded in additional reports.

Walter Menteth and Francis Graves
Research supervisors and editors
July 2018 (r.2. 12/18)

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Issues Identified

A thorough and detailed site analysis was carried out prior to design commencement. The physical and environmental characteristics of the urban fabric were interrogated at island level and for the Newport area in particular. Of equal importance was the investigation into the local residents and the social/political characteristics of the micro areas around Newport. These investigations informed the key areas of focus listed below.

A fuller site analysis booklet, titled ‘Newport Site Analysis’ is also available.

Key Issues and Opportunities
• The Medina Way dual carriageway creates a division
• Too many car parks and redundant spaces
• Flooding affects the quay area
• Good bus connections, but congested roads
• Train connections old and run down
• Lack of ‘Mixed Use’ areas
• Young population, but lack of education and training
• Low level of academic achievement
• High level of unemployment
• Lack of access to affordable housing
• Lack of top market detached housing
• Town centre contains many listed buildings, restricting development
• Large potential for solar energy generation
• Area not dense, and lacking in height
• Lack of quality retail and leisure

Issues Identified and Design Solutions

![Separation of the Town](image1)
![Residential Area to the Town Centre (Pedestrian)](image2)
![Identified Gateway to the Town](image3)
![Nodal Points / Points of Interest](image4)
Transport Strategy

The existing transport for the Isle of Wight is currently inadequate to support regeneration for the Isle of Wight. The Island currently has three vehicle ferry routes, three pedestrian ferry routes and a train line running from Ryde pier head to Shanklin. The existing transport to the island is currently expensive for residents and tourists to travel to and from the Island. The transport network on the Island is not accessible for all areas of the island and many residents rely on cars to travel around.

Existing Transport Plan

 Proposed Transport Plan

1. Existing tunnel proposal from Whippingham to Bembridge
2. Existing Newport Bypass proposal
3. New bridge providing a connection between A3050 and A3054
4. Direct Ferry Services from England to Sandown/Shanklin and between France and the Island.
5. Provide a new road connection at the south of Island, replacing the section that fell into the sea, ensuring a continuous route.
6. Provide a new train system using the old disused lines, with adjacent cycle routes.
Urban Fabric - Medina Valley
Key Demographic Analysis

For the full demographic and contextual analysis please see the site analysis booklet, titled ‘Newport Site Analysis’ that accompanies this portfolio.
Key Demographic Analysis

For the full demographic and contextual analysis please see the site analysis booklet, titled ‘Newport Site Analysis’ that accompanies this portfolio.
Development Opportunities
Buildings Removed

The buildings highlighted will be removed as part of the scheme. The Quay area is a prime area for develop and these buildings do not maximise the potential of the area.

Areas of Development

The areas highlighted potential areas that could be developed. These areas are predominantly underused spaces such as car parks, grass verges and buildings of poor quality.

Newport Transport Solution

To solve the transport issues the primary vision is for the railway line connection to Ryde to be reinstated. In addition a park and ride stop will be added outside of the town centre. These solutions will reduce the traffic congestion around the area.
Masterplan Options

The masterplan options developed around the same urban fabric, but the interaction with the water is varied across the three options.

This first option seeks to create a riverside park south of the road near the old Council offices.

The second option takes the river deeper into the old town centre, creating a marina on the site of the old council offices.

Like all our three of our options a tidal barrage has been included to the north of the site. The idea of the barrage is to control the level of the river, providing a consistent access for boats and preventing flooding.

The road would prevent tall boats from entering the old town marina proposed in option 2, minimising its usability. The third option provides a smaller marina to the north of the road on the site of the old Riverside Centre.
Taking masterplan option 3 as the scheme to go forward the above diagram indicates how we would phase the development. The focus is on income generation to allow social schemes to be funded by the initial commercial developments.
Newport Quay - Before and After

Existing Site

Proposed Site
Phasing Strategy

Phase 1

Phase 2

Phase 3
Phasing Strategy

Phase 4

Phase 5
Flood and Design Strategies

The threat of flooding is prevalent in all coastal areas, and the tidal quay at Newport is no different.

Although our main strategy is to control the tidal flow with a barrage, this page highlights flood defence strategies that could be incorporated into a riverside urban proposal.
Precedent Inspiration

NYA, ERIKSBERG - Neighbourhood Masterplan

PARGUS FINLAND - Waterfront Masterplan

REIMS, CHAMPAGNE-ARDENNE, FRANCE

ANGERS IN PAYS DE LA LOIRE
Individual Scheme Locations

Proposed Site

Connections
Newport Public Consultation

On the 14 November 2017 the group was invited to an open public consultation meeting at the Bargeman’s Rest in Newport. We presented our strategy and proposal to contribute towards expanding future options for Newport. Also, in attendance was architect Cany Ash and Public Consultant Advisor Angela Koch, both of whom presented research and ideas.

It was a valuable, and challenging, experience to share our scheme with the public in order to gain input in order to drive our scheme further. The scheme presented examines the current north / south divide of the city and explores spatial planning, climate change and the advancement of the future infrastructure on the Island. Feedback was generally positive, although there were some dissenting voices, particularly in relation to the historic quay walls and local allotments.
Scheme Development

Riverside Homes
The Riverside homes scheme has developed from an initial scheme of a variety of floating homes along the Medina which could have been linked to the floating homes industry. Once the barrage scheme was put in place for the scheme it would not have been the correct location as the water level would have remained the same, meaning a floating structure would not be required as the river would not be tidal. The scheme was then adapted to be located along the river’s edge to create high end detached housing. The site analysis identified the lack of detached housing in Newport and low level managers / directors / senior management roles living in Newport compared to other areas of the Island. The brief of the project changed greatly to address this by developing a scheme for 24 high end detached span housing units within an enhanced natural landscape.

Council Offices
The Council Offices scheme was originally a tram interchange point for the Island with commercial offices. Due to the location of Newport at the centre of the Island it was the most appropriate location. The Island has various old railway lines which are currently used as footpaths and the scheme wishes to develop the existing footpaths to be a shared surface tram line network. The scheme has since developed to incorporate the new Isle of Wight Council headquarters. The location’s centrality, and the new Island wide connection hub, makes it the ideal location for both staff and service users. It also frees up valuable commercial land in the town centre when the current headquarters is replaced.

Cultural Hub
The cultural hub for Newport has been adapted to enhance the cultural facilities and provide an additional theatre for the Island. The new Cultural Hub is located next to the existing Quay Arts Centre. Newport currently has a small theatre situated in Medina High School, however, by developing a theatre for the centre of Newport will provide greater activity. The access to the development will be on the roads frontage and also from the Quay Arts level. In addition the centre becomes a centre that caters to the needs of the vulnerable members of society, incorporating the services that are currently administered from the Riverside Centre.

Boatyard
The boatyard facilities have been developed on the western side of the Medina River. The scheme hopes to create training opportunities for young people to experience adventurous maritime activity. It will provide professional training courses for maritime employment and youth development programmes. The scheme will also provide boat mooring facilities for those visiting the harbour.

Mixed Use Development
The urban proposal will blend in a variety of residential, commercial and entertainment uses, where those functions are physically and functionally integrated. Pedestrian connections are enhanced via the proposed pedestrian bridge. This mixed use development can take the form of a single block. The scheme will provide greater housing variety and density, reduced distances between housing, workplaces and other destinations, stronger community character and pedestrian and bicycle-friendly environments.

Brewery/Hotel
The new brewery scheme will help attract another tourism industry to the island providing greater investment for the area. This scheme has since developed further to incorporate a hotel facility for visitors to stay at the attraction. The scheme will also provide a strong sense of identity creating a more attractive area.
Final Site Plan
Individual Project Locations

[Map showing project locations with various labels such as Cultural hub, Mixed-use leisure/residential hub, etc.]

Newport Quay – © Anthony Hoskins, Kristine Karlsen, Zoe Rees and Jeremy Watson
Areas of Development
Pedestrian Connections

The new pedestrian connections link all individual schemes for more direct and pedestrian friendly routes when compared to the existing infrastructure of Newport. The connections link from the existing town centre high street to both the western side of the Medina (riverside homes) and the east (Brewery / hotel facilities). The main connections which have been advanced to resolve one of the main issues for the scheme are those under or along the existing dual carriageway. As mentioned previously the dual carriageway has become a boulevard allowing a more active street front and pedestrian connections.
Demolished Buildings

The amount of demolished buildings has been reduced from the initial scheme. It is important to respect the existing buildings when developing a masterplan strategy. Some buildings have now been retained because they had architectural merit and could be easily adapted to the new scheme.
Landscape and Water Connections

In order to regenerate Newport additional green spaces and water connections have been incorporated into the scheme.

North
Further north of the site towards the riverside homes the river water’s edge has been retained in its natural form in order to preserve the existing marshland, wildlife and public footpaths.

Boulevard
The dual carriageway which currently separates the north of Newport from the town centre has been adapted in the scheme to become a more ‘active’ route for pedestrians. Green spaces along the route have been proposed in order to create a much more friendly area.

Public Park
The proposed scheme incorporates a public park running from the proposed Cultural centre down to the riverside to provide a more open connection from the town centre to the riverside.

Marina
The harbour has been adapted to accommodate a marina for small leisure sailing boats located near the proposed new council offices. This will create more activity / foot fall to the existing harbour which in turn will create a greater profit for the Isle of Wight Council’s land assets.

Pedestrian Bridge
A small pedestrian bridge will link the east of the river to west, again making connections around the town much easier providing a greater infrastructure and urban fabric.
The final scheme starts to address the issues of Newport’s existing social, environmental and infrastructure issues. The scheme explores the town's future expansion, spatial planning and inherits the need for resilience to climate change induced by sea level rises which already affect the area and the development of a mixed transportation scheme. All of the proposed individual location projects have enhanced the masterplan throughout the project by providing a greater insight into how the connections can be made from all sites.

The final masterplan illustrates the final spatial planning for Newport and the public park has also been shifted to create a more fluid connection between the cultural hub and boat industry through to the riverside homes development. The pedestrian bridge has also been altered since the previous masterplan to connect between the mixed use development and brewery.
Urban Fabric - Medina Valley
Demolished Buildings

Masterplan Development

Phasing
Site Model Photographs
Site Model Photographs
This Masters design research, has been undertaken as part of the University of a Portsmouth school of architecture, MUD Studio (Making Understanding & Doing) programme, under the supervision of Walter Menteth and Francis Graves, 2017-2018, on the invitation of the Isle of Wight Council development department.

The purpose of this research is to develop early academic analysis, evaluations and design synthesis to support informing future planning potential and opportunities for the Isle of Wight.

**Newport Quay Masterplan**

**DISCLAIMER**

All views expressed in this report are those of the authors and arise from an independent research programme to investigate Newport, undertaken in 2017-2018 as part of a master's programme at the School of Architecture at the University of Portsmouth. These outputs summarise the findings. The University of Portsmouth School of Architecture and the authors accept no responsibility for the information produced herein which has been undertaken for academic purposes or for tertiary or external information and data sources.