

4.0 ALTERNATIVES & DESIGN EVOLUTION

Introduction

4.1 Regulation 18 of the EIA Regulations require an applicant to provide:

"a description of the reasonable alternatives studied by the developer, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment".

4.2 Schedule 4 (2) is worded slightly differently and requires:

"A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects."

4.3 Alternative options typically comprise:

- The 'do nothing' alternative, where the Development is not progressed;
- Consideration of Alternative Locations or Uses; and
- Consideration of Alternative Designs.

The 'do nothing' Alternative and the Consideration of Alternative Locations and Uses

The 'do nothing' Alternative

4.4 Under the 'do nothing' scenario, the Development would not be progressed. In this situation, the existing configuration of the Site would not make the most efficient use of the Site for the delivery of high quality housing. In addition, the beneficial and adverse effects outlined in the ES relating to the Development would not occur. Therefore, this option has been discounted.

Consideration of Alternative Locations and Uses

4.5 The Applicant owns the Site and no alternative locations were considered.

- 4.6 As outlined in Chapter 1 Introduction of the ES, the Site forms part of a wider redevelopment across the entire Richmond upon Thames College campus, which is the subject of an Outline Planning consent (ref: 15/3038/OUT (dated August 2016)) and the redevelopment of the Richmond College site to provide a new campus for education and enterprise purposes, comprising a replacement College, a Science, Technology, Engineering and Maths (STEM) Centre, a new secondary school, a new special educational needs (SEN) school, a new ancillary 'Technical Hub', a replacement on-site sports centre, upgrading of the existing playing fields at Craneford Way, and a new residential development of up to 180 units.
- 4.7 A subsequent reserved matters approval was granted by LBRuT in August 2019 for the: *'demolition of existing college buildings, removal of hardsurfacing, site clearance and groundworks together with the redevelopment of the site to provide 180 residential units together with associated parking for 160 vehicles, open space and landscaping.'* (LBRuT ref: 18/4157/RES).
- 4.8 As set out in the formal description above, the reserved matters approval is for 180 residential units and this includes both houses and flats (45 x 1 bed, 81 x 2 bed, 36 x 3 bed and 18 x 4 bed). The proposed building heights are 3 storeys for the houses and a mixture of 4/5 storey blocks of flats. Proposed vehicle access to the consented reserved matters scheme is via a single vehicular access point from Marsh Farm Lane in the north-west corner of the site. The proposals include three separate but connected public open spaces in the centre of the site.
- 4.9 The Applicant now considers that the consented reserved matters scheme can be enhanced, and thus a new detailed planning application (supported by this ES) for the residential proposals, has been submitted to LBRuT to do so. In addition, a separate detailed planning application has also been submitted for the Sports Centre use, comprising the erection of the RTS Sports Hall and alterations and extensions to the existing RuTC Sports Hall on the Site. The two separate planning applications are supported by this new ES.
- 4.10 In comparison to the alternative reserved matters scheme, the residential element of the Development has been designed to increase the number of affordable homes, improve the central landscaped area, include some zero carbon homes and improve the access arrangements consented as part of the reserved matters scheme (ref: 18/4157/RES). The Development also includes changes to the internal layouts of some of the homes, which is especially important following the Covid-19 pandemic and the emerging changes in working habits. Furthermore, no significant changes to the height and massing of the Outline planning consent (ref: 15/3038/OUT) are proposed.

- 4.11 In addition, the Development will comprise of two sports halls, as noted in Chapter 3. The RuTC Sports Hall will be a new three storey extension to the existing sports hall.
- 4.12 The RTS Sports Hall will be a new building, comprising a Main Sports Hall and storage areas at first floor level, and a studio/fitness gym, changing areas, toilets/showers, storage areas and an office at ground floor level.
- 4.13 The principle of the Development is to help to address local housing needs and optimise the potential of the Site, thereby creating long term affordable and high-quality housing in LBRuT and new construction employment opportunities. Additionally, the Development will provide new and enhanced sports facilities across the entire Richmond upon Thames College campus.
- 4.14 The existing sports facilities on the Site, which comprise an ageing multi-use sports hall and changing facility are becoming un-fit for purpose and therefore require updating.

Consideration of Alternative Designs and Comparison of Environmental Effects

- 4.15 The design evolution process has been fluid and iterative. There are no discrete alternatives on which to base a direct comparison of environmental effects. The design of the Development has responded to technical and environmental constraints and consultation feedback. Changes were made to reduce adverse effects and improve beneficial effects, where possible. The sections below outline the drivers and objectives for the Development and how changes are likely to have affected impact on the environment.

RDZ Application

- 4.16 The design of the residential element of the Development has been guided by the following key social and environmental visions and objectives:

Social Vision

- To create a high quality neighbourhood that will be inclusive for all, adaptable to all stages of life and contribute towards a vibrant, healthy community.

Objectives

- To create inclusive, multi-generational spaces that offer equal opportunity to everyone;

- To include active spaces that improve personal wellbeing and enable residents to live a healthy lifestyle;
- To design spaces that are vibrant and interesting and promote a sense of pride and community stewardship; and
- To nurture the formation of a cohesive community through the design of social spaces that encourage frequent and informal interactions along with larger organised activities.

Environmental Vision

- Embrace a multi-layered environmental approach to create a diverse and resilient landscape that is healthier for the planet than the one it replaces.

Objectives

- To create external spaces that can adapt to the future pressures associated with climate change;
- To design external spaces and the routes between them that promote use of sustainable transport methods and make walking and cycling safe and enjoyable;
- To embrace the principles of sustainability in the specification and sourcing of materials with lower whole life carbon; and
- To include a variety of planting and habitat types to increase biodiversity within the site and improve urban greening and local green infrastructure.

4.17 Further detail on the key social and environmental visions and objectives is provided in the Design and Access Statement submitted with the planning application.

RuTC and RTS Sports Halls planning application

4.18 The design of the RuTC Sports Hall has been moulded through key design drivers. Through the process, the key points that were incorporated into the design were:

- Contribute to the aspirations of the wider masterplan;
- Complement recently completed Phase 1 & future Phase 2 schemes;
- Provide new changing facilities, to replace existing demolished facilities;
- Provide a new fitness suite;
- Provide a new activity studio;
- Retain existing sports hall as a multi-use facility;
- Provide both physical and visual connections with the sports hall; and

- Material should support and emphasise the culture and identity of the college.

4.19 The design of the RTS Sports Hall evolved after the results of the massing studies, it was decided that the sports hall would be best placed on the first floor and associated facilities at ground floor in a similar arrangement to the outlined approved scheme.

Consultation and Engagement

4.20 As set out in Chapter 2 EIA Methodology of the ES, the planning applications are the culmination of an extensive design process which has involved extensive consultation with LBRuT, statutory consultees, the local community and other local stakeholders.

4.21 A number of methods of engagement have been applied to raise awareness of the Development with the local community and this has been fundamental to the evolution of the Development.

RDZ planning application

4.22 Letters were issued to notify residents of the key details of the proposals, the details of the project website, and dedicated email, telephone and postal addresses for contact/ feedback. Leaflets were also sent to a wide range of local stakeholder groups. Social and press media were also utilised to inform the public of the website and contact details. The project website has been dedicated to the consultation and engagement process. The website contained key information on the proposals, a pre-recorded presentation and detailed images.

4.23 The local community was invited to join three public exhibition webinars at the end of January 2021. Further targeted engagement was undertaken with the ward's Councillors, and local community groups, including the Friends of the River Crane Environment group (FORCE) and the Richmond College Development Group (REEC).

4.24 The Applicant has also engaged extensively with the LBRuT during the design process, through pre-application meetings undertaken with Officers in June and July 2020 and in February and March 2021. Urban Design and Housing officers were present during the pre-application process, and feedback was also received from the Council's transport officers.

RuTC and RTS Sports Halls planning application

4.25 The RTS Sports Building was moulded through the design process, a pre-application meeting

held on the 11th November 2021 and attended by various stakeholders allowed for the proposed sports building to be shaped and altered. The design feedback that was delivered was as follows:

- Active frontage concerns had been addressed;
- Further work on scale and appearance of sub-station;
- Overall design, appearance, and material choices are not of concern;
- Would like to see soft landscaping proposals enhanced, particularly in the car parking area;
- Green roof – outline approval was for 70% - this needs to be addressed;
- Investigate deep reveals to enhance façade;
- Investigate a canopy over commercial entrance to enhance its visibility;
- Add an additional gate and path to West to provide direct access from Marsh Farm Lane;
- Fencing around community entrance is not of concern;
- Electric parking provision to be included in car park;
- Barrier required to secure car park – accepted as likely requirement – operation to be agreed in management plan; and
- Management plan to include operation and booking system of the two sports halls (school and college).

4.26 The Development submitted for approval is the result of a thorough analysis of environmental constraints and opportunities, access issues and market demand. Consultation with LBRuT, the statutory consultees, the local community and other local stakeholders has been a key influence in design evolution. The consultation process has allowed the Development to evolve to suit their needs and ensure that the Applicant's objectives can be achieved.

Design Evolution

Residential

4.27 A number of changes have occurred over the course of the design evolution for the residential element of the Development, which have included:

Blocks 1-4 & 5

- The 5th storey elements of Blocks 3 & 4 were stepped away to reduce overlooking towards the College, whilst not impacting on overshadowing. This would give rise to less adverse effects on daylight, sunlight and overshadowing than the previous design iteration;

- The internal layouts of many of the apartments in Blocks 1 – 5 were amended, including ground floor plans, to reorder proposed cycle stores such that each building had a designated cycle store for increased security. This would give rise to more beneficial effects with respect to population & human health than the previous design iteration;
- The design of Block 5 was developed to target a proportion of new dwellings Net Zero Carbon during operation. This would give rise to less adverse effects on climate change than the previous design iteration;
- The proposed elevational treatment of the blocks were amended but this was in keeping with the original design intent of the Reserved Matters planning application consent (ref: 18/4157/RES); and
- Efficiencies in the typical plans allowed for an increased number of dwellings and thus contributed to the Applicants enhanced affordable housing offer. This would give rise to more beneficial effects on population and human health /socio-economics than the previous design iteration.

Block 6 Footprint and Landscape

- The new building footprint of Block 6 was marginally increased with the addition of return elements to the building corners, in order to help enclose a new communal courtyard space to the rear of the block and to improve on back gardens abutting this edge;
- Deck access allowed for increased dual aspect apartments whilst offering opportunity for neighbourly interaction and surveillance over the shared gardens. This would give rise to more beneficial effects on population and human health /socio-economics than the previous design iteration. ; and
- The Reserved Matters planning application consent (ref: 18/4157/RES) included a significant number of high value townhouses and the Applicant aimed to reduce the number of these, replacing them with more modest apartments offered as Shared Ownership.

Terrace Houses

- The design of the street scene was revised following the initial energy appraisal and pre application meetings with LBRuT, to increase the energy performance of the proposed houses and to deliver eight houses as Net Zero Carbon in operation, giving rise to less adverse effects on climate change than the previous design iteration; and
- Cycle stores, previously shown in rear gardens, were relocated to the front of the properties for easy access.

Wider Design Amendments

- The proposed ecological buffer to the north of the residential use as well as the communal gardens and landscaping were enhanced, with the inclusion of a variety of planting and habitat types to increase biodiversity, following pre-application discussions with LBRuT;
- The road between Block 5 and Blocks 3 & 4 was removed to fully enclose and pedestrianise the communal gardens, thereby increasing the level of planting within the Development. This would give rise to more beneficial effects on biodiversity, landscape and visual impact than the previous design iteration; and
- Reliance on a gas heating system was removed and replaced by Air Source Heat Pumps (ASHP), giving rise to less adverse effects on climate change than previously.

RuTC Sports Hall

4.28 Following pre-application submission of the design to LBRuT planning officers in May 2021, informal advice on the design of the RuTC Sports Hall was provided. The following informal advice was provided by LBRuT planning officers:

- Increase the proposed GIA, which when combined with the School sports provision is closer to that provided in the Outline planning consent (ref: 15/3038/OUT);
- Increase the amount of active frontage to Marsh Farm Lane;
- Inclusion of a green roof.

4.29 In response to the informal consultation with LBRuT planning officers, the following amendments were made to the design of the RuTC Sports Hall:

- The schedule of accommodation has been updated to reflect the requirements for large college and community changing, activity and fitness suite requirements;
- The appearance of the building has been updated to accommodate a third storey with an increased amount of 'active frontage' facing Marsh Farm Lane;
- The floor plan has been reconfigured to create a pertinent visitor entrance directly off Marsh Lane along the western orientation as opposed to the east-facing side of the building. The landscaping has been updated to enhance this change of orientation;
- A green roof has been added to the building; and
- Photovoltaic panels are to be fitted on the roof of the building.

4.30 All these changes would serve to better the effects of the Development on landscape, biodiversity, population and human health and climate change.

RTS Sports Hall

- 4.31 The design of the RTS Sports Hall has evolved through consultation processes. The community entrance was incorporated into the south elevation alongside the external escape staircase. The community entrance was proposed through the design evolution to be larger and more open; this allows for views through the building and creates a central meeting place and a place for informal gathering.