Project Name: **Huddersfield Pharmaceutical Unit**

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Document Title: **Climate Change Statement**

Status: **S3 for Review & Comment**

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Climate Change Statement

Applicant Details

Applicant: Huddersfield Royal Infirmary

Architect / Agent: AFL Architects Ltd

Site Address: Arce Mill, School Street West, Lindley, Huddersfield, HD3 3EA

Description of Development: Demolition of existing industrial building and construction of new two-storey hospital-related manufacturing and storage facility for medical supplies.

Part 2: Climate Change Mitigation Measures

Q1 – Reducing Energy Demand

The proposed new building will be designed to exceed current Building Regulations Part L standards, adopting a ‘fabric-first’ approach to minimise energy demand. Please see attached BRUKL output document

Measures include:

- High-performance insulation in the walls to eliminate cold bridging

- High-performance insulation under the ground floor slab to reduce heat transfer into the ground

- Low-emissivity coated double glazing, thermally broken aluminum frames to prevent conductive heat loss, and airtight construction of 4.01 to reduce heat loss.

- Energy-efficient LED lighting with occupancy and daylight sensors.

- Roof system using thick insulation metal roof system with PV on top.

- Materials / manufacturers will be reviewed that publish environmental product declarations (EPD's) showing thermal and embodied carbon performance. Balancing thermal efficiency with embodied energy. With the goal of both good insulation and low carbon in production.

- Sub-metering for monitoring energy consumption, supporting the NHS Net Zero objectives.

Q2 – Minimizing Carbon Emissions and Waste During Construction

- Demolition materials will be sorted for reuse and recycling, with targets to divert at least 95% of waste from landfill. All contractors will be required to provide waste transfer documentation and demonstrate compliance with ISO 14001 standards.

- The footprint of the building has been designed to avoid unnecessary use of materials by minimizing the external wall area, we undertook in depth users groups to make efficient use of the spaces, redundant areas and circulation routes, dual-purpose and flexible spaces.

- The structural grid and spans have been optimized to use standard components, reducing waste and unnecessary structural mass

- Locally sourced, low-embodied-carbon materials will be prioritised to minimise transport emissions.

- Contractors will be required to implement a Site Waste Management Plan (SWMP) in line with Policy LP43.

- Construction plant and equipment will comply with Non-Road Mobile Machinery (NRMM) emission standards.

- Contractor will be required to choose responsible suppliers, source materials with minimal packaging or returnable pallets

- Work with suppliers offering take-back schemes for offcuts, packaging, and surplus stock

- Work with local suppliers to reduce transport – related waste and emissions

- Contractor will be required to monitor and record waste during the construction, maintain waste logs, regular toolbox talks to raise workforce awareness about segregation and recycling.

- Continuous improvements and lessons learned which can be applied to future NHS estate projects.

Q3 – Renewable and Low-Carbon Energy

- The building will integrate solar photovoltaic (PV) panels on the roof to generate on-site renewable electricity.

- High-efficiency air-source heat pumps will provide low-carbon heating and cooling.

Q4 – Building Design and Layout for Carbon Reduction

- The building will be orientated to maximize solar panel installation / positioning.

- 90% of the internal floor area of the building is shaded from solar gain

- The roof structure will accommodate PV panels

- High-efficiency boilers and HVAC systems with zonal temperature control will ensure operational energy efficiency.

Q5 – Flooding and Drainage

- A site-specific Flood Risk Assessment (FRA) will be prepared in accordance with Policies LP27 and LP28. Please refer to specific documentation within the planning submission

- For Sustainable Drainage Systems (SuDS) please refer to specific documentation within the planning submission

- The scheme will aim to achieve a 30% reduction in surface water discharge compared with existing conditions.

- Maintenance arrangements for drainage systems will be secured for the lifetime of the development.

Q6 – Minimising Water Usage

- Water-efficient fixtures and fittings, including dual-flush WCs, low-flow taps, will be specified.

- Smart metering will monitor water use to support conservation.

Q7 – Biodiversity and Landscaping

- The development will deliver biodiversity net gain of 10% through native planting, green roof habitats, and pollinator-friendly landscaping. Please refer to specific documentation within the planning submission.

- There are no existing trees within the site constraints however new tree planting within the scheme will contribute to urban cooling and carbon sequestration.

- A landscape management plan will ensure long-term maintenance of green infrastructure.

- A Seasonal planting programme will be implemented to maximize growth

- External lighting will be designed to minimise light pollution and protect nocturnal wildlife.

Q8 – Air Pollution

- All construction activities will comply with best practice dust and emissions controls, including the use of low-emission plant.

- Operational emissions will be minimised through efficient building systems and electric vehicle (EV) charging infrastructure.

- A staff travel plan will promote walking, cycling, and public transport use to reduce vehicle emissions. Please refer to specific documentation within the planning submission

- Secure cycle parking and EV charging bays will be provided on site, in line with Local Plan Policies LP20 and LP51.

Conclusion

This proposal for the NHS hospital-related manufacturing and storage facility supports both Kirklees Council's 2038 Net-Zero target and the NHS Net Zero Strategy. Through sustainable design, renewable energy integration, and low-carbon construction methods, the development demonstrates a robust and proportionate response to the Council's Planning Applications Climate Change Guidance (June 2021).