

3.0 SITE AND DEVELOPMENT DESCRIPTION

Site Context

- 3.1 The Site boundary (see Figure 1.1) is located at Stakehill, south of the M62 on the southern edge of the town of Rochdale in Greater Manchester, within the administrative boundary of RBC.
- 3.2 The north of the Site is bound Thornham New Road and the M62, which runs east-west across the northern boundary of the Site. The M62 is a 107-mile-long west-east trans-Pennine motorway in Northern England, connecting Liverpool and Hull via Manchester, Bradford, Leeds, and Wakefield. The south and east of the Site is bound by the A627(M) and the west of the Site is bound by the villages of Slattocks and Castleton as well as the A664 Manchester Road. The south west of the Site is bound by agricultural land.
- 3.3 The wider land uses surrounding the Site vary in nature. To the north of the Site, beyond the M62 is a mixture of open space and residential land uses within the south of Rochdale. The land to the south and west of the Site, beyond the A627(M) is agricultural in nature. Stakehill Industrial & Distribution Park, which includes distribution warehouses, depots, and engineering services is also located to the south of the Site, approximately 250m south from the Site boundary. Beyond the A664 Manchester Road to the west of the Site is the Rochdale canal towpath, a railway line (operated by Northern Rail), and Manchester Golf Club. National Cycle Route (NCR) 66 passes along the Rochdale canal towpath.
- 3.4 The closest railway station to the Site is Castleton, which is located approximately 1.1km north of the Site. Tandle Hill Country Park is located approximately 650m east of the Site. Other surrounding land uses include the Thornham Cricket Club to the immediate southwest of the Site. A number of uses are also encompassed by the Site, but which are located out with the Site boundary. These include St John's CE Primary School to the south of the Site, adjacent to Thornham Lane, St John's Thornham Church located towards the south west of the Site, and Thornfields farm buildings to the east of the Site. A further cluster of farm buildings (known as Newhey Farm) is located to the immediate west of the Site, adjacent to existing residential development within Castleton.
- 3.5 The Site is not covered by any national or local landscape or ecological designations. Within 1.5km of the Site there are two designated ecological sites. The closest international and national ecological designated site is the Rochdale Canal Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC), located approximately 190m south west of

the Site at its closest point. The Hopwood Woodlands Local Nature Reserve (LNR) is located approximately 380m south west of the Site.

- 3.6 There are two Grade II listed buildings that are encompassed by the Site but not within the Site boundary, the Church of St. John (LB ref. 1390504) and Thornham Parish War Memorial (LB ref. 1452837), which are located just north of Thornham Lane. There are no Grade I or Grade II* listed buildings on the Site. Beyond the Site boundary there are 11 Grade II listed buildings within 1.5km of the Site, the closest being the Rochdale Canal Slattocks Top Lock and Adjoining Bridge, located approximately 270m south west of the Site. The Grade II* listed Hopwood Hall is also located approximately 1.1km south west of the Site.
- 3.7 There are no Scheduled Monuments located on the Site. The nearest Scheduled Monument is the March Barn Bridge, Rochdale Canal, located approximately 1.2km north of the Site. There are no Registered Battlefields or Registered Parks and Gardens on or in proximity to the Site.
- 3.8 The Site is located entirely within Flood Zone 1ⁱ, which is considered to be at the lowest risk of fluvial flooding. Much of the Site is at low risk of flooding from all sources. However, there are areas of the Site that are identified as being at risk of surface water flooding, particularly from Thornfields farm buildings in the east to the central portion of the Site, following the topography of the Site and running in a south westerly direction.
- 3.9 The Site is located entirely within a Nitrate Vulnerable Zone¹. The Site is not within in a Drinking Water Safeguarded Zone² or a Source Protection Zone (SPZ)³.
- 3.10 The Site is partially located within the Greater Manchester Combined Authority (GMCA) Air Quality Management Area (AQMA)⁴, declared in 2005 and 2016 for exceedances of annual mean nitrogen dioxide (NO₂) objective, with the source being defined as 'mixture of road types'.
- 3.11 The Site is not located within an Area of Archaeological Importance.

¹ A nitrate vulnerable zone is a conservation designation of the Environment Agency for areas of land that drain into nitrate polluted waters, or waterways that could become polluted by nitrates due to environment and health threats.

² Drinking Water Safeguard Zones (Surface Water) are catchment areas that influence the water quality for their respective Drinking Water Protected Area (Surface Water).

³ Source Protection Zones are defined around large and public potable groundwater abstraction sites. The purpose is to provide additional protection to safeguard drinking water through constraining the proximity of an activity that may impact upon a drinking water abstraction.

⁴ An Air Quality Management Area (AQMA) is an area where air pollution levels have exceeded the national air quality objectives. The air quality objectives are set for the following pollutants: nitrogen dioxide, particulate matter.

Site Description

- 3.12 The Site (Figure 1.1) extends to 87.52 hectares (ha) and largely comprises agricultural land that is divided into a number of irregular shaped fields, associated with Newhey and Thornfields farms. Field boundaries comprise of mature trees and hedgerow. The Site is enclosed by existing development to the west and road infrastructure to the north, south and east. The Agricultural Land Classification (ALC)⁵ of the Site is classified as Grade 4 which is considered 'poor agricultural quality land'.
- 3.13 A garden centre lies within the west of the Site, adjacent to the A664 Manchester Road. The buildings are surrounded by hardstanding with introduced shrub and scattered trees. There are two tree belts within the Site, one extends from the northern Site boundary into the Site with the second extending along the rear of the garden centre, within the west of the Site.
- 3.14 Topography across the Site varies, there is a gradual rise from west to east, with Thornfields farm buildings towards the east marking a high point at 180m Above Ordnance Datum (AOD). Towards the high point in the east, there is a phone signal mast, located south east of Thornfields Farm. There is a further phone mast located to the north of Thornham New Road. The waterbodies located on-site are located in areas of lower topography. There are five ponds located on-site. One is located within the far north western corner of the Site, one is located within the west of the Site adjacent to Carnforth Avenue, two are located within the southern portion of the Site, south of Thornham Lane and the remaining pond is located centrally on the Site, to the north of the St John's CE Primary School.
- 3.15 Multiple Public Right of Way (PROWs) pass through the Siteⁱⁱ, including a PROW which runs south into the Site off Thornham New Road within the north of the Site, connecting to Thornfields Farm. A PROW is located along Thornham Lane within the south of the Site, and a further PROW also runs north into the Site connecting to Newhey Farm to the west.
- 3.16 Vehicular access to the Site is provided from several points around the Site, including from Thornham New Road which runs east-west through the northern portion of the Site and from Thornham Lane which runs east-west through the southern portion of the Site.
- 3.17 The habitats on the Site comprise semi-improved grassland, improved grassland, scrub, bare ground, building, tall ruderal, scattered trees, woodland, wet grassland water bodies,

⁵ The Agricultural Land Classification (ALC) provides a method for assessing the quality of farmland to enable informed choices to be made about its future use within the planning system. The Best and Most Versatile (BMV) agricultural land is defined as land which falls in ALC grades 1 to 3a. This land is considered the most flexible, productive, and efficient and is most capable of delivering crops for food and non-food uses

watercourses, and hedgerows with varying species richness.

Sensitive Receptors

3.18 The features which are considered potentially sensitive to the construction and operation of the Development have been identified and the likely significant effects on these potential receptors have been assessed by the various technical chapters of the ES (6-13). The potential sensitive receptors are identified in Table 3.1 below, and those assessed by each technical discipline are set out in the corresponding chapter.

Table 3.1: Potential Sensitive Receptors

Category	Sensitive Receptor/Land Use
Road Network	• A664/Manchester Road; • A663/Broadway (south of Chadderton Roundabout); • A627/Chadderton Way; • Slattocks Roundabout; • North of Thornham Lane; • Thornham New Road; • A627(M) (north of Thornham Interchange); and • Burnley Lane.
Residential/ Buildings	Residential properties adjacent to the Site: • Grange Road; • Clifton Road; • Rochdale Road; • Church Avenue; • Carnforth Avenue; and • Chatburn Avenue. Buildings adjacent to the Site: • St John's CE Primary School; • John's Thornham Church; and • Thornfields farm buildings.
Landscape and Views	Published Landscape Character Receptors including: • NCA: 54 Manchester Pennine Fringe; and • LCA 27 Simister, Slattocks and Healds Green. Site Level Landscape Receptors including: • Open Fields; • Hedgerows; • Canopy Trees; • Woodland; • Waterbodies; and • The Site and its Immediate Context. Visual Receptors including: • Receptors using PRoW within the Site; • Residential properties adjacent to or in proximity to the Site; • Users of the local PRoW adjacent to the Site; • Users travelling along Thornham Lane; • Users of Tandle Hill Park Country Park.
Ecological Features	Fauna including Bats, Nesting Birds, Great Crested Newts, Badgers, Water Voles, and Brown Hares. Designated Sites: • Hopwood Woods Local Nature Reserve (LNR); and

Category	Sensitive Receptor/Land Use
	- Rochdale Canal Sites of Special Scientific Interest (SSSI); and Special Areas of Conservation (SAC). Non-Designated Sites: - Lords Wood Site of Biological Importance (SBI); - Hopwood Clough SBI; - Rochdale Canal SBI (Scowcroft to Warland, west) running north / south to the west of the Site; - A627m by Tandle Hill SBI; - Gerrard Wood SBI; and - Tandle Hill Country Park SBI.
Cultural Heritage	Designated Assets: - The Grade II listed Church of St John the Evangelist - Grade II listed Thornham Parish War Memorial - Lock No. 52 and Towpath Bridge - Lock No. 53 - Slattocks Top Lock (No. 54) and adjoining bridge - Rochdale Canal Lock No. 58 and Adjoining Bridge - Sand Hole Farmhouse - Hopwood Hall Icehouse - Church of St Martin Conservation Areas: - Castleton (South) Conservation Area Non-Designated Assets on site: - Slattocks Peat - Site of Saplin Farm A further 35 non-designated heritage assets within 1km of the Site.

Description of Development

- 3.19 The Development comprises a hybrid planning application (Phase 1 will be in detail and the remainder of the Development will be in outline) for the development of the land at Stakehill, Rochdale Road. The formal description of Development is:

"Hybrid planning application seeking:

Full Planning permission for the erection of residential development (Use Class C3) with associated landscaping, means of access, drainage, and other necessary supporting infrastructure.

Outline planning permission for residential development, mixed-use development, landscaping, and supporting infrastructure (all other matters reserved)."

- 3.20 The Parameter plan for the Development is shown in Figure 3.1, the detailed Phase 1 site layout is shown in Figure 3.2. These figures have been used to describe the Development throughout this chapter.

- 3.21 Figure 3.3 shows the indicative masterplan, which is one particular way in which the Development could come forward. This has been provided for context in Figure 3.3,

however it has not used to assess likely significant effects or within this chapter.

Land Use

Residential

- 3.22 The Development includes the delivery of up to 1,380 new homes across the Site, 233 of which will be included as part of the detailed element of the Development as shown in Figure 3.2, with up to 1,147 included as part of the outline element of the Development. The Development will have an average dwelling per hectare (dph) of 30-35 dwellings.

Detailed Element

- 3.23 Phase 1 is located towards the south west of the Site, adjacent to St John Thornham church and the Thornham cricket club which abuts the Site. The Site area for the detailed element of the Development is 19.72ha.
- 3.24 Dwellings will be provided in a range of tenures as shown in Figure 3.2 and Table 3.2 below.

Table 3.2: Residential Unit Mix – Detailed element

Residential Unit Size	Total Number of Homes
1 bedroom	8
2 bedrooms	16
3 bedrooms	50
4 bedrooms	135
5 bedrooms	24
Total	233

- 3.25 Of the detailed element of the Development, a total of 35 homes will be affordable, equating to approximately 15% affordable homes in Phase 1. Table 3.3 below provides a breakdown of the proposed affordable housing mix.

Table 3.3: Detailed element - Proposed Affordable Housing Mix

Housing Mix	Total Homes (%)
1 bedroom	8 (23%)
2 bedrooms	14 (40%)
3 bedrooms	13 (37%)
Total	35

Outline Element

- 3.26 As outlined above, the outline element will comprise up to 1,147 homes. As this part of the

application is in outline, details relating to housing typologies, the number of bedrooms, and the size of habitable rooms will be agreed at Reserved Matters stage.

Mixed-Use

- 3.27 As shown in Figure 3.1, there is an area devoted to mixed use development in the western portion of the Development. This area could comprise residential land uses as well as commercial or a local centre.

Primary School

- 3.28 As shown in Figure 3.1, approximately 1ha of land has been reserved to accommodate an extension to St John's Primary School, towards the southern portion of the Site, located adjacent to Thornham Lane. The precise boundary of the school extension and scale of the extension is to be agreed with the Local Education Authority at a later design stage. The land adjoining the school extension area will accommodate a 'drop-off' point.

Building Heights and Massing

- 3.29 The proposed height and massing of the Development has been designed to confirm to the prevailing character of the surrounding landscape.
- 3.30 The proposed maximum heights of the Development are detailed below in Table 3.4 and shown in Figure 3.1. These denote the maximum ridge heights of the buildings in metres (m) as well as heights in metres Above Ordnance Datum (AOD).

Table 3.4: Maximum Heights of Proposed Buildings

Building / Land Use	Max Heights (mAOD)	Maximum Ridge Heights	Max Number of Storeys
Residential	Up to 185.5m AOD	Up to 12.5m	Up to 3 Storeys
Mixed Use	Up to 160m AOD	Up to 12.5m	Up to 2 Storeys
School Extension	Up to 168.5m AOD	Up to 10.5m	Up to 2.5 Storeys

Green Infrastructure

- 3.31 As outlined in the DAS submitted as part of the planning application, green infrastructure provided will be varied across the Development. A variety of ecological habitats such as native broadleaved woodland blocks; native species rich hedgerows; native tree planting; species rich wildflower grassland; ponds/ areas of open water, marginal wetlands, reed beds, street trees; native and ornamental garden planting; and garden trees are proposed for the Development.

- 3.32 Green infrastructure will include retained planting, new planting, ecological enhancement, children's play areas, and off-road pedestrian and cycle routes. Green corridors will be introduced that connect the Development with the existing settlement and wider countryside.
- 3.33 An existing pond located within the west of the Site will be retained (within the detail phase 1 area of the Development), and a Sustainable Urban Drainage System (SuDS) attenuation pond will be created adjacent to the pond.
- 3.34 The area of land for the primary school extension also includes public open space and a retained pond.

Community Parkland and Wildlife Area

- 3.35 As shown in Figure 3.1, the Community Park will be located within the south of the Development, south of Thornham Lane. The Community Park will include retained and new landscape features, ecological enhancement, active travel routes and seating areas. It is proposed that two existing ponds will be retained as part of the Community Park, providing flood attenuation and biodiversity benefits.
- 3.36 An existing area of trees are also proposed to be retained as part of the Community Park, as shown in Figure 3.1, however this will be confirmed at a detailed design stage.

Access

Vehicular Access

- 3.37 The parameter plan (Figure 3.1) shows that primary vehicular access to the Development will be provided from the south west of the Development, from the A664 Manchester Road. A secondary access point, for approximately 100 homes and emergency access, is proposed towards the north west of the Development via Thornham New Road, as shown in Figure 3.1.

Walking and Cycling Access

- 3.38 The footpath and cycle strategy within the Development is designed to provide pleasant, safe, and accessible routes for new residents at the Development.
- 3.39 The Development includes several pedestrian access points, as shown in Figure 3.1. There

are pedestrian access points from Church Avenue towards the south west of the Development. There are two pedestrian access points directly to the east and west of St John's CE Thornham Primary School, via Thornham Lane, towards the southern central area of the Development. Three pedestrian access points will be provided from existing residential areas associated with Chatburn Avenue. There is also an access point to the north of the Development towards the M62. These pedestrian access points will integrate the new built form with existing residential land uses to the west of the Development.

3.40 Figure 3.1 also shows that existing PROWs within and adjacent to the Site will be retained. A PROW route will run through the centre of the Development and can be accessed from existing residential uses to the west, from Church Lane to the south west and from Thornham Lane to the east of the Development.

3.41 PROWs will either be retained in situ or as part of proposed landscape corridors.

Vehicle and Cycle Parking

3.42 As the majority of the Development is in outline, information regarding vehicle and cycle parking from the outline element is currently unavailable and will be decided at a detailed design stage.

3.43 Within the Phase 1 detailed element of the Development, a total of 554 parking spaces will be provided. Each residential dwelling in the detailed phase (233 dwellings) will have an electric vehicle charging point (EVCPs).

3.44 There is currently no dedicated on-street cycle parking provision within the Development, however garage space of the residential dwellings can be used for cycle storage where applicable.

Drainage Infrastructure

3.45 The entirety of the Site is located within Flood Zone 1 and subsequently at low risk of fluvial and tidal flooding. However, there are central and eastern portions of the Site that are at low-high risk of surface water flooding.

3.46 It is proposed to provide a surface water drainage strategy which will closely mimic the pre-development greenfield surface water drainage of the Site. Therefore, following the suitable options on the SuDS Hierarchy, surface water discharge from the Site will be to the Site watercourse (the Dell).

- 3.47 On-site attenuation and controlled discharge will control surface water flows to greenfield rates. These features will be designed to store the volume of water associated with a 1 in 100-year rainfall event, plus an additional 45% allowance to account for increased rainfall due to climate change.
- 3.48 The Development will implement SuDS features in the form of attenuation basins.

Lighting

- 3.49 The Site is located on the southern edge of the town of Rochdale, adjacent to existing residential and industrial use and roads which are already considered to be well lit.
- 3.50 The Development will include the adoption of controlled lighting and implementation of a lighting strategy in accordance with current best practice guidance, including the Institute of Lighting Professionals (ILP) (2020) Guidance Notes for the Reduction of Obtrusive Lightⁱⁱⁱ and BS 5489-1:2013^{iv} and BS EN 13201-2:2015^v. These measures will be secured through suitably worded planning conditions at a later design stage and will ensure that the potential effects on surrounding sensitive receptors from light spill, glare and sky glow are minimised and reduced to an acceptable level.

Earthworks

- 3.51 As the Developable area will not be affected by fluvial flooding there is no requirement to incorporate any freeboard levels into the finished floor levels of the design. The Flood Risk Assessment (FRA) (Appendix 2.3) recommends that finished floor levels are set a minimum of 150mm above the local ground level which is in line with best practice to mitigate against the risk of surface water runoff.

Energy, Sustainability and Climate Change

- 3.52 In order to deliver environmentally responsible buildings, an exemplar approach is proposed based on low energy design principles. This approach involves energy demand minimisation through effective building form and orientation, good envelope design and proficient use of services. An Energy & Climate Adaptation Statement, submitted in support of the planning application sets out measures to reduce energy consumption and enhance efficiency of the Development within the detailed phase of the Development. Energy reduction measures, which follow the energy hierarchy⁶, incorporated into the detailed phase of the Development

⁶ The Energy Hierarchy is a classification of energy options, prioritised to assist progress towards a more sustainable energy system.

include:

- Highly insulated building fabric with external walls, floors and roofs of low U-Values to reduce heat loss;
- Efficient double glazed windows;
- Low air permeability;
- Use of natural ventilation;
- All dwellings have been designed to allow for cross-ventilation to reduce the risk of overheating and help them stay cool in warmer conditions;
- Low energy lighting; and
- Strong continuity of insulation at building junctions to reduce thermal bridging heat loss;
- Dwelling heat and hot water demand will be met by low carbon technology using Air Source Heat Pumps (ASHP).

3.53 The combination of demand reduction measures and efficient energy supply and low/zero carbon technologies reduce operational regulated energy emissions by 53% below the Part L 2021 Building Regulations baseline.

3.54 The measures outlined above will be secured through a suitably worded planning condition at the detailed design stage for the outline element of the Development.

Ecological Mitigation

3.55 The Development is designed to avoid and minimise adverse effects to key habitats and species identified on-site (as described in Chapter 7: Biodiversity). Mitigation in the form of a Construction Ecological Management Plan (CEcMP), included as part of the Construction Environmental Management Plan (CEMP) (to be secured through a suitably worded planning condition), will ensure that adverse effects on retained features are addressed to avoid any degradation during the construction phase.

3.56 New habitat creation has been incorporated into the landscape design proposals for the Development, as outlined in Figure 3.1 and the DAS. Hedgerows and trees throughout the Site will be retained where possible and replaced at a ratio of 2:1 should they be removed from the Site. The Development will also include wildflower planting which incorporates a meadow flower mix. Hedgerow planting will improve connectivity between existing and newly created habitats. Furthermore, ponds located on the Site, in the southern, western, and central portion of the Site will be retained alongside the provision of new SuDS attenuation basins which will provide opportunities for new aquatic plants and species.

- 3.57 A detailed Biodiversity Net Gain (BNG) assessment will be undertaken for the whole Development at the detailed design phase. It is anticipated that the Development will achieve a positive BNG.

REFERENCES

- ⁱ Flood Map for Planning, Link: <https://flood-map-for-planning.service.gov.uk/location>
- ⁱⁱ <https://footpathmap.co.uk/map/?zoom=15.5&lng=-2.17458&lat=53.57994>
- ⁱⁱⁱ Guidance Note 01/20. Guidance Notes for the Reduction of Obtrusive Light (2020). Institute of Lighting Professionals
- ^{iv} British Standards EN 13201-2:2015 Road Lighting Performance requirements.
- ^v British Standards EN 13201-2:2015 Road Lighting Performance requirements.