

Sustainability Statement

Proposed Community & Sports Facility

Land off Sheffield Road, Hoyland Common, Barnsley

Barnsley MBC & Forge Community Partnership

August 2023



BARNSELY
Metropolitan Borough Council

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1. Introduction

The application follows on from the previous of applications submitted by Newlands Developments, dating back to 2020, relating to the development of the employment land to the west of Sheffield Road. The development site was identified as a new location for the Rockingham Sports Centre (currently sited further north on Sheffield Road and operated by Forge Community Partnership), which currently sits within the employment allocation outlined under planning policy ES13 in the Barnsley Local Plan. The provision of the new sports facility was agreed following consultation with BMBC under Newlands planning application reference 2020/0647 for the large-scale employment development to the west of Sheffield Road.

Following approval of the above application, Newlands submitted a further application(ref. 2020/0999) for the works to form the new sports facility on the Sheffield Road site, which included the provision of level plateaus to accommodate new grass football pitches and a grassed archery range. The application also included provision for temporary welfare, changing and car parking facilities.

BMBC and Forge Community Partnership have been working closely together on the proposals for the site since early 2021, when the need for relocation was initially identified. Since then, Forge and BMBC have continued to work together to develop feasibility design proposals for the site, which include a permanent building, car parking and an all-weather pitch.

The purpose of this statement is to outline the sustainability requirements set out in the relevant policies under the Barnsley Local Plan and to demonstrate how compliance will be achieved for this development.

2. Planning Policy

Barnsley Local Plan

The Barnsley Local Plan was adopted in January 2019 and is available on the BMBC website. The plan covers future development up to the year 2033. The plan outlines the Council's vision for the future of Barnsley and its residents as well as aspirations to be involved with the wider city regions including Leeds and Sheffield.

The plan outlines Barnsley's commitment to economic growth including provision of jobs, improvement in living conditions/quality of life, improving the choice of homes and protecting and enhancing environmental assets.

The Planning Statement included with the application provides an overall summary of relevant policies. The sustainability statement specifically addresses the following policies:

Relevant Policies

The policies relevant to the proposed development are as follows:

- CC1 – Climate Change
- CC2 – Sustainable Design and Construction
- CC3 – Flood Risk
- CC4 – Sustainable Drainage Systems
- RE1 – Low Carbon and Renewable Energy

CC1 – Climate Change

Policy CC1 aims to reduce causes of climate change and to adapt to the future impacts of climate change. The criteria for this policy is as follows:

- Giving preference to development of previously developed land in sustainable locations.
- Promoting the reduction of greenhouse gas emissions through sustainable design and construction techniques.
- Locating and designing development to reduce the risk of flooding.
- Promoting the use of Sustainable Drainage Systems (SUDS).
- Promoting and supporting the delivery of renewable and low carbon energy.
- Promoting investment in Green Infrastructure to promote and encourage biodiversity gain.

CC2 – Sustainable Design and Construction

Policy CC2 follows on from Policy CC1 and requires new developments to minimise energy consumption through sustainable design and construction. In addition, Policy CC2 also states that non-residential developments will be expected to achieve a minimum standard of BREEAM Very Good.

CC3 – Flood Risk

Policy CC3 covers a wide range of criteria relating to flood risk, however, not all of the criteria are applicable to this development due to the site being located in Flood Zone 1. The relevant criteria are as follows:

- Site-specific Flood Risk Assessments (FRAs) for proposals over 1 hectare in Flood Zone 1 and all proposals in Flood Zones 2 and 3

CC4 – Sustainable Drainage Systems

Policy CC4 states that all major development will be expected to use SUDS to manage surface water drainage and that the Council also promote the use of SUDS on minor developments where feasible.

RE1 – Low Carbon and Renewable Energy

Policy RE1 aims to minimise Co2 emissions from new developments by using renewable and low carbon energy sources. RE1 also reference compliance with the carbon compliance targets outlined in the Building Regulations.

The policy states that the Council will allow renewable energy so long as there is no harm to the following:

- The character of the landscape and appearance of the area
- Living conditions
- Biodiversity, Geodiversity and water quality
- Heritage assets, their settings and cultural features and areas
- Key views of, from or to scenic landmarks or landscape features
- Highway safety, or Infrastructure including radar

3. The Proposed Development

The proposed development will comprise a single storey building, car parking (including motorcycle parking, cycle parking and EV charging spaces), an all-weather sports pitch and an archery range.

The proposed building will provide the following accommodation:

- Reception Area & Café Space
- Two activity spaces (which can be opened-up to form one larger space)
- Two Studio spaces
- Two full size changing rooms to accommodate sports teams
- Separate accessible changing rooms which can also be used as officials changing rooms
- Locker area

In addition to the above, the accommodation will also include the following ancillary spaces:

- WC's
- Cleaner's Stores
- Changing places room
- Kitchen
- Office
- Stores
- Plant Room
- Circulation

From the offset and through the feasibility stage, there has been a keen focus on sustainability, which is one of the 4 key focus areas in the Council's Barnsley 2030 Strategy, which aims to improve the lives of Barnsley's residents.

Policy CC1 under the Barnsley Local Plan (as referenced above) aims to deal with the impact of climate change through development. The proposed development will ensure compliance with the criteria of CC1 by implementing the following initiatives:

- Ensuring the design of the building and wider development reduces greenhouse gas emissions
- Considering the risk of flooding and the potential impact of the development on the surrounding area
- Using Sustainable Urban Drainage Systems (SUDS) for surface water disposal
- Utilising renewable and low carbon technologies to deliver building services requirements.
- Further enhancing the sites biodiversity and green infrastructure

Policy CC2 outlines more in-depth requirements for delivering sustainable design solutions in order to meet the requirements of Policy CC1. Firstly, CC2 aims to *minimise resource and energy consumption through the inclusion of sustainable design and construction features, where this is technically feasible and viable*. The policy requires energy efficiency and sustainable design to be considered from the outset. Secondly, CC2 requires all non-residential developments to achieve a minimum standard of BREEAM Very Good.

BREEAM was initially launched in the 1990's to give certification to developments that were considered to be energy efficient and sustainable. Over the past 30 years, BREEAM has been developed and is now the leading recognised certification scheme for sustainable and energy efficient developments. BREEAM assessments are carried out by suitably qualified assessors, who

have undertaken training and are registered with the BRE. The process works by scoring the design, construction, management and maintenance requirements of buildings against a set list of criteria using a weighted points system. BREEAM assessments cover ten main categories, which are as follows:

- Management
- Energy
- Water
- Waste
- Pollution
- Health and Wellbeing
- Transport
- Materials
- Land Use & Ecology
- Innovation

Each of the above are then broken down into sub-categories relating to specific elements.

For this development, BMBC Property Services will be commissioning a BREEAM assessor to provide an assessment of the designs and specifications to ensure that the minimum Very Good standard certification can be achieved upon completion.

Sustainable and energy efficient construction also contributes towards lower life cycle costs for the building. Forge Partnership (who will operate the facility) are a local community partnership that develop community owned projects inline with their 3 main principals:

- Economic Growth
- Environmental Stewardship
- Social Inclusion

It is therefore important that the development is sustainable from an operational perspective to enable them to continue to successfully operate this community facility.

The design will aim to incorporate as many sustainable elements as possible, which will include the following:

- Providing an efficient building layout to keep the building footprint as compact as possible.
- Creating multi-use/flexible spaces to enable a wide range of users to utilise the building, reducing the need for purpose built spaces.
- Specifying 'green' materials with low levels of embodied carbon, and where possible achieving a minimum of A rating for all materials in accordance with the BREEAM Green Guide document.
- Sourcing materials from local suppliers to reduce transportation requirements and therefore reducing vehicle emissions.
- Increasing the thermal efficiency of the building envelope beyond the minimum requirements of the Building Regulations.
- Encouraging natural light penetration to habitable spaces to reduce the requirement for artificial lighting and to enhance the well being of the building users.
- Considering building orientation, provision of natural shading, solar control glazing and blinds to prevent overheating.

- Provision of well established and safe access for pedestrians to encourage people from the immediate area to walk to the facility where possible.
- Provision of secure cycle storage and showering facilities to promote the use of sustainable transport.
- Provision of electric vehicle charging points.
- Use of Air Source Heat Pump (ASHP) technology for heating and hot water.
- Provision of photovoltaic panels to the roof to provide green electricity.
- Consider grey water recycling for flushing WC's.
- Use of LED lighting and smart lighting controls including presence detection to prevent lighting being used unnecessarily.

Green infrastructure and biodiversity are two other important factors in the design. Newlands Developments have already provided enhancements to the biodiversity on the site, which are outlined in their biodiversity net gain plan approved under application ref. 2020/0999. The Newlands landscaping design was approved via condition discharge under the above application in July 2023. Newlands will now implement the approved planting scheme across the site ahead of our development works commencing. Once the Newlands planting works have been completed; we will commission an Ecologist to undertake an ecological assessment of the site to ensure the 10% net gain has been achieved. As referenced in the main Planning Statement, initial pre-application discussions with BMBC planners confirmed that we would not be expected to provide any further enhancement to the biodiversity net gain, on the condition that we could provide evidence that 10% net gain across the whole site had been achieved.

As we will be providing additional landscaping as part of our development works, we do anticipate the biodiversity net gain increasing beyond the 10% threshold by default.

Policy CC3 deals with flood risk for new developments. The proposed development sits in Flood Zone 1, which means there is only a low probability of flooding (less than 1 in 1000 year probability of flooding). This would normally mean that a separate flood risk assessment (FRA) is not required, however, where Flood Zone 1 sites exceed 1 hectare in area, policy CC3 requires a separate FRA. BMBC have appointed STE to provide an FRA for the site and this is included with the application.

Policy CC4 relates to Sustainable Urban Drainage Systems (SUDS). CC4 states that all major developments should use SUDS for surface water disposal and where feasible, minor developments should also utilise SUDS drainage. Newlands have already installed a SUDS drainage system on the site, which has been designed to take the runoff from the proposed grass football pitches, the archery range, and the temporary 20 space car park, which was proposed under application 2020/0999. The system consists of a series of perforated pipes across the south side of the site, which lead to an attenuation/balancing pond in the south-east corner of the site. The pond then discharges into the adjacent brook via a culvert to the east side of the track on the eastern boundary.

The proposed development further enhances the provision of facilities on the site through the introduction of the permanent building and the all-weather pitch. We therefore commissioned STE to produce a further drainage strategy based on our proposals, which included an analysis of the capacity of the existing system to determine whether any additional retention or relief mains SW drainage would be required.

The drainage strategy summarises that the existing system does have the capacity to take some of the additional run off but also confirms that an additional attenuation tank will be required under the new car park area to ensure the discharge rates do not exceed those approved under the

Newlands proposals. An oil interceptor will also be included to the car park area to prevent contamination of the existing watercourse. The all-weather pitch will be designed by a specialist consultant, and we therefore don't have all of the design information for this area at present. However, to ensure this area has been considered, STE have provided a runoff calculation for the new pitch and indicated the requirement for an additional attenuation tank to deal with this area. The final size for the attenuation tank will be determined once we have further design information for the pitch.

In addition to the surface water attenuation, we are also exploring whether grey water recycling can be incorporated into the development. Using grey water recycling, reduces the surface water discharge from the site, which may help to reduce the amount of additional attenuation required.

Policy RE1 covers renewable and low carbon sources with a view to reducing Co2 emissions. The proposed development will include several renewable/low carbon technologies including air source heat pumps and photovoltaic electricity production. We explored different options for the heat pumps, first looking at ground source as this is considered favourable for sites over historic mine workings and we also thought the space available on the site would be sufficient to accommodate the pipework. Unfortunately, following consultation with specialist suppliers/designers, the constraints on the site meant that ground source would not be a viable option. This was mainly due to restrictions from the Football Foundation/Sport England, as they will not permit having the pipework located underneath the all-weather pitch. The car park area alone would not provide sufficient area for the required number of pipes. We therefore opted to go with Air Source for the provision of heating and hot water. One challenge with using heat pumps is that they cannot provide large amounts of on demand hot water in the same way that a traditional gas boiler can. Whilst this won't be an issue for day-to-day use, if the changing rooms are at full capacity with all showers being used simultaneously, there will not be sufficient on demand hot water. We have therefore had to look at using immersion storage tanks alongside the air source heat pumps to ensure there is sufficient hot water available for showering as required. The operation of the storage tanks will be linked to the Building Management System (BMS) allowing the tanks to be switched on remotely as and when required to ensure the water is ready when the users need it. The building will have underfloor heating, as this is the most efficient heating method when using ASHP. Comfort cooling will be provided to the studio spaces.

The air source heat pump units will be sited externally and do emit a small amount of noise. We have mitigated the impact of this on the adjacent residents by positioning the external plant on the south-east side of the building, furthest away from the residential properties on Parkside Road. The building will also provide screening of the noise to further mitigate any impact on the properties. The external levels to the south side of the building are lower than at the internal floor level, which lessens the visual impact of the plant. The plant area is also concealed with a timber fence for additional screening. A noise assessment has also been commissioned to confirm if any additional attenuation will be required for the external plant.

The photovoltaic panels will be positioned on the roof facing south-west to maximise exposure to the sun. The electricity generated will be converted with inverters and fed into the building's electricity supply. As the building will be in operation during the day, the electricity generated will be used straight away so there will not be any requirement for battery storage.

To minimise electricity usage, all lighting will be LED with presence detection and daylight sensors. The BMS will also allow the mechanical and electrical systems to be centrally controlled, maximising efficiency.

4. Summary

The application is for a new multi-use community building, car parking and an all-weather sports pitch on the site to the east of Sheffield Road and to the south of Parkside Road, Hoyland Common.

The development will feature renewable and low carbon energy sources as well as thermally efficient building materials. The building will not increase the flooding risk of the site or surrounding areas and the surface water drainage will be disposed of via SUDS.

We believe the justification outlined in this statement demonstrates our commitment to providing a sustainable development, which is inline with the relevant planning polices and the Council's long term sustainability aspirations.