

LAND TO REAR OF  
241 BURN CROSS ROAD  
CHAPELTOWN  
SHEFFIELD

SUSTAINABILITY STATEMENT



# SUSTAINABILTY



**Introduction**



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Introduction



**Introduction**

# Introduction Overview

This document has been prepared in support of an outline planning application with all matters reserved except for access.

This sustainability Report has been prepared with due consideration to Sheffield City Councils Adopted Policies and the structure found on their Sustainability Toolkit web site found at

<https://www.sheffield.gov.uk/planning-development/sustainability-toolkit>

The design for the land to the rear of 241 Burncross Road, Chapelton has been developed by Bespoke Improvements Ltd and Residential S72 Limited in response to local needs.



The purpose of this statement is to provide a structured record that highlights the sustainability considerations that have informed the development of the design proposals for the site.



The relevant Sheffield City Council policies that have been considered are:

# Introduction – Site Location



Figure 1: OS Map showing approximate site location. Copyright Ordnance Survey 2023.

# Introduction – Aerial Photograph



Figure 2: Redline - development site boundary

Design



**Considerations**

# Design – Indicative Layout

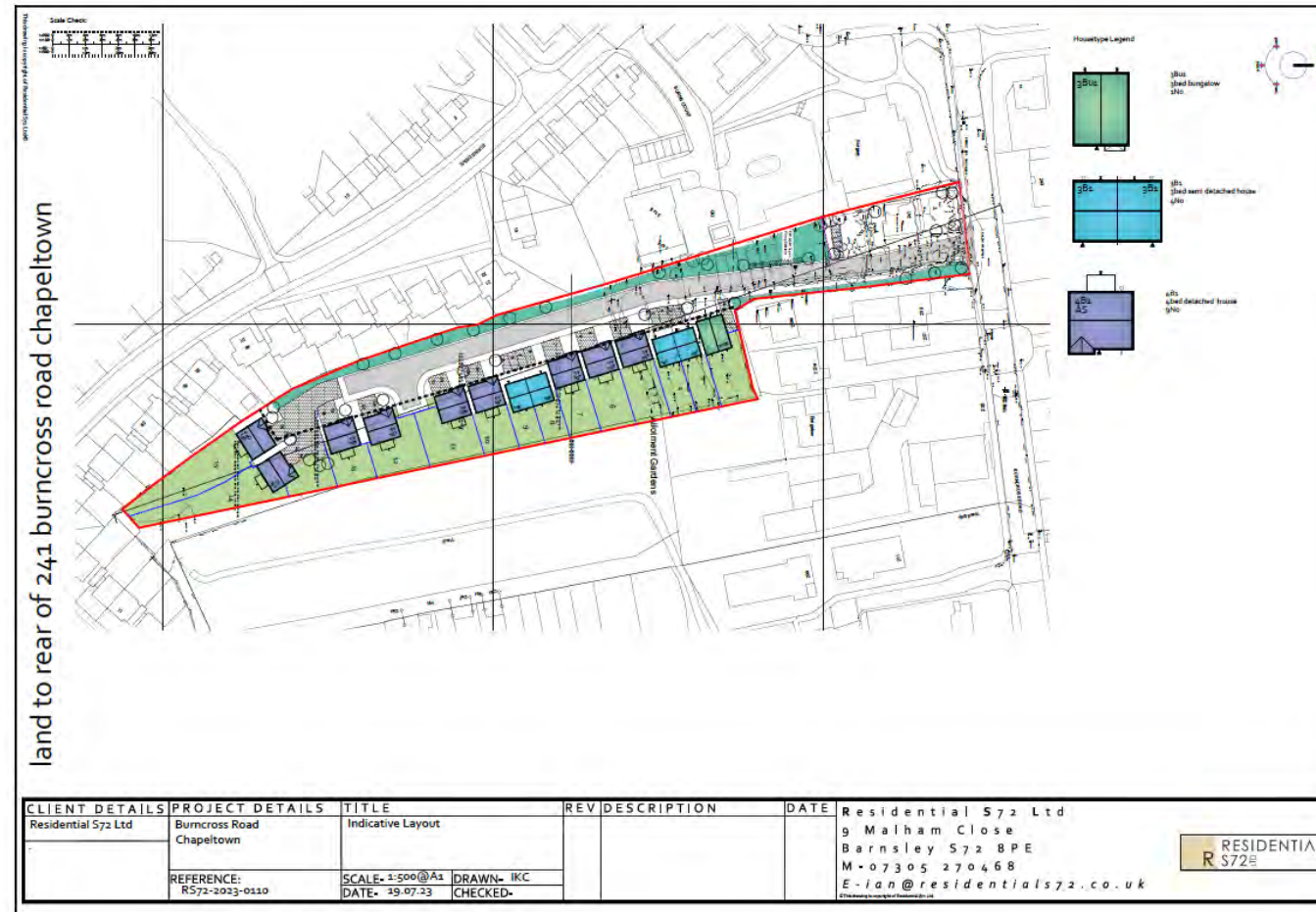


Figure 3: Indicative Site Layout

The site is a long thin, roughly rectangular site and the indicative layout above shows an efficient development form that responds to the local environment



# Considerations Overview

In line with Sheffield City Councils Sustainability Tool kit we have considered the following elements:

- **Environment and Resources**
- **Design and Construction**
- **Transport and Inclusive Access**
- **Economy and**
- **Air Quality**

# Considerations Overview

## Environment and Resources:

- Biodiversity:

In line with current legislation a Biodiversity Net Gain Analysis, has been prepared, prepared by Weddles, a local ecology and landscape architecture consultancy, and submitted as part of this application. The findings will allow an off-site ecological enhancement strategy to be agreed with Sheffield City Council.

- Water Quality:

In line with Sheffield City Councils a Sustainable Urban Drainage statement has been included within the submitted Drainage Statement prepared by Fortem Consulting Engineers. This report confirms that there are no suitable watercourses within the vicinity of the site that could be utilised as part of the surface water drainage strategy for this development.

This report further recommends the following strategies that may be appropriate:

- Attenuation Feature (likely to be required by YW as part of the sw sewer adoption process)
- Provision of water butts to each property to reduce the sw run off from the development and aid in the up-keep of gardens
- Bioretention systems such as rain gardens to collect and treat sw run off from driveways
- Permeable paving to private driveways

# Considerations Overview

## Environment and Resources ctd:

- Flood Risk:

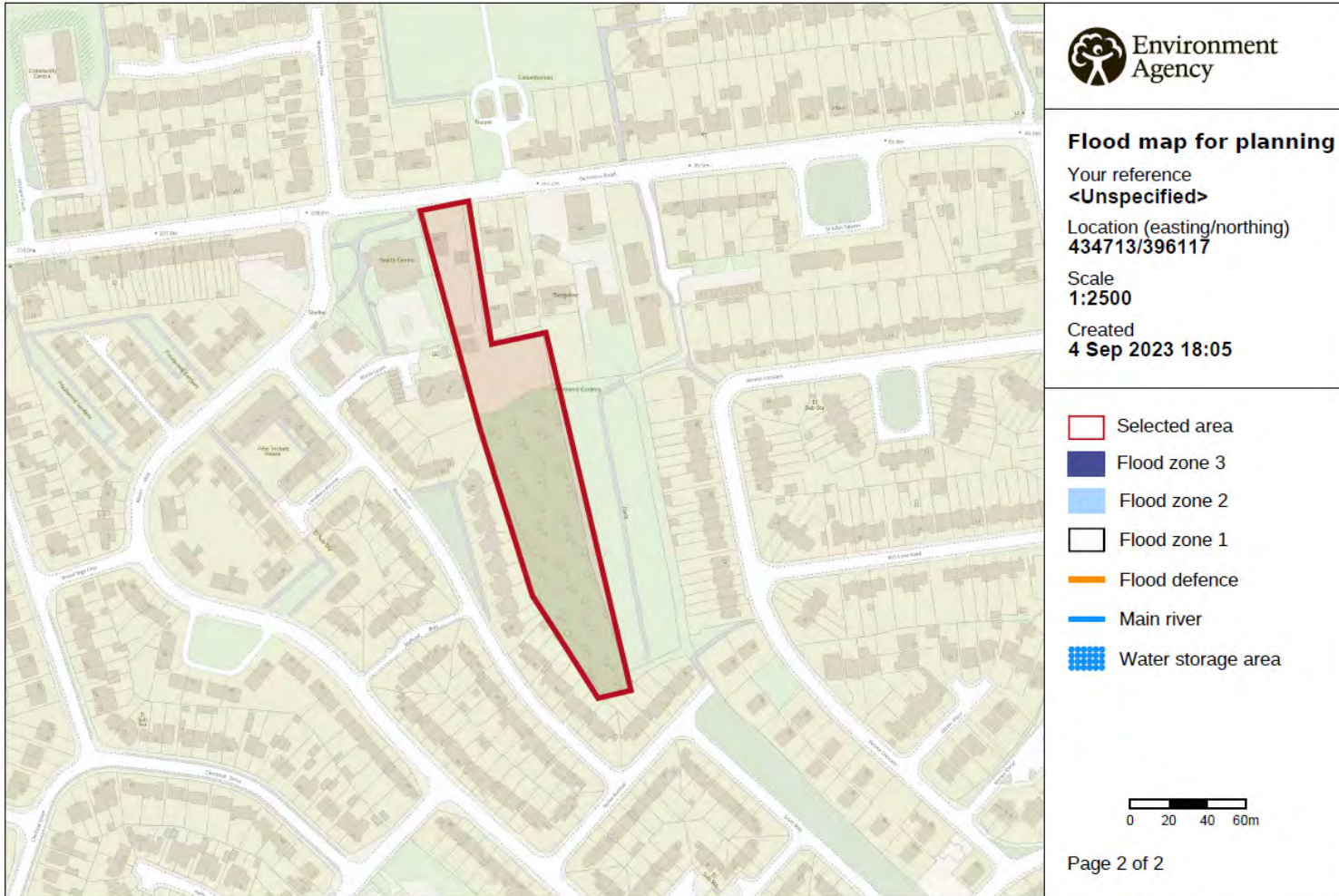
The site is located within Flood Zone 1 and a copy of the EA Flood Map for Planning has been submitted as part of this application. See extract below.

- Building Research Establishment Green Guide to Specification:

- The BRE Green Guide will be used as a tool to protect resources and minimise waste during the development phase of the project.

- Furthermore, the BRE Green Guide is an essential resource that offers guidance on the environmental impact of construction materials and practices. Developed by the Building Research Establishment (BRE), this guide aims to provide architects, contractors, and developers with valuable insight into the selection of sustainable materials and construction methods. With a focus on reducing carbon emissions, the guide supports the development of environmentally conscious buildings while offering practical solutions to enhance sustainability. By considering the lifecycle of buildings and their components, the BRE Green Guide facilitates the decision-making process and promotes the integration of sustainability principles in the construction industry.

# Considerations: Flood Zone 1 Map Extract



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Figure 4: EA Flood Map for Planning Extract

# Considerations Surface Water Flood Zone 1 Map Extract 2

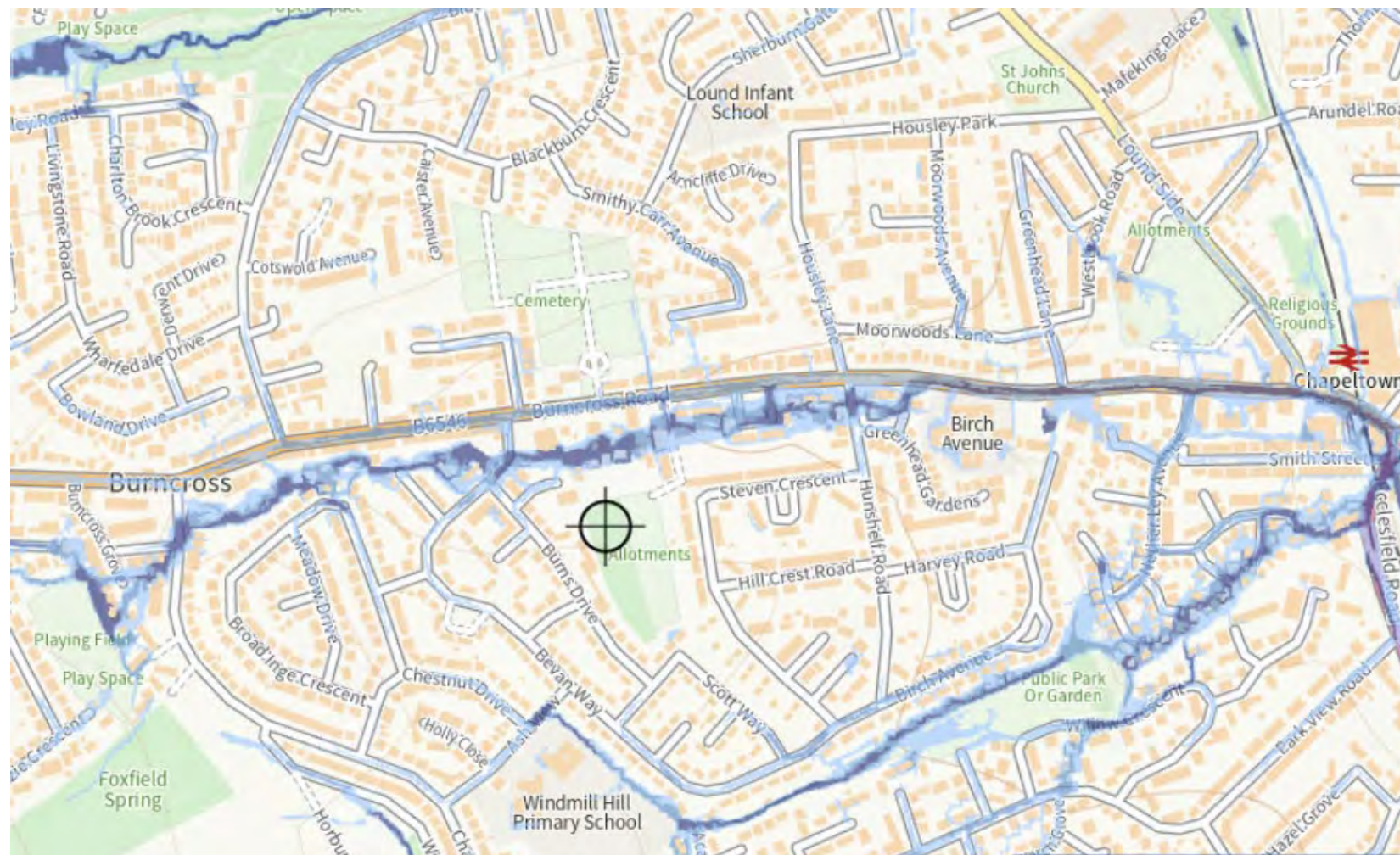


Figure 5: EA Flood Map for Planning Extract

# Considerations Overview

## Design and Construction:

- Fabric First:
  - Following the introduction of the updated building regulations in 2022 the fabric of the dwellings will meet the high thermal requirements stipulated by Approved Document L1. The specified U values within this document are the most efficient ever described by Building Regulations and will ensure that the properties minimise consumption of electricity and gas.
  - It may be that that air source heat pumps will be used on this development and this can be discussed and agreed at reserved matters stage
- All plots will be fitted with photo-voltaic arrays to supplement the load placed on the National Grid. The use of photovoltaic (PV) systems in the UK offers notable environmental advantages, converting sunlight into clean energy and reducing harmful emissions. PVs cut the UK's fossil fuel dependence, helping to achieve climate goals and comply with international pacts like the Paris Agreement. PV systems also boost the UK's energy security by decreasing the need to import energy, providing resilience against global market shifts. The solar sector further stirs economic growth and job creation in manufacturing, installation, research, and maintenance. This investment can drive local innovation and market expansion for solar products and services. Homeowners and businesses gain from installing PVs through lower energy costs and government incentives, which reward exporting surplus energy back to the grid, propelling the adoption of solar technology.
- In essence, PV systems are key to the UK's strategy for addressing climate change, bolstering energy independence, sparking job creation, and cutting energy expenses. The shift to renewable energy secures a sustainable and healthier future.
- This approach will help meet Sheffield City Council's Core Strategy CS64 (Climate Change, Resources and Sustainable Design of Developments) which sets requirements for mitigating climate change and using resources sustainably.

# Considerations Overview

## Design and Construction:

- A simple design that responds to the site constraints and context will provide a development that fits in to its surroundings.
- The developments simple urban form provides a legible layout that is easy to navigate
- By adopting sound Urban Design principles, such as 'public front – private rear' the development considers security through overlooking of all public areas. Each plot will have a lockable gate fitted to provide further restricted access to the rear private amenity areas
- A simple design that has considered the local urban grain and dwelling typologies, allows for a development that reflects the local character of its surroundings. The introduction of single storey dwellings in key locations protects the amenity of the existing residents that abut the site

# Considerations Overview

## **Transport and Inclusive Access:**

- The design of a new fully formed access for both vehicles and pedestrians from the proposed development onto Burncross Road has been submitted as part of this application.
- This access allows connection to the national highway network in the area. The M1 motorway junction 35 is under two miles or a 5minute drive from the site.
- Chapeltown is a key centre within the Sheffield City Region and as such is well served by regular train and bus services.
- Chapeltown train station is only 0.5 miles from the site which equates to a short 13-minute walk
- The local No 86 bus service runs regularly along Burncross Road, and the nearest bus stop is less than a quarter of a mile from the site entrance
- The site will also be developed to consider the requirements of Approved Document M to provide suitable inclusive access to all dwellings

## **Economy:**

- This application has been submitted an applicant who lives and works in Chapeltown and the wider Sheffield City Region
- This development will provide much needed jobs and these jobs will in turn help support and develop local economic growth and the development of this area is a key consideration in Sustainable Design
- When completed the occupants are likely to continue this support and economic growth by utilising the local shops and retail outlets located within Chapeltown town centre.
- Future residents may also work in the local area and this development will help reduce local journey times for such residents thereby reducing both carbon emissions from vehicles and pollution



# Considerations Overview

## Air Quality:

- The wider Sheffield City Region is located within an Air Quality Management Area.
- As such measures should be taken to reduce the impact of pollution on local air quality.
- As mentioned previously future local employment opportunities will reduce carbon emissions and help keep local pollution levels to a minimum.
- The installation of pv arrays discussed above will further reduce the carbon footprint of these future homes and will again reduce lifetime carbon emissions and pollution from the development
- Another measure that will be used is the provision of Type 3 Electric Vehicle Charging points to all dwellings.
- This will promote the use of low carbon technology vehicles further reducing carbon emissions and minimising the impact of the development on the local air quality



Conclusion



**Conclusions**

The application seeks an Outline planning permission for a development of up to 14 new dwellings of 3 and 4 bedroom homes in the village of Chapelton, Sheffield

The proposals comprise a simple high-quality layout that is derived from a careful and thorough process of analysis, of both form and sustainability

The design process has been carried out in accordance with good practice and within the context of local, regional and national design policy.

The site is well positioned in relation to transport and access, bus travel, local facilities and established residential communities.

This approach promotes local economic growth both during the construction phase of the development and its future use by residents

Development upon this site would utilise existing infrastructure and would provide a logical and high quality infill development

The measures discussed earlier in this statement will promote:

- Safety and security to future residents and visitors
- Sustainable inclusive access arrangements to the dwellings and the wider highway network and local public travel services such as bus and rail
- The future use of low carbon vehicles by the provision of electric vehicle charging points to each dwelling
- The use of fabric first approach to provide low emission dwellings that need reduced energy consumption for its lifetime
- The provision of pholto-voltaic arrays to minimise further the emissions form the dwellings and the demand of natural resources

Furthermore, the use of the renewable energy technology and the enhanced building fabric will further assist in reducing air pollution in the city wide Air Quality Management Area.

This report has described the sustainable nature of this development and has highlighted the sustainable approach considered to the development

## Conclusion

Thank you

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