

APPENDIX 2.1

EIA SCOPING REPORT

Land at Stakehill, Rochdale

Environmental Impact Assessment Scoping Report

October 2022

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Environmental Impact Assessment Scoping Report

Prepared on behalf of Redrow Homes Limited and Valerie Drake, Robert Allen and John Thomas Allen, June Greenwood, Willie Greenwood and Mark Greenwood and David Andrew Tetlow and Amanda Jane Tetlow

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1 INTRODUCTION

- 1.1 This Environmental Impact Assessment ("EIA") Scoping Report has been prepared by Barton Willmore, now Stantec¹, on behalf of Redrow Homes Ltd (the "Applicant") and Valerie Drake, Robert Allen and John Thomas Allen, June Greenwood, Willie Greenwood and Mark Greenwood and David Andrew Tetlow and Amanda Jane Tetlow. The report accompanies a request for an EIA Scoping Opinion from Rochdale Borough Council ('RBC') in accordance with Regulation 15 of the *Town and Country Planning (EIA) Regulations 2017*, as amended² (the "EIA Regulations") with respect to proposed development on land at Stakehill, Rochdale.
- 1.2 In accordance with the EIA Regulations, a person who is minded to make an EIA application may ask the relevant planning authority to state in writing their opinion as to the information to be provided in the Environmental Statement (ES) (a "Scoping Opinion").
- 1.3 Regulation 15 (2) states that a scoping request must be accompanied by:
- (i) a plan sufficient to identify the land;*
 - (ii) a brief description of the nature and purpose of the development, including its location and technical capacity;*
 - (iii) an explanation of the likely significant effects of the development on the environment; and*
 - (iv) such other information or representations as the person making the request may wish to provide or make.*
- 1.4 The purpose of the Scoping Report is to provide sufficient information on the proposed development and its potentially significant environmental effects to allow RBC to adopt an informed Scoping Opinion.
- 1.5 EIA Scoping is a statutory process through which the content and detailed methodology of the EIA process is agreed, formally, with RBC and statutory consultees. It is best practice and ensures that any future planning application is accompanied by a suitably proportionate and focused ES that takes all significant environmental issues into account.

¹ Institute of Environmental Management and Assessment (IEMA) qualified assessors and Environmental Impact Assessment (EIA) Quality Mark registrants

² SI 2017/571 as amended by SI 2018/695 and SI 2020/505

2 THE SITE AND PROPOSED DEVELOPMENT

The Site

Site Context

- 2.1 The site (see Location Plan at Appendix 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.
- 2.2 The north of the site is bound by Thornham New Road and the M62, which run 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 are 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 southwest of the site is bound by agricultural land.
- 2.3 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 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.
- 2.4 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 outwith 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.
- 2.5 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 Rochdale Canal Site of Special

Scientific Interest (SSSI) and Special Area of Conservation (SAC), located approximately 190m south west of the site, and the Hopwood Woodlands Local Nature Reserve (LNR), located approximately 450m south west of the site.

- 2.6 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 or in proximity to 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.
- 2.7 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.
- 2.8 The site is located entirely within Flood Zone 1³, which is considered to be at the lowest risk of fluvial flooding. The site is located entirely within a Nitrate Vulnerable Zone⁴. The site is not within in a Drinking Water Safeguarded Zone⁵ or a Source Protection Zone (SPZ)⁶.
- 2.9 The site is partially located within the Greater Manchester Combined Authority (GMCA) Air Quality Management Area (AQMA), declared for exceedances of annual mean nitrogen dioxide (NO₂) objective.
- 2.10 The site is not located within an Archaeological Priority Area (APA).

Site Description

- 2.11 The site (shown on Appendix 1), extends to approximately 89 hectares (ha) and largely comprises agricultural land that is divided into a number of irregular shaped fields defined by mature hedgerow. The site is enclosed by existing urban development to the west and road infrastructure to the north, south and east. The Agricultural Land Classification of the site is classified as Grade 4 which is considered poor agricultural quality land.

³ Flood Map for Planning, Link: <https://flood-map-for-planning.service.gov.uk/location>

⁴ 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.

⁵ Drinking Water Safeguard Zones (Surface Water) are catchment areas that influence the water quality for their respective Drinking Water Protected Area (Surface Water)

⁶ 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.

- 2.12 A garden centre lies within the west of the site, adjacent to the A664 Manchester Road. The buildings are surrounded by hardstanding with introduced shrubs 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.
- 2.13 Topography across the site varies, there is a gradual rise from west to east, from approximately 135m Above Ordnance Datum (AOD) to a high point at 175m 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 the site, one towards the far north western corner, one to the west adjacent to Carnforth Avenue, two located in the southern portion of the site (south of Thornham Lane), with the remaining pond located centrally on the site, to the north of the St John's CE Primary School.
- 2.14 Multiple Public Rights of Way (PRoWs) are located on the site including a PRoW which runs south into the site off Thornham New Road within the north of the site, connecting to Thornfields Farm. Further PRoW are located along Thornham Lane within the south of the site, and also run north into the site connecting to Newhey Farm to the west.
- 2.15 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.

Planning Context

- 2.16 The site forms part of the wider mixed-use allocation Policy JP – Allocation 2 within the Places for Everyone – Joint Development Plan DPD Submission Version. The Policy states that development at this site will be required to provide up to 1,680 high quality homes, as well as adaptable high quality employment space. Policy JP – Allocation 2 includes a series of development principles to inform development. The proposed development relates to the northern portion of the allocation, which is under the control of the Applicant.
- 2.17 The RBC Core Strategy⁷ also recognises the Site of Stakehill Business Park (Policy E3/5) as an area for economic growth as well as encouraging new housing in this area (Policy C2).

⁷ Rochdale Borough Council Core Strategy, Adopted 2016, Link: <https://www.rochdale.gov.uk/local-planning-policy/core-strategy-local-plan>

The Proposed Development

- 2.18 The Applicant is proposing to submit a hybrid planning application (part in outline, part in detail) for the proposed development of up to 1,500 new homes across the site, of which approximately 300 dwellings will form part of Phase 1 of the proposed development (the detailed element), with the remaining up to 1,200 units in outline. The proposed development will also comprise a new local centre, green infrastructure comprising planting, ecological enhancements, SuDS and play areas, new pedestrian and cycle routes and associated access.
- 2.19 In terms of buildings heights, it is anticipated that the maximum height of the proposed development will be up to 3 storeys (187.5m Above Ordnance Datum (AOD)).
- 2.20 Vehicular access to the site will be predominantly from the A664 Manchester Road at the west of the site, however some units will be accessed from Thornham New Road.

3 SCOPING

- 3.1 This scoping exercise has been informed by desk-based research, professional judgement, and other information available for the site. Table 1 provides a summary of the scoping exercise.

Table 1: EIA Scoping Summary

Topics	Potential Construction Phase Effects	Potential Operational Phase Effects	Likely Significant Effects (Pre-Mitigation)	Comments
Landscape and Visual Effects	✓ - T	✓ - P	✓	Topic scoped into the ES
Biodiversity	✓ - P/T	✓ - P	✓	
Cultural Heritage	✓ - T	✓ - P	✓	
Transport and Access	✓ - T	✓ - P	✓	
Air Quality	✓ - T	✓ - P	✓	
Noise and Vibration	✓ - T	✓ - P	✓	
Population and Human Health	x	x	x	Topic scoped out of the ES
Water Resources and Flood Risk	x	x	x	
Land Contamination	x	x	x	
Agricultural Land	x	x	x	
Wind Microclimate	x	x	x	
Daylight, Sunlight and Overshadowing	x	x	x	
Waste	x	x	x	
Lighting	x	x	x	
Accidents and Disasters	x	x	x	
Climate Change and Greenhouse Gases	x	x	x	

Key: ✓ Likely Significant Effect / x No Likely Significant Effect.
T – Temporary Effect / P – Permanent Effect

Environmental Disciplines Scoped Out

- 3.2 Further information on the topics scoped out of the EIA in Table 1 is set out in the following sections.

Population and Human Health

- 3.3 The proposed development will provide housing and construction employment opportunities. It is expected that construction employment would be taken up by the existing local population and would not lead to new residents moving into the area for employment. The scale of the proposed development is such that no significant construction effects on human health are anticipated. Standard mitigation measures, implemented through a Construction and Environmental Management Plan (CEMP) to be secured through a pre-commencement

planning condition would also minimise potential human health effects during the construction phase.

- 3.4 The proposed development will include green infrastructure that will exceed local planning requirements. Children's play areas will be provided as part of the green infrastructure proposals, as well as recreation and play space for a range of ages. Indicative plans show that green corridors will connect the proposed development to the existing settlement and wider countryside, provide cycle and walking connections, including incorporating existing PRow's, and a network of open spaces. All of this will contribute to the health and wellbeing of future residents by providing accessible green and open space for all residents. Furthermore, the ES will assess the impact the proposed development will have on transport, air quality and noise emissions, outlining suitable mitigation to reduce these effects, which in turn will mitigate adverse effects on human health. Therefore, it is proposed to scope Population and Human Health out of the ES.

Water Resources and Flood Risk

- 3.5 The site is located entirely within Flood Zone 1, which is considered to be at the lowest risk (<0.1% risk) of fluvial flooding in any given year. The majority of the site is also considered to be at a very low risk of flooding from surface water sources.
- 3.6 As mentioned previously, the topography across the site varies, there is a gradual rise from west to east, to a high point of 175m AOD. The waterbodies located on the site are located in areas of lower topography. There are five ponds located on the site, one towards the far north western corner, one to the west adjacent to Carnforth Avenue, two located in the southern portion of the site (south of Thornham Lane), with the remaining pond located centrally on the site, to the north of the St John's CE Primary School. Portions of the site, associated with existing waterbodies, which reflect the topography of the site, are at a low to high risk of surface water flooding.
- 3.7 A Flood Risk Assessment (FRA) and a Sustainable Drainage Strategy will be submitted in support of the planning application which will outline how the proposed development will include appropriate drainage and landscaping to reduce the risk of flooding.
- 3.8 Due to the site being at low to very low risk of flooding from a variety of sources, it is considered that water resources and flood risk can be scoped out of the ES.

Land Contamination

- 3.9 The site currently comprises agricultural land uses which of poor land quality.
- 3.10 As noted above, the entirety of the site is located within a Nitrate Vulnerable Zone. The site is not located within or in close proximity to a SPZ. Moreover, the site is not located within a Drinking Water Safeguard Zone for surface water or groundwater.
- 3.11 A Phase 1 Geo-Environmental Site Assessment study has been undertaken for the site which outlines that the site is underlain by superficial glaciofluvial deposits consisting of sand and gravel (Secondary A Aquifer) and till deposits (secondary undifferentiated). The bedrock geology consists of Pennine Lower Coal Measures Formation, Royley Sandstone and Old Lawrence Rock (Secondary A).
- 3.12 The Phase 1 Geo-Environmental Assessment also indicates that the site initially comprised farmland and is has largely remained unchanged during the course of its history with the exception of quarrying and infilling of ponds. Furthermore, historical landfill site mapping⁸ shows a historic landfill located within the central western portion of the site. Referred to as Land at Newhey Farm, the landfill closed in 1985 and was used to process inert waste.
- 3.13 The Assessment considers the site to be Low-Moderate risk of contamination. Several potentially active contaminant linkages have been identified with regard to human health and surface waters. This includes potentially infilled ponds and historical landfilling activities in the central portion of the site, as well as associated quarry working (sand and gravel) between 1928 and 1976.
- 3.14 However, a Phase 2 Geo-Environmental Site Investigation will be undertaken prior to construction of the proposed development, to qualitatively assess potential contamination linkages on the site. Should subsequent remediation (such as localised removal) be required, it would be secured through a planning condition and undertaken before or during construction, subject to agreement with RBC and undertaken in accordance with all relevant legislation and guidance.
- 3.15 Considering the existing risk of contamination, significant effects associated with contamination are not considered likely, therefore it is proposed that land contamination is scoped out of the ES.

⁸ Catchment Based Approach Data Hub, Historic Landfill Sites, Link:
<https://data.catchmentbasedapproach.org/datasets/historic-landfill-sites/explore?location=52.824396%2C-2.425850%2C7.85>

Agricultural Land

- 3.16 The site is currently in agricultural use and extends to 89ha. Notwithstanding, as the Agricultural Land Classification of the site is classified as Grade 4 (poor agricultural quality land), the proposed development would not result in a loss of more than 20ha of Best and Most Versatile (BMV) agricultural land⁹ (Natural England Technical Information Note 049¹⁰), which is considered the threshold for likely significant effects. The proposed development will therefore not generate significant effects on agricultural land, and it is proposed to scope this topic out of the ES.

Wind Microclimate

- 3.17 The proposed development will not include any high-rise buildings which could influence wind patterns. It is anticipated that the maximum height of the new residential dwellings will be up to 3 storeys in height (187.5 mAOD), to reflect the predominant scale of existing housing surrounding the site. Therefore likely significant wind effects are not anticipated, and this topic is proposed to be scoped out of the ES.

Daylight, Sunlight and Overshadowing

- 3.18 The scale and massing of the proposed development will not cause changes to daylight or sunlight availability or cause overshadowing of residents or amenity space. It is therefore proposed to scope this discipline out of the ES.

Waste

- 3.19 The proposed development is not anticipated to produce significant amounts of waste to the extent that the creation or disposal of which would give rise to significant effects on the environment. The CEMP to be secured by a planning condition following planning approval, would detail the mitigation measures to be implemented during the construction phase to minimise waste and ensure that it is stored, managed, collected and disposed of appropriately.
- 3.20 Operational waste would be minimised as far as possible and disposed of in line with RBC requirements and managed in accordance with all applicable legislation. The potential effects from refuse servicing movements will be considered within the Transport Assessment and Air

⁹ The best and most versatile land is defined as Grades 1, 2 and 3a by policy guidance (see Annex 2 of NPPF)

¹⁰ Natural England (December 2012) Technical Information Note TIN049 Second edition, Agricultural Land Classification: protecting the best and most versatile agricultural land.

Quality Assessment. No likely significant effects are anticipated and therefore this topic is proposed to be scoped out of the ES.

Lighting

- 3.21 The site is located on the southern edge of the town of Rochdale and existing surrounding uses, including residential and industrial uses and road infrastructure, are already well lit. In addition, lighting will be designed carefully in accordance with relevant Institute of Lighting Professionals (ILP) (2020) Guidance Notes for the Reduction of Obtrusive Light¹¹ and BS 5489-1:2013¹² and BS EN 13201-2:2015¹³. Therefore, the proposed development is not anticipated to produce a significant lighting impact. Where appropriate, lighting will be considered within the ES, including the Biodiversity chapter of the ES. Lighting has therefore been scoped out of the ES.

Accidents and Disasters

- 3.22 The proposed development will not include uses which are considered to be hazardous. The site is not in a location which is at risk of disasters such as, land instability or earthquakes. As previously stated, the site is located entirely within Flood Zone 1, meaning the site is at low risk of fluvial flooding. Moreover, the majority of the site is at very low risk of flooding from surface water sources. As previously stated, a FRA will be submitted with the planning application to ensure no significant effects arise in terms of flooding.
- 3.23 During the construction phase, the contractor(s) would implement measures in accordance with Health and Safety legislation, and best practice, to minimise the risks of accidents that would have effects on people or the environment. All such measures would form part of the CEMP. No likely significant effects are anticipated and therefore it is proposed to scope this topic out of the ES.

Climate Change

- 3.24 The Applicant will consider how climate change may affect the proposed development from the outset as part of the design process. Considerations will include future-proofing and resilience measures. The proposed development will also include identification of the future climate in assessments within the ES, including Flood Risk and where relevant in the

¹¹ Guidance Note 01/20. Guidance Notes for the Reduction of Obtrusive Light (2020). Institute of Lighting Professionals.

¹² British Standards BS 5489-1:2013 Road Lighting Performance requirements.

¹³ British Standards EN 13201-2:2015 Road Lighting Performance requirements.

landscaping proposals i.e. plants suitable for a changing climate. Additionally, an Energy and Climate Change Adaption Statement will be submitted in support of the planning application, outlining how the operational development can reduce its greenhouse gas emissions.

- 3.25 Accordingly, an assessment of climate change and greenhouse gases, as a separate chapter, is proposed to be scoped out of the ES. The introductory chapters will summarise the findings of the ES relevant to climate change and outline how climate change adaptations are integrated into the proposed development. These will draw upon technical chapters and reports, including the Air Quality Assessment and summarise the sustainability and energy provisions included as well as other mitigation measures seeking to reduce greenhouse gas emissions such as the implementation of Travel Plans. For a development of this nature, this is considered a suitably proportionate approach.

Environmental Disciplines Scoped In

- 3.26 For each of the topics scoped into the assessment further information on the details to be included in the assessment and the methodology to be employed are set out below.

4 LANDSCAPE AND VISUAL EFFECTS

Introduction

- 4.1 An assessment will be undertaken of the likely significant effects of the proposed development on landscape and visual effects.

Baseline Conditions

- 4.2 The baseline conditions on the site comprise the following:

- Landscape Character: The site lies within NCA Profile 54: "*Manchester Pennine Fringe*" at a national level, "*Simister, Slattocks and Healds Green LCA*" in the Greater Manchester Landscape Character Assessment and Sensitivity Study;
- Land Use: The site extends to approximately 89 ha and comprises agricultural land, that is divided into a number of irregular shaped fields defined by mature hedgerow;
- Vegetation cover / Enclosure: The site itself is open with vegetation limited to the field boundaries of the site. 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. The tree belt meanders into the site for a short distance;
- Scale: Large;
- Landform: This varies across the site, overall, the topography falls from higher ground at approximately 175m AOD to approximately 135m AOD located along the A664, with the landform within the site gently undulating. There are five waterbodies, a number of springs and a short section of water course associated with the tree belt adjacent to the garden centre, located within the site;
- Designations: There are no landscape designations with the immediate, local or wider area;
- Cultural / Recreational Associations: There are a number of listed buildings / features adjacent to the site boundary, the Church of St John and Thornham Parish War Memorial - both Grade II – are located just north of Thornham Lane. Several Public Rights of Way (PRoW) are located on the site including a PROW which runs south into the site from Thornham New Road and connects to a residential property and a cluster of farm buildings located to the east of the site, which is outside the site boundary (known as Thornfields);
- Scenic Beauty: The location of the site on rising landform, results in open views out towards the north west and south in particular, from the higher ground within the north eastern part of the site. The land falls to the south west, continuing beyond the site

boundary to the Rochdale Canal, after which it gently rises to around 158m AOD just north of Glade Wood. To the east, the land rises to the higher ground associated with Tandle Hill Country Park, through which passes Oldham Way Long Distance Path, this route passes over the higher landform, at approximately 222m AOD, where there is located a war memorial and viewing point, this allows for long distance views towards Manchester to the south and over the site towards the Pennines located to the north and north west. Views from the south and west, are heavily restricted by a limited number of receptors and the combination of intervening landforms alongside built form and mature vegetation structure. The eastern and western edges of the site, where the land drops away, are more visually sensitive to views. Overall, the scenic quality is moderate due to the large open nature of the site and associated arable use with limited boundary features which are characteristic features of this landscape type; and

- **Visual Influence:** Given the nature of the surrounding landform, built form and mature vegetation there is a limited visual envelope given the overall size of the site. The most visually and perceptually sensitive part of the site is the higher ground within the north eastern part, with the central and southern parts of the site being more enclosed due to the intervening mature vegetation, associated with the main roads that bound the site and the existing built form along Rochdale Road.

Approach

- 4.3 The assessment will be undertaken in accordance with the Guidelines for Landscape and Visual Impact Assessment (GLVIA) and would provide a review of the existing landscape planning policy context, published sources of landscape character and visual appraisal of the study area and an assessment of the likely significant landscape and visual effects of the proposed development, both during the construction and operational phases.
- 4.4 Baseline information for the study area will be collated, which will include settlement patterns and access, topography, vegetation, landscape designations, relevant planning policy and published landscape character information, as well as appraisals of the character of the site and its visual relationship with the study area. Appraisals will be based on a baseline timeframe of winter 2021/2022.
- 4.5 Assessments will be carried out to identify the likely significant landscape and visual effects arising from the proposed development during construction, on completion ('Year 1') and 15 years thereafter with the benefit of established planting mitigation. Mitigation planting will be assumed to grow approximately 1m in height every 3 years.

4.6 In accordance with the GLVIA, the assessment will address landscape and visual effects as separate issues. Landscape effects relate to both the effect on the physical features of the site, and on the landscape character of the site and surrounding area. Visual effects relate to the experience of views of the proposed development by visual receptors from publicly accessible vantage points in the study area. Where appropriate, the effects of the proposed development on residential receptors will also be assessed. Location and number of viewpoints will be agreed with the LPA / landscape officer.

4.7 The assessment will:

- Define the study area for the site, based on Zone of Theoretical Visibility (ZTV) mapping and a visual appraisal in the field, identifying key representative views to be used for the visual impact assessment;
- Provide an appraisal of the landscape and visual baseline;
- Assess the susceptibility to change of the landscape and visual receptors (the receiving environment), the value of landscape and views, and the resultant sensitivity of receptors;
- Assess the likely magnitude of landscape and visual effects arising from construction and operation of the proposed development (at 'Year 1');
- Assess the likely significance of landscape and visual effects arising from construction and operation of the proposed development (at 'Year 1');
- Identify requirements for any mitigation measures;
- Summarise any residual effects following the establishment of mitigation planting (at 'Year 15'); and
- Assess the likely significant cumulative effects of the proposed development with committed developments in the area.

Summary

4.8 Table 4.1 contains a summary of the likely significant landscape and visual effects of the proposed development.

Table 4.1: Landscape and Visual Effects

Receptor	Effects	Scoped In?
Landscape features, including existing vegetation	Landscape effects on the landscape resource	✓
Landscape character	Effects on landscape character areas	✓

Receptor	Effects	Scoped In?
Visual receptors in publicly accessible locations, including roads, footpaths and public open spaces, and residential receptors where appropriate	Visual effects on users	✓

5 BIODIVERSITY

Introduction

- 5.1 An assessment will be undertaken of the likely significant effects of the proposed development on the environment in respect of Biodiversity.

Baseline

- 5.2 A Preliminary Ecological Appraisal (PEA) was undertaken at the site in May 2019. The assessment comprised a desk study and biological records search, as well as a site walkover survey in order to map habitat types. The survey was extended to assess the potential for protected species to use the site.
- 5.3 An updated walkover survey was carried out on the 17th March 2022 when the existing habitats and buildings within the site were assessed to check for any changes in condition from the 2019 survey.
- 5.4 The assessments provided baseline data as to current site conditions and where appropriate allows recommendations to be made in respect of further potential work in order to satisfy current wildlife legislation.
- 5.5 The habitats on-site comprise buildings, semi improved & improved and wet grassland, hardstanding, semi-natural broadleaved woodland, scattered trees, introduced shrubs, waterbodies, watercourses, hedgerows of varying species richness, scrub and tall ruderal vegetation of mixed species diversity. A garden centre with two buildings lies within the west of the site and the buildings are surrounded by hardstanding with introduced shrubs and scattered trees.

Approach

- 5.6 The PEA and updated site visit involved the collection and review of data from a desk study and field survey along with assessment of the value of the habitats following CIEEM guidelines. Habitats and species on the site were evaluated following the 'Guidelines for Ecological Impact Assessment in the UK and Ireland' 2018.
- 5.7 The PEA identified important sites, habitats, species, and other ecological features that are of conservation value based on factors such as legal protection, statutory or local site

designations such as Sites of Special Scientific Interest (SSSI) or Local Wildlife Sites (LWS), and inclusion on Red Data Book Lists or Local Biodiversity Action Plans. The importance of an ecological feature will be considered within a defined geographical context, with International Value being most important, then National, Regional, County, District, Local and lastly, within the immediate Zone of Influence (ZoI) of the proposed development only.

- 5.8 For the purpose of the assessment, a 'Likely Significant Effect' or 'within the zone of influence' is an effect that is sufficiently important to require assessment and reporting so that the ecological consequences of the project are understood. In broad terms, Likely Significant Effects encompass impacts on structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance, and distribution). Negligible describes where there is no likely significant residual effect. For the purposes of the assessment, a significant effect will be defined as a moderate effect or above for both beneficial/ adverse effects.
- 5.9 A review of the designated sites and habitats within 2km of the site has been undertaken using the Multi Agency Geographic Information for the Countryside (MAGIC) and the Natural England websites.
- 5.10 An updated review of the designated sites and habitats within 2km of the site has been undertaken in March 2022 using the MAGIC and the Natural England websites. A review of UK and Local priority species and habitats known to occur in the region of the site has been undertaken, using the Joint Nature Conservation Committee website and local records from Greater Manchester Ecology Unit (GMEU).
- 5.11 During the walkover surveys of the site, the habitat types and features of ecological interest were identified and mapped in compliance with the Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit (JNCC, 2010). The survey methods involved the recording and mapping of all habitat types and ecological features present on-site, including the identification of the main species present and examination of the potential for any protected species. Habitats were mapped and target notes made for any interesting features.
- 5.12 The surveys particularly focused on the following species and habitat features:
- Mammals (badgers, bats, otter and water vole);
 - Birds;
 - Amphibians and reptiles;
 - Invertebrates;
 - Hedgerows and boundaries;

- Invasive plant species; and
- Plant communities and trees.

- 5.13 Bat survey methods followed the guidelines set out by the Bat Conservation Trust Bat Surveys for Professional Ecologists Good Practice Guidelines – 3rd Edition (2016). Habitats, Buildings and Trees were assessed for suitability for use by bats and categorised independently using the Bat Conservation Trust Guidelines (Collins, 2016).
- 5.14 The site was searched for setts and badger field signs including foraging areas, latrines and tracks.
- 5.15 The watercourses within the site were briefly assessed for use by otters and water voles. Signs of otter use including prints, spraints, couches or holts were searched for from the banks of the watercourses. Signs of water vole use, including latrines, footprints, feeding remains, runs and burrows were also searched for along the banks of the watercourses.
- 5.16 A Biodiversity Net Gain (BNG) Metric Calculation will be undertaken on the site, based on the proposed development, using the Department for Environment, Food and Rural Affairs' (DEFRA) Biodiversity Metric 3.1 2022.
- 5.17 The majority of the habitats are likely to be lost to the proposed development, however most of the southern portion of the site that lies adjacent to Thornham Lane will be retained and enhanced as part of the proposed development. Areas of open space and wildlife buffers/corridors will be created within the design of the proposed development to allow species to continue to move through the area following completion of the proposed development. Recommendations have been made to contribute towards no net loss of biodiversity as a result of the development of the site.

Summary

- 5.18 Table 5.1 contains a summary of the likely significant effects of the proposed development in relation to Biodiversity.

Table 5.1: Biodiversity Effects

Receptor	Effects	Scoped In?
Bats	Loss of roosting provision and commuting/foraging habitat. Potential increase in light disturbance.	✓
Great Crested Newts (GCN) and amphibians	Loss of aquatic habitat for breeding and the fragmentation of terrestrial habitat. Potential killing or injuring during the construction phase.	✓

Receptor	Effects	Scoped In?
Birds	Loss of nesting and foraging provision. Potential killing or injuring during the construction phase.	✓
Badger	Disturbance to potential setts identified, habitat fragmentation and loss of foraging habitat.	✓
Water vole	Loss of suitable habitat and disturbance to areas and water courses that provide connectivity.	✓
Brown hare/ hedgehog and other small mammals	Loss of forage and areas of refuge and fragmentation of habitats. Potential killing or injuring during the construction phase.	✓
Designated sites	Increased visitor effects anticipated in absence of mitigation.	✓
Habitat Loss	Habitat loss is anticipated as a result of the proposed development.	✓

6 CULTURAL HERITAGE

Introduction

- 6.1 An assessment will be undertaken of the likely significant effects of the proposed development on the environment in respect of designated and non-designated (above ground) built heritage assets and (below ground) archaeological assets within the site and surrounding area.
- 6.2 The historic environment comprises archaeological sites, historic buildings, gardens and designed landscapes, historic battlefields and other sites, features or places in the landscape that have the capacity to provide information about past human activity, or which have cultural relevance due to associations with folklore or historic events. Sites of cultural heritage interest may also derive some, or all, of that interest from their setting within the wider landscape.
- 6.3 This Cultural Heritage scoping text is intended to present a methodology for the identification of likely significant environmental effects of the proposed development upon the physical fabric and settings of heritage assets within the site, and potential effects on the settings of assets within the wider landscape, which would need detailed consideration as part of the ES.
- 6.4 The significance of a heritage asset will derive from factors including fabric, setting, rarity, completeness, historic and cultural associations, community, research and place-making potential. Significance is assessed in relation to the criteria in HEAN12¹⁴ (i.e. in archaeological, architectural, artistic, or historic terms), which are intended primarily to inform decisions regarding heritage designations, but may also be applied more generally in identifying the 'special characteristics' of a heritage asset, which contribute to its significance and should be protected, conserved and enhanced according to the NPPF.
- 6.5 This use of the word 'significance', referring to the range of values or interest attached to an asset, should not be confused with the unrelated usage in EIA where the 'significance of an effect' reflects the weight that should be attached to it in a planning decision.
- 6.6 Within the ES, the Cultural Heritage Chapter will make reference to National Planning Practice Guidance (NPPG) and Local Planning Policy.

¹⁴ <https://historicengland.org.uk/images-books/publications/statements-heritage-significance-advice-note-12/heag279-statements-heritage-significance/>

Baseline Conditions

- 6.7 The historic environment within the site and the wider 1 km study area has been characterised.
- 6.8 Baseline conditions for the site have been derived from designation data available on the Historic England website. The location of designated assets is shown in Appendix 2.
- 6.9 The site is currently greenfield and has not been developed in the last 200 years as demonstrated by historic mapping. Therefore, below the ploughing level there is potential for survival of previously unknown archaeological remains.
- 6.10 There are two known Grade II listed buildings that are encompassed by the site but not within the site boundary itself:
- Church of St John – 1390504; and
 - Thornham Parish War Memorial – 1452837.
- 6.11 There are no known Conservation Areas, Registered Parks and Gardens or Registered Battlefields located within the site.
- 6.12 Within 1 km of the site there are seven Grade II listed buildings:
- Sand Hole Farmhouse – 1396460;
 - Hopwood Hall Icehouse – 1356255;
 - Church of St Martin – 1203230;
 - Rochdale Canal Lock Number 52 and Towpath Bridge – 1038295;
 - Rochdale Canal Lock Number 53 – 1346237;
 - Rochdale Canal Slattocks Top Lock (Number 54) and Adjoining Bridge – 1068507; and
 - Rochdale Canal Lock Number 58 and Adjoining Bridge – 1356233.
- 6.13 A historic environment assessment has previously been carried out by The Centre for Applied Archaeology (now Salford Archaeology) (2019/CfAA/2) at the Site. The assessment noted that an area in the south west of the site would require further assessment for palaeoenvironmental potential in regard to Slattocks Peat (HER No. 5085.1.0).
- 6.14 The site also has the potential for prehistoric remains as a result of the underlying geology of sands and gravels.

- 6.15 Historic mapping shows that the site has remained in agricultural use throughout the late post-medieval period.

Approach

- 6.16 The significance of potential effects is determined by integrating the importance of heritage assets and assessed magnitude of impact upon cultural significance using a reasoned matrix-style approach.
- 6.17 Subject to consultation, an ES chapter will be produced, which will address built heritage, archaeological and heritage landscape sub-topics. This will be supported by a combined archaeological and built heritage baseline study as a standalone appendix.

Desk-based assessment

- 6.18 A 1 km study area is proposed for the identification of heritage assets that may be affected by the proposed development, to identify potential direct (physical) impacts, and to identify assets beyond the site that may be affected through development within their setting.
- 6.19 Within the site, all known and potential heritage assets will be assessed for potential direct, setting and indirect effects. Within the study area, potential effects on the settings of heritage assets will be identified from an initial desk-based appraisal of data. The methodology adopted for the identification and assessment of potential adverse effects on setting follows the approach set out in Statements of Heritage Significance: Analysing Significance in Heritage Assets (Historic England Advice Note 12, 2019), Managing Significance in Decision-Taking in the Historic Environment (Historic England's Historic Environment Good Practice Advice in Planning GPA2, 2015) and The Setting of Heritage Assets (Historic England's Good Practice Advice in Planning GPA3, Second Editions, 2017).
- 6.20 A baseline desk-based assessment to identify potential constraints and to assess the potential cultural heritage sensitivity of the site and study area will be conducted to establish the baseline conditions. The principal sources of information will comprise the following:
- Historic England's National Heritage List for England (NHLE) and the Greater Manchester Historic Environment Record (HER) for details of designated heritage assets;
 - RBC's records of non-designated heritage assets;
 - The Greater Manchester Council and Rochdale Council records of conservation areas,

- conservation area appraisals and locally listed buildings;
- Historical Ordnance Survey mapping, pre-Ordnance Survey mapping and tithe mapping and apportionments where available;
- Relevant published and unpublished documentary sources; and
- LiDAR data where available.

- 6.21 A gazetteer of all known heritage assets within the study area will be compiled.
- 6.22 A site visit will be undertaken to record the sites characteristics, and visible archaeology and geographical/geological features which may have a bearing on previous land use and archaeological survival, as well as those which may constrain subsequent archaeological investigation. The baseline assessment will include up-to-date records of known extant earthworks or structural remains or below-ground archaeological remains, local topography and aspect, exposed geology, soils, watercourses, health and safety considerations, surface finds, and any other relevant information.

Environmental Impact Assessment

- 6.23 Impact assessment is concerned with effects on heritage significance, the values or interest that applies to all heritage assets and relating to the ways in which the historic environment is valued both by specialists and the public. The impact assessment will be undertaken in line with IEMA and CIfA's Principles of Cultural Heritage Impact Assessment in the UK (2021).
- 6.24 The importance of a heritage asset is the overall value assigned to it based on its cultural significance, reflecting its statutory designation or, in the case of non-designated assets, the professional judgement of the assessor. Any feature which does not merit consideration in planning decisions due to its cultural significance may be said to have negligible heritage importance; in general, such features are not considered as heritage assets and are excluded from the assessment.
- 6.25 The magnitude of an effect is a measure of the degree to which the cultural significance of a heritage asset will potentially change as a result of the proposed development. This definition of magnitude applies to likely effects on the setting as well as likely physical effects on the fabric of an asset.
- 6.26 Each heritage asset in the study area will be assessed in turn to identify those which have a wider landscape setting that contribute to their cultural significance and whether it is likely that cultural significance would be harmed by the proposed development.

- 6.27 Where this initial appraisal identifies the potential for a significant effect, the asset will be visited to define baseline conditions and identify key viewpoints.
- 6.28 To assess the impact of the proposed development upon cultural heritage, the significance of any effect will be calculated through comparison of the importance of each heritage asset against the potential magnitude of change upon it.
- 6.29 Effects from cumulative developments will also be assessed.

Summary

- 6.30 The site contains no designated assets, although it does encompass two Grade II listed buildings.
- 6.31 The setting of these designated assets is likely to be impacted by the proposed development, and RBC is likely to require consideration in the form of an archaeological desk-based assessment which will inform an ES. This would present the assessment of the potential impacts of the proposed development on both known and potential archaeology within the site and the settings of heritage assets within the wider study area. Setting impacts will require consultation early in the process to inform a potential approach and gauge RBC's position on this issue.
- 6.32 RBC is likely to require a geophysical survey to identify potential archaeological remains.
- 6.33 RBC is likely to require a palaeoenvironmental assessment of Slattocks Peat.
- 6.34 Table 6.1 contains a summary of the likely significant effects of the proposed development. An assessment of non-designated assets will be presented in the archaeological desk-based assessment and Cultural Heritage ES chapter.

Table 6.1: Cultural Heritage Effects

Receptor	Effects	Scoped In?
Church of St John	Potential Alteration of Setting	✓
Thornham Parish War Memorial		✓
Sand Hole Farmhouse		✓
Church of St Martin		✓
Hopwood Hall Icehouse		✓
Rochdale Canal Lock 52 and Towpath Bridge		✓
Rochdale Canal Lock 53		✓

Receptor	Effects	Scoped In?
Rochdale Canal Top Lock 54 (Slattocks) and Adjoining Bridge		✓
Rochdale Canal Lock 58 and Adjoining Bridge		✓

7 TRANSPORT AND ACCESS

Introduction

- 7.1 An assessment will be undertaken of the likely significant effects of the proposed development on the environment in respect of transport and access.

Baseline

- 7.2 The site is located approximately 2km to the south of Castleton and approximately 4km to the south of Rochdale town centre. The site is enclosed by existing urban development along A664 Manchester Road, the A627(M) and Thornham Lane.
- 7.3 The A664 Manchester Road is located to the west of the site and connects to Castleton and Rochdale to the north and the A627(M)/A664 roundabout to the south. Manchester Road is subject to a 30mph speed limit in the vicinity of the site and the carriageway width varies between approximately 7m and 9m. Manchester Road benefits from footways, street lighting and dropped kerbs at the majority of side roads and crossing points.
- 7.4 Thornham New Road borders the northern site boundary. It provides access to residential estates to the north and south. Thornham New Road is approximately 5.5m wide and provides direct access to a number of residential properties. Thornham New Road transitions to a rural access track at the northwestern boundary of the Site (approximately 350m from the junction with Manchester Road), serving local farm properties.
- 7.5 Thornham Lane is located towards the south of the site and connects the A664 Manchester Road to the west to the A671 Oldham Road to the east where Thornham Lane becomes Thornham Old Road. Thornham Lane is approximately 4m wide and provides access to St John's C of E VA Primary School, St John's Thornham Church and a handful of residential properties.
- 7.6 The surrounding area benefits from a good level of pedestrian infrastructure. Manchester Road benefits from 2m wide footways, street lighting and dropped kerbs on both sides of the carriageway. The majority of Castleton can be reached within a 2km walk distance, which includes a wide range of key local everyday facilities.
- 7.7 The site benefits from being located near to NCR66. NCR66 is a predominantly traffic-free cycle route located to the north and west of the site. It begins in Stanycliffe and links to

residential areas including Trub, Castleton and Deeplish. A number of areas can be accessed within a 5km cycle distance of the site including Middleton, Castleton and Rochdale, ensuring that the site is within an acceptable cycle distance of a range of places and associated facilities.

- 7.8 The nearest bus stops in relation to the site are on A664 Manchester Road, which serve a 10-minute frequency route connecting to Rochdale, Castleton, Middleton, Harpurhey and Manchester city centre.
- 7.9 Castleton railway station is located approximately 1.1km north of the site, providing cycle stands with CCTV. This station serves services to Rochdale, Clitheroe, Manchester Victoria, Blackburn, and Rochdale, whilst also stopping at many other destinations on route. Trains operate at a rate of approximately two per hour in each direction on a typical weekday.
- 7.10 Rochdale is accessible from Manchester on the Metrolink tram service. Rochdale railway station Metrolink stop is located approximately 4.2km to the north of the centre of the site. Rochdale town centre Stop is located in Zone 4.
- 7.11 Overall, the site is well connected by road, active travel modes and public transport services with a range of everyday facilities within easy reach. The centres of Rochdale and Manchester are highly accessible by frequent public transport and offer an extensive range of facilities and employment destinations.

Approach

- 7.12 Detailed baseline survey data will be obtained through a combination of desk-based reviews and collection of traffic data. The desk-based review will include an examination of walking and cycling networks, public transport services, accident data and classification of sensitive receptors. These will be supported by a detailed site visit that records and observes local conditions and user behaviour in and around the site.
- 7.13 Where historical traffic data is not available, up to date traffic data will be collected through Manual Classified Counts (MCC) at junctions across the study area and Automatic Traffic Counters (ATC) along key road links in the vicinity of the site. The study area will be agreed with the local highway authority consistent with the accompanying Transport Assessment (TA).
- 7.14 The proposed development has the potential to introduce traffic impacts during the construction and operational phases. The environmental effects of traffic will be assessed in

accordance with the following principal sources:

- Institute of Environmental Management and Assessment (IEMA) (1993). Guidelines for the Environmental Assessment of Road Traffic; and
- LA104, Environmental assessment and monitoring, Design Manual for Roads and Bridges (DMRB) (Standards for Highways, 2020).

7.15 In accordance with the Institute of Environmental Management and Assessment (IEMA) Guidelines, the method used for assessing environmental effects of the increased traffic will be based on a comparison in percentage terms between predicted traffic flows on potentially affected roads with and without the proposed development traffic. The IEMA Guidelines express two 'rules' which should be followed when determining the scale and extent of the assessment, these are:

- *"Rule 1: include highway links where traffic flows would increase by more than 30% (or the number of heavy goods vehicles would increase by more than 30%); and*
- *Rule 2: include any other specifically sensitive areas where traffic flows have increased by 10% or more".*

7.16 Rules 1 and 2 will be used as a screening tool to determine if a full assessment on routes within the study area is required due to the level of increase in traffic flows. The largest volume of traffic is expected to occur during occupation of the proposed development given its scale. However, construction traffic has the potential to cause environmental effects where proposed mitigation for the completed development has not yet been put in place. Where it is anticipated that traffic volumes do not increase by more than 30% (or 10% in sensitive locations) then a detailed assessment of the environmental effects is not deemed necessary.

7.17 During construction and occupation, activities will generate traffic resulting in potential impacts on sensitive receptors. Whilst the site is in a well connected location, potential construction traffic routes will pass close to established residential areas and are therefore environmental receptors from a traffic and transport perspective. Increases in traffic resulting from full occupation of the site will also utilise the local road network in all directions, potentially affecting environmental receptors such as residential properties, schools and routes with limited footway provision.

7.18 Where the IEMA thresholds are likely to be exceeded, consideration of the environmental effects of construction and operational traffic would be undertaken in relation to the following transport effects:

- Severance;
- Driver delay;
- Pedestrian delay and amenity; and
- Accidents and safety.

- 7.19 In addition to this, the overall carrying capacity of the road in question will be considered in undertaking the assessment. A quantitative assessment of impact would be undertaken, based on the predicted rise in traffic flows against a measured baseline. The likely 'worst case' scenario will be described for the periods of peak traffic generation, with the daily numbers of vehicle movements predicted.
- 7.20 The data analysis of traffic effects will also be used to inform air quality and noise assessments based on a relevant format of daily traffic volumes and HGV proportions.
- 7.21 Significance of effect will be determined using a matrix approach combining a function of the sensitivity of receptors and the magnitude of change. The assessment matrix incorporates information about the importance / sensitivity of the receptor, the magnitude of impact, the duration / persistence of the impact and the likelihood of the impact occurring. The criteria that will be used to categorise sensitivity of the receptor and magnitude impact characteristics will be set out in the Transport and Access chapter of the ES.
- 7.22 Mitigation measures to reduce the level of any anticipated significant adverse impacts will be described, where necessary.

Summary

- 7.23 The site is expected to result in a reasonable increase in traffic volumes along Manchester Road, which will reduce in magnitude as the traffic disperses onto the surrounding network. The largest effects will therefore be in the vicinity of the site access locations and adjoining road links, which is likely to be accompanied by infrastructure improvements directly related to the site to facilitate connectivity to the surrounding area.
- 7.24 Any additional mitigation required as a result of the assessment will be considered as part of a package of improvements to address impacts identified.
- 7.25 Table 7.1 contains a summary of the likely significant effects of the proposed development on Transport and Access.

Table 7.1: Transport Effects

Receptor	Effects	Scoped In?
Residential properties	Secondary traffic effects in terms of Air quality and noise (assessed in detail in Air Quality and Noise ES Chapters)	✓
Pedestrians and cyclists	Severance	✓
	Pedestrian delay and amenity	✓
Vehicles (private cars and buses)	Driver delay	✓
	Accidents and safety	✓

8 AIR QUALITY

Introduction

- 8.1 An assessment will be undertaken of the likely significant effects of the proposed development on the environment in respect of local air quality, including dust. This will consider both the potential impacts of existing sources of pollution on the proposed development as well as the potential impact of the proposed development on existing local air quality.

Baseline Conditions

- 8.2 Following a review of local air quality, it is noted that the site is partially located within the Greater Manchester Combined Authority Air Quality Management Area (AQMA), declared for exceedances of annual mean nitrogen dioxide (NO₂) objective. Baseline air quality data has been obtained from monitoring sites maintained by RBC and from the local air quality management (LAQM) Support website operated by Defra (<http://laqm.defra.gov.uk>).
- 8.3 According to the Greater Manchester Combined Authority Air Quality Annual Status Report for 2021 (published in June 2022), there was 1 automatic station (monitoring NO₂, particulate matter (PM₁₀ and PM_{2.5})) and 27 diffusion tube sites operational in RBC in 2021. The annual average NO₂ concentrations for 2020 and 2021 at monitoring locations within 1km of the site are presented in Table 1.1. None of these diffusion tubes breached the annual mean objective in 2020 or 2021.

Table 1.1: Annual Average Measured NO₂ Concentrations (µg/m³) at Monitoring Sites Within 1km to the site

Diffusion Tube ID	Site Name	Site Type	Approx. Distance to site (km)	Annual Average NO ₂ (µg/m ³) 2020	Annual Average NO ₂ (µg/m ³) 2021
RO2ANO	2	Urban Background	0.25	21.7	-
RO3ANO	3	Urban Background	0.35	16.0	16.4
Annual Mean NO ₂ objective				40	

- 8.4 Estimated background air quality data is also available from the LAQM website operated by Defra. The Defra LAQM website provides estimated annual average background concentrations of NO₂, PM₁₀ and PM_{2.5} on a 1km² grid basis.
- 8.5 Table 1.2 presents the estimated annual average background NO₂, PM₁₀ and PM_{2.5}

concentrations at the site for 2022. The estimated background concentrations at the site are below the relevant air quality objectives.

Table 1.2: LAQM Estimated Annual Average NO₂, PM₁₀ and PM_{2.5} Concentrations at the site for 2022

Assessment Year	Estimated Annual Average Pollutant Concentration (µg/m ³)		
	NO ₂	PM ₁₀	PM _{2.5}
2022	18.02	12.48	7.98
Air quality objective	40	40	25

Note: Presented concentrations for 1km² grid centred on 389500, 409500; approximate centre of the site is 389158, 409362.

Approach

8.6 The assessment will include the following:

- Consultation with RBC regarding the proposed assessment methodology;
- Review of relevant local air quality monitoring data and Defra's background pollutant maps;
- Qualitative assessment of the potential impacts during construction using the approach provided in the IAQM guidance;
- Detailed air quality dispersion modelling assessment of emissions from the traffic associated with the proposed development to identify the impact on existing receptors;
- Detailed air quality dispersion modelling of air quality within the site to identify whether air quality for future residents is suitable; and
- The cumulative effects with other developments in the area will also be assessed, during both construction and operation.

8.7 During construction, air quality impacts are likely to be local to the site and will be temporary in nature (i.e. during the construction phases only). A qualitative study will be undertaken with reference to the '*Guidance on the assessment of dust from demolition and construction*' (Institute of Air Quality Management, 2014) to assess potential construction phase dust impacts on amenity and particulate matter impacts on human health. The aim of the risk assessment of the construction impacts on dust and particulate matter (PM₁₀) concentrations is to identify appropriate mitigation measures to be included in a CEMP.

8.8 The operational phase air quality impact assessment will predict concentrations of NO₂ and particulate matter (PM₁₀ and PM_{2.5}) as these are the pollutants of concern from road traffic. The assessment will be carried out with reference to the latest Environmental Protection UK (EPUK)-Institute of Air Quality Management (IAQM) guidance '*Land-Use Planning & Development Control: Planning for Air Quality*', and Defra '*Local Air Quality Management*

Technical Guidance (TG16)'.

- 8.9 An advanced air dispersion model, ADMS Roads, will be used to model the dispersion of emissions from additional road traffic generated by the proposed development. The modelling of the traffic emissions will be undertaken for three different scenarios, as follows:
- Baseline year (for model verification purpose);
 - Opening year without the proposed development; and
 - Opening year with the proposed development.
- 8.10 The modelling exercise will utilise Annual Average Daily Traffic (AADT) flows for all affected roads from the TA produced for the proposed development. Sensitive receptor locations will be included in the dispersion modelling assessment. A selection of receptors will be chosen to include existing residential and other sensitive receptors near to junctions likely to experience the greatest changes in traffic flows. The model will predict the annual mean pollutant concentrations for comparison with the relevant UK air quality objectives and the results will be verified using monitoring data, where possible. Operational phase mitigation will be proposed where required.

Summary

- 8.11 Table 8.1 contains a summary of the likely significant effects of the proposed development that will be considered within the Air Quality ES Chapter.

Table 8.1: Air Quality Effects

Receptor	Effects	Scoped In?
Existing residential receptors	Potential exposure to increased pollution levels during both construction and operation of the proposed development.	✓
Future residents and users of the proposed development	Potential exposure to increased pollution levels during both construction (due to phasing) and operation of the proposed development.	✓

9 NOISE AND VIBRATION

Introduction

- 9.1 The scope of the noise chapter will cover the noise impact of the proposed development primarily on existing noise-sensitive receptors in the area. This will include an assessment of the construction and operational phases. The latter will comprise a comparative study to investigate any likely increases in traffic noise on the local highway network as a result of traffic generated by the proposed development. Thus, the study area will include the site itself and extending outwards to residential areas adjacent to a sample of roads in the wider area, the extent/details of which will be informed by the transport consultants.
- 9.2 The impact of noise on the proposed development itself (i.e. from nearby roads and also the spine road through the proposed development) will also be fully assessed and will be described within a separate report that will form a technical appendix to the noise chapter.
- 9.3 Due to the nature of the proposed development, there are not expected to be any significant sources of vibration, neither is the site subject to any existing sources of vibration that could have amenity implications. It is therefore proposed to scope ground vibration out of the assessment. Nevertheless, standard best practice mitigation measures would be implemented during construction in accordance with the CEMP, to minimise potential temporary vibration from construction plant and activities.

Baseline

- 9.4 It is proposed that the existing noise environment will be quantified by carrying out a baseline noise survey.
- 9.5 A baseline noise monitoring survey will be undertaken over 24 hour weekday period (therefore including a night-time period) at one location on the site with attended daytime monitoring at a number of other sample locations at the nearest existing residential locations (e.g. along the western boundary of the site). The baseline noise monitoring will be undertaken in line with standard acoustic measurement practices and fully calibrated noise monitoring equipment will be used.
- 9.6 Based upon the results the baseline noise climate is influenced mainly by road traffic noise, as well as aircraft, birdsong, and agricultural activity.

Approach

- 9.7 Potential noise impacts associated with the proposed development include:
- Site preparation and construction works; and
 - Increase in traffic on surrounding road network.
- 9.8 The impact of road traffic noise on future residents of the proposed new dwellings on the proposed development will be evaluated taking into account guidance in BS 8233:2014 'Guidance on sound insulation and noise reduction for buildings' and will be included as an appendix.
- 9.9 The proposed development comprises up to 1500 new homes. The associated increase in road traffic noise on the local and wider road network is unlikely to be significant due to the busy nature of existing roads in the area and surrounding permitted developments. However, the noise impacts in terms of potential change in road traffic noise levels will be quantified as part of the ES chapter.
- 9.10 The following tasks will be undertaken as part of the noise assessment:
- Quantifying baseline noise conditions at appropriate locations on the site and at boundary or off-site locations representative of existing (and permitted) dwellings nearest to the proposed development;
 - Assessment of potential construction noise impacts;
 - Assessment of noise associated with potential changes in traffic flows during the operational phase of the proposed development; and
 - Assessing noise impact on the proposed development (e.g. from road traffic noise) to be included in an appendix of the ES.
- 9.11 At this stage of the proposed development, it is not possible, nor appropriate, to undertake detailed calculations of construction noise levels as the information is not available regarding construction timetabling, plant types and specific build techniques on which to base a detailed assessment. However, due to the type and location of the proposed development, proposed construction impacts are highly unlikely to present any significant planning constraints and can be adequately mitigated by standard construction practices/measures. A qualitative assessment will therefore be provided highlighting general requirements and best practice in terms of mitigation of construction noise based on the advice in BS5228-1:2009+A1:2014 'Code of Practice for noise and vibration control on construction and open sites – Part 1: Noise'. Reference will also be made to the ABC threshold approach in BS5228 taking into

account the results of the baseline noise survey. Following the outcome of the baseline survey and recommended threshold noise limits, suitable mitigation measures will be proposed to be included in CEMP.

- 9.12 For the operational phase, a traffic noise assessment will be provided in a comparative study, evaluating the impact of potential changes in traffic noise on a sample of roads in the area from traffic flow situations with and without development. Noise increases will be calculated in accordance with relevant guidance in the Department of Transport document 'Calculation of Road Traffic Noise' (1988) based on appropriate traffic flow data used in the TA and impacts based upon the IEMA noise impact assessment guidelines.
- 9.13 The results of the baseline survey and assessment of noise associated with the proposed development during the construction and operational phases will be reported in an ES chapter. Where appropriate, this will also include any outline recommendations for mitigation measures to address any predicted, significant adverse effects.
- 9.14 Where necessary appropriate noise mitigation measures will be recommended to adequately ameliorate noise impacts on the proposed development. The noise mitigation measures will take account of guidance in British Standard 8233:2014.
- 9.15 At this stage, during the operational phase, no noise mitigation measures are considered likely to be necessary for existing receptors on or near the existing highway network, but this will be reviewed as part of the assessment.

Cumulative Effects

- 9.16 Cumulative effects will be considered for neighbouring permitted residential developments, if relevant.
- 9.17 Should the construction programmes of committed developments in the vicinity of the proposed development overlap, then there is the potential for significant cumulative construction noise effects at sensitive locations.
- 9.18 For the operational phase, cumulative noise effects will also be assessed in terms of potential traffic noise changes in the area taking into account relevant committed developments for which traffic data is available.

Summary

- 9.19 This section of the scoping report sets out the approach to the noise assessment of the proposed development on existing noise-sensitive receptors (dwellings) in the area. In particular, the assessment will consider the potential impact (and mitigation) of construction site noise and the impact of any additional traffic noise generated on the local highway network as a result of the completed development.
- 9.20 Reference will be made to relevant national planning guidelines, British Standards, and local planning policies.
- 9.21 A baseline noise monitoring survey will be undertaken to establish the prevailing noise climate of the area at relevant locations.
- 9.22 The assessment and mitigation of road traffic noise impact on the proposed development will be fully addressed in a separate technical report prepared by Hepworth Acoustics Ltd, which will include baseline noise survey data, and will be presented as a technical appendix to the Noise ES chapter.
- 9.23 Table 9.1 below contains a summary of the likely significant noise effects of the proposed development.

Table 9.1: Noise and Vibration Effects

Receptor	Effects	Scoped In?
Existing residential receptors and other sensitive receptors (where required)	Temporary noise and vibration effects during construction and need for control/mitigation measures.	✓
Existing noise sensitive receptors	Permanent noise effects of change in traffic flows associated with the proposed development.	✓
Proposed noise sensitive receptors - dwellings	Permanent noise effects from existing noise sources in the vicinity of the proposed development.	✓

10 CUMULATIVE EFFECTS

- 10.1 The ES will consider the potential for likely significant effects on the environment resulting from committed developments in the area. PPG¹⁵ identifies that:

"...There are occasions where other existing or approved development may be relevant in determining whether significant effects are likely as a consequence of a proposed development..."

- 10.2 Following a search of the planning register in August 2022, three committed schemes have been identified in the surrounding area of up to 2km from the site boundary. These are outlined in Table 10.1 below. The Applicant seeks confirmation from RBC as part of this Scoping request of any additional schemes that should be considered in the assessment of likely significant cumulative effects on the environment.

Table 10.1: Cumulative Schemes

Site and Planning Reference	Description of Development	Planning Status	Distance from the site
Stakehill Industrial Estate, Unit 61 Touchet Hall Road Middleton M24 2RW Planning Ref. 20/01439/FUL	Demolition of the existing industrial unit (Use Class B2/B8) and replacement with a new B2/B8 use facility, with ancillary office accommodation, service yards, vehicle parking and landscaping.	Granted subject to Conditions 23 February 2021	Approximately 750m south
Land At Hollin Lane Middleton Planning Ref. 15/01183/OUT 19/01183/REM	Outline application (including access) for up to 205 residential units (Use Class C3) with associated landscaping, open space, access arrangements and car parking (Resubmission of 14/00849/OUT) Submission of reserved matters (appearance, landscaping, layout and scale) for 90 dwellings pursuant to outline planning permission 15/01183/OUT (Phase 2).	Granted subject to Conditions 14 October 2016 Granted subject to Conditions 24 May 2021	Approximately 1.8km south west
Land Bound By Manchester Road, Hareshill Road And Pilsworth Road West Of Junction 19 Of The M62 Rochdale Planning Ref. 16/01399/HYBR	Part full/part outline planning application for the development of land at South Heywood, including the demolition of a number of existing on-site buildings and structures. Full consent sought for the construction of a new link road between Junction 19 of the M62 and Pilsworth Road, the widening of part of Pilsworth Road, together with associated junction	Granted Subject to Conditions 31 March 2020	Approximately 2km west

¹⁵ <https://www.gov.uk/guidance/environmental-impact-assessment>

Site and Planning Reference	Description of Development	Planning Status	Distance from the site
	improvements, landscaping, lighting and other works including the importation of material and engineering works in order to construct the link road. Outline consent (with all matters reserved for future approval except access) sought for a major mixed-use development comprising supporting residential uses comprising up to 1000 dwellings (Class C3); employment uses (Classes B2/B8) comprising up to 135,460m2 Gross Internal Area(GIA); a new primary school (Class D1); Class A1/A2/A3/A5 uses comprising up to 2500m2 GIA which includes no more than 499m2 of A1 uses; together with associated landscaping, open space and sports pitches, drainage, ecological enhancements, cycleway and footpath linkages, infrastructure and other works ancillary thereto.		

Consultation

10.3 The following statutory and other consultees will be consulted through the EIA process:

- National Highways;
- Environment Agency;
- Natural England;
- Historic England;
- RBC (various departments);
- Greater Manchester Council; and
- This will also include any other stakeholder that RBC nominates.

10.4 The feedback received through the consultation will be summarised in the ES and written up in full in the Statement of Community Involvement submitted in support of the planning application.

11 ENVIRONMENTAL STATEMENT STRUCTURE

11.1 The ES will contain two main volumes as set out in Table 11.1 below.

Table 11.1: Environmental Statement Structure

Volume 1: ES Main Text and Figures		
Chapter No.	Chapter Title	Description
1	Introduction	Introduction to the ES, EIA requirements, details of project team, ES organisation and availability.
2	EIA Methodology	Methods used to prepare each chapter, description of ES structure and content, generic significance criteria, scoping and consultation.
3	Site and Development Description	Site description and details of the proposed development.
4	Alternatives and Design Evolution	Outline of the main alternatives considered by the Applicant.
5	Construction Methodology and Phasing	Details of anticipated Phasing for development and construction methodology.
6	Landscape and Visual Effects	Effects of the proposed development on landscape and visual amenity.
7	Biodiversity	Assessment of the effects of the proposed development on biodiversity and ecology at the site.
8	Cultural Heritage	Assessment of the effects of the proposed development with respect to above ground built heritage receptors and below ground archaeological assets.
9	Transport and Access	Assessment of the effects of the proposed development on traffic on the local highway network and access.
10	Air Quality	Assessment of the effects of the proposed development relating to air quality.
11	Noise	Assessment of the effects of the proposed development on noise emissions.
12	Summary and Residual Effects	Summary of the residual and interactive effects of the proposed development.
Volume 2		
Technical Appendices		Technical data and reports to support the chapters in Volume 1.
Standalone Document		
Non-Technical Summary		Summary of the ES in non-technical language.

11.2 The first five chapters of the ES would be introductory and provide essential information for the subsequent technical chapters. Further information on these chapters is set out below.

Introduction

11.3 This chapter will provide background to the EIA, describe the structure of the ES, and identify the project team. It will be supported by an appendix setting out the professional qualifications and experience of the contributors to the ES to comply with the EIA Regulations'

requirement for “competent experts” to undertake EIA.

EIA Methodology

- 11.4 This chapter will set out the methodology used in the EIA, state the assumptions applicable to all disciplines, summarise the EIA Scoping process undertaken and summarise the public consultation process. Bespoke methodologies, limitations and assumptions will be contained in the technical chapters of the ES where required.
- 11.5 The significance of an environmental effect is determined by the interaction of magnitude and sensitivity, whereby the effects can be positive or negative. Generic criteria to be used in carrying out this process are detailed below. Some technical chapters will use discipline-specific criteria with their own terms for magnitude, sensitivity, and significance. This will be explained in the relevant chapter.

Prediction of Impact Magnitude

- 11.6 The methodology for determining the scale or magnitude of impact is set out in Table 11.2 below.

Table 11.2: Methodology for Assessing Magnitude

Magnitude of Impact	Criteria for assessing impact
Major	Total loss or major/substantial alteration to key elements/features of the baseline (pre-development) conditions such that the post development character/composition/attributes will be fundamentally changed.
Moderate	Loss or alteration to one or more key elements/features of the baseline conditions such that post development character/composition/attributes of the baseline will be materially changed.
Minor	A minor shift away from baseline conditions. Change arising from the loss/alteration will be discernible/detectable but not material. The underlying character/composition/attributes of the baseline condition will be similar to the pre-development circumstances/situation.
Negligible	Very little change from baseline conditions. Change barely distinguishable, approximating to a 'no change' situation.

- 11.7 The sensitivity of a receptor is based on the relative importance of the receptor using the scale set out in Table 11.3 below.

Table 11.3: Methodology for Determining Sensitivity

Sensitivity	Examples of Receptor
High	The receptor/resource has little ability to absorb change without fundamentally altering its present character, or is of international or national importance.
Moderate	The receptor/resource has moderate capacity to absorb change without significantly altering its present character, or is of high importance.

Sensitivity	Examples of Receptor
Low	The receptor/resource is tolerant of change without detriment to its character, is of low or local importance.

Assessment of Effect Significance

- 11.8 Effect significance will be calculated using the matrix in Table 11.4. This illustrates the interaction between impact magnitude and receptor sensitivity.

Table 11.4: Effect Significance Matrix

Magnitude	Sensitivity		
	High	Moderate	Low
Major	Major Adverse/Beneficial	Major - Moderate Adverse/Beneficial	Moderate - Minor Adverse/Beneficial
Moderate	Major - Moderate Adverse/Beneficial	Moderate – Minor Adverse/Beneficial	Minor Adverse/Beneficial
Minor	Moderate - Minor Adverse/Beneficial	Minor Adverse/Beneficial	Minor Adverse/Beneficial - Negligible
Negligible	Negligible	Negligible	Negligible

Site and Development Description

- 11.9 This chapter will describe the setting of the site and the existing conditions on the site, as well as explaining and setting out the proposed development. The parameter plans will be included as figures to the chapter.
- 11.10 This chapter will also outline the climate change mitigation and adaptation measures to be incorporated into the proposed development.

Alternatives

- 11.11 This chapter would describe the evolution of the proposed development based on environmental constraints. It will include a high level comparison of the environmental effects of any alternatives studied by the Applicant.

Construction Methodology and Phasing

- 11.12 This chapter will outline the anticipated construction programme, phasing and methodology and explain the assumptions made. This chapter will form the basis of the construction phase assumptions documented in each of the technical chapters of the ES.

Technical Assessments

11.13 Each ES chapter will follow the headings set out below to ensure the final document is transparent, consistent, and accessible.

- Introduction;
- Planning Policy Context;
- Assessment Methodology;
- Baseline Conditions;
- Likely Significant Effects;
- Mitigation Measures;
- Residual Effects;
- Cumulative Effects; and
- Summary.

11.14 Each chapter sub-heading is explained in further detail in Table 11.5 below.

Table 11.5: Technical Chapter Format and Content

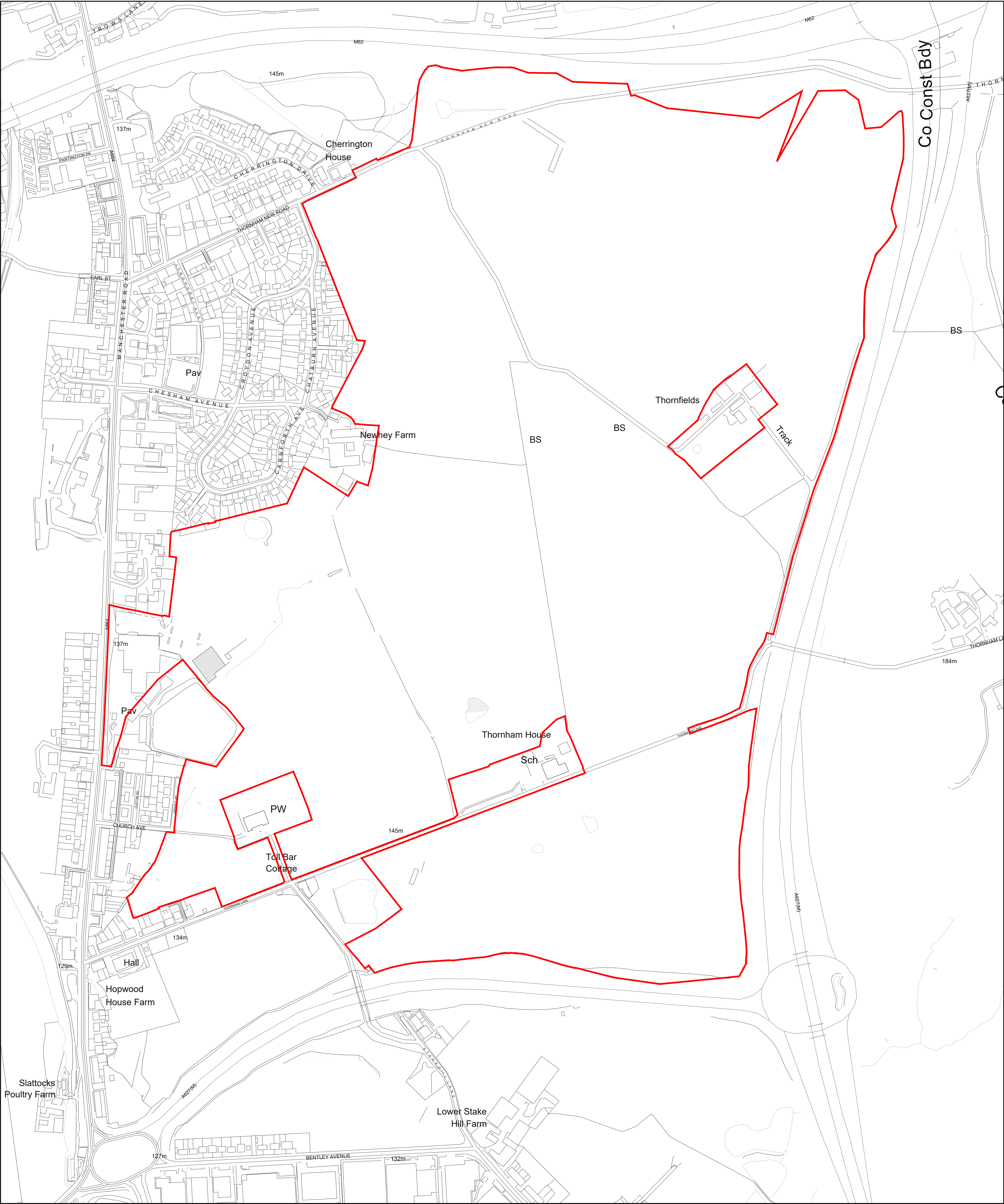
Sub-Heading	Content
Introduction	This section will introduce the assessment discipline and the purpose for which it is being undertaken.
Planning Policy Context	This section will include a summary of national, regional and local policies of relevance to the environmental discipline and assessment. Where applicable, relevant legislation will also be summarised.
Assessment Methodology	- This section will provide an explanation of methods used in undertaking the technical study with reference to published standards, guidelines and best practice. The application of significance criteria will also be discussed. - It will also outline any difficulties encountered in compiling the required information.
Baseline Conditions	This will include a description of the environment as it is currently (2022) and as it is expected to change given the project were not to proceed (i.e. 'do-nothing' scenario). The method used to obtain baseline information will be clearly identified. Baseline data will be collected in such a way that the importance of the particular subject area to be affected can be placed in its context and surroundings so that the effects of the proposed changes can be predicted.
Likely Significant Effects	This section will identify the likely significant effects on the environment resulting from the construction and operational phases of the proposed development.
Mitigation Measures	- Adverse effects will be considered for mitigation and specific mitigation measures put forward, where practicable. Mitigation measures considered may include modification of the project, compensation and the provision of alternative solutions (including alternative technology) as well as pollution control, where appropriate. - The extent of the mitigation measures and how these will be effective will be discussed. Where the effectiveness is uncertain or depends upon assumptions about operating procedures, data will be introduced to justify the acceptance of these assumptions. - Clear details of when and how the mitigation measures will be carried out will be given. When certainty of impact magnitude and/or effectiveness of mitigation over time exists, monitoring programmes will be proposed to enable

Sub-Heading	Content
	subsequent adjustment of mitigation measures, as necessary. • The opportunity for enhancement measures will also be considered, where appropriate. • Information will be included on the mechanism by which the mitigation will be secured (e.g. by planning condition) with outline arrangements for monitoring and responsibilities for doing so, where necessary.
Residual Effects	• The residual effects, i.e. the effects of the proposed development assuming implementation of proposed mitigation, will be determined. The residual effects represent the overall likely significant effect of the development on the environment having taken account of practicable/available mitigation measures.
Cumulative Effects	• The cumulative effects of the proposed development and the identified committed developments will be assessed.
Summary	• A summary of the assessment and conclusions will be provided at the end of each technical chapter.

Summary and Residual Effects

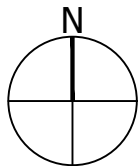
- 11.15 The residual effects of the proposed development will be summarised in one table at the end of the ES setting out the overall beneficial and adverse effects of the proposed development. This chapter will also set out any interactive effects that are likely to arise. These effects are defined as multiple effects on a single receptor. (e.g. noise and dust on a designated ecological site).

APPENDIX 1
SITE LOCATION PLAN



LEGEND

Site Boundary

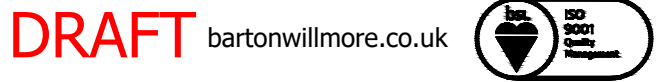


Project
Land at Stakehill
Rochdale
Drawing Title
Site Location Plan

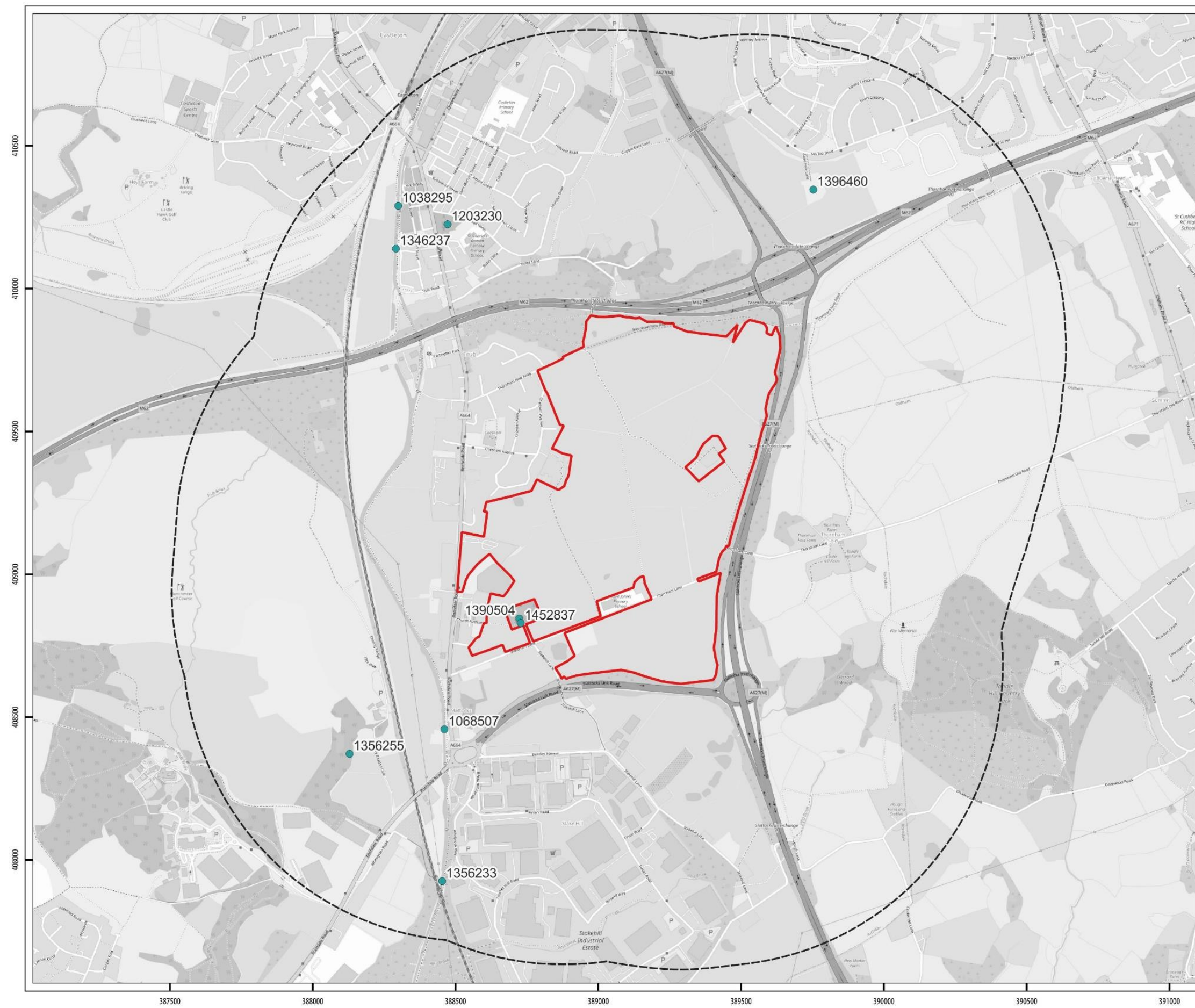
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19.08.22	1:2500@A1	SW	-
Project No	Drawing No		Revision
33961	DWG03		-



Town Planning • Master Planning & Urban Design • Architecture •
Landscape Planning & Design • Infrastructure & Environmental Planning •
Heritage • Graphic Communication •
Communications & Engagement • Development Economics

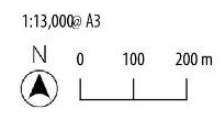


APPENDIX 2
LOCATION OF DESIGNATED ASSETS



Headland Archaeology North West
RSK Fourways House
57 Hilton St
Manchester M1 2EJ
t 0161 236 2757
www.headlandarchaeology.com

- Key
- Site boundary
 - Study area
 - Grade II listed building



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