

Energy & Climate Change Adaptation Statement

for

Erection of 1 b2/ b8 industrial building

at

**Cown Top Lane
Rochdale
Greater Manchester**

client

Supashed

January 2022

1.0 General

This statement has been prepared to accompany an application for full planning permission to Rochdale Borough Council for the erection of a new b2/ b8 industrial building at Land Off Cowm Top Lane, Rochdale, Greater Manchester.

The statement should be read in conjunction with the following drawings by Campbell Driver Partnership:

- OS plan - 22.113.001B
- proposed site plan - 22.113.002F
- proposed plans and elevations - 22.113.007C
- existing site plan - 22.113.008B
- proposed site sections - 22.113.009A
- 22.113A design and access statement
- 22.113 planning statement

And the following supporting documents by others:

- Arboricultural impact assesment - Bowland Tree Consultancy
- Arboricultural constraints appraisal - Bowland Tree Consultancy
- Extended Phase 1 Habitat Survey - Rachel Hacking Ecology
- Transport Statement - Mode
- Air Quality Assessment - Miller Goodall
- Noise Impact Assesment - Miller Goodall
- Crime Impact Statement - Greater Manchester Police
- Phase 1 Geo-Environmental Assessment - Paul Waite Associates
- Proposed Drainage Strategy - Paul Waite Associates
- Proposed Impermeable area - Paul Waite Associates
- Existing Greenfield Areas - Paul Waite Associates
- Greenfield Run-off Analysis - Paul Waite Associates
- Site Location Plan - Paul Waite Associates
- Drainage Attenuation Storage - Paul Waite Associates

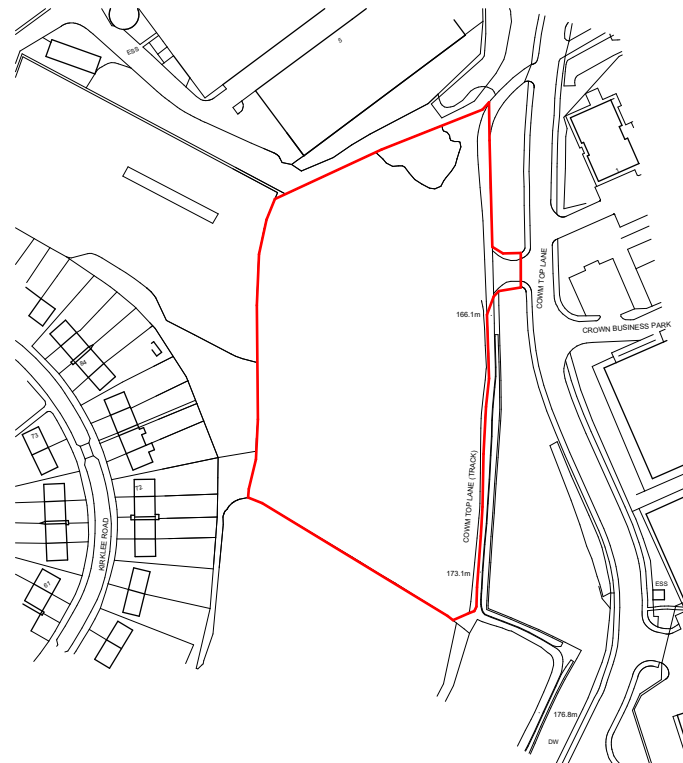
2.0 Site

2.1 Location

The site is located off Cowm Top Lane in Rochdale, Greater Manchester. The site is highlighted in drawing 22.113.001A by a red outline.

2.2 Site History

The surrounding area to the site has been subject to numerous planning applications for the erection of b2/b8 units for the crown business park area. The last application for the adjacent site was for a b8 industrial unit in 2018.



3.1 Existing usage

The site is currently vacant open space land

3.2 Proposed usage

The proposed usage of the land will be for a new b2/b8 industrial building split into 3 industrial units.



4.0 Regulations

The proposed development has been designed in accordance with the parameters of Approved Document L2 which aims to regulate the conservation of fuel and power through:

- (a) limiting heat gains and losses -
 - (i) through thermal elements and other parts of the building fabric
 - (ii) from pipes, ducts and vessels used for space heating, space cooling and hot water services
- (b) providing fixed building services which -
 - (i) Are energy efficient
 - (ii) Have effective controls
 - (iii) Are commissioned by testing and adjusting as necessary to ensure they use no more fuel and power than is reasonable in the circumstances

The buildings Target Primary Energy Rate and Target Emission Rate will be calculated as part of a design stage and as built stage model and will be evaluated against calculations of the 'actual building' against calculations of the 'notional building'. Proof of these design standards and performance will be submitted to building control in the form of a design stage and as built stage BRUKL report.

The target primary energy rate and target emission rate will be achieved by using a combination of the following:

- Low fabric u-values for the building thermal elements which meet the minimum standards set out in section 4 of approved document L2
- Efficient building services

5.0 U-Values of thermal elements

In order to achieve the TPER and TER the minimum fabric u-values would need to be achieved. These minimum standards are set out in section 4 of approved document L2 2021. When compared with the notional building as part of the SBEM calculation an improvement of 10-15% will be required for the building to pass.

Roof - $0.16\text{W/m}^2\text{K}$

Wall - $0.26\text{W/m}^2\text{K}$

Floor - $0.18\text{W/m}^2\text{K}$

Windows/doors - $1.6\text{W/m}^2\text{K}$

This will be achieved through the use of high performance thermally insulated cladding and double-glazed window/ door units. Full details and specifications will be provided to the energy assessor to provide an accurate SBEM calculation.

6.0 Thermal Bridging

As part of the technical design process the insulation and thermal line of the building envelope will be continuous across all built thermal elements to limit thermal bridging.

Construction joint details will be designed and calculated using:

- The guidance set out in the Building Research Establishments BR 497
- A process flow sequence provided to the building control body which indicates the way in which the detail should be constructed.

7.0 Renewable Energy Sources

Provisions will be made to the steel structure to allow for the installation of future Solar PV panels to provide clean, renewable electricity for the building which would reduce the TER of the building over the buildings lifetime. Dependent on end user requirements different levels of Solar PV's may be required to suit their consumption therefore the provisions will allow for flexible use of the building to comply with regulations.

8.0 Building Operation Strategy

Once the construction phase of the development is completed an operation strategy will be handed over to the building occupier detailing information on how to operate the heating system efficiently and advise on how to minimise excessive use of power through management strategies such as ensuring all lights and power switches are turned off when not in use.

9.0 Relation to local and national planning policy

9.1 National Planning Policy Framework

Section 2 Achieving Sustainable Development indicates how one of its core principles are building achieving an environmental objective. Due to the use of maximising the efficiency of the thermal elements and ensuring the unit meets the minimum standards set out in Approved Document Part L2 the development will comply with section 2. Paragraph 11 further states that plans and decisions should apply a presumption in favour of sustainable development of which development will be.

9.2 Rochdale Adopted Core Strategy

The following policies have been seen as relevant to this proposal from an energy and climate change perspective:

- SO4 To promote a greener environment
- SD1 Delivering sustainable development
- SP3/R To promote a greener environment
- G1 Tackling and adapting to climate change
- G2 Energy and new development

10.0 Summary

This document sets out the intention moving forward onto a detailed design stage for this development once approved. It is intended that the buildings fabric will achieve at least the minimum levels set out in Approved Document Part L2 and will achieve a satisfactory level of airtightness through the previously described good workmanship practices. This build quality will ensure there will be efficient heat retention in the property. Provisions will also be made to allow the roof to be adapted to fit solar PV panels for future tenant use to reduce the carbon output of the development's future use. The adaptability of the building will also help in ensuring a considerably lengthened life span for the building reducing the possibility of future demolition of the unit and replacement of another for any different future landowners. Due to these reasons, we believe the proposal should not be refused for any energy and climate change reasons.