1. Introduction

- 1.1 This report is intended to outline the approach to sustainability and the proposed heating strategy for Market Street. The report has been prepared jointly with our energy consultant Hodkinson's.
- 1.2 Market Street is a key site within the Councils long term aspirations within the 'Bracknell Town centre Vision 2032' report which sets out how Bracknell will realise its potential as a strong town centre, serving a prosperous and dynamic area. Market Street is part of the first phase of sites to come forward under this strategy and will seek to reinvigorate the wider town centre by delivering a high-quality development of complementary uses in the town centre and surrounding area. The development also proposes to utilise vacant, suitable brownfield land within the town centre.
- 1.3 The site has been designed with the following considerations inputting into the heating strategy the partnership has opted to proceed with:
 - Carbon Performance (now and into the future)
 - Site Appropriateness
 - Running Costs
 - Long term sustainability considerations
- 1.4 Countryside Partnerships in their capacity as Development Manager have a high build fabric and service specifications which are typically above current Building Regulations Part L requirements. This will help contribute to the overall sustainability of the site and specifically the energy strategy.

2. Policy background - Commitment to sustainability and climate change

2.1 Bracknell Forest Council (BFC) have committed to becoming carbon neutral by 2050 though the adoption of a Climate Change Strategy in March 2021. Countryside UK Properties, as development manager are committed on supporting BFC to deliver on these aspirations through pragmatic delivery solutions, value for money options and technical support. Part of our support is through the heating strategy at Market Street which will establish a platform for the delivery of BFC's carbon neutrality aspirations.

3. Sustainability agenda

- 3.1 The Bracknell Forest Cambium Partnership (BFCP) will focus on all areas of the project to deliver a truly sustainable approach. These will include:
 - Jobs: Promoting local skills and employment
 - **Growth:** Supporting the growth of regional businesses
 - Social: Creating healthier, safer and more resilient communities
 - Environment: Protecting and improving our environment
 - Innovation: Promoting social innovation in our communities



4. Heating Strategy

- 4.1 BFCP are progressing with an electric panel heating strategy to utilise the ever-growing greening and sustainability of the electric grid. This is all in line with prevailing standards. A significant level of photovoltaic (PV) panels will also been installed across the development.
- 4.2 The carbon performance of the electric heating strategy proposes to reduce carbon emissions by 55% over Part L 2013 baseline by 2025 and 85% by 2040.

5. Site Appropriateness

5.1 For the proposed electric strategy for Market Street, each apartment will require its own hot water cylinder. Room panel heaters provide space heating, sourced directly from the increasingly low carbon electricity grid. As all apparatus is housed inside each dwelling, amenity space or the appearance of the facades will not be adversely affected. Direct electric heating will provide a straightforward future proofed and robust form of low carbon heating at Market Street.

6. Heating Strategy Conclusion

- 6.1 We consider that an electric heating strategy is the most appropriate strategy for Market Street, as it will deliver the following:
 - Significant carbon emission reductions, both now and into future, are achieved by linking the site's heating requirements to the increasingly low carbon electricity grid. No gas heating is required as a backup supply;
 - Running costs are reasonable, and due to the size of the site significantly lower than the most appropriate alternative strategy;
 - The system is simple to install and operate, reliable whilst ensuring maintenance and replacement costs and requirements are kept low;

7. Key Target

- 7.1 The key sustainability features to be delivered on this site are listed below and demonstrate the BFCP's commitment to create a place of high-quality dwellings where a reduced impact on the environment becomes a reality. We will work hard to deliver a pragmatic and well-conceived response to the need to manage the resources of the environment carefully. This will be achieved through the delivery of:
 - Energy efficiency: The development will target a 55% reduction in Regulated CO2 emissions beyond the Part L baseline through energy-efficiency measures and photovoltaic panels



- Water efficiency: technology will be employed to deliver water-efficient fixtures and fittings into dwellings
- **Waste and recycling:** Facilities will be provided for domestic, commercial and construction-related waste, including segregated bins for refuse and recycling
- **Materials:** Where practical, new building materials will be sourced locally to reduce transportation pollution and support the local economy. New materials will be selected based on their environmental impact
- **Sustainable Procurement Policy:** ensuring that any impacts are minimised through our procurement strategies
- **Sustainable drainage (SUDs):** will be used throughout the site which incorporates permeable paving and attenuation features
- **Sound insulation:** The dwellings are designed to exceed required sound insulation standards
- **Sustainable transport:** The site will benefit from a good existing public transport network 297 cycle storage spaces will be constructed along with electric vehicle charging points. 2 car club spaces are also proposed on the scheme
- **Biodiversity and ecology:** bespoke habitats will be created through the provision of landscaped areas, amenity space and additional tree and shrub planting across the site and the use of Brown roofs
- **Sustainable construction:** The site will aim to achieve a 'Beyond Best Practice' score with the Considerate Constructors Scheme and will closely monitor construction site impacts.
- 7.2 In addition to the above we propose to include the following sustainability enhancements where possible:
 - Energy efficient appliances within the new homes
 - Measures to improve biodiversity on the site
 - Re-use of rainwater to irrigate landscaped areas
 - All external lighting will be energy efficient and sensor controlled
 - High standards of insulation to buildings and airtightness to deliver further heating efficiencies whilst managing overheating considerations
 - Reduction in energy demands through provision of mechanical ventilation with heat recovery (MVHR)



- We will minimise the nuisance caused by dust, noise, vibration, and vehicle movement
- Monitoring, recycling, and reducing waste with minimal construction waste going to landfill, Local resourcing of materials, use of recycled material

8. Looking to the future

- 8.1 BFCP are committed to delivering sustainable developments to advance the efficiency of our developments whilst reducing the carbon footprint. Our developments will strive to have the lightest possible impact on the environment. Our dwellings will be built, to deliver value for money, modern accommodation for environmentally minded purchasers.
- 8.2 The partnership is committed in achieving net zero carbon emissions by 2030, with the Market Street proposal supporting Bracknell Forest Council's Climate Change Strategy.

