

## **Appendix A – Climate Change Statement**

### **Climate Change Statement for Planning Applications**

#### **Part 1: Applicant details**

Name of applicant/agent	NL Jones Planning for Achieve Together
Site Address	Land adj 196 Wakefield Road, Earlsheaton, Dewsbury, WF12 8AH
Description of Development	Erection of 5 Dwellings (Use Class C3) with Ancillary Office Accommodation and Associated Access, Car Parking and Landscaping

#### **Part 2: Climate Change Mitigation measures**

Please respond to the following questions considering the measures set out in the Climate Change Guidance note:
<b>Q1: What measures have been/will be taken to reduce the energy demand associated with your proposed development beyond the minimum required in Building Regulations? (See section 2)</b>
<p>To reduce the energy demand associated with the proposed development the following range of measures will be used:</p> <p>Use high-quality insulation materials for walls, roofs, and floors to minimize heat loss and reduce the need for heating and cooling.</p> <p>Airtight Construction: Ensure that the building envelope is airtight by using proper sealing techniques to prevent drafts and heat loss.</p> <p>Energy-Efficient Windows and Doors: Install energy-efficient windows and doors with low U-values to minimize heat transfer and air leakage.</p> <p>Natural Ventilation: Design the bungalows with cross-ventilation and operable windows to promote natural cooling and reduce the need for air conditioning.</p> <p>Energy-Efficient Lighting: Use energy-efficient lighting, such as LED fixtures, throughout the properties.</p> <p>Energy-Efficient Appliances: Install ENERGY STAR-rated appliances to reduce electricity consumption for domestic use.</p> <p>Zoned Heating and Cooling: Implement zoned heating and cooling systems to optimize temperature control in different areas of the bungalows.</p> <p>Thermal Mass: Use materials with high thermal mass, such as concrete or brick, to absorb and store heat, helping to stabilize indoor temperatures.</p> <p>Water-Efficient Fixtures: Install water-saving fixtures, such as low-flow toilets and showerheads, to reduce water heating demands.</p> <p>Renewable Energy: Consider on-site renewable energy sources like solar panels or wind turbines to generate clean electricity.</p>
<b>Q2: What measures have been/will be taken to limit the carbon consumed through the implementation and construction processes, e.g. by reusing existing on-site materials or sourcing materials locally? (See section 3)</b>

To limit the carbon footprint associated with the implementation and construction processes the following will be adopted:

**Sustainable Sourcing:** Prioritize the use of locally sourced building materials to reduce the carbon emissions associated with transportation. Materials like timber, stone, and recycled materials from local suppliers can be considered.

**Recycled and Reclaimed Materials:** Incorporate recycled and reclaimed materials into the construction process, which can reduce the need for new materials and lower carbon emissions.

**Energy-Efficient Construction Equipment:** Use energy-efficient and low-emission construction equipment and machinery, such as electric or hybrid vehicles and equipment.

**Minimize Waste:** Implement construction waste reduction measures, including recycling and reusing materials on-site, to reduce the carbon impact of waste disposal.

**Green Construction Practices:** Follow green construction practices, such as minimizing construction site disturbance and using sustainable site management techniques.

**Q3: What measures have been/will be taken to utilise renewable or low carbon energy sources? (See section 4)**

Provide Air Source Heat Pump. Prioritize energy-efficient building design and layout measures.

**Q4: What measures have been/will be taken to ensure the building design and layout has been optimised to energy efficiency beyond the minimum requirements in Part L of the Building Regulations ? (See section 5)**

**High-Quality Insulation:** Use superior insulation materials for walls, roofs, and floors to reduce heat loss and maintain comfortable indoor temperatures.

**Energy-Efficient Glazing:** Install high-performance windows and doors with low U-values and efficient glazing to minimize heat transfer and air leakage.

**Air Tightness:** Ensure the building envelope is airtight by using proper sealing techniques to prevent drafts and heat loss.

**Thermal Mass:** Use materials with high thermal mass, such as concrete or brick, to absorb and store heat, helping to stabilize indoor temperatures.

**Natural Ventilation:** Design the bungalows with cross-ventilation and operable windows to promote natural cooling and reduce the need for air conditioning.

**Energy-Efficient Heating and Cooling Systems:** Install energy-efficient HVAC systems, such as heat pumps, and use zoned heating and cooling to optimize energy use.

**LED Lighting:** Use energy-efficient LED lighting throughout the bungalows and common areas.

**Energy-Efficient Appliances:** Install ENERGY STAR-rated appliances to reduce electricity consumption.

**Water Heating Efficiency:** Use energy-efficient water heaters and consider heat pump water heaters to reduce hot water energy consumption.

**Q5: What measures have been/will be taken to reduce potential impacts of flooding associated with your proposed development? (See section 6)**

See question 6

**Q6: What measures have been/will be taken to reduce water stress associated with your proposed development? (e.g. Water retention and minimisation measures) (See sections 7 and 8)**

Sustainable Drainage Systems (SuDS): Implement SuDS, such as permeable paving, swales, and retention basins, to manage stormwater on-site. These systems allow rainwater to infiltrate the ground, reducing the burden on local drainage systems.

Minimized Impervious Surfaces: Design the development with minimized impervious surfaces (e.g., driveways and roads) to reduce runoff and allow for natural infiltration.

Water-Efficient Landscaping: Use native and drought-tolerant plants in landscaping to reduce the need for irrigation and conserve water.

Low-Flow Fixtures: Install low-flow plumbing fixtures in the bungalows to reduce water consumption for domestic use.

**Q7: What measures have been/will be taken to provide biodiversity net gains? (See section 8)**

Biodiversity Surveys: Conduct thorough biodiversity surveys on the project site to assess the existing flora and fauna. This will help identify areas of ecological value and potential opportunities for enhancement.

Habitat Creation and Enhancement: Identify areas for habitat creation and enhancement, such as planting native trees and shrubs, creating wildlife ponds, and establishing wildflower meadows. Ensure that these new habitats are designed to attract and support local wildlife.

Wildlife-Friendly Landscaping: Use native plants in landscaping around the bungalows to attract pollinators and other wildlife. Create buffer zones with natural vegetation between the development and adjacent natural areas.

Sustainable Drainage Systems (SuDS): Implement SuDS that mimic natural water flows and filter rainwater, promoting biodiversity in constructed wetland areas.

Bird and Bat Boxes: Install bird and bat boxes on the bungalows or nearby structures to provide nesting opportunities.

Ecological Monitoring: Develop a long-term ecological monitoring plan to track changes in biodiversity over time. This can help ensure that the project is achieving its net gains goals.

**Q8: What measures have been/will be taken to reduce air pollution associated with your proposed development? (See section 9)**

Emissions: Ensure that construction equipment and vehicles are well-maintained and equipped with emission control devices to minimize on-site air pollution.

Dust Control: Implement dust control measures, such as regular watering of construction sites, using dust screens, and applying dust suppressants to prevent the release of particulate matter into the air.

Construction Schedule: Develop a construction schedule that minimizes the use of heavy machinery during peak traffic hours to reduce congestion and associated emissions.

Green Construction Practices: Implement green building practices for the bungalows, including energy-efficient design and construction materials that have low emissions.

Waste Management: Properly manage construction waste, including recycling materials and minimizing waste sent to landfills, to reduce environmental impact and the release of harmful pollutants.

Transportation: Encourage workers to carpool or use public transportation to the construction site to reduce the number of individual vehicles traveling to and from the site.

Site Design: Consider the placement of the bungalows to maximize natural ventilation and reduce the need for energy-intensive HVAC systems.

Local Regulations: Comply with all local regulations and building codes related to air quality and construction practices.

Vegetation: Preserve existing vegetation as much as possible and consider planting additional trees and vegetation around the bungalows to help filter the air and provide natural shade.