Cheltenham Road, Corby

Design & Access Statement

Revision A
December 2018

Prepared by rg+p Ltd on behalf of Corby Borough Council

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1.1 PURPOSE

This Design and Access Statement (DAS) has been prepared by rg+p to support a full planning application submitted on behalf of Corby Borough Council, for a residential development at land off Cheltenham Road, Corby.

1.2 CLIENT

The client, Corby Borough Council, is helping to provide dwellings throughout the borough in response to Corby's growing population.

1.3 BRIEF

rg+p Ltd were instructed to appraise the site, surrounding context and prepare a sustainable housing scheme in which the units met the National Space Standards 2015 as well as investigations into whether or not Passivhaus standards could be achieved.

The following is an extract of the original brief from Corby Borough Council:

"The Oakley Vale residential estate formed a major part in Corby's aspirations to grow and develop as a town. However, following the insolvency of the land developer, Cofton in 2009, progress across the estate slowed.

Nevertheless, the final phases are now underway and Cofton's administrator sort to dispose of a small parcel of land on the edge of the estate, between the end of Cheltenham Road and the railway tracks.

This land was identified on the Masterplan as a railway halt, although Network Rail has subsequently confirmed they have no intention of providing such a facility.

CBC is always seeking to further its agenda of providing more homes for affordable rent and to this end, has decided to develop the site for this purpose.

It is hoped the site will support 17 two bedroom dwellings consisting of houses, bungalows and flats. Site investigations have been carried out and a license to clear the site of Great Crested Newts & Reptiles will be required post-planning."

1.4 PROPOSED DEVELOPMENT

The proposed development is for 18 residential dwellings, with 38 car parking spaces.

With regards to the sites size, current development densities in the area and viability it is concluded that the development could deliver:

Rented
- 4x 1-bed units
- 8x 2-bed units
- 4x 2-bed bungalow units
- 2x 3-bed units

2.1 INTRODUCTION

A comprehensive appreciation of the overall site context is the starting point of designing a successful and distinctive place.

2.2 LOCATION

Corby is a town and borough in the county of Northamptonshire, England, located approximately 23 miles North-East of Northampton. With the neighbouring villages of Brigstock, Geddington, Stanion & Cottingham it has a population of 61,255. It has the fastest population in both Northamptonshire and the whole of England.

The site is located to the south of Corby and is situated next to the railway. It sits 3.5 miles away from Corby Train Station and has good bus links to Kettering. It is surrounded by both old and new residential development to the east and agricultural land to the west.

The site area is 0.48 Ha

2.3 IMMEDIATE CONTEXT

2.4 SITE PHOTOGRAPHS

The images below highlight the immediate site context. These photographs were taken on the site visit undertaken on the 18/02/2018.


1. View of existing vehicular access to site boundary


2. Rear of adjacent housing along Peterborough Road


3. View looking eastward


4. Boundary to railway


5. Panoramic view from site entrance

2.5 SURROUNDING BUILT ENVIRONMENT

The following images show the immediate built context around the site. There are several key features that contribute to the character and appearance of Corby. Corby contains a significant amount of 1950's/1960's Radburn design principles which has lead to various antisocial behaviour issues. The new development seeks to reverse this through better design of dwellings and spaces.

1. Residential development, Snatchill

2. Industrial estate, Long Craft Road

3. New residential development at Woodstock Court

4. Willow Place Shopping Centre

5. View down Copenhagen Road

6. New residential development Conyger Close

2.6 LOCAL AMENITIES

1. Neighbourhood Centre
2. Local supermarket
3. Primary School
4. Church
5. Cricket Club
6. Medical Centre
7. Kingswood Secondary Academy
8. Hotel
9. Supermarket
10. Shopping Centre

3.1.CONSTRAINTS AND OPPORTUNITIES

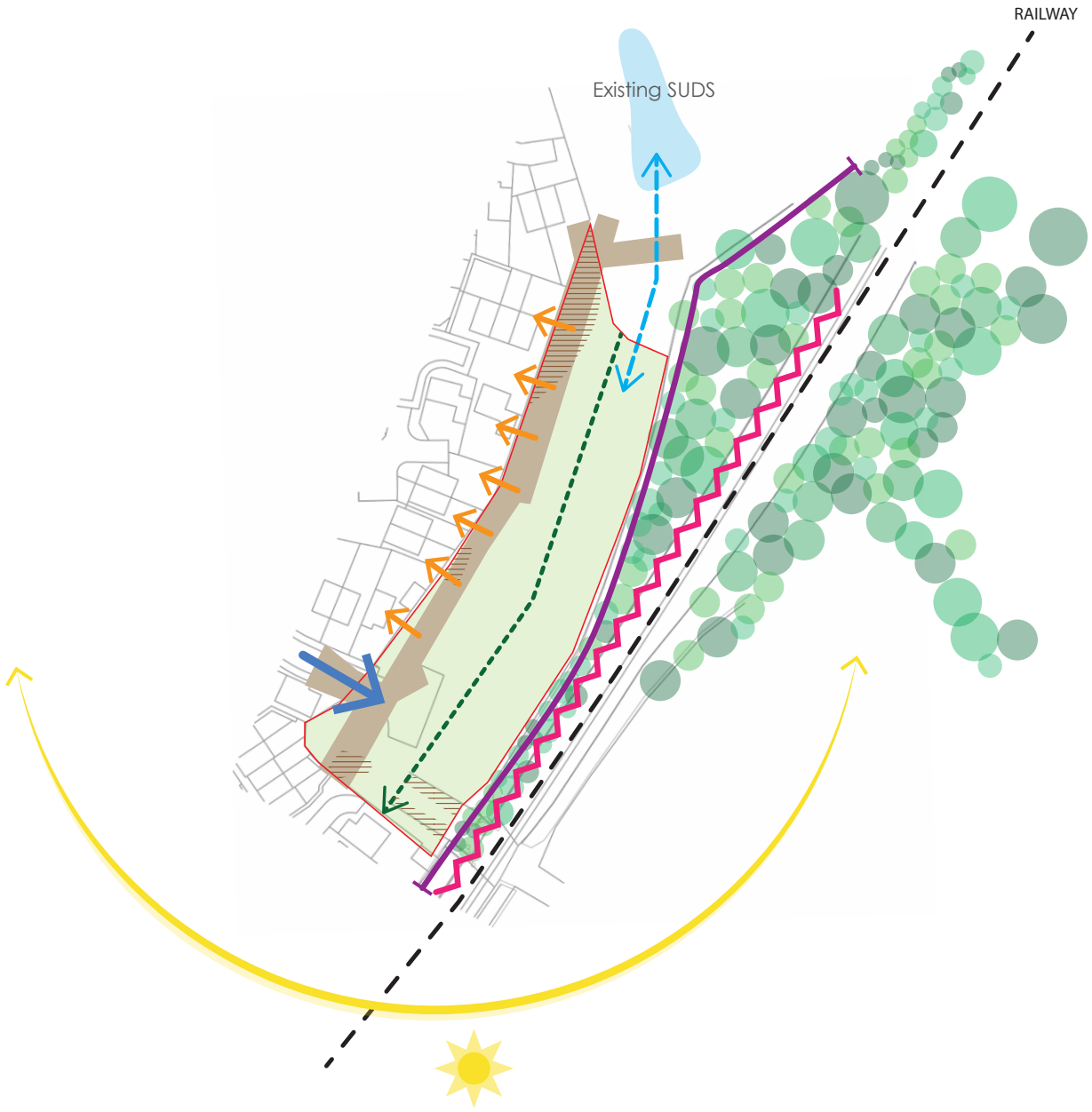
The layout will be informed by the constraints and opportunities of the site. The narrow site shape will be a primary factor in determining the plot layout, accessibility & distribution of parking.

Constraints

- Railway noise
- Site topography
- Site Shape
- Non build area over sewer
- Earth banks

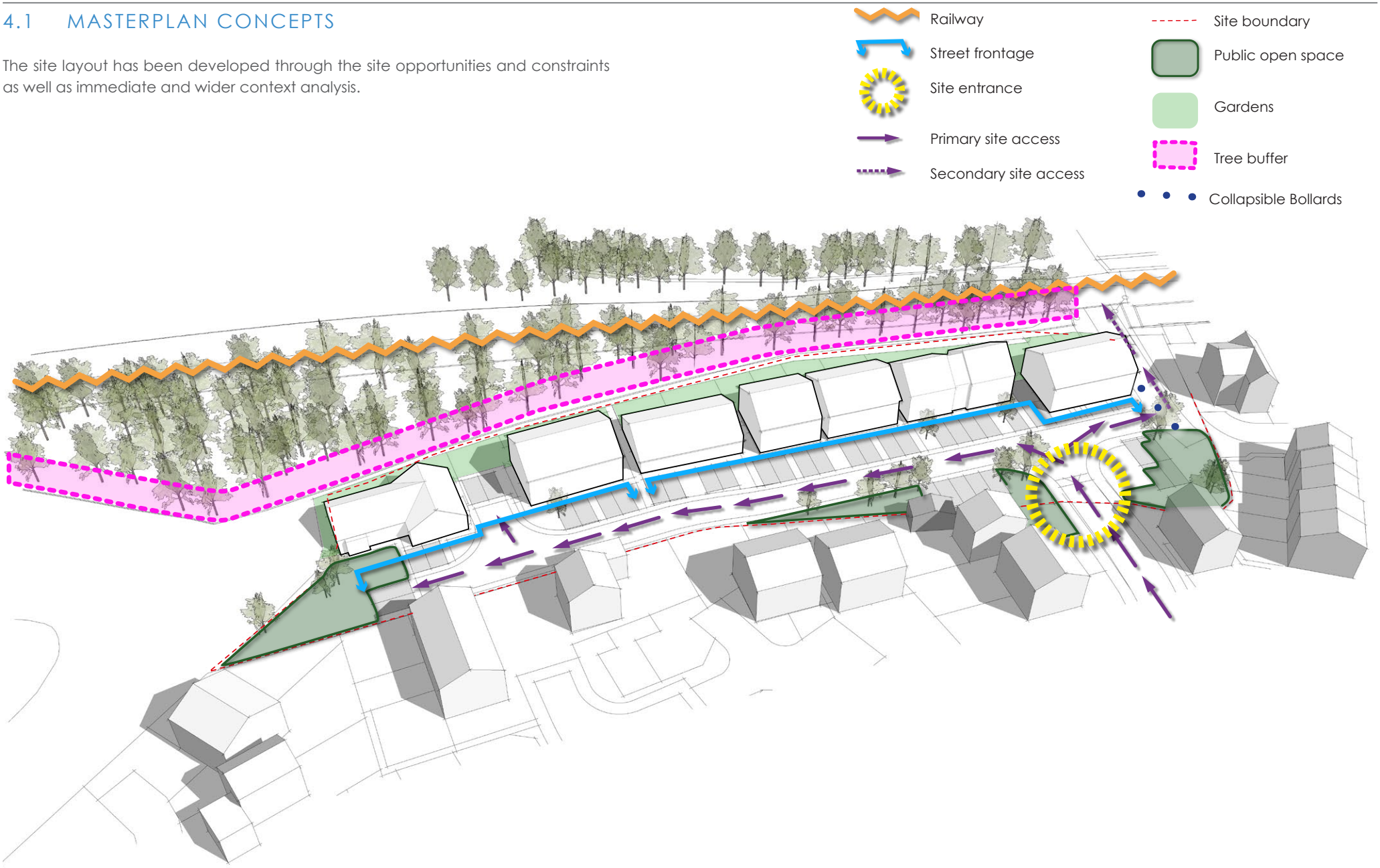
Opportunities

- Site entrance (interact with existing turning head)
- Interaction with existing context
- Interaction with existing SUDS
- Trees to provide buffer zone to railway



4.1 MASTERPLAN CONCEPTS

The site layout has been developed through the site opportunities and constraints as well as immediate and wider context analysis.



4.2 SITE LAYOUT

The site layout is dictated to by the constraints of the site
The site area is 0.48 Ha and provides 18 dwellings at a density of 37 dwellings per hectare.

4.3 TENURE MIX

The mix plan shows that the dwellings are spread out across the site providing an integrated community.

2 BED 4 PERSONS

3 BED 5 PERSONS

1 BED 2 PERSONS FLATS

2 BED 4 PERSONS BUNGALOW

4.4 SITE AMOUNT & SCHEDULE

The site plan consists of 18 dwellings, comprising of 4x 1-bed units, 8x 2-bed units, 4x 2-bed bungalow units & 2x 3-bed units.

The development provides 100% affordable housing.

Additional landscaping and new planting has been introduced to create an attractive development and to define private and public space.

38 Car parking spaces are to be provided, in accordance with the LPA's guidance.

41232 Cheltenham Road Corby									**Date: 22.03.2018**
HOUSE TYPE	**Beds**	**NUMBER**	**SQM**	**SQM Total**	**SQFT**	**SQFt total**	**%**	**sub %**	**plot nos**
A 1b2p Flats m (GF)	1	2	51.2	102.4	551.12	1102.23	11.1%		04,06
A 1b2p Flats (FF)	1	2	57.3	114.6	616.78	1233.55	11.1%		05,07
B 2b4p House	2	8	79	632	850.36	6802.85	44.4%		01,02,03,10,11,14,15,16
C 3b5p House	3	2	93	186	1001.05	2002.10	11.1%		08,09
D1 2b4p Bungalow	2	1	70	70	753.48	753.48	5.6%		18
D 2b4p Bungalow	2	1	70	70	753.48	753.48	5.6%		17
D2 2b4p Bungalow	2	2	70.6	141.2	759.9384	1519.8768	11.1%		12,13
Affordable Sub total		18		1316.2		14167.58	100.0%		
TOTALS:		**18**		**1316.2**		**14167.58**	**100.0%**		

4.5 PROPOSED STREET VIEWS

1. Street frontage from site entrance

3. Main access route through site

3. View to show the varying scale of development

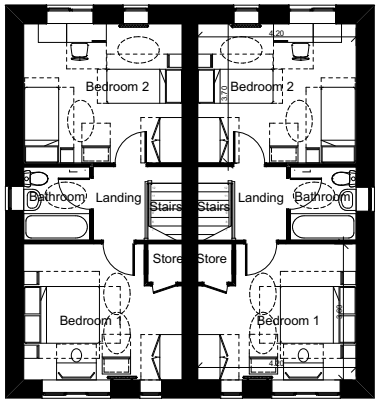
4.6 SCALE AND MATERIALS

All dwellings are to comprise of 1 or 2 storeys.

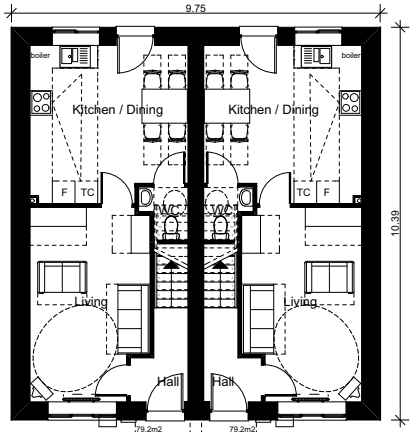
The following drawings highlight the materials used. The appearance of the scheme is driven by the desire to create a high quality residential area with a distinctive modern character. As there is no specific vernacular to respond to and as the development is located behind existing dwellings, the scheme creates its own character.

Elevations have been created using a mixture of brick, UPVC windows and grey roof tiles. Therefore collectively creating a modern and welcoming design.

2 BED 4 PERSONS HOUSE TYPE



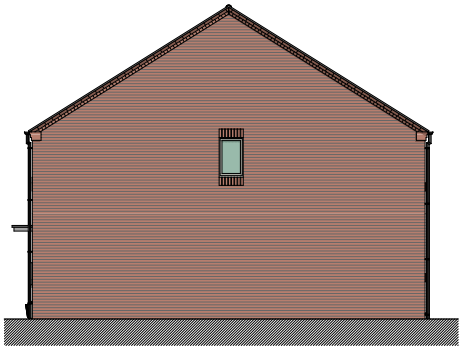
First Floor



Ground Floor

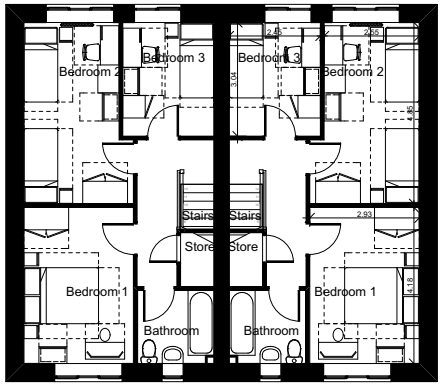
Front Elevation

Rear Elevation

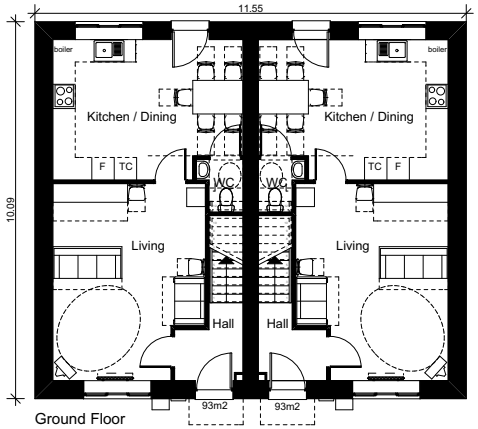


Side Elevation

3 BED 5 PERSONS HOUSE TYPE

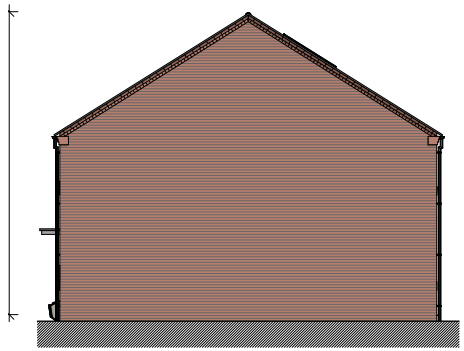


First Floor

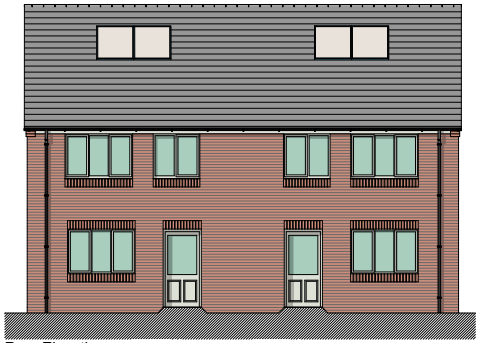


Ground Floor

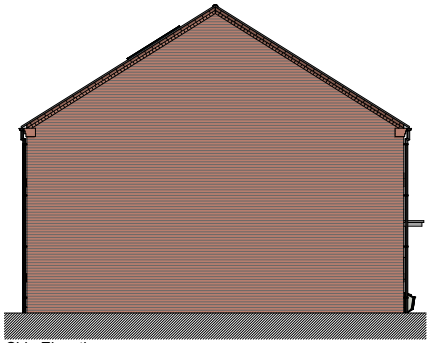
Front Elevation



Side Elevation

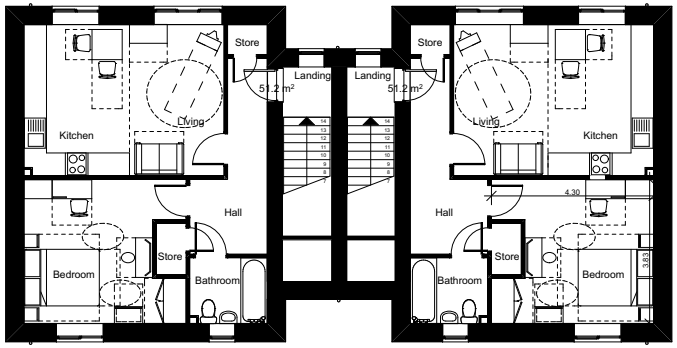


Rear Elevation



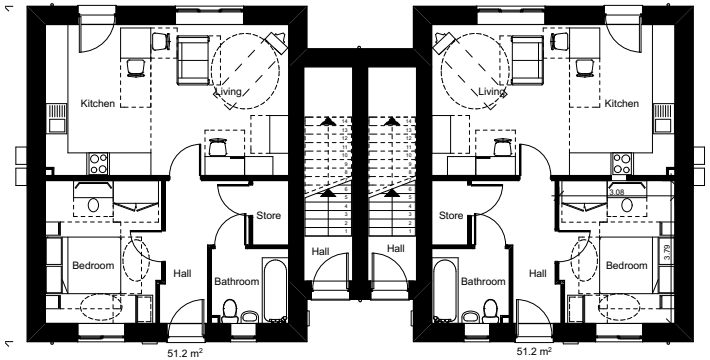
Side Elevation

1 BED 2 PERSON FLATS



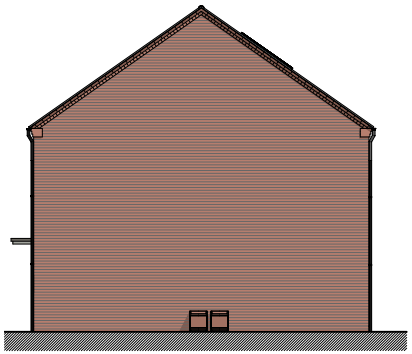
First Floor

Front Elevation



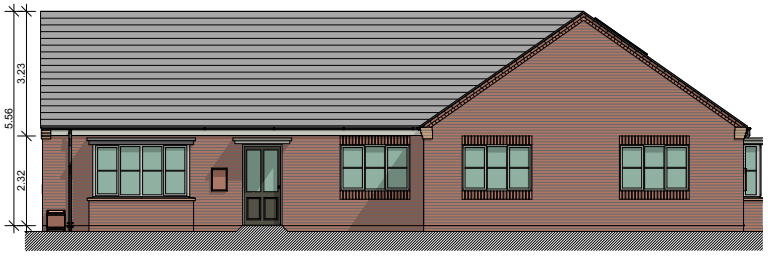
Ground Floor

Rear Elevation

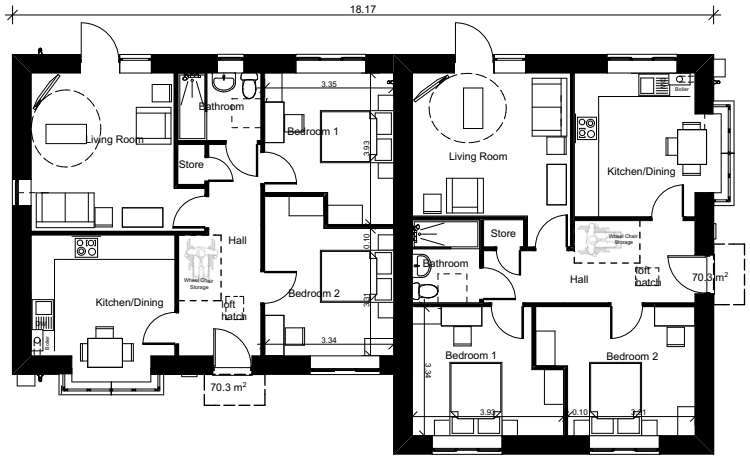


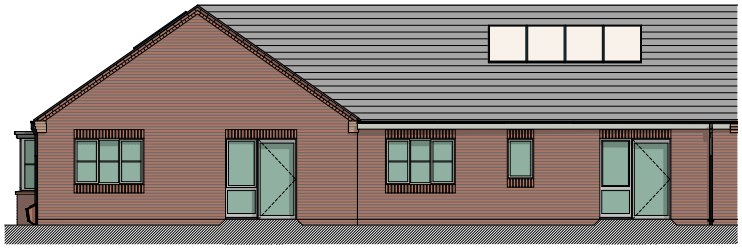
Side Elevation

2 BED 4 PERSON BUNGALOW



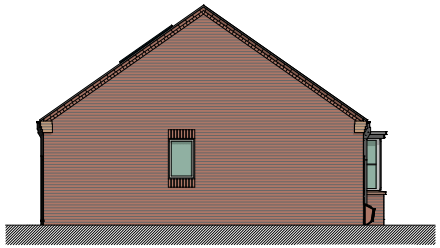
Front Elevation





Rear Elevation

Side Elevation



Side Elevation

4.7 NATIONAL SPACE STANDARDS

All house type footprints meet the National Space Standards 2015 for dwellings (see table 1). In addition, the requirements stipulate that:

- A dwelling with two or more bedspaces has at least one double (or twin) bedroom

- In order to provide one bedspace, a single bedroom has a floor area of at least 7.5m2 and is at least 2.15m wide

- In order to provide two bedspaces, a double (or twin bedroom) has a floor area of at least 11.5m2

- One double (or twin bedroom) is at least 2.75m wide and every other double (or twin) bedroom is at least 2.55m wide

- The minimum floor to ceiling height is 2.3m for at least 75% of the Gross Internal Area

All house types have been designed to meet these requirements.

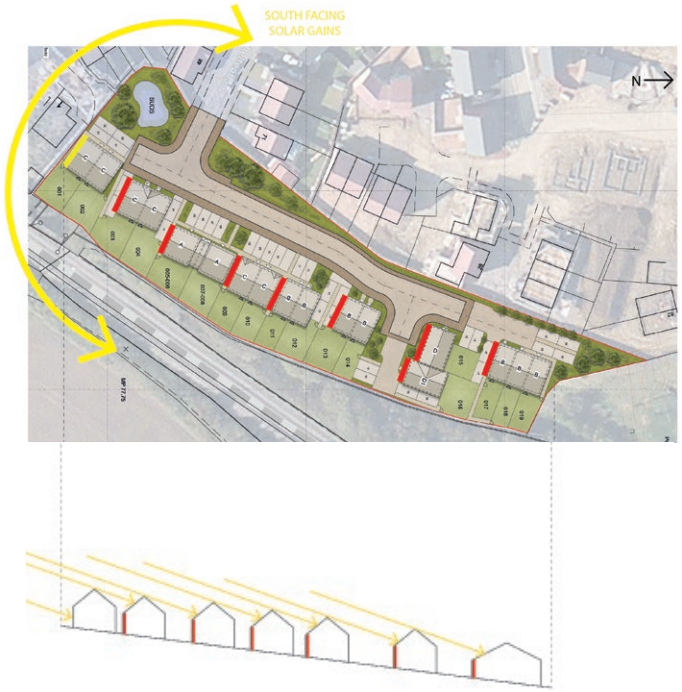
Table 1 - Minimum gross internal floor areas and storage (m^2)

Number of bedrooms(b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	39 (37)[2]			1.0
	2p	50	58		1.5
2b	3p	61	70		2.0
	4p	70	79		
3b	4p	74	84	90	2.5
	5p	86	93	99	
	6p	95	102	108	
4b	5p	90	97	103	3.0
	6p	99	106	112	
	7p	108	115	121	
	8p	117	124	130	
5b	6p	103	110	116	3.5
	7p	112	119	125	
	8p	121	128	134	
6b	7p	116	123	129	4.0
	8p	125	132	138	

4.8 PASSIVHAUS STUDIES

Studies were undertaken to access the viability of providing Passivhaus dwellings.

The sites orientation and topography prevents sufficient passive solar gains to the south facing facades (see image below). South facing orientation of plots is critical in order to achieve adequate the passive solar gains required to meet the heating standards, particularly in the winter months (please see pages 6-7 of the BRE Passivhaus Designer's guide). We therefore conclude that this is a barrier to achieving Passivhaus certification. The level change in the site topography would also increase the difficulty of achieving solar gains.

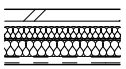


PASSIVHAUS STYLE DESIGN

The development can however be designed to other Passivhaus construction standards that would help achieve considerable energy savings. This would include achieving for example maximum U values of 0.15W/m2K for walls/floors/roofs and 0.85W/m2K for windows through the design of the building envelope (see below image). Achieving airtightness through the building membrane would also reduce heating demands and prevent moisture from entering the buildings.

Mechanical ventilation with heat recovery can also be used to reduce heat losses whilst maintaining air quality.

HOUSES EXTERNAL WALL - FACING BRICK 480mm O/A



103mm facing brickwork, 53mm clear cavity, 100mm **Kingspan K5 0.020W/mK insulation**, TF200 Thermo Breather Membrane, 11mm OSB Sheathing Board, 140mm Timber frame fully filled with 0.032W/mK insulation, 11mm OSB Sheathing Board, Protect VC Foil Vapour Check, 50mm timber battens, 12.5mm Plasterboard. Total structural wall thickness 480mm. 'U' value of 0.111 W/m²K, 30 mins Fire Resistance

Typical construction for building envelope that meets passivhaus standards

4.9 PROPOSED STREET SCENES

Street Scene AA

4.10 ECOLOGY AND LANDSCAPING

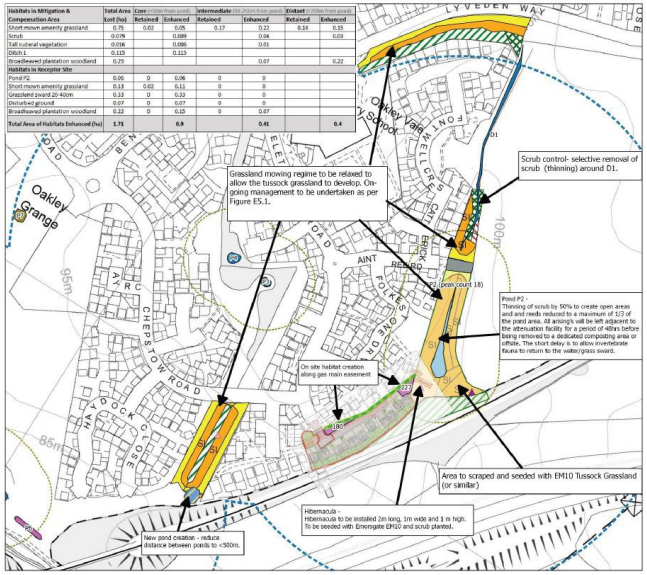
The proposed landscaping will contribute to the ecological value of the site.

Planting of low maintenance trees will be of an appropriate size and species and will add to the biodiversity.

Rear gardens will be laid with lawn for residents to landscape themselves. Private gardens will have secure boundary treatments

An ecology report has been produced by FPCR Environment and Design Ltd Consultants which states that loss of on site habitats is unlikely to impact on local biodiversity.

Great Crested Newts have been located on site. A relocation strategy as well as an off site habitat mitigation strategy to include habitat creation, restoration and enhancement has been detailed in FPCR's report.



There is also potential for habitat mitigation along the western site boundary with opportunities for pockets of habitat creation (see image below):

Great Crested Newts are a protected species and careful consideration has been given to their preservation

4.11 SUSTAINABILITY

The dwellings will be constructed with high levels of fabric insulation and low air permeability to an overall standard that will meet current UK Building Regulations. This will be done via a fabric first approach rather than providing renewables, which will ensure that the dwellings provide long term, low cost living. All house types will also be designed and constructed using Passivhaus style details which will both limit the environmental impact of the development and also help tackle energy poverty for the residents.

The scheme will utilise solar panels on the roof of all the dwellings, this will ensure sustainable living whilst reducing the cost of energy.

5.1 INCLUSIVENESS

Fully inclusive access to all areas will be available to everyone regardless of ability. All dwellings will have level thresholds and comply with the necessary Building Regulations requirements for access.

5.2 SERVICING AND MOVEMENT

Any proposed new roads within the development will be constructed to council adoptable standards, allowing emergency vehicles and refuse vehicles access to all dwellings.

The new access point to the development will be formed to meet highways standards. The site is ideally suited for residential development with existing roads and footpaths linking the site to the surrounding area.

5.3 EMERGENCY ACCESS

The site is fully accessible to all areas for emergency vehicles to reach within 45m of the furthest point of any dwelling in accordance with the Building Regulations requirements.

5.4 PARKING

The development proposes the following parking standards:

2 car parking spaces have been provided for dwellings with 2 or more bedrooms. 1 bed homes have one space each and 1 visitor space between 4 dwellings. An additional 5 visitors spaces have been provided across the site for all dwellings to use.

5.5 SECURITY

To address the principles for designing out crime, the following elements have been included into the layout:

Access and Movement

• Rear access footpaths are generally avoided.
• All public routes are to be adopted and will therefore have the required adoptable lighting levels to be safe at night.
• Routes are designed to maximise surveillance, with no blank gables to public spaces.
• Routes are designed to be necessary and provide access to where people want to go.

Structure

•The development is housing only so there is no possible conflict with other users and it does not act as a short cut to adjacent areas.
•Vehicle parking is provided on plot or in well surveyed locations.

Surveillance

• Habitable rooms have windows overlooking vehicle parking.
•Recesses in building frontages and boundary fences and gates are avoided to reduce the potential for shadows and places for offenders to hide.

Ownership

•All spaces are defined as public, semi private or private and are clearly defined. Defensible space is provided to ensure that residents are able to take control of the areas adjacent to their homes. Public open space areas will be either offered for adoption or maintained by Corby Borough Council.

• Private space is not easily accessible and bounded by 1.8m high fencing or boundary walls where it does the public domain.
• Boundary structure planting is used in strategic locations as demarcation to prevent unauthorised access to land or windows.
•Surface finishes have been designed to differentiate between the public, semi public and private zones.

Physical Protection

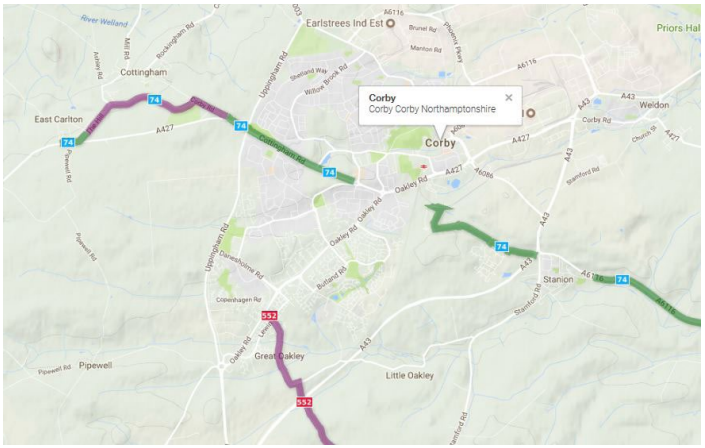
•The physical structure of these dwellings will be provided with doors to PAS 24 and BS 7509 for windows.
•It anticipated that the scheme will be submitted for and hopefully achieved a Secured by Design award.

Activity

• Areas of open space are overlooked by dwellings.

5.7 CYCLING

National Cycle Network routes 74 and 552 are nearby as indicated on the plan below.



5.7 PUBLIC TRANSPORT

Buses run every 30 minutes between Corby Town Centre and Kettering, and the bus stops are 600m away on Lyveden Way

Corby train station is 3 miles away which is a 10 minute drive or a 17 minute cycle ride.

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6.1 CONCLUSION

Careful consideration has been made to the design to positively enhance both the site and its surroundings, with detailing designed to a high standard.

The massing of the proposed scheme is appropriate to the existing surrounding buildings.

The proposed scheme has been designed to address and enhance a current vacant site.

The development will bring forward much needed family housing to the area supporting the social and economic aspirations for the area generally and we trust that the local authority will support this application.