

12 January 2023

Energy and Climate Statement

Proposed Apartments at Townhead, Yorkshire Street, Rochdale

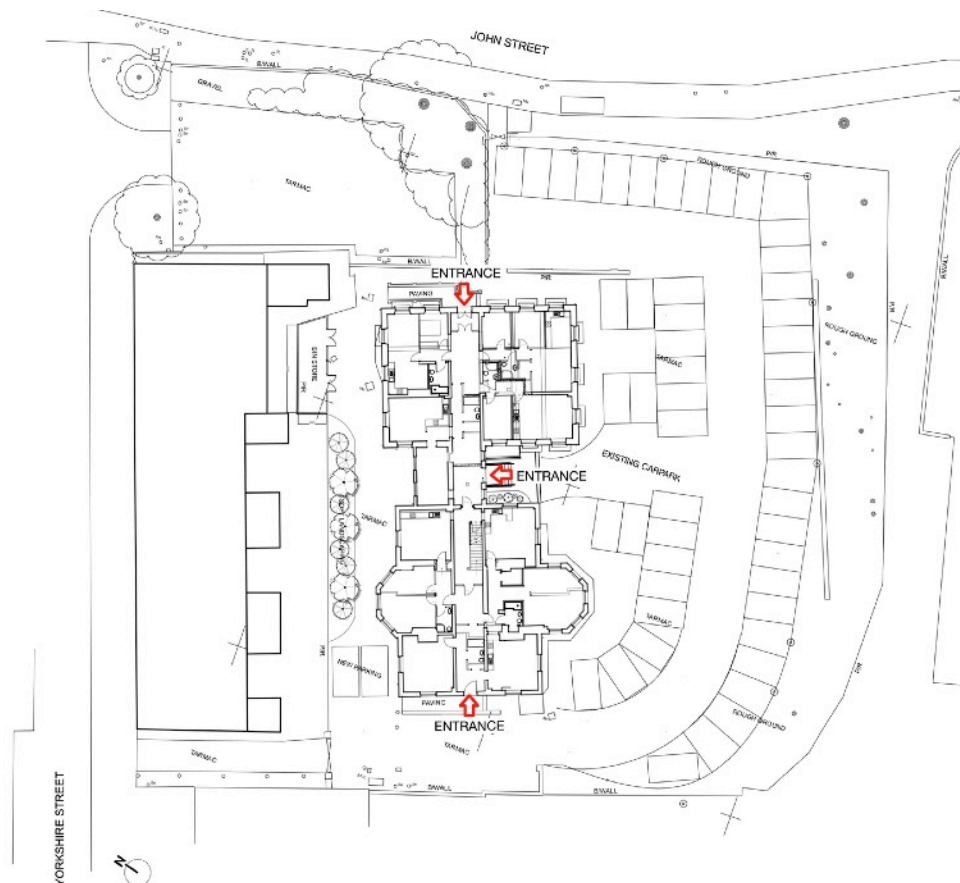
1.0

Introduction

This statement sets out the design considerations for a proposal to seek planning permission and listed building consent for the change of use of the former Council offices at Townhead to form 14 residential apartments.

This statement has been undertaken to consider sustainability measures for the proposed development.

The property is listed grade II. This will impact on some of the measures proposed.



Site Plan

Storah Architecture Ltd
Chartered Architects : Historic Building Consultants

46 Halifax Road
Todmorden
OL14 5QG

T 01706 813214
mail@storah.com
www.storah.com

Directors:
J. David Storah Arch. Tech. Cert.
Richard A. Storah Dip. Arch. MA Cons. RIBA AABC SCA IHBC



Company Registered in
England. No: 9547619

2.0 Fabric Considerations

According to Historic England's 'Heritage Counts' research, the carbon emissions of historic buildings can be reduced through retrofit and their re-use can avoid carbon emissions resulting from their demolition and replacement. Additionally, the longer a buildings lifespan the less embodied carbon is expended. Furthermore, the reuse and repurposing of historic buildings can reduce other negative environmental impacts such as waste production and resource depletion (*Source: Heritage Counts 2019 - There's No Place Like Old Homes: Re-Use and Recycle to Reduce Carbon*).

The proposals involve the re-use and retrofit of the existing building to form 14 residential apartments. This increases the existing buildings lifespan and reduces its embodied carbon expenditure. The listing of the existing building limits the retrofit interventions available within the proposals. However, where possible measures to retrofit and improve the energy efficiency of the existing building have been employed. The existing insulation is to be upgraded within the roof and the existing windows are to be upgraded to include double glazing and be draught stripped. This will reduce the overall heat loss of the building, improving its thermal and sound insulation and reduce its CO2 emissions.

It is proposed to reinstate the existing rainwater systems renewing unsuitable materials with cast iron, to be sympathetic to the buildings character, allow high capacity and long term durability. The existing roof area is maintained within the proposal. As a result of the proposals the rainwater systems will be upgraded and maintained to suit the existing roof areas and a rainfall intensity of 0.018 litres per second per square metre. Careful and co-ordinated rainwater management from the roof will ensure the external fabric below is kept dry, improving the existing buildings thermal energy efficiency.

3.0 Building Services

The existing building had an industrial gas fired boiler and large bore radiator system. Much of this has been stolen whilst the property has been unoccupied. It is proposed to heat the new dwellings with electric boilers supplying individual small bore radiator systems. This offers opportunities to obtain the energy from renewable suppliers. It also provides the option to change the boilers to Air Source Heat pumps in the future. This is not considered appropriate at present due to the impact (size and appearance) of the external condenser units. As the technology allows external condenser units to become smaller and less harmful to the appearance and significance of the listed building, a change to utilise Air Source Heat pumps would allow further sustainable energy use in the future.

Energy efficient lighting will be installed to the common areas of the building. LED lighting with PIR and daylight sensors to common areas of the building will improve the buildings energy efficiency.

4.0

Site Location

The site is located within the town centre of Rochdale and is accessed directly from Yorkshire Street via the gated entrance. The site is in a sustainable location being in close proximity to all amenities and within walking distance of good public transport networks due to its town centre location.

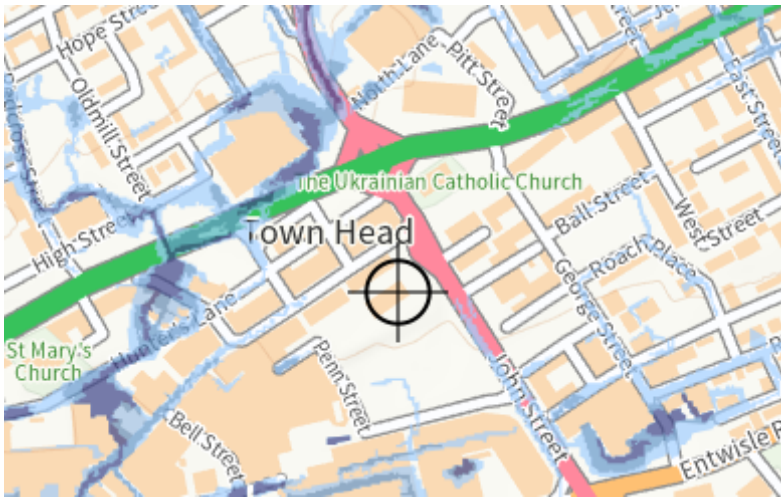
The town centre location of the site reduces the need to rely on private vehicle use and encourages public transport use. There is limited car parking provision proposed to the South West side of the building. However, private vehicle use and the corresponding carbon emissions are unlikely to significantly increase as a result of the proposals.

The existing building's basement, which is accessed from the ground floor common area, offers the provision of an adequately sized, waterproof and secure cycle store for the proposed residents. The provision of adequate cycle storage and the site's town centre location aim to encourage the users of the building to cycle instead of rely on private vehicle transport.

The site is located within Flood Zone 1, as defined by the Environment Agency on their 'Flood Map for Planning'. This means there is low risk of flooding from river or sea sources. The site also has 'Very low risk' of surface water flooding as indicated by [GOV.uk](https://www.gov.uk)'s 'Extent of flooding from surface water' map. The proposals involve the upgrading and maintenance of the existing buildings rainwater systems. Therefore, the rainwater and surface water management of the existing building and site are benefited as a result of the proposals.



The site is outside the areas of flood risk from watercourses as indicated on the Environment Agency's 'Flood Map for Planning'



The site is outside the areas of surface water flood risk as indicated on the [GOV.uk](https://www.gov.uk) 'Extent of flooding from surface water' map

6.0 Conclusion

The existing site is in a sustainable location, due to its town centre location which offers close proximity to all amenities and good public transport networks. The proposals are for the reuse and retrofit of an existing building, increasing the buildings lifespan, reducing its embodied carbon expenditure and securing its future.

Despite the limits on fabric improvements due to the buildings listing, the proposals seek to improve the energy efficiency of the existing building where possible.

In conclusion, the impact of the proposals on the climate are taken into consideration and it is considered the proposed works improve the energy efficiency of the existing building.

Prepared by

Laura Aspinall
BA (Hons) Architecture, MArch

On behalf of Storah Architecture Ltd.