

**Extension of the existing changing rooms to both the side (north) and the rear (west).
Introduction of a pitched roof predominantly over the existing flat roof to the changing areas.
Remodelling of internal layout and external servery.**

Ruislip Rugby Football Club

West End Road

Ruislip

UNITED KINGDOM

MIDDLESEX

HA4 6DR

SUSTAINABILITY STATEMENT

Submitted for Planning

AUG 2023

1.0 INTRODUCTION.

This Sustainability Statement has been prepared on behalf of the Ruislip Rugby Football Club (RRFC). It accompanies the planning application for a new side to rear single storey extension to the existing club house with the intention of modernising primarily the changing facilities, at West End Road, Ruislip, Middlesex, HA4 6DR.

The RRFC is an amateur community-based sports club organisation for adults, children, male or female. The extension to the existing rugby club will future proof the RRFC to meet their aspiring sporting requirements.

The RRFC, seek to modernise their changing facilities and ablutions, upgrading them close to the design standards of the Rugby Football Foundation. The realignment of the changing facilities and re-organisation of the showers along with the additional WC's have consequently resulted in the need to expand the building marginally. The proposals seek planning approval for extensions to both to the side (north) and the rear (west) of the existing flat roof element of the building along with approval for the introduction of a new pitched roof, sited over the existing flat roof to the changing areas.

The existing configuration contains six changing room facilities, accessed via two corridors along with one undersized communal shower area servicing all areas. The proposed layout rearranges the internal layout with a single circulation corridor (to maximise on the existing space) and introduces six larger changing rooms all with screened shower cubicles that are accessed directly from each of the individual changing areas. In addition to this there are to be a WC within each of the six changing spaces. There is also the introduction of a small gym area facing towards the rear and fields.

The new six changing rooms will include two larger spaces, one for the home team and one for visitors along two further changing spaces. Changing rooms 5 & 6 will have direct external access to be primarily used as children's changing which can be operational independently to the remainder of the changing facility and club house.

Other amendments to the internal layout will include an improved plant room and cellar, designated laundry & bag area, officials changing, enlarged kitchen & external servery, players entrance lobby, and external access to the physiotherapist's room.

This Sustainability Statement will aim to provide an assessment of the design approach and intent behind the development of the scheme. It will demonstrate that the proposal is based on a practical and an equitable approach to design

1.0 SUSTAINABILITY / ENERGY.

The SBEM energy calculation have been generated to comply with the new Building Regulations Part L which came into force on the 15 June 2022. A large area where we believe we can incorporate energy and sustainability is within the materials. The specification of materials will be based on the 'Green Guide to Specification' with principal elements being selected for the achievement of an 'A' rating.

If there is a requirement for the SBEM percentage to be over and above the current Building Regulations, this could be secured by condition and designed into the scheme during RIBA Stage 4 technical stages.

'U'-values through building fabric first approach:

The proposed building aims to obtain a reduction in Co2 emissions through the insulated fabric, the thermal 'U' values for the materials are listed below.

- Ground Floor:**

Minimum 'U'-value of 0.15 W/m2K.
75mm deep screed on 500-gauge slip sheet.
150mm insulation rigid board foil-backed- on 1200-gauge DPM.
Strip concrete foundations (subject to Structural Engineers details).
To achieve a minimum u-value of 0.18 w/m2K.

- External Walls:**

Minimum 'U'-value of 0.18 W/m2K.
102.5mm facing brickwork
150mm fully filled cavity insulation – Crown Drytherm Cavity slab 32 or similar approved.
100mm medium density blockwork inner leaf (subject to Structural Engineers details).
12mm Daub & Dab and skim plasterboard.

- Main Roofing & flat warm roofing:**

Minimum 'U'-value of 0.11 W/m2K.

Main roof Construction – Attic Trusses:

Interlocking concrete tiles to match existing, on
25 x 50mm battening over
Tyvek breathable membrane over
Trussed roof members @ 600mm c/s
500 - 600mm mineral wool insulation laid over bottom cord of roof truss.

Flat Roofs - Warm Roof:

TBC: Polyroof GRP or similar approved.
22mm WBP plywood on firlings.
175 - 200mm rigid board foil-backed insulation.
Tyvek breathable membrane.
Existing substrate.

- **Glazing:**

Minimum 'U'-value of 0.14 W/m2K.
UPVC frames and Powder coated aluminium. Thermally broken double glazed with low E glass double sealed units.

The addition of new walling and insulation levels will not only bring the fabric in-line with the current Building Regulations but will thermally uplift the existing building vastly improving efficiency.

Artificial Lighting.

The proposed dwelling will have 100 % Low energy lighting Efficacy 90.

Heat gains from lighting will be reduced by providing energy efficient lighting installations with low energy/high efficiency LED bulbs, modern energy saving lighting control system, which shall incorporate presence/absence detection and daylight sensing. This will reduce the running costs of the dwelling considerably as well as save energy.

The selection of equipment with a low electrical requirement, and energy saving automatic switch-off controls when not in use, will reduce cooling demands and indirectly CO2 emissions.

Construction:

Prior to the construction stage the contractor will be made aware of the following list, for them to implement a Site Waste Management Plan (SWMP).

Site operations generally:

- Plan locations for depositing and stacking of materials prior to delivery.
- Provide recycling skips and ensure waste stream sorting compliance by all trades.
- Form a compound to contain plastic film, cardboard, glue and paint tins.
- Use reputable waste service providers.
- Negotiate recycling paybacks with local resource recovery firms.
- Use waste aware sub-contractors.

- Use written contracts with all trades including clauses requiring waste minimisation practice.
- Require trades to dispose of their own waste.
- Back charge for sorting of waste streams not sorted by each sub-contractor.
- Colour code or label waste skips and protect them from contamination, rain and wind.
- Provide regular waste bins for food scraps and household waste during construction.
- Lock special skips at night and weekends to prevent rubbish dumping in recycling bins.

Materials storage and handling:

- Minimise time between delivery and installation and the risk of damage or theft.
- Ask suppliers to collect/recycle packaging.
- Have fragile materials and fixtures delivered and installed close to completion date.
- Use prefabricated framing and trusses to reduce time on site before installation.
- Check quantity, condition and quality on delivery, report discrepancies immediately.
- Reject inferior goods or materials if their quality will result in additional waste.
- Refuse oversupply as compensation for inferior quality or condition.
- Report careless delivery staff to the supplier.

Concreting

- Use concrete with recycled aggregate in all viable applications.
- Use reinforcement made from recycled steel.
- Form up accurately and fine tune estimating to minimise waste. Up to 10 percent is often wasted.
- Return surplus to the plant for recycling.
- Buy from plants that wash out cement to allow recycling of sand and aggregate.
- Break remnants into small pieces before final set to allow later use as backfill or recycling.
- Always form up a small area of path or low-grade slab ready to accept remnants.

Carpentry and joinery:

- Use engineered timber products that make efficient use of materials where possible.
- Use sustainably sourced timber.
- Encourage your supplier to find sustainable sources.
- Prepare accurate cutting lists before ordering.
- Give joiners a copy of the cutting list.
- Ensure that carpenters have a complete cutting list to allow efficient timber use.
- Use joinery profiles that can be easily and invisibly joined to reduce off-cuts.
- Use off-cuts wherever possible.

Bricklaying and Block:

- Have bricks dropped around perimeter to save damage in transporting to place of use.
- Use appropriate mortar strength. Softer mortar saves cement and helps in recycling.

Electrical services:

- Use sub-boards and plan wiring to reduce wiring distances, quantities, waste and cost.
- Recycle off-cuts. Strip insulation from copper.
- Use PVC free insulated cable - it lowers leachate toxicity.
- Consider pulse switching and intelligent controls to reduce cabling and energy use.

Plastering:

- Buy plasterboard from suppliers who recycle.
- Sort off-cuts and store on site for return to recycler.
- Keep off-cuts clean and dry.
- Carry useful sized off-cuts to the next job.

Waste Audit:

The building contractors selected to tender for the construction works will be made aware that waste management is a high priority, and during the tender process, contractors will be asked to demonstrate how they will reduce, recycle and re-use during the construction process. To be cost effective, waste minimisation strategies will be agreed to and implemented by all parties involved in building the proposed dwelling at the construction and operation stages. A team approach by the owner, builder and Architect is the most effective way to implement waste reduction.