Blenheim Estates

37-41, BRIGHTON ROAD, SHOREHAM-BY-SEA

Energy and Sustainability Statement

MAY 2025

PUBLIC

FINAL (V1) PUBLIC

PROJECT NO. 70118838_2

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1 INTRODUCTION

1.1 OVERVIEW

1.1.1. WSP UK Ltd (WSP) was commissioned by Blenheim Estates to prepare an Energy and Sustainability Statement that supports an Outline Planning Application for the design and construction of 37-41, Brighton Road, Shoreham-by-Sea (hereby referred to as 'the Proposed Development'). The Proposed Development is described in detail below (Section 1.2).

1.1.2. The Proposed Development will aim to meet the highest levels of sustainability, and this Statement is derived from, and responds to, relevant regional and local policies.

1.2 THE PROPOSED DEVELOPMENT

1.2.1. The Proposed Development is located in the town of Shoreham-by-Sea, within the Adur district of West Sussex, England. It lies along the English Channel at the mouth of the River Adur, between the city of Brighton & Hove to the east and the town of Worthing to the west.

1.2.2. The site, approximately 0.21 Ha in size, is bordered by the planned Free Wharf Development to the south and east, and an existing car wash facility to the west.

1.2.3. The Applicant (Blenheim Estates) is seeking outline planning consent for the development of a residential complex at 37-41, Brighton Road in Shoreham-by-sea, to provide the following:

- The construction of a residential complex of a total of 49 units comprising of studios, one, two and three bed apartments in one block ranging from 5 to 8 storeys.
- Provision of retail space on the ground floor.
- Provision of 18 car parking spaces in the under croft.

1.2.4. **Figure 1** shows the location of the Proposed Development, with the proposed layout illustrated in **Figure 2**.

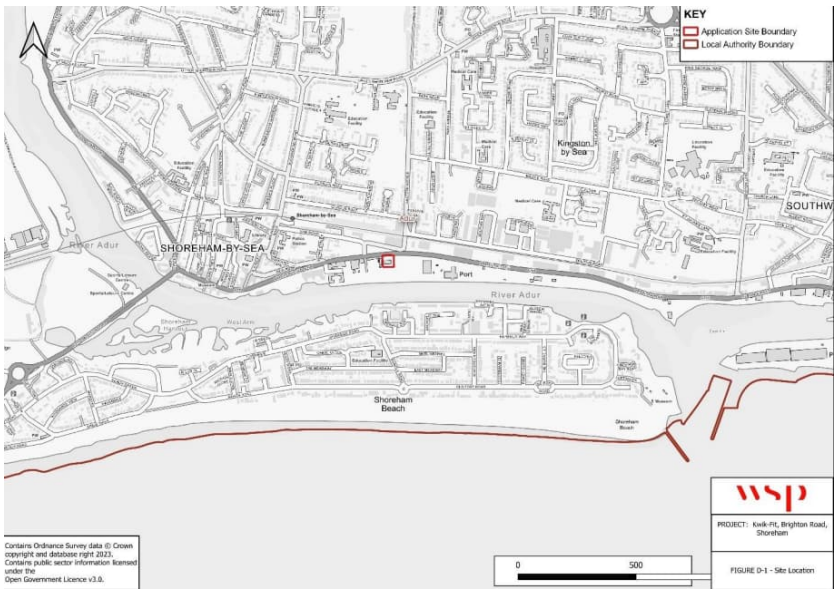


Figure 1: Site Location

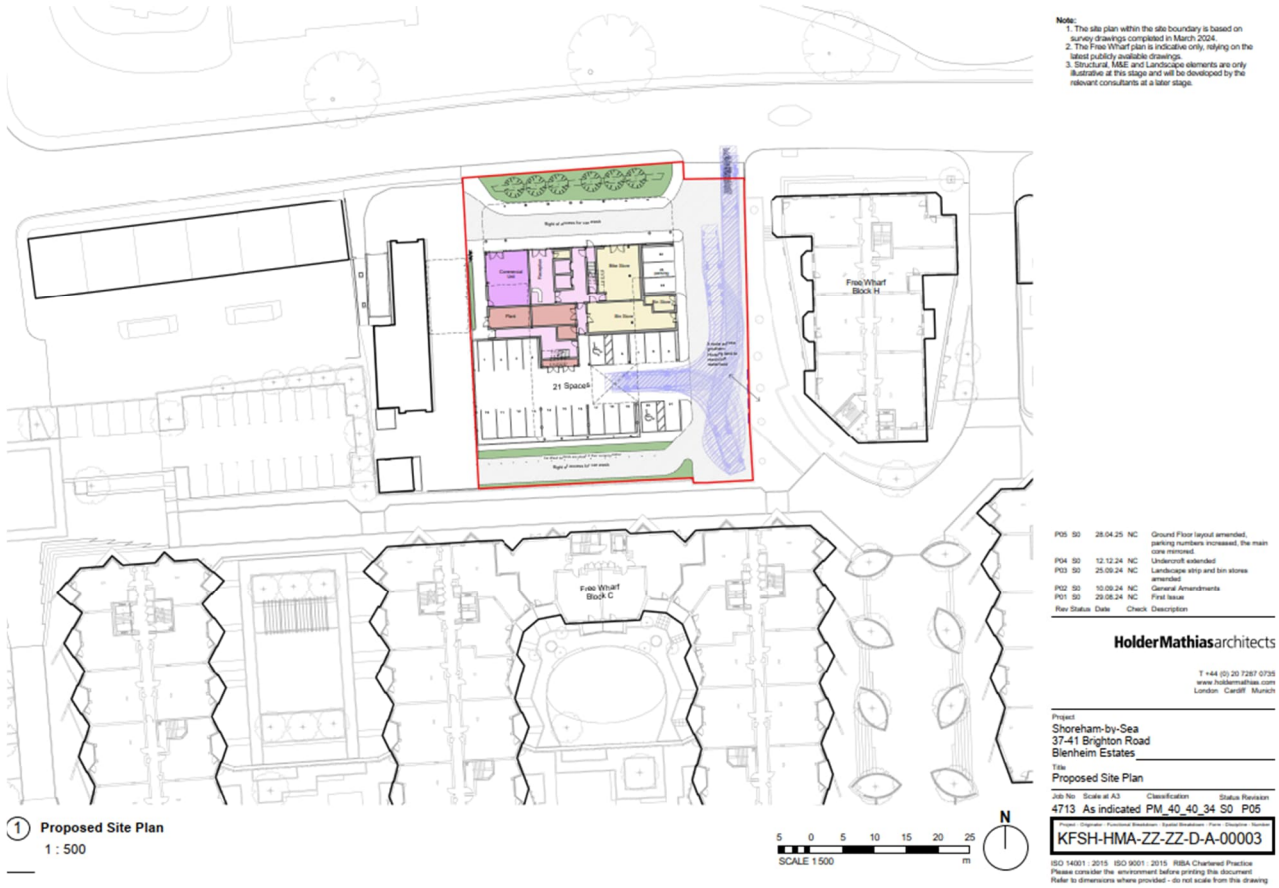


Figure 2: Proposed Site Plan

1.2.5. The Proposed Development is closely aligned with national, regional, and local plans, policies and strategies as outlined in Section 2.

2 POLICY REVIEW

2.1 OVERVIEW

2.1.1. The proposed approach to sustainable development is strictly underpinned by national and local policies. This section describes the policy context in which the Proposed Development has been designed. It considers the relevant legislation, policy, plans and strategies relevant for the Proposed Development.

2.2 NATIONAL POLICY RESEARCH

1. **The National Planning Policy Framework (NPPF)[1]**

   The National Planning Policy Framework was updated on 12 December 2024 and again amended on 7th Feb 2025. It sets out the UK Government's planning policies for England and how these are expected to be applied. At the heart of the NPPF is a presumption in favour of sustainable development (paragraph 2), with economic, social, and environmental objectives to be met through planning policy.

   Sustainability is a common theme in many sections of the NPPF including most notably the sections titled "Promoting healthy and safe communities," "Promoting sustainable transport," "Meeting the challenge of climate change, flooding, and coastal change," "Conserving and enhancing the natural environment" and "Facilitating the sustainable use of minerals."

2. **BUILDING REGULATIONS (PART L)[2]**

   Part L of the Building Regulations relates to the conservation of fuel and power and applies to both new and existing buildings. The current edition covers the energy efficiency requirements of the building regulations as set out in Part L of Schedule 1 to the Building Regulations. Technical guidance is contained in 4 Part L Approved Documents and 2 building services compliance guides.

   Part L 2021 of national building regulations took effect on 15 June 2022.

   - **Approved Document Part L1A:** Covers the requirements for new homes to be energy efficient, and individuals responsible for building work must ensure that the homes comply with the requirements provided within this document.
   - **Approved Document Part L1B:** Covers the requirements for renovations and extensions to existing homes to be energy efficient. It recognises that it is not always possible to meet new build standards, but the regulations state that if a thermal element (roof, wall, or floor) is being replaced or renovated then it must be done to Part L1A standard.
   - **Approved Document Part L2A:** Covers the required energy standards during construction of new commercial buildings.
   - **Approved Document L2B:** covers existing buildings other than dwellings.

3. **Climate Change Act (2008)[3]**

[1] National Planning Policy Framework, 2024 - Link
[2] Building Regulations Part L: Conservation of Fuel & Power, 2022- Link
[3] Climate Change Act (2008) - Link

The Climate Change Act commits the UK government by law to reducing greenhouse gas emissions by at least 100% of 1990 levels (net zero) by 2050. The Act also established the Committee on Climate Change (CCC) to ensure that emissions targets are evidence-based and independently assessed. In addition, the CCC's Adaptation Committee advises on these climate change risks and opportunities and assess the progress to adapting or tackling them.

The Climate Change Act requires the government to set a series of legally binding target 'carbon budget' to act as steppingstones towards the 2050 target. Each carbon budget caps the scale of emissions which can be emitted by the UK over a five-year period. To date, six carbon budgets have been put into law that run up to 2037 which require a 78% reduction by this time. The UK government is currently awaiting advice from the CCC in setting the seventh carbon budget for the period 2038-42.

4. **Planning Practice Guidance**[4]

National Planning Practice Guidance (PPG) is an extensive online resource of detailed policy guidance provided by the Ministry of Housing, Communities and Local Government. Along with the NPPF (National Planning Policy Framework), PPG sets out how the government envisages the day to day working of the planning system in England to operate.

5. **Clean Growth Strategy**[5]

This strategy sets out a comprehensive set of policies and proposals that aim to accelerate the pace of 'clean growth,' i.e., deliver increased economic growth and decreased emissions. The key actions which the government will take as part of the strategy include 'Accelerating clean growth,' 'Improving Business and Industry Efficiency – 25% of UK Emissions,' 'Accelerating the shift to low carbon transport – 24% of UK emissions,'' Delivering Clean, Smart, Flexible Power – 21% of UK Emissions,' Enhancing the Benefits and Value of Our Natural Resources – 15% of UK Emissions',' Leading in the Public Sector – 2% of UK Emissions,' and 'Government Leadership in Driving Clean Growth.'

6. **Clean Air Strategy (2019)**[6]

This document builds on an extensive consultation process which indicated broad-based support for many of the actions proposed. It sets out the comprehensive action that is required from across all parts of government and society to meet the new goals to cut public exposure to particulate matter pollution, as recommended by the World Health Organization. These will support the creation of Clean Air Zones to lower emissions from all sources of air pollution, backed up with clear enforcement mechanisms.

7. **Net Zero Strategy: Build Back Greener**[7]

This strategy sets out the UK Government's long-term plan to reduce the greenhouse gas emissions and end the UK's domestic contribution to man-made climate change by 2050. The strategy sets out plans for reducing emissions from each sector of the economy, while offsetting any residual emissions with greenhouse gas removals.

[4] National Planning Practice Guidance - Link
[5] UK Clean Growth Strategy - Link
[6] UK Clean Air Strategy - Link
[7] Net Zero Strategy – Build Back Greener - Link

8. **Noise Policy Statement for England (NPSE), 2010**[8]

   The Noise Policy Statement for England (NPSE) sets out the long-term vision of Government noise policy- Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development. The application of the NPSE investigates the cost-effective management of different types of noise. It also provides a clear description of desired outcome from the noise management.

- 5.195 – Avoid significant adverse impacts from noise on health and quality of life.
- 5.195 – Mitigate and minimise other adverse impacts of noise from new developments.
- 5.195 – Contribute to improvements to health and quality of life through noise from new developments.

2.3 LOCAL POLICY RESEARCH

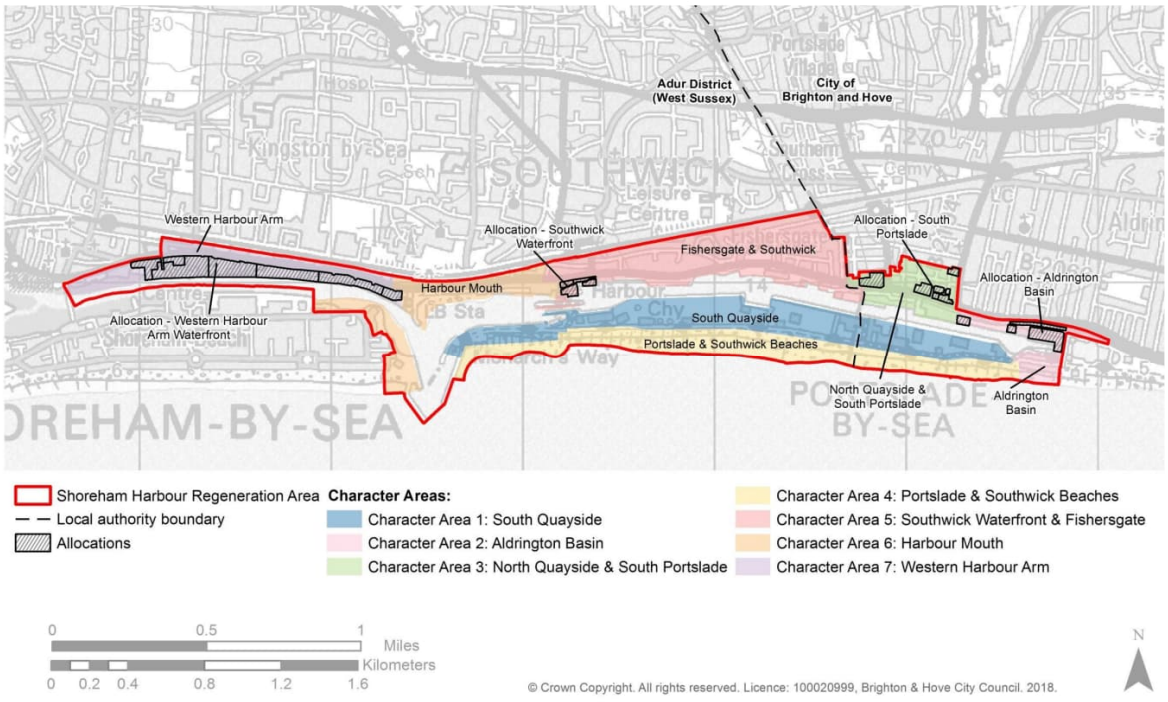
2.3.1. As stated previously, sustainable development is a material consideration in planning. Therefore, to identify those elements of sustainability that are relevant to the Proposed Development, the following local policy and guidance documents were (in addition to the Local Plan) researched for key commitments and requirements:

9. **Shoreham Harbour Joint Area Action Plan (JAAP)**[9]

   The Action Plan was adopted by Adur District Council, Brighton & Hove City Council (BHCC) and West Sussex County Council (WSCC) along with Shoreham Port Authority in October 2019. The area inclusive of and surrounding the Site comes under the Shoreham Harbour Regeneration Area. According to the Action Plan, by 2031 Shoreham Harbour will be transformed into a vibrant, thriving waterfront destination comprising a series of sustainable, mixed-use developments alongside a consolidated and enhanced Shoreham Port which will continue to play a vital role in the local economy. The JAAP sets the strategic development and land-use priorities for the Shoreham Harbour Regeneration Area up to 2032 and contains the policies against which development management decisions within that area will be made. The Site for the Proposed Development falls under **Character Area 7 (Western Harbour Arm)**. Currently the Western Harbour Arm is mostly an employment area. It includes an allocation for proposed development at Western Harbour Arm Waterfront. According to the Local Plan, this area will deliver a minimum of 1,100 new homes and 12,000 m^2 employment generating floor-space.

[8] Noise Policy Statement for England (NPSE) - Link
[9] Shoreham Harbour Joint Action Area Plan (JAAP) - Link

Figure 3: Shoreham Harbour Joint Area Action Plan - Character Areas



Some relevant objectives and policies from the Plan are mentioned below:

- **Objective 1 (Climate change, energy and sustainable buildings):** To minimise carbon emissions, address the challenges of climate change and create a renewable energy hub. To ensure all new developments use energy and water as efficiently as possible, use energy from renewable technologies, use sustainable materials, reduce waste, incorporate innovative approaches to open space, biodiversity, and green infrastructure, encourage uptake of low carbon modes of transport and support sustainable lifestyles in existing and new areas.

Policy SH1: Climate change, energy and sustainable building

- **Objective 4 (Housing and community):** To provide new homes and contribute to meeting housing need. To contribute to meeting the housing needs of Adur and Brighton & Hove through delivering new homes of a range of sizes, tenures and types, including affordable and family homes as well as associated supporting community infrastructure.

Policy SH4: Housing and Community

- **Objective 5 (Sustainable Travel):** To improve connections and promote sustainable transport choice and to promote sustainable transport choices through ensuring that new developments are well served by high quality, integrated and interconnected networks, improved pedestrian, cycling and public transport routes and seeking to reduce demand for travel by private car in innovative ways.

Policy SH5: Sustainable travel

- **Objective 6 (Flood Risk and Sustainable Drainage):** To reduce the risk of flooding and adapt to climate change. To ensure that development avoids and reduces the risks from flooding and impacts on coastal processes and that risks are not increased elsewhere as a result. To ensure that appropriate and comprehensive flood infrastructure is delivered. To ensure surface water

run-off and water pollution have been reduced by the introduction of sustainable drainage systems.

Policy SH6: Flood risk and sustainable drainage

- **Objective 7 (Natural Environment, biodiversity and Green Infrastructure):** To add to the natural capital of the Shoreham Harbour Regeneration Area by delivering net gains to biodiversity and a multifunctional green infrastructure network. To conserve and protect the area's important environmental assets, wildlife habitats and ecosystem services and to enhance the biodiversity of the area by creating new habitats. To minimise and mitigate impacts on the natural and local environment from soil, air, water or noise pollution.

Policy SH7: Natural environment, biodiversity and green infrastructure

- **Objective 9 (Place making and Design quality):** To promote high design quality and improve townscape. To promote developments of high design quality that maximise the waterfront setting, respect local character and form and enhance key gateways and public spaces. To protect and enhance the area's historic assets including the Scheduled Monument at Shoreham Fort, listed buildings and conservation areas.

Policy SH9: Place making, design quality and heritage

10. **Shoreham Harbour Transport Strategy**[10]

    It aims to support the JAAP by identifying a programme of transport infrastructure improvements, services and travel behaviour initiatives; to minimise the impact of the new development on the existing transport network and communities, while connecting the Harbour with its surroundings. It is underpinned by a comprehensive technical evidence base, so that the improvements are proportionate and can support the delivery of the planned regeneration to 2031.

11. **Adur Local Plan**[11]

    The Local Plan provides a strategy for development in Adur up to 2032. This Local Plan covers Shoreham-by-Sea, Southwick, Fishersgate, Lancing and Sompting. It provides guidance to new development under various categories. The Site for the Proposed Development falls under Adur Local Plan in the 'Shoreham Harbour Regeneration Area'. Below is a list of key policies that are relevant to the Proposed Development.

- Policies for Change and Prosperity

Policy 1: Sustainable Development
Policy 3: Housing Provision
Policy 8: Shoreham Harbour Regeneration Area

The policy states that "New development at the harbour will be expected to meet high standards of environmental efficiency and a Sustainability Statement will be required as supporting information to accompany all development proposals in the parts of the Shoreham Harbour Regeneration Area within Adur."
"Development will be expected to incorporate low and zero carbon decentralised energy generation, in particular heat networks, and required to either connect, where a suitable

[10] Shoreham Harbour Transport Strategy- Link
[11] Adur Local Plan 2017- Link

system is in place (or would be at the time of construction) or design systems so they are compatible with future connection to a network."

- Policies for Places

Policy 11: Shoreham-by-Sea

- Development Management Policies

Policy 16: A Strategic Approach to the Historic Environment
Policy 18: Sustainable Design
Residential: All new dwellings must achieve a water efficiency standard of no more than 110 litres/person/day (lpd).
Policy 19: Decentralised Energy and Standalone Energy Schemes
"An assessment of the opportunities to use low carbon energy, renewable energy and residual heat/ cooling for both domestic and non-domestic developments must be provided with any major planning application. This must include details of:
Opportunities for expansion of any proposed networks beyond the development area over time, and to plan for potential expansion.
Where viable and feasible, commercial and residential developments in areas identified in the Shoreham Harbour Heat Network Study[12](2015) will be expected to connect to district heating networks where they exist. Stand-alone energy schemes will also be supported subject to compliance with other policies in this Plan. All new major development will be expected to incorporate renewable/low carbon energy production equipment to provide at least 10% of predicted energy requirements."
Policy 20: Housing Mix and Quality
Policy 21: Affordable Housing
Policy 28: Transport and Connectivity
Policy 30: Green Infrastructure
Policy 31: Biodiversity
Policy 34: Pollution and Contamination
Policy 35: Water Quality and Protection
Policy 36: Flood Risk and Sustainable Drainage

12. Adur District Council Supplementary Planning Document- Sustainable Energy[13]

The Sustainable Energy Supplementary Planning Document (SPD) is intended to provide guidance to developers on meeting the sustainable energy policies set out in Adur Local Plan 2017 (ALP) and the Shoreham Harbour Joint Area Action Plan (JAAP) (2019). The Document describes how developers can demonstrate that policy requirements have been met by; undertaking an assessment of energy demand; developing a strategy to reduce energy demand and to meet that demand though the provision of sustainable energy generation technologies; and developing an Energy Statement to support planning applications. The Energy Statement ensures sustainable energy is an integral part of the development's design and evolution.

The document states that the Council requires an Energy Statement to be submitted for:

- Major residential and non-residential developments proposed in the Adur Local Plan area.

[12] Shoreham Harbour Heat Network Study - Link
[13] Adur District Council Supplementary Planning Document- Sustainable Energy- Link

- Major and non-major residential and non-residential development proposals (excluding household applications) within the Shoreham Harbour Regeneration Area (as part of the Sustainability Statement).

The Energy Statement should include:

- Baseline energy demand and Target Emission Rate (TER) for each proposed building.
- A description of the measures taken to reduce energy demand.
- A description of the measures taken to increase energy efficiency.
- Energy demand and Dwelling Emissions Rate (DER, for residential buildings) and/or Building Emission Rate (BER, for non-residential buildings) for each proposed building, before onsite renewable, low and zero-carbon technologies are included.
- A calculation of the minimum requirement for onsite renewable, low and zero-carbon energy generation (10% of total regulated energy demand in the previous step).
- A description of the proposed onsite renewable, low and zero-carbon energy generation technologies.
- Energy demand and Dwelling Emissions Rate (DER, for residential buildings) and/or Building Emission Rate (BER, for non-residential buildings) for each proposed building, after onsite renewable, low and zero-carbon technologies are included.
- A description of the measures proposed to avoid overheating.
- For non-residential buildings, a BREEAM design stage assessment.

13. West Sussex Transport plan (WSTP) 2022-2036[14]

The WSTP builds on the local plans prepared by the Local Planning Authorities (LPAs) and is supported by a series of thematic strategies such as the Road Safety Framework, Bus Strategy, Walking & Cycling Strategy, Rights of Way Management Plan, Highway Infrastructure Asset Management Plan and Bus Service Improvement Plan which guide day-to-day operational matters. WSTP comprises five thematic strategies and area transport strategies for each planning area in West Sussex.

- Active travel strategy is intended to facilitate greater use of active travel modes (e.g. walking and cycling),
- Shared transport strategy (i.e. buses, community transport and mobility solutions)
- Rail strategy identifying priorities that will help the rail network to perform a strategic role in the transport network, providing connectivity between towns in West Sussex and other regional economic centres.
- Gatwick Airport Strategy that includes supporting initiatives that will increase sustainable transport mode share for passengers and employees.
- Road Network Strategy by enabling increased use of electric vehicles and sustainable modes of transport. It also aims to improve the efficiency of the most strategically important local roads and provide facilities for active travel and shared transport services,

14. Adur & Worthing Councils Household Waste and Recycling Collection Policy[15]

The policy lays out details of household waste collection including the responsibilities of the household in terms of segregation of waste, methods of recycling, excess waste or side waste and the responsibilities of the Councils in the timely waste collection and termination rights. The

[14] West Sussex Local Transport Plan - Link
[15] Adur & Worthing Councils Household Waste and Recycling Collection Policy- Link

policy states that where a new development is being built and communal bulk bins are required, it will be the responsibility of the developer to purchase the correct number of bins for each block for a fee and to inform the Councils once the property has been occupied.

15. **Planning and Climate Change Position Statement (November 2019)[16]**

The Planning and Climate Change Position Statement summarises the existing policy linked to climate change that should be considered during the planning process. It provides guidance on the relevant planning policies (within the context of climate change) that must be taken into account when formulating development proposals. Adur District Council declared a Climate Emergency in July 2019 and has since have committed to work towards becoming carbon neutral by 2030. The planning system is one of many tools that can be used to address climate change.

The Adur Planning and Climate Change Checklist[17] sets out the policy requirements in relation to climate change that are contained in the adopted development plan documents and will be considered when determining planning applications to clearly indicate for which developments and in which locations they apply.

It is therefore recommended that the designers and developers refer to this for further applications.

16. **West Sussex County Council Guidance on Parking at New Developments (September 2020)[18]**

This guidance note outlines the County Council's approach to parking at new developments (both residential and non-residential). It should be used to help determine the level of parking at new developments and provides the basis for the County Council's advice to the LPAs in West Sussex on planning applications and the soundness of policies relating to parking at new developments. It provides the number of parking requirements based on occupancy type, number of occupants and other design considerations such as electric vehicle charging infrastructure and travel plan measures that promote sustainable transportation.

The guidance states that for new residential developments the expected parking demand per dwelling should be used to calculate the number of parking spaces that should be provided in the design of new residential developments. In general, the choice of PBZ (Parking Behaviour Zone) should correspond to the location of the development; for example, sites near transport hubs, then consideration can be given to using a different PBZ that more closely relates to the location of the development.

[16] Planning and Climate Change Position Statement (November 2019)- Reference not available, Link
[17] Adur Planning and Climate Change Checklist- Link

[18]West Sussex County Council Guidance on Parking at New Developments- Link

3 ENERGY STATEMENT

3.1 INTRODUCTION

3.1.1. WSP has undertaken this Energy Statement for the Proposed Development at Brighton Road, Shoreham-by-Sea to be submitted to accompany the application for outline planning permission for 49 dwellings and associated infrastructure. This is in line with the requirements listed in the Sustainable Energy Supplementary Planning Document (SPD)[13] which encourages all developments to submit an Energy Statement.

3.1.2. Calculations presented in this report are based on preliminary assumptions that demonstrate the site will achieve more than **+60%** overall improvements above Building Regulations standards.

3.1.3. In terms of energy supply efficiency, the proposed specifications for an air source heat pump with radiators and underfloor heating as emitters will deliver >90% efficiency. Furthermore, the full range of low / zero carbon technologies were assessed to determine their applicability to the site and several alternative technologies (such as Solar Thermal and Biomass Boilers) were ruled out.

3.2 ENERGY AND CARBON TARGETS

3.2.1. Multiple layers of energy and carbon requirements apply to the development at a national, regional, and local level, each of which requires different targets to be met.

3.2.2. On that basis, the implications of the relevant targets for the proposed development can be summarised as follows:

- All development must meet the prevailing Building Regulations Part L 2021 requirements. The development will be brought forth under this policy, and this has been used as the basis of this energy statement.
- Part L 2021 requires a 31% CO_2 reduction for domestic buildings compared to the earlier update.
- Part L 2021 also introduces primary energy as a new metric to measure the efficiency of a building's heating and the energy required to deliver it. It specifies the maximum primary energy use for a dwelling in a year.

3.2.3. As per the requirements listed in the Sustainable Energy Supplementary Planning Document (SPD), an assessment of the opportunities to use low carbon energy, renewable energy and residual heat/ cooling for both domestic and non-domestic developments must be provided with any major planning application. The relevant targets for the Proposed Development are as follows:

- Where viable and feasible, commercial and residential developments in areas identified in the Shoreham Harbour Heat Network Study (2015) will be expected to connect to district heating networks where they exist.
- All new major development will be expected to incorporate renewable/low carbon energy production equipment to provide at least 10% of predicted energy requirements.

3.3 ENERGY STATEMENT METHODOLOGY

3.3.1. The Energy Statement has been structured in accordance with the energy hierarchy provided in the Sustainable Energy SPD:

- Be Lean (Reduce Energy Demand)
- Be Clean (Energy Efficiency)

- Be Green (Onsite renewable, low and zero-carbon technologies

3.3.2. The Proposed Development outline design has followed this energy hierarchy. The dwellings will be designed to achieve optimum performance and will incorporate the following design features:

Be Lean

- Meet or exceed the minimum fabric requirements of Part L1A (2021) of the Building Regulations.
- All dwellings will include 100% low energy lighting.
- Each building will be served by a centralised heating system. Heat to the dwellings will be supplied and metered by heat interface units located in each home / tenancy.

Be Green

- The homes will be designed for future connections into a district heating network for the import and export of heat should it prove feasible.
- Renewable energy sources will be considered in the design of new buildings.
- Renewable electricity potential includes a 0.265 kWp rooftop Photovoltaic system per dwelling in the Proposed Development. This is in line with the requirement for all new major developments to incorporate renewable/low carbon energy production equipment to provide at least 10% of predicted energy requirements.

3.4 RESULT SUMMARY

3.4.1. Given the early-stage design, Accredited Design SAP10 software was used to determine the regulated and non-regulated carbon emissions and Fabric Energy Efficiency (FEE) standards for typical apartment typologies. The results were then extrapolated across the whole development to assess the total baseline carbon emissions, the carbon emissions after the application of energy efficiency measures and the carbon emissions after the application of low and zero carbon technologies. The results are shown in Table 3-1 and exceed the 31% target. In addition, the FEE for all the modelled units were found to meet the target requirements.

Table 3-1 - Carbon emissions reductions

	Regulated emissions (tCO_2)	Unregulated emissions (tCO_2)	% Reduction in Regulated Carbon Emissions
Building Regulations Part L 2021 Compliant Development	40.4	10.3	-
Be Lean - After energy demand reduction	16.1	10.3	60.2%
Be Clean - After energy efficient supply	16.1	10.3	60.2%
Be Green - After renewable energy	11.8	10.3	70.8%

3.5 LIMITATIONS AND ASSUMPTIONS

3.5.1. The calculations carried out and presented in this assessment are based on assumed specifications (after getting approved by the architects) at this early design stage. The calculations and results are

subject to change in the later design stages once more detailed architectural specifications are available for the Proposed Development.

3.5.2. The Energy Statement Template[19] provided along with the Supplementary Planning Guidance (Sustainable Energy) has not been populated at this stage for the Proposed Scheme due to a lack of project specific data at this early design stage.

3.6 BASELINE CARBON EMISSIONS

3.6.1. Stroma FSAP10 software was used to establish the baseline regulated carbon emissions and unregulated carbon emissions. Energy modelling was undertaken based on the methodology from Part L Vol.1 Dwellings of the Building Regulations. In the absence of the exact specifications for the building fabric and other building components at this stage, assumed specifications (based on similar building typologies) have been used to carry out the assessment.

3.6.2. To undertake the assessment, the following housing mix has been used based on the information and typical floor plans provided by Holder Mathias Architects. One typical unit (with a most common layout and orientation) of each of the specified apartment typologies was chosen to represent the worst-case scenario for passing the compliance requirements for Building Regulations Part L.

Table 3-2 - Housing Units Mix for the Proposed Development

Beds	Total Units	% Mix	Area of Each Unit (NIA) sq.m.
Studio	2	4%	38
1B (2P)	12	24%	50
2B (3P)	3	6%	65
2B(4P)	27	55%	70
3B5P	5	10%	86
Total	**49**	**100%**	

3.6.3. As seen in Table 3-2 there is a mix of Studio, 1-Bed, 2-Bed and 3-Bed apartments, varying in area within the Proposed Development.

3.7 BE LEAN: REDUCE ENERGY DEMAND

DESCRIPTION

3.7.1. The first step to achieving Building Regulations compliance and the targets outlined previously is to reduce energy demand.

3.7.2. The Proposed Development will incorporate several relevant energy conservation measures; the benefits of which are discussed below. In summary the following measures will be included:

- Improved standards and fabric efficiency.
- Good levels of air tightness.
- High performance building glazing.

[19] Energy Statement Template, Adur and Worthing Council, Available at: https://www.adur-worthing.gov.uk/adur-ldf/spd-and-guidance/

- 100% low energy lighting.
- Effective and efficient building systems.
- Natural ventilation

BUILDING FABRIC EFFICIENCY

3.7.3. The Proposed Development consists of a multi-storey residential building, containing up to 49 apartments and a retail unit at ground floor.

3.7.4. The proposed massing consists of two elements - the 5-storey base forming the Brighton Road frontage and an 8-storey component perpendicular to the Road. The various types of apartment typologies have been listed in Table 3-2**.** The layout will ensure that all units will benefit from high levels of natural daylight while also balancing the risk of overheating.

3.7.5. Table 3-3 outlines typical fabric standards that were used in the assessment for the apartment blocks, showing an improvement against Part L standards in many areas. It should be noted that the exact values can vary slightly between each unit type.

Table 3-3 - Baseline fabric performance – New Domestic

Element	Part L 2021 (Notional Building)	Modelled Building (Based on Assumed Specifications)
Floor U-Value (W/m^2K)	0.13	0.13
External Wall U-Value (W/m^2K)	0.18	0.15
Roof U-Value (W/m^2K)	0.11	0.11
Thermal Bridging (y-value)	0.05	0.01
Air Permeability ($m^3/hr.m^2$ @ 50 Pa)	5	4
Window U-Value (W/m^2K)	1.2	1.2
Window G-Value / solar factor	0.68	0.72
Window Frame Factor	0.7 (70% glass)	0.7

3.7.6. Further opportunities to improve upon these will be considered at the detailed design stage.

BUILDING SERVICES

3.7.7. High-performance mechanical, electrical and plumbing (MEP) building services are proposed for the scheme. Table 3-4 lists the general specification for the heating system, lighting, and ventilation strategy for the proposed dwellings.

3.7.8. The preferred space heating and domestic hot water servicing strategy for all dwellings involves the use of an air source heat pump (ASHP).

Heat pumps are more efficient than other heating systems because the amount of heat they produce is more than the amount of electricity they use. This amount of heat for the electricity consumed is called the Coefficient of Performance (CoP).

Table 3-4 - General heating, cooling, ventilation, and lighting specification for dwellings

Element	General Specification
Ventilation	The units to have a continuously running centralized mechanical extract ventilation system, and trickle ventilation for windows.
Internal lighting	100% Low Energy
Primary heat source	Air source heat pumps (ASHP) with radiators and underfloor heating in apartments, with an efficiency of 91%.
Heating controls	Programmer and room thermostats
Heat emitters	Radiators in apartments
Overheating control / cooling	Cross ventilation possible with windows open half the time

3.7.9. Underfloor heating is to be incorporated in the proposed dwellings. Due to the large surface area of an under-surface system, it can operate at a much lower temperature, while still providing the same amount of heat output as conventional radiators.

CARBON EMISSIONS

3.7.10. The Carbon Emissions for the Proposed Development are shown to be lower than the minimum requirements of the Building Regulations.

3.7.11. The Dwelling Emissions Rate (DER) is equal to the annual CO_2 emission per unit of floor area for, space heating, water heating, ventilation, and lighting less the emission that could be saved from renewable technology. This is calculated along with the Target Emissions Rate (TER), which is a notional value in accordance with Building Regulations Part L1A documents.

3.7.12. This considers the energy efficiency measures proposed (including a highly efficient building fabric, 100% low energy lighting, space heating and natural ventilation) to favour good performance of the building across both summer and winter periods.

Table 3-5 - Brighton Road indicative residential mix – DER and TER values

Beds	DER ($kgCO_2/m^2$)	TER ($kgCO_2/m^2$)	CO_2 reduced	GIA (sq.m)	No. units
Studio	6.23	15.03	58.55	38	2
1B (2P)	5.04	12.58	59.94	50	12
2B (3P)	4.69	12.35	62.02	65	3
2B(4P)	5.27	12.95	59.31	70	27
3B5P	3.96	11.28	62.02	86	5

3.7.13. Unregulated carbon emissions refer to emissions resulting from demand sources, which are not controlled or regulated. These include IT equipment, lifts, refrigeration appliances, laptops, and other small appliances.

3.7.14. Regulated emissions result from controlled building services like space heating, hot water, ventilation, fans, pumps, and lighting.

3.7.15. The total of regulated and unregulated emissions for the Proposed Development is presented in Table 3-6**.**

Table 3-6 - CO_2 emissions - Be Lean

	Regulated emissions (tCO_2)	Unregulated emissions (tCO_2)	% Reduction in Regulated Carbon Emissions
Building Regulations Part L 2021 Compliant Development	40.4	10.3	-
After energy demand reduction	16.1	10.3	60.2%

PART L 2021 FABRIC ENERGY EFFICIENCY (FEE)

3.7.16. Accredited Design SAP10 software was used to determine the FEE standards for the same sample of five typical apartment typologies across the proposed development.

3.7.17. The FEE essentially includes the parts of the building that would lose heat, incorporating the U-values of the materials, air tightness and thermal bridging of the fabric. The external fabric specifications for the Proposed Development have been assumed based on similar previous projects delivered by WSP in the absence of actual project specifications at this stage. The specifications used (based on the assumptions) have been approved by the architects.

3.7.18. Results for the extrapolated Target Fabric Energy Efficiency (TFEE) and for the Design Building Fabric Energy Efficiency (DFEE) are as follows:

Table 3-7 - Fabric Energy Efficiency by Model

Ref Model	Target FEE ($kWh/m^2/yr$)	Design FEE ($kWh/m^2/yr$)	Improvement
Studio	24.2	24.1	0.1%
1B (2P)	21.4	20.2	5.6%
2B (3P)	28.3	26.3	7.1%
2B(4P)	30.4	30.1	1.0%
3B5P	27.5	25.9	5.8%

3.7.19. These results show that the overall fabric energy efficiency of the Proposed Development for all the modelled typical units improve upon the regulatory target values by an average improvement of 3.8%.

3.8 BE CLEAN: SUPPLY ENERGY EFFICIENTLY

DESCRIPTION

3.8.1. After energy demand has been reduced through the application of energy efficiency measures, the next step is to consider low carbon technologies to provide further reduction in carbon dioxide emissions.

COMBINED HEAT AND POWER (CHP) AND HEAT NETWORK

3.8.2. Heat networks are characterised as systems where heat is generated and supplied by a network with heat generators located separately to the consumers served by the network.

3.8.3. Typical designs within the UK to date have incorporated natural gas combined heat and power (CHP) with the resultant electricity providing a higher value supply for the operator to recoup costs in also supplying heat via medium temperature hot water flow and return circuits.

3.8.4. Current designs cannot use this technology given revised Building Regulation requirements. This means use of low temperature circuits with heat pumps as the primary source and use of other available sources of waste heat incorporated (where relevant).

3.8.5. The Shoreham Harbour Heat Network Study[20] has been carried out to inform local planning policy, in particular the Shoreham Harbour Joint Area Action Plan (JAAP); and in response to the opportunity to deliver district heating from Shoreham Port, presented by the planned development of a 32 MW power station, Edgeley Green Power Station (EGPS) on the South Quayside.

3.8.6. Figure 4 shows the possible network route (phase 1, 2 and 3) from the proposed Edgeley Green Power Station. It depicts that the site (on Brighton Road – circled red) will have a possibility of being provided a connection to the heat network should it be developed.

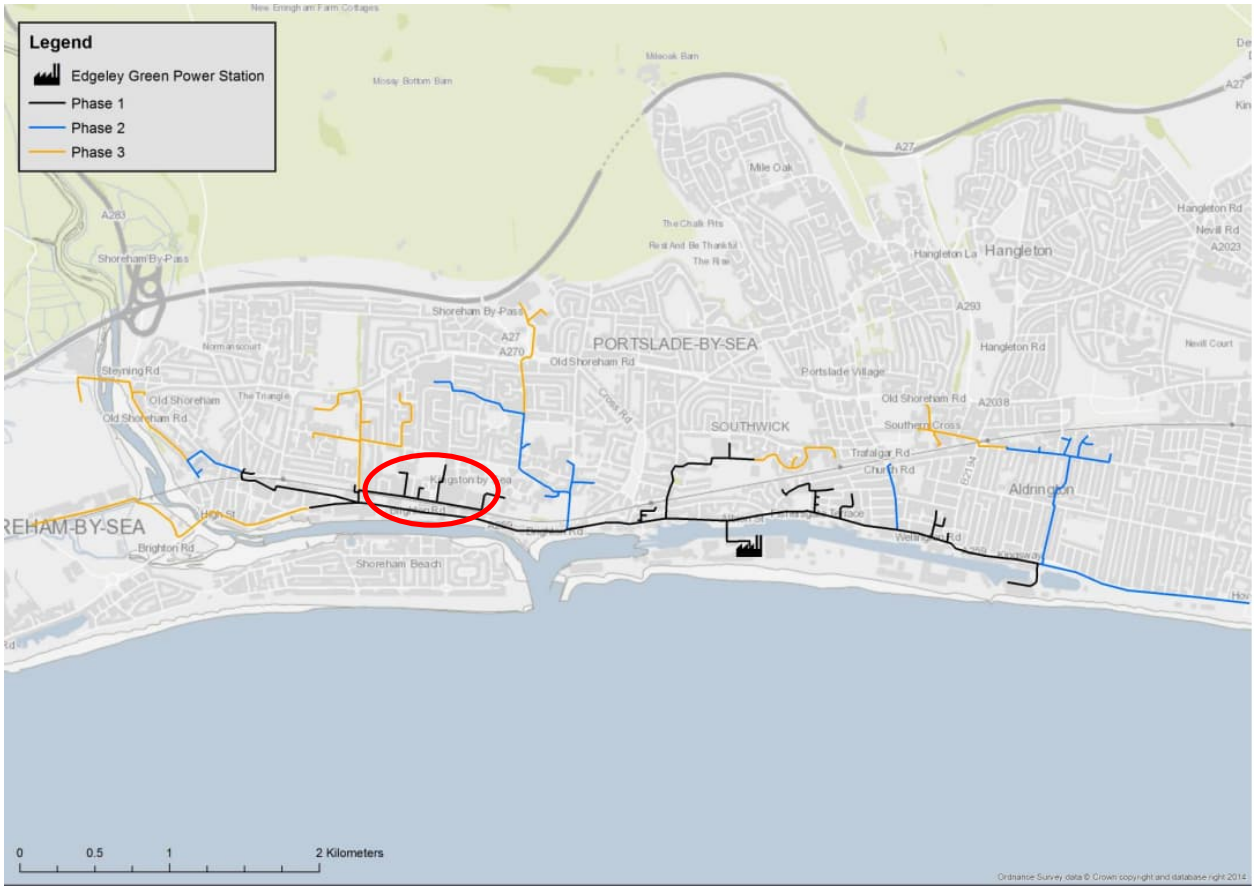


Figure 4: Map of the Proposed pipe route from the Proposed Edgeley Green Power Station Location (Source: Shoreham Harbour Heat Network Study)

[20] Shoreham Harbour Heat Network Study (2016)- Link

3.8.7. This proposed network is not currently in development and so is not available to the Proposed Development. There are currently no other existing district heating networks, so connecting to existing networks is not possible. However, the Council recommends that large scale developments should seek to establish district heating networks and if this is not feasible, applicants should consider installing heating and cooling equipment that is capable of connection later. This should be looked at in the detailed design stage.

3.8.8. The results of the 'Be Clean' given in Table 3-8 are therefore unchanged from those reported under 'Be Lean' (Table 3-4).

CARBON EMISSIONS REDUCTION

3.8.9. Following this 'Be Clean' step, the overall carbon emissions for the development are unchanged to those shown in the 'Be Lean' section.

Table 3-8 - CO_2 emissions – Be Clean

	Regulated emissions (tCO_2)	Unregulated emissions (tCO_2)	% Reduction in Regulated Carbon Emissions
Building Regulations Part L 2021 Compliant Development	40.4	10.3	-
After energy demand reduction	16.1	10.3	60.2%
After energy efficient supply	16.1	10.3	60.2%

3.9 BE GREEN: RENEWABLE ENERGY TECHNOLOGIES

DESCRIPTION

3.9.1. Renewable Energy Technologies are those listed below which can provide a source of energy on-site that is not primarily based on the consumption of fossil fuels or grid electricity and/or utilises a heat source that is renewable such as ground source and solar thermal systems.

- Wind Power
- Biomass Heating
- Air / Ground Source Heating and/or Cooling
- Solar Thermal Hot Water Heating; and
- Photovoltaic Panels

3.9.2. The overview of the suitability of each of these renewable technologies in the context of Adur has been provided in the Sustainable Energy SPD (**Table 3-9**).

Table 3-9 - Overview of renewable technologies and suitability in Adur

Renewable Technology	Regulated emissions (tCO_2)
Solar PV	Yes
Micro Wind	No, unlikely to be economic because of poor energy yields experienced in practice
Large scale wind	Yes, if in a suitable location and allocated in a plan

Biomass Boilers	Unlikely to be supported within an Air Quality Management Area or where it may impact on residents unless it can be clearly demonstrated that there will be no adverse impact on air quality
Solar Thermal	Yes
Air Source Heat pumps	Yes, where communal solutions are not possible
Ground Source heat pumps	Yes, where communal solutions are not possible
Water source heat pumps	Yes, best suited to large scale communal solutions

3.9.3. After the consideration of all renewable energy technologies for their feasibility on the Site, it was concluded that the most appropriate form of renewable technology for the building would be to utilise Photovoltaic (PV) panels.

PHOTOVOLTAIC PANELS

3.9.4. PV generate electricity from sunlight which can either be consumed on site or exported to the grid.

3.9.5. The feasibility of providing PV panels has been assessed based upon estimated energy production (kWh) from the installed location along with manufacturers' cost data to enable a life cycle cost analysis to be undertaken.

3.9.6. A rooftop solar PV deployment is viable. Table 3-10 show typical PV installations specification on a typical rooftop in the Proposed Development, if installed.

Table 3-10 - Assumptions for PV installation

Modelling Input	Figure Used	Comments
Capacity of Solar Panels	265 Wp	This is based on typical manufacturer offering but will vary according to the final product selected. Larger capacity panels may be preferred leading to an overall reduction in the number of panels.
Size of Solar Panels	Approx. 1.6 m^2	Typical size of 265 W panels currently available. Again, this will vary according to final product selection.
Performance of PV Systems	682 – 863 kWh/kWp	Each kW of installed capacity will produce approximately 682-863 kWh of electricity per year. The figures are estimated using the SAP methodology and considering the different orientations of roof spaces on site.

Table 3-11 - Be Green: Carbon emissions – Domestic

	Regulated emissions (tCO_2)	Unregulated emissions (tCO_2)	% Reduction in Regulated Carbon Emissions
Building Regulations Part L 2021 Compliant Development	40.4	10.3	-
After energy demand reduction	16.1	10.3	60.2%
After energy efficient supply	16.1	10.3	60.2%
After renewable energy	11.8	10.3	70.8%

3.10 RESULTS

3.10.1. The three principal steps taken; Be Lean (Use Less Energy), Be Clean (Supply Energy Efficiently) and finally Be Green (Renewable Technology measures) are summarised below.

Energy Conservation and energy efficiency (Be Lean)

3.10.2. Through the application of the measures identified in Section 3.7, the regulated carbon emissions are shown to be **16.1 tCO_2 per annum.**

Supply Energy Efficiently (Be Clean)

3.10.3. The application of low carbon technologies has been explored; the application of a district heating network has not been considered for the assessment at this stage as it has not been built yet. Following on from this stage, the regulated carbon emissions are unchanged at **16.1 tCO_2 per annum.**

Renewable Technology (Be Green)

3.10.4. The feasibility of a range of renewable technologies has been assessed, and rooftop solar PV deployment is considered the most viable. Overall, this reduces the regulated carbon emissions to **11.8 tCO_2 per annum.**

3.10.5. Through the use of the Be Lean, Be Clean and Be Green framework, regulated carbon emissions have been shown to be reduced by **70%.**

PART L 2021 AND PROPOSED DEVELOPMENT

3.10.6. Accredited Design SAP10 software was used to determine the regulated and non-regulated carbon emissions and FEE standards for a sample of typical apartments for the Proposed Development. The graph below (Figure 5) shows that the Proposed Development has a reduction against the Part L Building Regulations requirements and exceeds the 31% reduction target requirement.

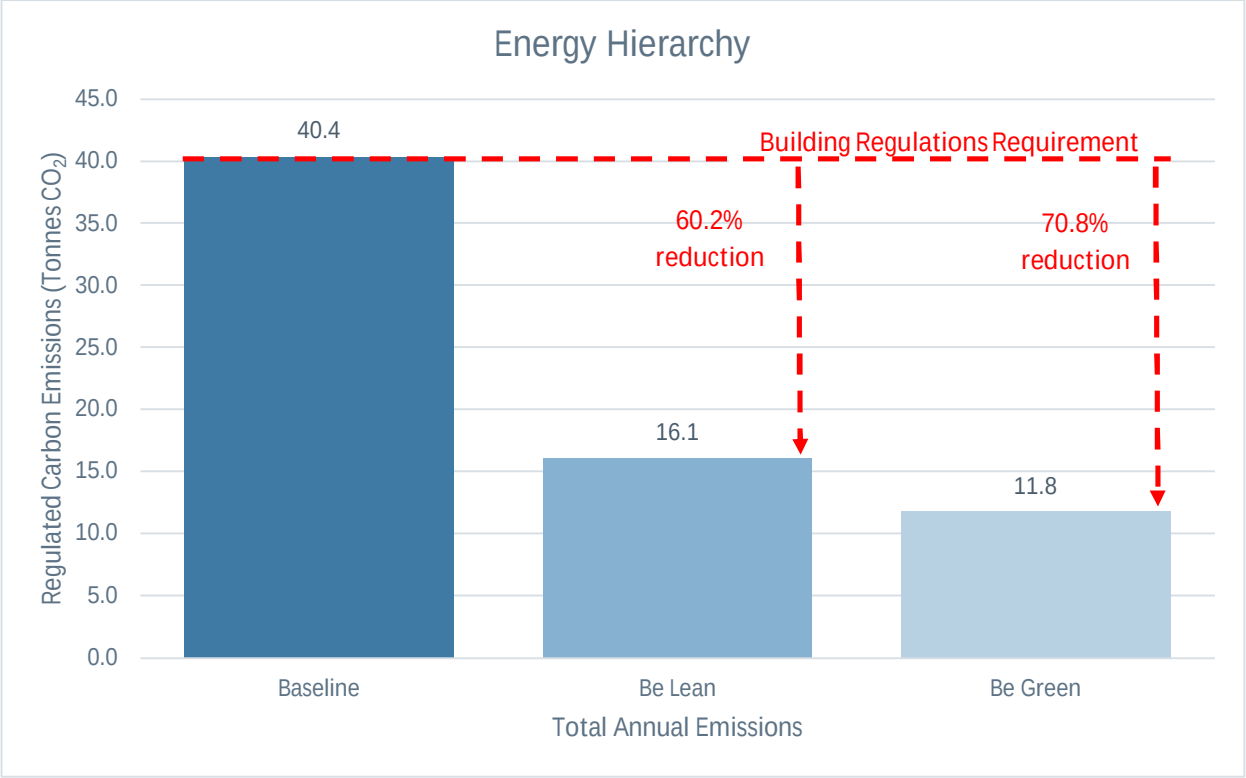


Figure 5: Projected reduction after Energy Demand Reduction measures

3.11 CONCLUSION

3.11.1. The results shown in **Figure 5** demonstrate how the Proposed Development exceeds the 31% target for energy demand reduction for domestic buildings as per the Building Regulations Part L, based on preliminary calculations using the relevant assumed specifications in the absence of actual specifications. In addition, the FEE for all the modelled units were found to meet the target requirements (as shown in **Table 3-7).** The results show that the Proposed Development can meet all relevant national and local policy requirements regarding energy demand, supply, and deployment of renewable energy regulations, including the requirements listed in Sustainable Energy SPD as mentioned in Section 2. The adherence to the requirements mentioned in the Sustainable Energy SPD will be demonstrated in more detail in the next stages of design development, once more project specific data and detailed design specifications are available for the Proposed Development.

4 SUSTAINABILITY STATEMENT

4.1 SUSTAINABILITY THEMES

4.1.1. The output of the policy review (summarised in Section 2) culminated in the identification of a number of core sustainability themes, as relevant to the Proposed Development. These themes were as follows:

- **Flood Risk & Drainage**
- **Acoustics/ Noise**
- **Air Quality**
- **Waste**
- **Transport**
- **Ecology**
- **Ground Conditions / Contamination**
- **Economic Impact**
- **Energy**
- **Daylight**
- **Utility**

4.2 ENGAGEMENT WITH DESIGN TEAM

4.2.1. To effectively target information to support this Statement, the requirements listed within the relevant Local Policies were identified for each of the sustainability themes. Following this, a series of questions formulated based on the policy requirements were circulated to each specialist discipline and responses against the questions (among other considerations) were collated. The completed assessment reports directly informed the statement findings in Section 4.3.3.

4.2.2. The approach adopted meant that design intent, as well as any measures achieved to date, can be clearly tied back to the sustainability requirements of local strategy and planning policy. The following section describes the results of this process.

4.3 STATEMENT FINDINGS

4.3.1. This section of the Sustainability Statement provides information and data on how the Proposed Development has responded appropriately to the relevant core themes identified, as distilled from the local strategic and planning policy documents reviewed. For ease of reference, information is provided by theme and policies applicable to the theme.

4.4 AIR QUALITY

Relevant Local Policies

Table 4-1 - Relevant Local Policies for Air Quality

Policy	Document	Extract
Policy 34: Pollution and Contamination	Adur Local Plan	▪ Development should not result in pollution or hazards. ▪ Mitigation measures required for new developments. ▪ Air quality assessments and/or noise assessments required with development proposals as appropriate.
Policy SH7: Natural environment, biodiversity and green infrastructure	Shoreham Harbour Joint Area Action Plan (JAAP)	▪ Development proposals must accompany an air quality impacts assessment for existing and future occupants. ▪ Development within or adjacent to AQMA should provide a contribution towards Air Quality Action Plan objectives.

Evidence / Response

4.4.1. The Policy 34: Pollution and Contamination of the Adur Local Plan and the Shoreham Policy SH7: Natural environment, biodiversity and green infrastructure in the Harbour Joint Area Action Plan (JAAP) specify the air quality requirements for new developments.

4.4.2. An Air Quality Assessment[21] was carried out by WSP for the Proposed Development in August 2024 in line with the policy requirements stated in Table 4-1 - Relevant Local Policies for Air QualityTable 4-1. The scheme is not located within an Air Quality Management Area (AQMA) and therefore, no specific measures related to AQMA requirements have been adopted.

4.4.3. A qualitative assessment identified a medium risk of dust soiling and a low risk to human health due to increased particulate matter concentrations from construction activities. This assessment considers the potential exposure of new occupants to poor air quality and outlines the inherent mitigation measures included in the design to minimise emissions of air pollutants. The assessment states that the impact of dust, PM10, and PM2.5 emissions can be reduced through good site practices and the implementation of mitigation measures.

4.4.4. For the operational phase exposure assessment, the predicted future year concentrations are well below the relevant air quality standards and Exposure Criteria. Therefore, exposure of future site users to short-term NO_2 concentrations above the air quality standard objective is not anticipated. No additional operational phase mitigation measures are required.

4.4.5. To minimise local air quality impacts during the construction phase, mitigation measures recommended by the IAQM Construction Dust Guidance 2024[22] will be considered.

[21] Air Quality Assessment Report- WSP, September 2024
[22] Guidance on the assessment of dust from demolition and construction, 2024- Link

The following operational mitigation measures are deemed appropriate, in reference Sussex's Air Quality and Emissions Mitigation Measures Guidance 2021[23]**Error! Bookmark not defined.** .

- All gas-fired boilers to meet a minimum standard of <40mgNOx/kWh. Consideration should be given to renewable sources of energy, e.g. air source heat pumps, as an alternative.
- The Proposed Development should meet the electric vehicle charging point guidance set out above under 'commercial/ retail/ industrial'. Meet the relevant West Sussex County Council (WSCC) Guidance, on electric vehicle charging points (minimum 7kW (fast) chargers) and travel plans.

4.4.6. It is anticipated that the impact of the operation phase is likely to be negligible, and therefore no further mitigation measures have been suggested in Air Quality Assessment.

4.4.7. Overall, the Proposed Development is anticipated to have a minimal impact on local air quality. The assessment has demonstrated that the development aligns with national and local air quality policies and that appropriate mitigation measures are in place to address potential issues related to construction activities and operational emissions.

[23] Air quality and emissions mitigation guidance for Sussex (2021)- Link

4.5 ECOLOGY

Relevant Local Policies

Table 4-2 - Relevant Local Policies for Ecology

Policy	Document	Extract
Policy 31: Biodiversity	Adur Local Plan	▪ Development should ensure the protection, conservation, and where possible, enhancement of biodiversity. ▪ If significant harm cannot be avoided, then such harm should be adequately mitigated. ▪ Where it cannot be adequately mitigated then such harm must be compensated for.
Policy SH7: Natural environment, biodiversity and green infrastructure	Shoreham Harbour Joint Area Action Plan (JAAP)	▪ All development applications must be accompanied by up-to-date ecological information to ensure no net loss, and seek to provide a net gain to biodiversity, in particular to HPIs. ▪ Indirect impacts of development, such as recreational disturbance, on designated nature conservation sites and other significant habitats must be considered. ▪ Appropriate mitigation must be identified, along with the means for its delivery and maintenance.

Evidence / Response

4.5.1. The Policy SH7: Natural environment, biodiversity and green infrastructure of the Shoreham Harbour Joint Area Action Plan (JAAP) and the Policy 31: Biodiversity of the Adur Local Plan states that all development applications must be accompanied by up-to-date ecological information to ensure no net loss, and seek to provide a net gain to biodiversity, in particular to Habitats of Principal Importance and appropriate mitigation measures should be ensured where possible.

4.5.2. A Preliminary Ecological Appraisal (PEA)[24] and Preliminary Bat Roost Assessment (PBRA) have been undertaken in line with the policy requirements mentioned in Table 4-2. The PEA provides up-to-date ecological information about the Site and the surrounding study area as per Policy SH7.

4.5.3. A UK Habitat Survey of the Site was undertaken in August 2024 in adherence to Policy 31. Habitats were described and mapped following the standard UK Habitat classification methodology (UKHab Ltd, 2023)[25]. Where appropriate, consideration was given to whether habitats qualify or could qualify

[24] Preliminary Ecological Appraisal (PEA)- WSP, October 2024
[25] UK Habitat Classification System- Link

as a ‘Habitat of Principal Importance’ (HPI) and whether they could classify as irreplaceable habitats.

4.5.4. According to the results of the study, no HPI were identified within the Site boundary, with mudflats HPI being the closest record approximately 0.14 km to the south of the Site. No ancient woodland records were returned during the desk study. The results of the Habitat Survey identified one parcel of modified grassland in the vicinity of the Proposed Development. The presence of mudflats and coastal saltmarsh HPI are a consideration for the Proposed Development. Due to the proximity of the coastal saltmarsh HPI to the Site it is at risk of being negatively impacted by construction related pollution. Under current plans, no HPI habitats will be lost, which thereby shows compliance to Policy SH7.

4.5.5. The PBRA identified a building on site with an overall ‘Low’ bat roosting suitability. Further survey has been recommended for bats, with nesting bird checks recommended prior to any demolition works. A bat survey is to be completed in May 2025.

4.5.6. Adur Estuary SSSI (Sites of Special Scientific Interest) is a key consideration for the Proposed Development due to its proximity to the Site. As current proposals include development of a residential block, consultation between the Local Planning Authority and Natural England during the planning process is likely to be required to determine impacts the Proposed Development may have on the Site.

4.5.7. The Biodiversity Net Gain (BNG) legislative framework requires the Biodiversity Gain Hierarchy to be followed requiring developments to achieve 10% for replaceable habitats, as measured using the Defra Biodiversity Metric. The PEA states that under current plans, it is expected that the Proposed Development will not be subject to the mandatory BNG requirement as it is a development below the required threshold under the Town and Country Planning Act 1990[26].

4.5.8. A list of recommended enhancement opportunities which could be taken to increase the biodiversity value of the Proposed Development are detailed in the PEA.

4.5.9. In line with the requirements of Policy SH7, the mitigation measures are listed in detail in the PEA. Some of the environmental protection measures recommended to prevent ecological impacts during construction include:

- Preparation of a Construction Environmental Management Plan (CEMP),
- Measures to prevent dust, wind-blown debris and other emissions from construction
- Fencing with clear signage for habitats, control of lighting, noise and vibration

[26] Town and Country Planning Act 1990- Link

4.6 TRANSPORT

Relevant Local Policies

Table 4-3 - Relevant Local Policies for Transport

Policy	Document	Extract
Policy 28: Transport and Connectivity	Adur Local Plan	▪ Ensure new development is located and designed to minimise travel, facilitates, promotes use of sustainable alternatives, provides necessary infrastructure to serve the development. ▪ Requires Travel plans and Transport Assessments for certain developments.
Policy SH5: Sustainable travel	Shoreham Harbour Joint Area Action Plan (JAAP)	▪ New development in regeneration area to show how it reduces the travel by car and help to deliver sustainable transport improvements ▪ Residential development Proposals should include adequate levels of car parking. ▪ Development proposals required to provide adequate, appropriate and secure cycle parking and storage.
West Sussex Transport plan (WSTP) 2022-2036	West Sussex Transport plan	▪ Active travel strategy is to facilitate greater use of active travel modes (e.g. walking and cycling), ▪ Shared transport strategy (i.e. buses, community transport and mobility solutions) ▪ Road Network Strategy by increased use of electric vehicles and sustainable modes of transport. It also aims to improve the efficiency of the most strategically important local roads and provide facilities for active travel and shared transport services.

Evidence / Response

4.6.1. The Policy SH5: Sustainable travel in the Shoreham Harbour Joint Area Action Plan (JAAP) and Policy 28: Transport and Connectivity of the Adur Local Plan specify the Transportation requirements for new developments. The West Sussex Local Transport Plan (WSTP) 2022-2036 details its active travel strategy, shared transport strategy and road strategy. Adherence to these policies is detailed in the following paragraphs.

4.6.2. A Transport Assessment[27] along with a Framework Residential Travel Plan[28] have been completed in support of the planning application for the Proposed Development in line with the requirements of Policy 28 mentioned in Table 4-3. The Transport Assessment (TA) provides detail on the general accessibility of the Proposed Development and its impacts on the operation of the local transportation network. In terms of the general accessibility of the Proposed Development, the site is within 500 m of Shoreham town centre. Therefore, residents will have easy access to amenities

[27] Transport Assessment- WSP, January 2025
[28] Framework Residential Travel Plan- WSP, January,2025

such as bus stops, railway station, retail and commercial facilities and cycle networks. The Proposed Development is well served by buses. The nearest bus stops are located on Brighton Road to the northeast of the site, within a 100m / 2-minute walking distance of the site.

4.6.3. The Proposed Development is forecast to have a negligible net impact on the level of vehicle trips generated to and from the site. The junction assessment demonstrates the insignificant impact that the proposed development will have on the operation of the local highway network.

4.6.4. A Residential Travel Plan has been produced, providing incentives and measures that will support and encourage residents to use sustainable travel modes in line with requirements stated in Policy SH5. A range of potential measures which are suitable for incorporation and implementation into the full Travel Plan have been identified that includes promotion and marketing of pedestrian and cycle routes and bus stops in the form of a Travel Plan Information Board, setting up of a Sustainable Travel Information Website and discount vouchers for cycle purchases. Blenheim Estates will retain overall responsibility for the implementation of the Travel Plan and will ensure implementation and monitoring is undertaken.

4.6.5. Further provisions in the Proposed Development layout relevant to transport use include:

- **Parking-** The current indicative layout for the site provides 18 car parking spaces, a ratio of 0.37 spaces per residential unit which is considered sufficient based on the sustainable location of the site.
- **Cycle Route**- The site layout safeguards land providing space for a high-quality segregated cycle route with secure and covered cycle parking.
- **EV charging-** Space for active charging will be provided, with the remaining spaces provided with passive provision.

4.6.6. The Framework Residential Travel Plan[28] can be referred for further details.

4.7 LAND CONTAMINATION

Relevant Local Policies

Table 4-4 - Relevant Local Policies for Land Contamination

Policy	Document	Extract
Policy 34: Pollution and Contamination	Adur Local Plan	▪ Mitigation measures for developments that could increase pollution levels/ impact on drinking water supplies. ▪ Where increased pollution cannot be mitigated, development will be refused. ▪ Where appropriate, air quality assessments and/or noise assessments will be required. ▪ Investigations of sites in proximity to contaminated land required in relevant development proposals.
Policy 35: Water Quality and Protection	Adur Local Plan	▪ Preliminary risk assessment required development with potential contamination risk of controlled waters. ▪ New development within Groundwater Source Protection Zones will be permitted if it has no adverse impact on groundwater quality.
Policy SH7: Natural environment, biodiversity and green infrastructure	Shoreham Harbour Joint Area Action Plan (JAAP)	▪ Applications for development within a 10-metre radius of potentially contaminated sites will be required to submit a desk study, conceptual model, site investigation and risk assessment.

Evidence / Response

4.7.1. Policy 35: Water Quality and Protection, Policy 34: Pollution and Contamination as per the Adur Local Plan and Policy SH6: Flood risk and sustainable drainage as specified in the Shoreham Harbour Joint Area Action Plan (JAAP) detail the requirements relevant to pollution or contamination.

4.7.2. A Preliminary Risk Assessment (PRA)[29] for the Proposed Development has been completed in line with Policy 34 and 35 as shown in Table 4-4, incorporating:

- Review of Groundsure report[30].
- Review of publicly available historical maps and plans to understand former land uses and potential contaminative activities on and surrounding the Site.
- Review of relevant regulatory databases.

[29] Preliminary Risk Assessment (PRA) - WSP, November 2025
[30] Groundsure report is attached to Appendix E of the Preliminary Risk Assessment (PRA)- November 2025.

- Review of relevant publicly available information relating to hydrological features, hydrogeology, neighbouring land use, ecologically sensitive uses and geology in order to establish the environmental setting of the Site.
- Develop a preliminary conceptual site model via the source-pathway-receptor contaminant linkage approach.
- Describe the environmental risks and or opportunities surrounding ground, groundwater and ground gas conditions

4.7.3. Based on the contaminated land reports including site investigations, remedial and verification works of an adjacent parcel of land known as 'Free Wharf' in accordance with the provisions of Policy 34: Pollution and Contamination, it is noted that evidence of contamination was reported. While the Free Wharf site may have historically posed an offsite source of contamination, the remediation work completed to date means that it is unlikely to do so in the future with ongoing contaminant source removal.

4.7.4. The Site is not located in a Source Protection Zone (SPZ) and no potable water abstractions are recorded within 500 m of the Site therefore complying with Policy 35 as shown in Table 4-4. A review of the Groundsure Report shows the Site to mostly be at moderate risk of groundwater flooding for those areas in Flood Zone 2 and moderate to high risk for areas located within Flood Zone 3.

4.7.5. The PRA recommends that a detailed Unexploded Ordinance (UXO) threat assessment desk study is commissioned to assess and potentially zone, the UXO hazard level on the Site.

4.7.6. A list of potentially contaminative sources has been identified on-Site. Risks posed to human health, controlled waters receptors and future infrastructure from the potential sources of contamination identified are predominantly considered to be Moderate.

4.7.7. Based on the findings of this report an intrusive investigation at the Site is recommended in line with the requirements of Policy SH7, to allow:

- Refinement of the Conceptual Site Model (CSM) presented by completion of both human health and controlled waters generic quantitative risk assessments (GQRA's).
- Development of a better understanding of the underlying hydrogeological regime; and,
- Determine the ground gas regime at the Site and if any ground gas protection measures are likely to be required in future buildings.

4.7.8. The ground investigation could also be used to collect ground data to provide input for preliminary geotechnical design.

4.7.9. The findings within the PRA suggest that following the completion of ground investigation, supplementary assessments (Remediation Strategy, Material Management Plan, Construction phase Environmental Management Plan and a Construction Phase Plan) may also be required subject to finalisation of design details and establishment of baseline ground conditions.

4.8 WASTE

Relevant Local Policies

Table 4-5 - Relevant Local Policies for Waste Management

Policy	Document	Extract
1.0 Domestic Refuse Collections Using Wheeled Bins – Grey Lid Bin	Adur & Worthing Councils Household Waste and Recycling Collection Policy	▪ Domestic refuse collection in residential properties.
4.0 Domestic Recycling Collections Using a Wheeled Bins - Blue Lid Bin		▪ Domestic recycling collection in Residential properties.

Evidence / Response

4.8.1. The Adur & Worthing Councils Household Waste and Recycling Collection Policy details the household waste collection including the responsibilities of the household in terms of segregation of waste, methods of recycling, excess waste or side waste in its jurisdiction.

4.8.2. In compliance to the policies stated in Table 4-5, a Waste Management Strategy [31] has been prepared that outlines the strategy that will be adopted to manage the waste arisings within the Proposed Development once operational. Since the Proposed Development has both residential and commercial units, different strategies are adopted to manage both types of waste.

4.8.3. The strategy to manage waste generated from individual residential units is as follows.

- Each residential property will be provided with a segregated waste bin.
- The residents will be responsible for cleaning these bins, and for regularly transporting their refuse, recycling and food waste from their property to the waste store at ground floor level where they will segregate their waste into the appropriately labelled bins.
- It is proposed that a waste store for residential units will be provided at ground floor level, to accommodate all refuse, recycling and food waste by residents.
- On nominated collection days, the refuse collection vehicle (RCV) will collect bins directly from the waste store at ground floor level to be emptied, before promptly returning these to the residential waste store.

4.8.4. The strategy to manage waste generated from commercial units are as follows.

- It is proposed that the commercial unit will be required to provide an interim waste storage within their premises. The unit should have sufficient capacity to allow refuse, recycling and food to be segregated.
- The tenant within the commercial unit will be provided with a waste storage area that is sufficient to accommodate the bins.

[31] Waste Management Strategy- WSP, November 2024

- The commercial tenant will be responsible for transporting their own wastes to the waste storage area, and for appointing a suitable licensed commercial waste contractor to collect the waste.
- On waste collection days, the commercial waste management contractor appointed by the tenant will collect the bins, before promptly returning them.

4.8.5. The strategies ensure that a full collection service to the site is operational, therefore adhering to the Council's waste collection and management policy. The detailed waste generation quantities and details are stated in the Waste Management Strategy[31].

4.9 NOISE IMPACT

Relevant Local Policies

Table 4-6 - Relevant Local Policies for Noise Impact

Policy	Document	Extract
Policy SH7: Natural environment, biodiversity and green infrastructure	Shoreham Harbour Joint Area Action Plan (JAAP)	▪ Development proposals should adhere to the following basic principles of noise control - Noise sources should be separated from sensitive receptors. - Then noise should be controlled at source. - the sensitive receptor should be protected. ▪ Consideration will be required in relation to noise generated by transport and arising from adjacent industrial, trade and business premises, construction sites, activities in the street and on-going port and marine-related activities.

Evidence / Response

4.9.1. The Policy SH7: Natural environment, biodiversity and green infrastructure of the Shoreham Harbour Joint Area Action Plan (JAAP) and the Noise Policy Statement for England (NPSE) states how development proposals should adhere to principles of noise control and in particular to noise generated by transport and arising from adjacent industrial, trade and business premises, construction sites, activities in the street and on-going port and marine-related activities.

4.9.2. A Noise Assessment[32] was undertaken presenting the baseline noise survey and establishing the existing noise climate across the site. The survey results have been used to assess the suitability of the site for residential use in accordance with relevant criteria as per the policies mentioned in Table 4-6. Mitigation measures have been identified with the aim of providing suitable internal and external noise environments for future occupants. A Consultation with the ADC Environmental Health Officer (EHO) was undertaken to discuss assessment methodologies, the noise monitoring regime and any complaint history for the area.

4.9.3. A baseline noise survey has been undertaken to establish the existing noise levels on the site, with the noise climate being dominated by road traffic from Brighton Road to the north. To the west of the site, the operation of the car wash facility was noted to be dominant, when in reasonably close proximity and during lulls in road traffic noise.

4.9.4. A digital noise model of the site, including traffic on Brighton Road and the commercial noise sources from the car wash, was developed. The model was calibrated to the measured data at the site.

[32] Noise Assessment- WSP, November 2024

4.9.5. It is considered that for the proposed façade in close proximity to the car wash, there is the potential for a significant adverse impact on future residents. It is recommended that, to allow the car wash to operate fully and without a high threat of complaints, proposed balconies along the western boundary within the southern section on the first to third floor are excluded or replaced with wintergardens. This will allow the car wash to continue to function fully and without complaints.

4.9.6. The noise modelling for the proposed residential uses concluded that the Proposed Development falls in the high-risk category fronting onto Brighton Road, medium for eastern and western façades, and low along the southern boundary. The daytime and night-time noise levels at the building façades of the predicted magnitudes indicated by the noise modelling, can be suitably mitigated using a combination of the measures outlined.

4.9.7. Predicted noise levels for balconies on are up to 18dB above the 55dB LAeq,T criterion on the northern boundary with Brighton Road. Whilst this is considered a high noise level, there are benefits to access to outdoor amenity spaces as outlined in the relevant British Standard.

4.9.8. The Noise Assessment[32] report recommends a more detailed assessment during the detailed design phase, a to confirm the exact specification for the glazing units, ventilators and any provision required to control overheating.

4.10 FLOOD RISK AND DRAINAGE

Relevant Local Policies

Table 4-7 - Relevant Local Policies for Flood risk and Drainage

Policy	Document	Extract
Policy SH6: Flood risk and sustainable drainage	Shoreham Harbour Joint Area Action Plan (JAAP)	▪ Prior consent of the Environment Agency is required for any works within 16m of the tidal River Adur. ▪ Flood Risk Assessment required for development that alters flood flow routes. ▪ Residential development proposals must protect against a breach scenario through the application of an appropriate finished floor level of 5.77m AOD (Above Ordnance Datum). ▪ New developments must incorporate open space, appropriate planting, green ▪ roofs and/or green walls (suitable for coastal growing conditions) to reduce levels of surface water runoff.

Evidence / Response

4.10.1. According to the Policy SH6: Flood risk and sustainable drainage as per the Shoreham Harbour Joint Area Action Plan (JAAP) and the Policy 36: Flood Risk and Sustainable Drainage in the Adur Local Plan, development proposals in the regeneration area must comply with the principles and approach to flood risk management and must take account of the most up to date flood risk management evidence and a site specific flood risk assessment must be submitted with planning applications.

4.10.2. As per the guidance in Table 4-7, a Flood Risk Assessment (FRA)[33] has been undertaken as required for the Proposed Development given its classification as a 'More Vulnerable' development, given its location within Flood zone 2 and 3. During the pre-application consultation with the Environment Agency (EA) in November 2024, the EA confirmed that flood compensation will not be needed for the Proposed Development as it is under tidal flood risk.

4.10.3. The FRA sets out flood risk to the Proposed Development and the potential impacts of the Proposed Development on flood risk off-site.

4.10.4. A flood mapping shows that the Proposed Development is partially within Flood Zone 3 associated with flooding from the River Adur. Most of the site and the Proposed Development features are located in Flood Zone 2. Further, the site is located within an EA Warning Area: Shoreham Harbour

[33] Flood Risk Assessment- WSP, February 2025

Flood Warning Area. The level of flood risk in the Proposed Development from rivers and the sea is considered to be medium to high.

4.10.5. Based on EA long term flood risk assessment, the overall flood risk from groundwater flooding is low. Also, the Proposed Development is at very low probability of surface water flooding, based on the EA's flood map for planning which is entirely managed by on-site drainage features detailed within the Drainage Strategy.

4.10.6. In conclusion, no residential accommodation is proposed at the ground floor level. The Environment Agency advised to use the 0.5 % (2115 epoch) flood level for the undefended scenario for the commercial development which is 5.39 m AOD. The properties will be protected against flooding from the River Adur by the 5.6 m AOD hard defences along the river front. The proposed commercial finished floor levels are to 4.40 m AOD. Therefore, it complies with the terms in Policy SH6, and flood resilience and resistance measures will be incorporated into the structure of the building and the commercial development to mitigate the residual risk of floodwaters.

4.10.7. According to the Surface Water Drainage Strategy [34] the peak surface water discharge rates for pre-development site are calculated for the site by creating a model based on the topographical survey and assumed outfall to drainage system for Brighton Road.

4.10.8. The building in the Proposed Development is designed with residential units located on the upper floors, The finished floor level for the ground floor, which is designated for commercial use. The guidance referenced in the Drainage Strategy stipulates that the surface water drainage system must be designed to prevent flooding on any part of the site during a 1 in 30-year rainfall event. Additionally, it should ensure that no flooding occurs in any part of a building, including basements, or in any utility plants susceptible to water during a 1 in 100-year event with a 40% climate change allowance considered.

4.10.9. During extreme rainfall events, exceedance flow will get directed towards Brighton Road according to the slope, where it will be captured by the Brighton Road drainage system. The use of planting, landscaping area with bioretention features and permeable paving at the ground level will offer improvement in post-development peak run-off both qualitatively and quantitatively thus complying with Policy SH6 as given in Table 4-7.

4.10.10. Further recommendations and potential improvement to the surface water run-off post development have been detailed in the Flood Risk Assessment[33] to ensure no adverse impact on flood risk to the Proposed Development or off-site areas, either upstream or downstream of the site.

[34] Surface Water Drainage Strategy- WSP, January 2025

4.11 ECONOMIC IMPACT

Relevant Local Policies

Table 4-8 - Relevant Local Policies for Economic Impact

Policy	Document	Extract
Policy SH3: Economy and employment	Shoreham Harbour Joint Area Action Plan (JAAP)	▪ New employment generating floor-space-Retail uses ▪ As part of mixed-use redevelopments, small-scale, ancillary retail uses are acceptable provided that such activity will assist in enlivening key frontages and supporting existing retailing areas.
Policy SH4: Housing and community	Shoreham Harbour Joint Area Action Plan (JAAP)	▪ New residential development will be expected to make provision for a mix of affordable housing, including social rented, affordable rented and intermediate housing.
Policy SH9: Place making, design quality and heritage	Shoreham Harbour Joint Area Action Plan (JAAP)	▪ Schemes should be designed to reflect the character of the marine environment. ▪ Development proposals should improve the quality, accessibility, security and legibility of public streets and spaces.
Policy 8: Shoreham Harbour Regeneration Area	Adur Local Plan	▪ The Council will encourage developments that are consistent with the vision, strategic objectives.

Evidence / Response

4.11.1. The Policy SH3: Economy and employment in the Shoreham Harbour Joint Area Action Plan (JAAP) talks of the requirement for new employment generating floor-spaces and ancillary retail uses as part of mixed-use. The Policy 8: Shoreham Harbour Regeneration Area mentions that the Council will encourage developments that are consistent with the vision, strategic objectives.

4.11.2. An Economic Impact Assessment[35] sets out the economic benefits of the Proposed Development in adherence to the policies stated above in Table 4-8. The assessment includes the analysis of the baseline conditions, including economic context, population and labour force, skills and unemployment, industry and the economy (including local business demography), local employment, the existing employment uses on-site.

4.11.3. The economic, social and community benefits of the Proposed Development for the District and wider West Sussex County is presented in the Economic Statement. A monetised estimate of the

[35] Economic Impact Assessment- WSP, November 2024

economic impacts of the Proposed Development was developed for the Construction phase, Operational Phase, Fiscal benefits and the Local Regeneration Impacts.

It is estimated that the 13 Full Time Equivalent (FTE) direct jobs supported by existing on-site uses that generates Gross Value Added (GVA) of approximately £500,000 per annum. An estimated £523,000 direct GVA generated by on-site uses per annum. The Gross On-Site FTE Jobs and Net Additional FTE Employment is expected to decrease to 5 FTE jobs after the Proposed Development.

4.11.4. The Proposed Development will bring with it other socioeconomic benefits during the operational phase. The delivery of 49 additional housing units over an estimated two-year construction period that is expected to house 169 people will make a significant contribution equal to 14% towards Adur's annual housing target set out in the Local Plan.

4.11.5. After the proposed change of land, the Development is expected to generate around £709,000 of economic benefits. The development is also expected to generate additional expenditure in Adur on retail and leisure goods and services equal to at least £82,000 per annum.

4.11.6. While the Proposed Development will result in an overall loss of employment and Gross Value Added generated at the Site, it will provide much needed housing in the area that will make a significant contribution to Adur's annual housing need target, as mentioned in Policy 8 in the Adur Local Plan. In summary, the Proposed Development is committed to delivering significant employment and skills benefits to the Adur community and is in line with the contribution commitments made by other Shoreham Harbour development sites and is consistent with the vision and strategic objectives of the Council.

4.12 DAYLIGHT

Relevant Local Policies

Table 4-9 - Relevant Local Policies regarding Daylight

Policy	Document	Extract
Policy SH9: Place making and design quality	Shoreham Harbour Joint Area Action Plan (JAAP)	▪ Development proposals must demonstrate that the effects of the development on the amenity of proposed future and existing users, residents and occupiers would not be unacceptable. When designing new development, applicants will be required to consider the effect of their proposal upon all the following: ▪ Visual privacy and overlooking, outlook, overshadowing, sunlight and daylight, artificial lighting, disturbance from noise, odour, vibration, air pollution
Policy 15: Quality of the Built Environment and Public Realm	Adur Local Plan	▪ Make a positive contribution to the sense of place, local character and distinctiveness of an area; and not have an unacceptable impact on adjacent properties, particularly residential dwellings, including unacceptable loss of privacy, daylight/sunlight, outlook or open amenity space;

Evidence / Response

4.12.1. The Daylight Impact Assessment[36] completed in accordance with the Building Research Establishment (BRE)[37] guidelines and as mentioned in the Policy 15: Quality of the Built Environment and Public Realm in the Adur Local Plan and the Policy SH9 of the Shoreham Harbour Joint Area Action Plan (JAAP), to provide a clear understanding of the daylight implications posed by the Proposed Development on these specific rooms in the adjacent properties.

4.12.2. The existing baseline scenario (i.e., without the Proposed Development) has been evaluated, followed by a second scenario that includes the Proposed Development to determine any potential loss of light to the Free Wharf scheme in compliance with policies states in Table 4-9. The assessment focused on the front-facing rooms of the adjacent Free Wharf development, specifically bedrooms, living rooms, and kitchens, as these are considered primary living spaces. Other rooms, such as hallways or bathrooms, were not assessed in line with the BRE guidelines, as they are not considered fully occupied spaces.

[36] Daylight Impact Assessment- WSP, November,2024
[37] The Building Research Establishment- Daylight and Sunlight- Link

4.12.3. The criteria used for the assessment of Internal daylight is the BS EN 17037-2021[38] guidelines.

4.12.4. In the Baseline Scenario, all the assessed spaces pass the BRE criteria, making the pass rate 100%.

4.12.5. With the introduction of the Proposed Development, the daylight levels in some assessed rooms decrease; however, all the identified spaces remain within the BRE daylight criteria targets, and the pass rate therefore remain 100%. The impact on the assessed spaces is considered negligible, and no mitigation is required.

4.12.6. The results of the Daylight Assessment indicate that the Proposed Development has a negligible impact on the assessed spaces located within the adjacent Free Wharf development, and therefore, the daylight levels would remain within acceptable levels within the areas assessed.

[38] British Standards Document BS EN 17037-Daylight in buildings- Link

4.13 UTILITIES

Relevant Local Policies

Table 4-10 - Relevant Local Policies for Utilities

Policy	Document	Extract
Policy 18: Sustainable Design	Adur Local Plan	▪ Residential: All new dwellings must achieve a water efficiency standard of no more than 110 litres/ person/ day (lpd).
Policy SH7: Natural environment, biodiversity and green infrastructure	Shoreham Harbour Joint Area Action Plan (JAAP)	▪ All development must consider implications upon the sewerage and water supply network and ensure that capacity is adequate. ▪ New development must connect to the sewerage and/or water supply system at the nearest point.

Evidence / Response

4.13.1. The Utilities Statement[39] has been prepared in line with Policy requirements in Table 4-10 including a review of the existing utilities present at the site and any potential impacts on the Proposed Development layout.

4.13.2. As per the requirements of Policy 18: Sustainable Design in the Adur Local Plan and Policy 18 within the Sustainable Energy SPD, all new dwellings must achieve a water efficiency rate of no more than 110 litres/person/day. However, at this early design stage, the water efficiency rate information for the Proposed Development is not available. This information will be incorporated in the detailed design stage.

4.13.3. The Utilities Statement reviews the existing provisions of Foul Sewerage, Potable Water, Electricity, Telecommunications and Gas at the proposed site. Further details regarding the provision of utilities for the Proposed Development is stated in the Utilities Statement[39] prepared by WSP.

[39] Utilities Statement- WSP, November 2024

5 CONCLUSIONS

5.1.1. The evidence provided in this Statement supports the Outline Planning Application to be submitted for the Proposed Development. It details plans for delivering sustainable outcomes based on design work for the construction of a proposed residential development at 37-41 Brighton Road, Shoreham-by-Sea located at A259 Brighton Road.

5.1.2. A detailed review of local policy, evidence collated with members of the design team and further correspondence with the members carrying out various technical assessments for the Proposed Development, has shown that a range of positive and proportionate steps to achieving sustainable outcomes across the Proposed Development lifecycle have been considered and will continue to be pursued.

5.1.3. Evidence shows that the design is consistent with all local policy and strategy commitments to sustainable development and aligns with Shoreham Harbour Joint Area Action Plan (JAAP).

5.1.4. The Energy Assessment results show that the Proposed Development can meet all relevant national and local policy requirements regarding energy demand, supply, and deployment of renewable energy regulations, including the requirements listed in Sustainable Energy SPD as mentioned in Section 2. The adherence to the requirements mentioned in the Sustainable Energy SPD will be demonstrated in more detail in the next stages of design development, once more project specific data and detailed design specifications are available for the Proposed Development.

5.1.5. Any further refinement of the design and delivery of the Proposed Development will be expected to progress in accordance with the commitment and intent set out in this Statement, as well as other relevant documents submitted under this planning application. Evidence of outcomes achieved in this context will remain valuable in demonstrating a comprehensive and ongoing response to the requirements for a sustainable development.

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