

Blythe Vale, Phase 2
Environmental Impact Assessment (EIA)
Screening Report

May 2021

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Client

St Modwen Homes

Our reference

STMQ3056

May 2021

1. Introduction

- 1.1 Turley is acting on behalf of its client, St Modwen Homes (hereafter referred to as the 'Applicant'), who are preparing to submit an outline planning application for up to 230 dwellings.
- 1.2 The site of the application is approximately 11.4 hectares (ha) (hereafter referred to as the 'Site'), and currently consists of greenfield land with ponds and hedgerow/tree-lined field boundaries. The Site is bordered by agricultural land and farmhouses/buildings to the north and east; the A50 to the south; and Stone House Farm/Woodlands Lane to the west and is located in between the eastern edge of Blythe Marsh and Draycott in the Moors. The Site is defined by the red line on **Figure 1: Site Location Plan**.
- 1.3 This report has been prepared in order to obtain an EIA Screening Opinion from Staffordshire Moorlands District Council (SMDC) in accordance with Part 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017¹ (as amended), hereafter referred to as the EIA Regulations.
- 1.4 The Site forms part of the DSR 1² mixed use allocation at Blythe Bridge. Phase 1 of this allocation (immediately to the north west of the Site, defined by the blue line on **Figure 1**) is under construction and is considered in-combination with the Proposed Scheme in **Section 7**. Due to the uncertainties around the details of what the future phases will entail and their timescales, the future phases of the allocation are not considered further within this EIA Screening Report. The future phases will be subject to EIA Screening at the appropriate time and will consider the Proposed Scheme in-combination.
- 1.5 The Site shown in **Figure 1** includes a portion of land in the west corner of the Site, immediately adjacent to the Phase 1 boundary. There are currently uncertainties as to whether this land (and associated additional proposed dwellings) would form part of the Application, so to ensure the EIA Screening Report appraises a worst case, this land has been included for appraisal within this Report. Therefore, this EIA Screening Report has considered up to 230 dwellings, which is considered to be the maximum that would come forward on the Site shown on **Figure 1**.
- 1.6 In accordance with Regulation 6, Paragraph 2, this EIA Screening Report includes the following information:
 - A plan sufficient to identify the land (see **Figure 1: Site Location Plan**);
 - A description of the development, including in particular;

¹ Town and Country Planning (Environmental Impact Assessment) Regulations 2017. UK SI 2017 No. 571 (as amended).

² Staffordshire Moorlands District Council (2020). Staffordshire Moorlands Local Plan Adopted September 2020. Available at: https://www.staffsmoorlands.gov.uk/media/6155/Adopted-Local-Plan/pdf/Adopted_Local_Plan.pdf?m=1601645140880 [Accessed 04/05/2021].

- A high level description of the physical characteristics of the development, and where relevant, of demolition works (set out within **Section 2**);
- A description of the location of the development, with particular regard to the environmental sensitivity of geographical areas likely to be affected (see **Section 3**);
- A description of the aspects of the environment likely to be significantly affected by the development (set out within **Section 6**);
- To the extent the information is available, a description of any likely significant effects of the proposed development on the environment resulting from:
 - The expected residues and emissions and the production of waste, where relevant (see **Section 6**);
 - The use of natural resource, in particular soil, land, water and biodiversity (see **Section 6**); and
- Such other information or representations as the person making the request may wish to provide or make, including any features of the proposed development or any measures envisages to avoid or prevent what might have otherwise been significant adverse effects on the environment (see **Section 6** and **Appendix 1**).

1.7 Furthermore, this report has been prepared in line with Regulation 6, Paragraph 4 (including criteria set out in Schedule 3) and covered the following steps.

Identification of the characteristics of the Proposed Scheme (**Section 2**)



Identification of the characteristics of the Site and surrounds (**Section 3**)



Taking into account the characteristics of the Proposed Scheme and the Site and surrounds, identification of how Schedule 1 or 2 of the EIA Regulations applies (**Section 4**)



An explanation of how the Proposed Scheme has been appraised within this report and how this report sets out the consideration of likely environmental effects and in-combination effects (**Section 5**)



An appraisal of whether there would be any likely environmental effects, including the identification of any plain or easily achievable mitigation to avoid significant effects (**Section 6**)



An appraisal of whether there would be any likely in-combination effects (**Section 7**)

- 1.8 Where, through the appraisal of likely environmental effects, mitigation has been identified, this has been collated and set out within a Schedule of Mitigation in **Appendix 1**.
- 1.9 As such, the information provided within this report is considered sufficient to inform SMDC's EIA Screening Opinion, in accordance with Regulation 6, Paragraph 2.
- 1.10 In accordance with Regulation 6, Paragraph 6(a), SMDC has three weeks within which to provide an EIA Screening Opinion, from the date of receipt of this request.

2. Characteristics of the Proposed Scheme

- 2.1 All temporary and permanent works will take place within the red line boundary shown on **Figure 1: Site Location Plan**. This boundary shows the area within which planning permission will be sought.

Overview of Site Preparation and Construction

- 2.2 Access to the Site during construction will be via spine road being formed as part of the Phase 1 works, which will connect to the A521, and the existing temporary access off Woodlands Lane (permission will be sought to continue to use Woodlands Lane for construction access in the Construction Environmental Management Plan). The initial section of Woodlands Lane up to the existing temporary access (which forms a public right of way) is the section which will be used for temporary access by construction vehicles. Beyond this, Woodland Lane becomes a private road which will remain as such. Woodlands Lane will not be used to access the Site following completion of construction.
- 2.3 It is envisaged that temporary fencing/hoarding will be erected around the perimeter of the Site at the outset of construction.
- 2.4 No demolition is required as part of the Proposed Scheme.
- 2.5 Tree and hedgerow removal will be limited, with existing hedge lines and associated trees retained.
- 2.6 To obtain appropriate development plateau levels, there will be both areas where levels will reduce (areas of cut) and areas where levels will increase (areas of fill). A cut and fill exercise is ongoing and it is anticipated that a broad cut and fill balance will be achieved, with the requirement for some export of material off-site, though this is not anticipated to be a significant amount.
- 2.7 The Ground Investigation³ completed on Site concluded that no remediation is considered necessary for the Proposed Scheme. Site-won topsoil will be placed in all gardens and landscaped areas to provide a clean growing medium. During site preparation works, all topsoil will be stripped and stockpiled separately for re-use.
- 2.8 All existing on-site utilities and services have been identified and will not cross the Site. A new electric sub-station will be installed on Site, and link to the Phase 1 network. Gas, water and virgin and BT utilities will also be extended from the Phase 1 site.
- 2.9 Welfare facilities and other temporary infrastructure required (i.e. site compound, material laydown/storage etc.) will be set up at a designated location within the Site, as determined by the appointed contractor.

³ Georisk Management (2019). Geoenvironmental Assessment Phase 2 Blythe Bridge. Report No: 19068/1.

- 2.10 All construction activities will be in accordance with the Considerate Constructors Scheme. Construction working hours would be 08:00 to 18:00 Mondays to Fridays; 08:00 to 13:00 on Saturday; and it is anticipated that there will be no construction on Sundays or Bank Holidays. A Construction Environmental Management Plan (CEMP) will be prepared and agreed with SMDC; the detail of what this will contain is set out under **M1** in **Appendix 1**.

Development Principles

- 2.11 The Proposed Scheme is for up to 230 dwellings (Use Class C3).
- 2.12 Proposed residential building heights will be up to 10.5m from finished floor level⁴ to ridge (equivalent to up to 2.5 storeys).
- 2.13 Primary vehicular, pedestrian and cyclist access to the Site during operation will be from the A521 through Phase 1 of the site allocation which is under construction. The Proposed Scheme will feature new footpath trails which will connect to the existing Public Right of Way (PRoW Forsbrook CP 6) to the north of the Site (which will be partly re-routed in the Site).
- 2.14 Noise mitigation will include a 1:3 landscaped acoustic bund along the southern boundary of the Site, between the proposed residential development and A50. The barrier will comprise a 2m bund with a 1.8m close-board fence installed on top of this. Tree/hedge planting will be provided in from of the 1.8m high fencing (on the development side).
- 2.15 Landscape buffers of minimum 20m width to the north and 15m to the east are proposed, which include woodland planting. The buffer to the north will include sufficient space to accommodate belts of woodland planting and a diverted footpath route. Dwellings will be set back from the north eastern Site boundary. A variety of open space is proposed throughout the Site to provide amenity space for existing and new residents. A children's play area (Local Equipped Area for Play (LEAP)) is proposed within the landscaped open space in the southern part of the Site.
- 2.16 Boundary features will be retained and enhanced, maintaining and increasing connectivity for foraging/commuting bats and other wildlife.
- 2.17 An existing Great Crested Newts reserve area is located within the south-eastern corner of the Site. This will be enhanced to comprise two new breeding ponds, native woodland planting, scrub, hibernacula and managed long grass. A pathway / trim trail (to be flanked on either side by knee-rail fencing) will be provided through this area. The wider area of landscaped open space will also include ponds, scrub, hedgerows and meadow grassland. The additional habitats in the reserve will also create habitat for amphibians, reptiles, nesting birds, invertebrates, foraging and commuting bats.
- 2.18 The proposed drainage system will retain surface water runoff at greenfield rates at 1 in 1,30 and 100 year plus climate change storm events. Attenuation will be provided as part of the Proposed Scheme and the use of Sustainable Drainage Systems (SuDS) to

⁴ Assumed to be +/-1m in relation to existing.

manage surface water and control the rate at which it is discharged into the network. It is proposed that surface water will be discharged into the existing watercourse at the south east of the Site, which is culverted underneath the A50 and flows into the River Blythe. Foul water will discharge into the existing network.

- 2.19 All future lighting installations will be designed and installed in line with relevant standards and guidance⁵.

Timescales

- 2.20 Subject to gaining planning permission initial site works and construction is anticipated to commence in 2022. The Proposed Scheme will be fully operational in 2026.

⁵ CIE 150: 2017 – Guide on the Limitation of the Effects of Obtrusive Light from Outdoor Lighting Installations, 2nd Edition; ILP GN01 - Guidance Notes for the Reduction of Obtrusive Light 2020; BS 5489-1 : 2013 – Code of Practice for the Design of Road Lighting; BS EN 13201-2:2015 – Road Lighting – Part 2: Performance Requirements; BS EN 12464 – 2 2014 – Outdoor Work Spaces; SLL Guide to Limiting Obtrusive Light 2012; SLL Lighting Handbook 2009; LG 6 (CIBSE) – The Exterior Environment 2016; and ILP Guidance Note 08/18 Bats and Artificial Lighting in the UK.

3. Characteristics of the Site and Surrounding Area

3.1 Publically accessible information (i.e. national held environmental data sets) and the following draft application reports (which have been undertaken for the Application) have been used to inform this EIA Screening Report and the description of the Site and surrounding area:

- Geoenvironmental Assessment⁶;
- Acoustics Proposed Residential Development Report on Existing Noise Climate⁷;
- Written Scheme of Investigation for an Archaeological Evaluation⁸;
- Air Quality Assessment⁹;
- Ecological Appraisal¹⁰ (the 2018 Ecological Appraisal report has been referenced as the 2021 update report was still in progress at the time of drafting this EIA Screening Report. However, the project ecologist has provided a separate update regarding the changes in habitat from 2018. It has also been confirmed that there are no changes to the species present on Site since the 2018 report);
- Flood Risk Statement¹¹; and
- Landscape and Visual Appraisal¹².

Location and Setting

3.2 The Site is within the administrative area of SMDC and currently comprises approximately 11.4ha of greenfield land (as shown on **Figure 1**), and includes ponds and hedgerow/tree lined field boundaries. The Site is bordered by agricultural land and farmhouses/buildings to the north and east; the A50 to the south; and Stone House Farm/Woodlands Lane to the west.

⁶ Georisk Management (2019). Geoenvironmental Assessment Phase 2 Blythe Bridge. Report No: 19068/1.

⁷ Hoare Lea (2018). Blythe Vale Phase 2. Blythe Bridge, Staffordshire. St Modwen. Acoustics Proposed Residential Development Report on Existing Noise Climate Revision 0 – 05 December 2018.

⁸ Centre of Archaeology (2021). Land at Blythe Bridge Phase 2 Development, Staffordshire. Written Scheme of Investigation for an Archaeological Evaluation. Project Number 21-01.

⁹ SLR (2021). Phase 2, Land at Blythe Vale, Blythe Bridge. Proposed Residential Development Air Quality Assessment. SLR Ref: 410.09095.00005.

¹⁰ Fpcr (2018). Blythe Bridge, Staffordshire Moorlands. Ecological Appraisal.

¹¹ Baynham Meikle Partnership Ltd (2021). Land East of A50 Blythe Bridge Phase 2. Flood Risk Statement. Project Ref: 13051.

¹² Fpcr (2021). Blythe Vale, Blythe Bridge Phase 2 Landscape and Visual Appraisal.

- 3.3 In the wider context, the surrounding area comprises of further agricultural land to the north, east and south and the residential area of Blythe Bridge to the west.
- 3.4 Post 1998 Agricultural Land Classification data for the Site shows the land to be a mix of Grade 2, Grade 3a and Grade 3b agricultural land¹³, with approximately 75% of the land Grade 2 and 3a (considered Best and Most Versatile agricultural land).

Connection and Access

- 3.5 The road network surrounding the Site includes the A50 to the south, Woodlands Lane to the west, and Uttoxeter Road to the north. The Site can be accessed via Woodlands Lane to the west, which connects to Uttoxeter Road to the north.
- 3.6 The Forsbrook CP 6 PRow¹⁴ footpath runs along the northern boundary of the Site.
- 3.7 The closest train station to the Site is the Blythe Bridge train station, approximately 1.3km north west. This provides East Midlands Railway services west to Crewe and east to Derby. The closest bus stops to the Site are on Uttoxeter Road, approximately 0.4km north west of the Site. The 6A route stops at these bus stops, which provides services west to Hanley and to Blythe Bridge.

Local Air Quality, Lighting and Noise and Vibration

- 3.8 The Site is not located within an Air Quality Management Area (AQMA). The closest AQMA to the Site is the Stoke On Trent AQMA, approximately 2km west of the Site. This was declared in 2006, and amended in 2011, for exceedances of the annual mean and 1-hour annual mean nitrogen dioxide from road transport¹⁵. The main influence of air quality on Site is likely to be from the surrounding road network, particularly the A50 to the immediate south of the Site.
- 3.9 The noise environment on Site is influenced by the road traffic on the A50. Measurements undertaken in 2016¹⁶ showed that the derived mean daytime sound level was L_{Aeq} 69.8dB with a night time level of L_{Aeq} 68.1dB. Typical maximum levels at the measurement position from the survey during the night were in the range of L_{Amax} 74-78dB with just five events on each night in the range L_{Amax} 78-85dB. No other noise sources were noticeable on Site, other than the traffic noise.
- 3.10 Lighting on Site will also be influenced by the surrounding road network from headlights on vehicles. The extent of the A50 which borders the southern Site

¹³ Multi-Agency Geographic Information for the Countryside. Available at: <https://magic.defra.gov.uk/MagicMap.aspx> [Accessed 29/04/2021].

¹⁴ Map showing rights of way. Available at: <http://www.rowmaps.com/showmap.php?place=Blythe%20Bridge&map=BingOS&lat=52.9645&lon=2.06524&lonew=W> [Accessed 04/05/2021].

¹⁵ Defra (2011). AQMA Details. Available at: https://uk-air.defra.gov.uk/aqma/details?aqma_ref=126 [Accessed 04/05/2021].

¹⁶ The noise report by Hoare Lea considers this archive data will provide a more accurate assessment of traffic noise impact for the Site compared to the current site conditions which are likely to be affected by Government Covid 19 restrictions.

boundary does not have street lighting, though this is present slightly further to the west at the approach to the roundabout. Uttoxeter Road to the north is lit with street lighting. The Site is likely to be considered an E2 (*Areas of low ambient brightness, Other urban or rural residential areas*) lighting environmental zone, given the general absence of lighting on Site, and its location south east of Blythe Bridge and surrounding road network.

Biodiversity

Designated Sites

- 3.11 There are no European protected sites (Special Area of Conservation, Special Protection Area or Ramsar) within 10km of the Site.
- 3.12 The closest Site of Special Scientific Interest (SSSI) to the Site is the Hulme Quarry SSSI approximately 5.2km north west of the Site. Within 10km of the Site, there are a further five SSSIs (the Dimmings Dale & The Range SSSI approximately 8.4km north east; the Whiston Eaves SSSI approximately 8.6km north east; the Froghall Meadow and Pastures SSSI approximately 8.3km north east; the Wetley Moor SSSI approximately 7.9km north and the King's and Hargreaves Woods SSSI approximately 9.9km west).
- 3.13 The only National Nature Reserve (NNR) within 10km of the Site is the Hulme Quarry NNR approximately 5.2km north west of the Site. Within 5km of the Site there are three Local Nature Reserves (LNR). These are the Barlaston and Rough Close Common LNR approximately 3.8km west of the Site; the Coyney Woods LNR approximately 4.4km north west of the Site; and the Cecilly Brook LNR approximately 4.9km east of the Site.
- 3.14 There are no non-statutory designated sites recoded within 1km of the Site boundary.

Habitats

- 3.15 The Site comprises several field compartments, largely dominated by semi-improved grassland which varies in management and species diversity. Fields are bound by native species hedgerows. Other habitats within the Site comprise ruderal vegetation, scattered and dense scrub and trees (semi-mature to mature), as well as five waterbodies (ponds).
- 3.16 Habitats within the Site are of variable nature conservation value, with moderately diverse semi-improved grasslands, outgrown hedgerows and mature trees on Site of greater value.
- 3.17 No non-native invasive weeds have been recorded within the Site.

Protected / Notable Species

- 3.18 There is no evidence of bats roosting on Site, with trees on Site considered as having low-moderate potential to support roosting bats. Common and widespread species of bats use the Site for foraging and commuting, including common pipistrelle and small numbers of noctule and *Myotis* species.

- 3.19 A small number of bird species have been recorded on Site, including great tit, chaffinch, goldfinch, dunnoek and mistle thrush. The grassland and hedgerows on Site are likely to be of value to feeding birds, and the Site offers opportunities for nesting birds within the scrub and outgrown hedgerows.
- 3.20 A small population of great crested newts has been recorded on Site, given the presence of the five ponds on Site and additional eight points within 500m of the Site.
- 3.21 One badger record is located close to the site boundary but no evidence of badgers has been recorded on Site, however it is likely that the grassland provides potential foraging opportunities for badgers.
- 3.22 No reptiles have been recorded on Site, though it is considered that the areas of long grassland, hedgerows and waterbodies on Site are likely to provide habitat for reptiles.
- 3.23 No further evidence of, or potential for, protected and notable species has been recorded on Site.

Built Heritage and Archaeology

- 3.24 There are no World Heritage Sites within 10km of the Site. The closest listed building to the Site is the Grade II listed Stonehouse Cottage, approximately 200m north of the Site. Within 2km, there are a further 15 listed buildings. There are no Scheduled Monuments within 2km of the Site, with the closest being the Paynsley Hall moated site and outer enclosure, approximately 2.5km south east of the Site. The Site is not within a Conservation Area. The closest Conservation Area to the Site is the Caverswall Conservation Area approximately 2.6km north west of the Site.
- 3.25 There are no Registered Battlefields or Registered Parks and Gardens within 2km of the Site.
- 3.26 No archaeological investigations have been undertaken within the Site, though previous investigations have been undertaken on the Phase 1 site to the immediate north west. The Site is within an area identified for moderate to low potential for previously undiscovered archaeological remains due to the proximity of a Roman road (the current Uttoxeter road to the north of the Site). In the land to the north west of the Site (Phase 1 of the allocation), archaeological investigations did not identify any archaeological features, other than field drainage and ridge and furrow plough effects, land drains and a former fence line. These findings suggest the land remained as an open area, free from structures or development.
- 3.27 One artefact of archaeological significance (a perforated stone axe hammer, recorded in the Historic Environment Record (HER MST574, HEA 77774)) is known to have been recovered from within the Site, which is considered to have been derived from a casual loss rather than intense prehistoric activity. No Roman evidence has been recorded from within the Site, though in the wider area, the historic course of the Roman road between Little Chester, Rochester and Chesterton (HER MST1222, HEA 1061222) (the current Uttoxeter Road) is approximately 100m to the north of the Site. No Saxon, early-medieval, medieval, post-medieval and modern evidence has been recorded from within the Site.

Landscape and Visual

- 3.28 The closest Area of Outstanding Natural Beauty (AONB) to the Site is the Cannock Chase AONB approximately 16.6km south of the Site. The Site lies on the southern edge of National Character Area (NCA) 64: Potteries and Churnet Valley, which covers a large area of north Staffordshire and is a diverse and contrasting landscape of ridges, hills and intervening well-wooded valleys. The Site is close to the boundary of NCA 64 and NCA 68: Needwood and South Derbyshire Claylands, which is generally characterised as having rolling countryside, broadly divided by the River Dove and is a predominantly pastoral and wooded landscape with some towns and villages.
- 3.29 Visually, the Site is relatively well contained due to screening effects of vegetation, the existing urban fabric and local topography (the Site lies at around 170-180mAOD and gently slopes towards the A50, whilst localised higher ground occurs along the northern Site boundary). Views towards the Site (north of the A50) from the existing Blythe Bridge settlement are prevented by tree belts and the Phase 1 development (under construction). From Woodlands Lane, close range views of the western part of the Site are restricted by an established hedgerow along Woodland Lane. Views across the Site are available from PROW Forsbrook 6. Glimpsed views of the Site from the north are restricted to a few localised vantage points from Draycott in the Moors and wider landscape. The vegetation corridor along the A50 corridor largely screens the Site from the immediate landscape to the south and the south west which mainly consists of open farmland.

Ground Conditions and Contamination

- 3.30 The British Geological Survey¹⁷ characterises the bedrock geology below the Site as *Tarporley Siltstone Formation - Siltstone, Mudstone and Sandstone* in the south and *Chester Formation - Sandstone And Conglomerate, Interbedded and Chester Formation – Mudstone* in the north. Superficial deposits include a mix of *Till, Devensian – Diamicton* in the south and a small strip of *River Terrace Deposits, 1 - Sand and Gravel* in the north, with no deposits across the middle of the Site.
- 3.31 A ground investigation has been completed on Site, which did not identify any visual or olfactory evidence of significant contamination. All test results for contaminants of concern in soil were below the relevant thresholds for human health. No asbestos was detected in the samples surveyed.
- 3.32 No methane gas was recorded during the ground investigation, and carbon dioxide gas levels were steady state during the monitoring, ranging from 0.3 to 5.2 % by volume (v/v).

¹⁷ British Geological Survey. Geology of Britain Viewer. Available at: https://mapapps.bgs.ac.uk/geologyofbritain/home.html?&_ga=2.265263759.1474045328.1619700883-2039301012.1563273403 [Accessed 29/04/2021].

Flooding and Hydrology

- 3.33 The Site is within Flood Zone 1, so is at low risk of flooding¹⁸. The Site is largely at very low risk of surface water flooding¹⁹, with some localised patches of low – high risk of surface water flooding in the south of the Site.
- 3.34 It is anticipated that perched groundwater will be present in localised areas as the Site is considered to be generally of low permeability.
- 3.35 Rainfall is understood currently to naturally permeate into the ground and/or flows over ground to the ditch along the southern boundary during rainfall events.
- 3.36 Within the south east of the Site there are some ponds. The River Blythe is located approximately 500m to the south west of the Site. This flows through central Warwickshire, Solihull and Coleshill in North Warwickshire.

Community and Socio-Economics

- 3.37 The Site is located largely within the Forsbrook Ward²⁰, with a small extent of the eastern part of the Site within the Checkley Ward²¹. The Forsbrook Ward has a population of 5,095 (as of 2011). Of this population, 3,873 are aged 16 to 74, and 67.9% of people within this age group economically active. The Checkley Ward has a population of 5,729 (as of 2011). Of this population, 4,373 are aged 16 to 74, and 72.0% of people within this age group are economically active.
- 3.38 The Site is largely within the Staffordshire Moorlands 012D Lower Super Output Area²² (LSOA), which is amongst the 20% least deprived neighbourhoods in the country. The eastern part of the Site falls within the Staffordshire Moorlands 012B LSOA, which is amongst the 50% least deprived neighbourhoods in the country.

¹⁸ Flood map for planning. Available at: <https://flood-map-for-planning.service.gov.uk/confirm-location?easting=395613&northing=341140&placeOrPostcode=blythe%20bridge> [Accessed 05/05/2021].

¹⁹ Check your long term flood risk. Available at: <https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?easting=396957&northing=340608&map=SurfaceWater> [Accessed 05/05/2021].

²⁰ Nomis (2011). Forsbrook Ward (as of 2011). Available at: <https://www.nomisweb.co.uk/reports/localarea?compare=E05007056> [Accessed 05/05/2021].

²¹ Nomis (2011). Checkley Ward (as of 2011). Available at : <https://www.nomisweb.co.uk/reports/localarea?compare=E05007052> [Accessed 05/05/2021].

²² Indices of Deprivation (2019). Available at: http://dclgapps.communities.gov.uk/imd/iod_index.html [Accessed 05/05/2021].

4. Schedule of the Proposed Scheme

- 4.1 In line with the EIA Regulations, the Proposed Scheme has been appraised against the development descriptions contained within Schedule 1 and Schedule 2.
- 4.2 Based on the characteristics of the Proposed Scheme (**Section 2**), it is not considered that the Proposed Scheme would constitute Schedule 1 development.
- 4.3 As established in **Section 3**, the Site is not located within a 'Sensitive Area'²³, within the meaning of the EIA Regulations. The thresholds as set out within Schedule 2 should therefore be considered.
- 4.4 Following an appraisal against Schedule 2 of the EIA Regulations, the Proposed Scheme is considered to fall under Schedule 2 10(b) – *Urban development projects* as the Site area (approximately 11.4ha) exceeds the 5ha threshold under 10(b)(iii), and the quantum of housing (230 dwellings) exceeds the 150 dwelling threshold under 10(b)(ii).
- 4.5 As outlined within the EIA Regulations and Planning Practice Guidance, the exceedance of the threshold/criteria does not automatically determine that the Proposed Scheme is EIA Development, but rather that the *"proposal needs to be screened by the local planning authority to determine whether significant effects on the environment are likely and hence whether an Environmental Impact Assessment is required"*²⁴.
- 4.6 The selection criteria for Schedule 2 development are detailed within Schedule 3 of the EIA Regulations and are as follows:
- Characteristics of development;
 - Location of development; and
 - Types and characteristics of the potential impact.
- 4.7 The characteristics of the Proposed Scheme were set out in **Section 2** and the location of the Site in **Section 3**. The following sections consider the types and characteristics of the potential impact, termed as an appraisal of likely environmental effects.

²³ Sites of Special Scientific Interest and European sites; National Parks, the Broads and Areas of Outstanding Natural Beauty; and World Heritage Sites and scheduled monuments.

²⁴ Planning Practice Guidance Paragraph: 017 Reference ID: 4-017-20170728.

5. Approach

Appraisal of Likely Environmental Effects

5.1 The appraisal of likely environmental effects, set out within **Section 6**, has been based on baseline information presented within **Section 3** and has considered likely environmental effects arising from the Proposed Scheme, as detailed within **Section 2**. The appraisal has focused on environmental effects and whether any of these are considered ‘likely’ and ‘significant’ at receptors, with consideration to the following factors in Regulation 4, Paragraph 2 of the EIA Regulations:

- Population and Human Health;
- Biodiversity;
- Land, soil, water, air and climate;
- Material assets, cultural heritage and the landscape; and
- The interactions between the above factors.

5.2 Regulation 6, Paragraph 2(e) allows for the discussion and identification of project specific measures to avoid and/or prevent significant adverse environment effects, specifically stating;

“A person making a request for a screening opinion in relation to development where an application for planning permission has been or is proposed to be submitted must provide the following—...

...(e) such other information or representations as the person making the request may wish to provide or make, including any features of the proposed development or any measures envisaged to avoid or prevent what might otherwise have been significant adverse effects on the environment”

5.3 As part of this appraisal, they have only been considered if they are specific, easily achievable and if there is a high degree of confidence in their effectiveness and implementation.

5.4 As such, as part of the review of likely environmental effects set out in **Section 6**, mitigation measures have been considered in order to understand environmental effects associated with the Proposed Scheme. Where mitigation has been identified at this stage, this has been clearly identified for the benefit of SMDC with the use of a reference system within the text (use of M1, M2, etc.) that links to the Schedule of Mitigation provided as **Appendix 1** that contains a summary of all mitigation.

5.5 There are three types of mitigation: primary, secondary and tertiary. These are defined in **Table 5.1**. All three of these types of mitigation have been considered in **Section 6** and the Schedule of Mitigation (**Appendix 1**).

Table 5.1: Mitigation Types

Mitigation Category	Definition of Mitigation
Primary Mitigation	Inherent mitigation, comprising fundamental aspects of the project design.
Secondary Mitigation	Foreseeable mitigation, requiring further input and assessment in order to achieve the desired outcome of the assessment.
Tertiary Mitigation	Inexorable mitigation, in that it would be compulsory regardless of Environmental Impact Assessment. There is a high degree of confidence in their effectiveness and implementation.

Appraisal of In-Combination Effects

- 5.6 In line with Schedule 3 of the EIA Regulations, the “*cumulation of the impact with the impact of other existing and/or approved development*” has also been taken into consideration and is set out in **Section 7**. At present, there is no widely accepted methodology or best practice for the assessment of cumulative effects (especially at the screening stage).
- 5.7 In order to determine the likelihood of possible in-combination effects, a qualitative appraisal has been undertaken. To identify ‘*existing and/or approved development*’ (hereafter referred to as ‘approved projects’) for consideration of in-combination effects with the Proposed Scheme, a review of the SMDC planning portal has been undertaken in order to identify projects in proximity to the Site, based on the following criterion:
- Permitted application(s) either under construction or not yet implemented;
 - Submitted applications(s) not yet determined but which have the potential to be determined prior to the determination of the application for the Proposed Scheme;
 - All refusals subject to appeal procedures not yet determined; and
 - The project being of a relevant scale: the threshold for consideration has been the Schedule 2 criteria in the EIA Regulations, at which there is a potential for ‘likely significant effects’, however, it is recognised that this needs to be applied with caution.
- 5.8 Projects identified, which met these criteria have been considered against the following points (where sufficient information allows):
- Is there or likely to be a concurrent construction or operational phase with the Proposed Scheme; and
 - Is there potential that the Proposed Scheme shares common sensitive receptors with the identified approved projects.

- 5.9 A high-level appraisal, taking into account the above approach, has been set out in **Section 7**. The appraisal has been undertaken on receptor category basis, where a possible in-combination effect may be likely. In order for there to be a potential in-combination effect, there needs to be more than one potential effect on the same receptor at the same time.

6. Appraisal of Likely Environmental Effects

- 6.1 Given the nature of the Site and the Proposed Scheme, a number of environmental effects are not considered to be significant due to an absence of receptors (**Section 3**) or source of effects (**Section 2**), as follows:

Construction

- **Loss of agricultural land:** As described in **Section 3**, post 1998 Agricultural Land Classification data for the Site shows the land to be a mix of Grade 2, Grade 3a and Grade 3b agricultural land. Land of Grade 3a and above is considered to be Best and Most Versatile agricultural land. Construction of the Proposed Scheme would result in the loss of agricultural land on Site. However, the quantum of any BMV land (only the Grade 2 and Grade 3a land on Site) to be lost would be below the 20 hectare threshold (given the whole site is approximately 11.4ha) whereby Defra recommend consultation with Natural England in its guidance on assessing development proposals on agricultural land²⁵. It is also assumed a Soil Management Plan will be in place (which will be managed as part of the CEMP [M1]) to ensure the reuse of soil on Site. Therefore, the loss of agricultural land is not considered to be significant.
- **Impacts to designated ecological sites:** The closest statutory designated site to the Site is the Barlaston and Rough Close Common approximately 3.8km west of the Site. This is sufficiently distanced and separated from the Site that any potential contaminated runoff / pollution generated during construction would not impact the designated site. The Air Quality Assessment prepared for the Application also confirms there are no designated sites within the 50m of the Site / any road to witness construction phase road traffic movements which could potentially be affected by construction dust. Therefore, impacts to designated ecological sites during construction are not considered to be significant.
- **Spread of non-native invasive plant species:** No non-native invasive plant species have been recorded on Site. Should any invasive species be identified on Site during construction, these will be suitably contained and removed. This will be controlled by the CEMP [M1]. Therefore the spread of non-native invasive plant species is not considered to be significant.
- **Direct loss and/or damage to designated above ground heritage assets and change to/loss of setting of built heritage assets:** As described in **Section 3**, the closest designated heritage asset to the Site is the Grade II listed Stonehouse Cottage, approximately 200m north of the Site. This is sufficiently distant and separated (by the A521 and properties on Woodlands Lane), that direct loss or

²⁵ Defra (2018). Guide to assessing development proposals on agricultural land, [online]. Available at: <https://www.gov.uk/government/publications/agricultural-land-assess-proposals-for-development/guide-to-assessing-development-proposals-on-agricultural-land> [Accessed 29/04/2021].

damage / a change in setting as a result of construction activities are unlikely. Furthermore, hoarding will be erected around the Site at the outset of construction which would visually screen construction activities [M1]. Therefore, effects to built heritage assets during construction are not significant.

- Exposure to / migration of on Site hazardous materials (specifically asbestos, radon) and historic contamination:** The Site has not historically been developed. As identified in **Section 3**, evidence of significant contamination has not been identified on Site, with all test results for contaminants of concern in soil below the relevant thresholds for human health. No asbestos was detected in the samples surveyed. As such, the Geoenvironmental Assessment (to be submitted with the Application) concluded that remediation was not considered necessary. Site-won topsoil will be placed in all gardens and landscaped areas to provide a clean growing medium. During site preparation works, all topsoil will be stripped and stockpiles separately for re-use [M1]. Furthermore, the principal contractor, will be required to identify appropriate safe working standards and methodologies taking account of Construction Design and Management Regulations (CDM) (2015) and Control of Asbestos Regulations 2012 and CIRIA C741 (2015) Environmental Good Practice on Site Guide and C670 (2008) Site Health Handbook, all of which will be included/managed as part of the CEMP [M1]. Should any unforeseen contamination be encountered during construction and remediation is required, such works would be carried out as part of the enabling works in line with standard industry practices [M1]. Therefore, exposure to / migration of on Site hazardous materials and historic contamination is not considered to be significant.
- Changes to economic productivity and creation of additional jobs:** During construction the appointed contractor is unlikely to need to take on significant additional staff in order to complete the works, nor will the activities result in a noticeable induced effect on the local community. Therefore, changes to economic productivity and creation of additional jobs is not considered to be significant.
- Generation of waste:** During construction, regrading will be required to achieve development platforms. As outlined in **Section 2**, a cut and fill exercise is ongoing, and a broad cut and fill balance is expected to be achieved on Site, with the requirement for some export of material off Site, though this is not considered to be significant. There is no demolition required as part of the construction of the Proposed Scheme. It is assumed that the appointed contractor will manage construction related waste in line with The Waste (England and Wales) Regulations 2011 and adoption of practices to minimise waste that will be documented in the CEMP [M1]. Therefore, the generation of waste during the construction phase is considered unlikely to be significant.

Operation

- Impacts to designated ecological sites:** There are no statutory designated sites of international or national nature conservation value within 5km and 2km of the Site respectively. In addition there are no non-statutory designated Sites within

1km of the Site. Therefore, there are no likely significant effects to designated ecological sites anticipated during the operational phase.

- **Change to / loss of setting to built heritage assets:** The Proposed Scheme will change the use of the Site from open fields to residential use with built form. As described in **Section 3**, the closest built heritage asset to the Site is the Grade II listed Stonehouse Cottage, approximately 200m north of the Site, with the next closest approximately 0.9km north west. The built heritage assets within 2km are separated from the Site by the surrounding road network and other built form and, as such, it is considered unlikely that the Proposed Scheme would change the setting of these assets. In addition, as described in **Section 2**, a landscape buffer of a minimum 20m width is proposed in the north of the Site [M2]. This would further visually screen the built form on Site from the Stonehouse Cottage Grade II listed building approximated 200m north of the Site. Overall, the change to / loss of setting to built heritage assets is not considered to be significant.
- **Changes to existing daylight and sunlight hours and levels of shadowing and wind microclimate:** The Proposed Scheme comprises residential dwellings that do not result in significant massing so as to materially change the existing microclimate experience by existing surrounding receptors and that of future users of the Proposed Scheme. As such, effects relating to microclimate are not considered to be significant.
- **Changes to local noise environment as a result of noise generated by proposed on Site uses:** The Proposed Scheme is for residential use. Considering this use, and the scale of the Proposed Scheme (up to 230 dwellings), there is not anticipated to be a significant increase in noise on Site from the uses proposed.
- **Creation of additional jobs:** The Proposed Scheme is for residential use only. This is not an employment generating use and as such, the operation of the Proposed Scheme would not result in the generation of significant employment.
- **Expenditure by new residents in the local economy:** New residents of the Proposed Scheme will spend in the local economy, however given the number of dwellings proposed (up to 230 dwellings), this is not likely to result in a significant noticeable effect in the local economy. In addition, not all residents will be new to the area, with some likely to be a displacement from the existing local community. Therefore, expenditure by new residents is not considered to be significant.
- **Changes to access to open space:** As part of the Proposed Scheme, landscaping is to be provided, including a diverted footpath route that connects to the existing PRoW (Forsbrook CP 6) to the north of the Site [M2]. As described in **Section 2**, a variety of open space is proposed throughout the Site to provide amenity space for existing and new residents. A children's play area (LEAP) is proposed within the landscaped open space in the southern part of the Site. Whilst this is beneficial, it is not considered to be a significant change to access to open space considering the scale of the Proposed Scheme.

- **Increase in demand on public transport:** Initial analysis of the Proposed Scheme and Journey to Work Census data has shown that existing public transport usage by those in the local area is very low. The Proposed Scheme is anticipated to generate approximately 12 additional trips on trains and 25 on buses, which equates to 3% of the trips to be generated by the Proposed Scheme. Therefore, the increase in demand on public transport is not considered to be significant.

6.2 Where a receptor and effect has been identified, an appraisal of likely environmental effects is provided within **Table 6.1**. The appraisal has focussed on possible effects during the construction and operational phases of the Proposed Scheme. Where possible, conclusions have been made as to whether the likely environmental effects are significant.

Table 6.1: Appraisal of Likely Environmental Effects

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
Construction Phase		
Disturbance associated with noise, vibration, light spill / glare, dust and particulate matter generated by temporary on-site construction activities and construction traffic	Local community	<p>The local community, comprising nearby residents, educational and commercial properties and members of the public using public areas (i.e. footpaths) may experience temporary nuisance/disturbance throughout the construction of the Proposed Scheme, as a result of noise, vibration, light spill/glare, dust and particulate matter from machinery, plant or general construction activities, as well as during the limited demolition to be undertaken on Site.</p> <p>The tolerance and sensitivity of the receptors is considered to be varied, with transient receptors considered to have a lower sensitivity than residential, educational and commercial properties, which are considered to be of higher sensitivity. Nevertheless, all effects are considered temporary and reversible.</p> <p>In addition, the identified effects are well understood and measures to avoid, reduce or offset are well defined by best practice measures set out in relevant guidance, including (but not limited to):</p> <ul style="list-style-type: none"> • BS5228:2009 Code of practice for noise and vibration control on construction and open sites; • Control of Pollution Act 1974; • ILP Guidance Note 1 for the reduction of obtrusive light 2020; and • IAQM Guidance on the Assessment of Dust from Demolition and Construction. <p>The implementation of best practice measures (defined by an understanding of the construction activities/methodologies) during construction will be controlled via the implementation of a CEMP [M1] prepared by the principal contractor (when appointed) and submitted to SMDC for approval prior to the commencement of on-site construction activities.</p>

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
		As such, disturbance associated with noise, vibration, light spill/glare, dust and particulate matter generated by temporary on-site activities and construction traffic is not considered to be significant.
Loss / disturbance to below ground heritage assets and historic site features of interest	Below ground heritage assets	<p>As described in Section 3, there is some low potential for prehistoric archaeology and medium potential for Roman archaeology on Site. Construction of the Proposed Scheme, specifically ground disturbance during earthworks and establishing foundations and installation of new services, would result in the damage and loss of any archaeological remains.</p> <p>The Written Scheme of Investigation for an Archaeological Evaluation states that archaeological evaluation trenches [M3] are required in order to determine the character, extent, date, state of preservation and potential significance of any buried remains. This will be agreed with the County Archaeologist for Staffordshire. At this time, it is anticipated mitigation will include preservation by record [M3].</p>
Change to / loss of valuable / notable habitat within the Site and impacts on protected / notable species	On site habitat Protected / notable species	<p>Construction of the Proposed Scheme will change the use of the Site from greenfield land to residential development. However, as described in Section 2, the boundary features (hedgerows and trees) which hold moderate to high nature conservation value will be retained. During the construction works, trees within the Site will be protected from damage and soil compaction during works by maintaining fenced Root Protection Areas (RPAs) [M1].</p> <p>With regards to bats, adverse effects are not anticipated following mitigation measures, which will be documented in the 2021 update to the Ecological Appraisal being prepared for the Application. These will include the avoidance of lighting of habitat corridors hedgerows and biodiversity features to the east, in addition to new bat boxes located in retained trees [M10]. The retention and enhancement of boundary features will maintain and increase connectivity for bats and the proposed areas of woodland will increase opportunities for foraging and roosting [M10].</p> <p>There is a small breeding population of Great Crested Newts on Site. An existing Great Crested Newt reserve area is located within the south-eastern corner of the Site. This will be enhanced to comprise two new breeding ponds, native woodland planting, scrub, hibernacula and managed</p>

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
		<p>long grass [M10]. The mitigation proposed for the Great Crested Newts will be controlled by the Great Crested Newts Mitigation Strategy. The proposed works will be completed under a Natural England European Protected Species (EPS) Licence [M10].</p> <p>In the event that any removal of woody vegetation (including trees and scrub) is necessary, this will take place outside of the bird breeding season (March to August inclusive) to minimise the risk of disturbance to breeding birds. If this is not possible, such vegetation should be checked prior to removal by a suitably experienced ecologist [M1].</p> <p>As described in Section 3, one badger sett was recorded near to the Site. The Ecological Appraisal found that due to the isolated nature of the site, being bound by main roads, it is considered the land is not of high value for badgers and the loss of grassland is not considered to be significant.</p> <p>Although habitats on Site are suitable for reptiles, none have been recorded on Site. As such, the Ecological Appraisal does not consider reptiles to be a constraint to the Proposed Scheme.</p> <p>No further evidence of, or potential for, protected and notable species has been recorded on Site.</p> <p>Overall, the change to / loss of valuable / notable habitat within the Site and impacts on protected / notable species is not considered to be significant.</p>
Release of GHG emission through embodied carbon, construction activities / plant / machinery / traffic	Climatic system	<p>Construction of the Proposed Scheme has the potential to release GHG emissions from the use of plant and machinery, construction traffic and from the embodied carbon associated with the manufacturing of construction materials. The exact likely emissions from construction is unclear without full knowledge of materials, their origins and machinery/plant being used.</p> <p>The possible emissions can be mitigated through careful sourcing of construction materials to reduce associated GHG emissions as well as direct emission reducing practices on Site. Such measures will be detailed within the CEMP [M1], which will outline carbon reduction targets/practices to be adopted throughout this phase.</p>

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
		Overall, direct and indirect GHG emissions during construction are not clearly understood, though considering the scale of the Proposed Scheme and measures to be included in the CEMP, significant effects are considered unlikely.
Accidental release of contamination arising from construction activities	Soil / Waterbodies Construction workers Local community	<p>During the construction phase of the Proposed Scheme, there is a potential for spillages (such as oil, fuel, cement, chemicals etc.), soil erosion or the generation of suspended solids during construction activities (including excavations and plant/wheel washing).</p> <p>Such effects can be controlled through best practice measures, including (where applicable): bunded storage; designated wheel washing areas; settling basins; screening stockpiles of materials; dampening exposed soils as appropriate; and set out requirements for ongoing monitoring and liaison (with the local community, the Environment Agency and SMDC as appropriate). Such measures will be defined within a CEMP [M1] for submission and approval by SMDC in advance of construction activities commencing on Site.</p> <p>Therefore, considering the measures above, accidental migration / release of existing on-site contamination or contamination arising from construction activities is considered unlikely to be significant.</p>
Encountering unstable ground conditions	Construction workers	<p>All necessary groundworks will be implemented in order to provide suitable construction platform(s) (i.e. removal of any compressible/unstable ground encountered, appropriate foundation typology or shoring of ground) during enabling works and/or construction, in line with relevant standards and building regulations including CIRIA Report C572: Treated ground engineering properties and performance; British Research Establishment document FB75: Building on Fill – Geotechnical Aspects and BS 6031:2009: Code of Practice for Earthworks. The Geoenvironmental Assessment to be submitted with the Application documents the types of foundations that will be suitable for the Proposed Scheme (strip/trench fill foundations bearing onto competent Glacial Drift and/or Tarporley Siltstone Formation, with minimum founding depths to be adopted across different strata). These measures will be documented within the CEMP [M1]. As such, effects are not considered to be significant.</p>

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
Changes to visual amenity and landscape character as a result of construction activities / plant / machinery on-site and built form	Local community Landscape character	<p>During the construction phase, the Landscape and Visual Appraisal prepared for the Application found that short term effects upon the landscape would occur from clearance and set up of the compound area; building of new properties and roads; and construction traffic travelling to and from the Site. These effects were considered to be of a transient and temporary nature. Whilst there would be some disruption to the Site landscape character and its immediate surroundings, this would be localised and limited in extent. There would be an effect on the Site itself and the immediate context, through the Site is relatively well contained due to screening from vegetation, existing urban fabric and topography.</p> <p>In addition, residents in close proximity of the Site may be subject to some disruption from construction vehicles, machinery, site compounds and earthworks. However as above, this would be short term, and would be limited to the properties in the vicinity of the Site such as those on Woodlands Lane, the detached property at Marsh House, properties on Uttoxeter Road and the residents of Woodlands Farm. The users of PRoW Forsbrook 6 would be affected by the construction works in the short term (and limited to a relatively short extent of the footpath). Views of the construction work would also be visible from a short stretch of the A50, though this would be filtered by existing vegetation.</p> <p>The Landscape and Visual Appraisal concludes that the Proposed Scheme would not result in any long term major landscape or visual effects, and the predicted adverse effects identified would not be significant.</p>
Changes to traffic flows on the local road network as a result of construction related traffic	Local community	<p>The construction phase of the Proposed Scheme will result in additional vehicular movements on the local road network as a result of movement of plant/machinery, workers (including subcontractors) and deliveries/collections.</p> <p>In order to reduce adverse impacts associated with the construction traffic, the CEMP will include traffic management measures [M1] and will be prepared in line with best practice guidelines. Specifically the CEMP should set out the following:</p>

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
		<ul style="list-style-type: none"> • Management and proposed routing of construction related traffic, including details of HGV booking/management systems; • Delivery of large oversized plant/machinery to the Site should take place outside of peak highway hours (where possible); and • Vehicular parking, within the Site. <p>As such, with the adoption of identified best practice measures, effects are considered unlikely to be significant.</p>
Operational Phase		
Exposure of new residents to existing poor air quality	Residents of the Proposed Scheme	<p>As described in Section 3, the Site is located approximately 2km to the east of the Stoke AQMA. The Stoke AQMA centres on the A50, a section of which (outside the AQMA) also runs adjacent to the Site. Local air quality monitoring in the immediate area undertaken by SMDC measures pollutant concentrations below the relevant Air Quality Objective (AQO). Monitoring location DT5 (Chestnut Close) monitored a 2018 annual mean NO₂ concentration of 24.7µg/m³. However, local monitoring undertaken by Stoke on Trent City Council (SOTCC) along the A50 predicts exceedances of the relevant AQO with a 2018 maximum annual mean concentration 44µg/m³ at SOTCC monitoring location DT74.</p> <p>A Site suitability assessment is currently being undertaken to quantify annual mean NO₂, PM₁₀ and PM_{2.5} concentrations at proposed dwellings / locations of relevant exposure, for assessment against the annual mean AQALs (Air Quality Assessment Levels). Initial findings show that the following mitigation will be implemented as part of the Proposed Scheme should exceedances be identified [M12]. This will either be:</p> <ul style="list-style-type: none"> • The layout would be amended to remove proposed dwellings / locations of relevant exposure from the predicted area of exceedance; or

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
		<ul style="list-style-type: none"> Appropriately located air intakes as part of a ventilation system to source ventilated air from a location where exceedances are not predicted to occur, or scrubbing units to reduce the concentrations of air pollutants from within the ventilated air. <p>Implementation of the above would result in a not significant effect.</p>
Changes in pollutant concentrations (NO _x , NO ₂ , and PM ₁₀) from exhaust emissions arising from traffic generated by the Proposed Scheme	Local community Stoke AQMA	<p>As a result of the additional trips associated with the 230 dwellings proposed there is the potential for elevated pollutant concentrations at existing residential dwellings in the local area and the Stoke AQMA. Initial traffic data provided by the transport consultants highlights a trip generation of 1,061 Annual Average Daily Traffic (AADT) as a result of the 230 residential dwellings proposed. This trip generation exceeds the EPUK & IAQM 'indicative criterion for assessment' (500 Light Duty Vehicle AADT on roads outside of an AQMA). As such, detailed modelling is required for pollutants NO₂, PM₁₀ and PM_{2.5}.</p> <p>As described in Section 2, the opening year is 2026. The Air Quality Assessment being prepared for the Application will utilise this opening year for both background concentrations and emission factors. It is generally accepted that variables such as background concentrations and / or vehicle emission factors will improve to some degree in future years as per national forecasts, with local monitoring trends somewhat supporting this as indicated by SMDC and SoTCC NO₂ monitoring datasets which indicate a general downward trend in monitored concentrations. When applying opening year background concentrations and emission factors means that lower marginal changes / lower absolute concentrations are likely to occur in future years which is likely to result in an impact which is not significant.</p> <p>Mitigation measures such as using sustainable transport and electric vehicle infrastructure [M11] will also have commensurate and beneficial impacts on air quality etc. and therefore help to ensure that the resultant impact is not significant.</p>
Impacts of climate change	The Proposed Scheme	<p>The impacts of a changing climate on the Proposed Scheme is largely dealt with by building regulations and appropriate design of the Proposed Scheme. The Proposed Scheme will accord with existing building regulations [M4], however, existing building regulations do not fully account for some future climate scenarios. As such, the future users may be subject to such</p>

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
		<p>impacts as building overheating. Such effects can be appropriately designed through consideration of existing building regulations alongside future climate conditions [M4]. The proposed landscaping should be designed in accordance with the England Biodiversity Strategy 2020 so as to increase Site biodiversity and include native species that are also tolerant to changing climatic conditions [M2]. Overall, effects are considered unlikely to be significant. In addition, the drainage systems [M5] will be designed to accommodate runoff arising from a 1 in 1,30 and 100 year plus climate change storm events. Therefore, effects are not considered to be significant.</p>
Release of GHG Emission	Climatic system	<p>During the operational phase, GHG emissions will be released as a result of energy used for heating and lighting etc., within the residential dwellings, as well as transportation. Residential dwellings are required to meet specific standards covered within Building Regulations (Part L1A) which is focused on the conservation of fuel and power in order to improve dwelling efficiency (and therefore require less energy and indirect GHG emissions) [M4]. As such, the Proposed Scheme will include dwellings built in line with such standards as a minimum in order to reduce the adverse effects associated with operational phase GHG emissions.</p> <p>The exact GHG emissions are not clearly understood, nor how these emissions would compare to that of regional and national budgets. However, the scale of the Proposed Scheme is relatively small in the context of regional development proposed and the measures outlined above will reduce GHG emissions in combination with the continued decarbonisation of the UK electricity distribution network through the national strategy for electricity reform and grid decarbonisation. As such, the release of GHG emissions is considered unlikely to be significant.</p>
Changes to local lighting environment due to operational lighting	Local community	<p>The Proposed Scheme will introduce lighting to the Site, associated with the dwellings and internal road networks. Although new lighting will alter the lighting environment on Site, the change is not considered to result in a change in lighting environment experienced by surrounding receptors, given the existing lighting present along the A50. In addition, it is</p>

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
		<p>considered that all future lighting installations will be designed and installed in line with relevant standards and guidance²⁶ [M6].</p> <p>Therefore changes to the lighting environment due to operational lighting is unlikely to be significant.</p>
Changes to visual amenity as a result of new built form	Local community	<p>During operation of the Proposed Scheme, the Site will have changed from open fields to residential development, changing views to the Site. This would change the way local residents experience characters of the views to the Site, which would include filtered views over the residential development set back within the Site behind landscape buffers. The greatest effect would be for residential properties adjacent to the Site, including on Woodlands Lane, Marsh House and Marsh Cottage Farm, Woodlands Farm and a limited number of properties on Uttoxeter Road. The landscape proposal (as outlined in Section 2) provides mitigation measures to reduce the visual impact by creating a landscape buffer along the A50 which includes attenuation features, buffer planting (a minimum of 20m along the northern boundary of the Site and 15m along the east) and retained landscape features [M2]. Furthermore, effects would reduce in the long term as planting as part of the Proposed Scheme matures.</p> <p>Regarding PRow Forsbrook 2, users will be visually affected by the changes of character as they walk towards and through the Site. Adverse effects will be limited to a relatively short stretch of the footpath. At the north of the Site, development will be set back behind the landscape buffer (as described in Section 2) which would filter and soften views, with effects reducing as planting matures.</p>

²⁶ CIE 150: 2017 – Guide on the Limitation of the Effects of Obtrusive Light from Outdoor Lighting Installations, 2nd Edition; ILP GN01 - Guidance Notes for the Reduction of Obtrusive Light 2020; BS 5489-1 : 2013 – Code of Practice for the Design of Road Lighting; BS EN 13201-2:2015 – Road Lighting – Part 2: Performance Requirements; BS EN 12464 – 2 2014 – Outdoor Work Spaces; SLL Guide to Limiting Obtrusive Light 2012; SLL Lighting Handbook 2009; LG 6 (CIBSE) – The Exterior Environment 2016; ILP Guidance Note 08/18 Bats and Artificial Lighting in the UK.

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
		The Landscape and Visual Appraisal prepared for the Application concludes that the Proposed Scheme would not result in any long term major visual effects, and the predicted adverse effects identified would not be significant.
Change to landscape character as a result of new built form	Landscape character	<p>During operation of the Proposed Scheme, the Site will have changed from open fields to residential development. The Landscape and Visual Appraisal prepared for the Application concluded that effects would be negligible on NCA64: Potteries and Churnet Valley as the Site forms a very small area of this large NCA. The Proposed Scheme includes a green infrastructure strategy to provide a robust landscape buffer along the northern boundary (as described in Section 2) [M2], with proposed built development set back behind the landscape buffers. This will assist in softening the built development and assimilating the Proposed Scheme into the surrounding landscape. This would improve overtime as new planting matures. The landscaping proposed will be managed by a Landscape Management Plan [M2] to ensure the establishment of the landscape proposals.</p> <p>The Landscape and Visual Appraisal concludes that the Proposed Scheme would not result in any long term major landscape effects, and the predicted adverse effects identified would not be significant.</p>
Risk of major accidents and disasters	The Proposed Scheme	The probability, frequency and likelihood of natural disasters arising from climatic occurrences (i.e. hurricanes) are considered to be very low due to the natural climatic conditions of the UK within the global climate system. There are no hazards for which the Health and Safety Executive needs to be consulted on within or surrounding the Site. All earthworks and foundation design will be in accordance with industry guidance presented in CIRIA Report C572: Treated ground engineering properties and performance; British Research Establishment document FB75: Building on Fill – Geotechnical Aspects and BS 6031:2009: Code of Practice for Earthworks [M1] , thereby negating the probability and likelihood of any significant effect. It is assumed that all buildings will be designed and constructed in line with fire preventative measures (i.e. fire doors, etc.) and all external façades and materials will meet the necessary fire resistance standards set

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
		out within Building Regulations Approved Document B ²⁷ and by law. Furthermore, prior to occupation of all buildings all necessary apparatus/instruments (i.e. smoke detectors/sprinklers) will be in place as required by law [M4] . As such, effects are unlikely to be significant.
Disturbance due to noise generated by existing off Site sources	The Proposed Scheme	<p>The Proposed Scheme will introduce a new residential population to the Site who will be sensitive to existing noise generated off Site, notably from the road traffic on the A50 immediately south of the Site.</p> <p>The Noise Assessment prepared for the Application found that internal maximum sound levels below L_{Amax} 45dB during night time would be achieved for all vehicle movements, with a reduction of 34dB from the building fabric for bedrooms overlooking the A50. Where screening measures are provided adjacent to the boundary with the A50 the noise risk will reduce and the sound reduction requirement for dwellings nearest the road be lower. The Proposed Scheme will include noise mitigation will include a 1:3 landscaped acoustic bund (barrier fencing of a minimum mass of 10kgm is being provided on garden boundaries of any plots which face the A50) along the southern boundary of the Site, between the proposed residential development and A50, setting back residential development from the A50 [M7]. In addition, glazing on bedrooms facing the A50 will ensure a minimum manufacturer's rating of R_w 35dB and be provided with propriety wall or window mounted trickle vents to achieve background ventilation in accordance with the Building Regulations [M7]. The Noise Assessment concluded that such screening measures would enable BS 8233 internal criteria to be achieved within rooms nearest to the road when windows are open.</p> <p>As such, disturbance due to noise generated by off-site sources is not considered to be significant.</p>
Changes to noise environment as a result	Local community	The Proposed Scheme will increase the number of vehicles accessing the Site due to the new residential population. Preliminary data from the traffic analysis has shown the percentage

²⁷ Ministry of Housing Communities and Local Government (2020). Fire safety: Approved Document B. Available at: <https://www.gov.uk/government/publications/fire-safety-approved-document-b> [Accessed 09/03/2021].

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
of traffic generated by the Proposed Scheme		<p>increase in traffic from the Proposed Scheme to range from 0.00% to 6.3% (when compared against 2021 (+committed development) as a base year). As a rule, a 25% or more change in traffic flows results in a perceptible increase (1dB) in noise levels²⁸. In addition, even at this level, a 1dB change would still be considered negligible.</p> <p>Given this, change to the noise environment as a result of traffic generated by the Proposed Scheme is not considered to be significant.</p>
Increased demand for education provision (early years, primary, secondary)	Local education infrastructure	<p>The Proposed Scheme will increase the population on Site (some of which will be new to the area and some as a result of displacement from the surrounding community). Nevertheless, the increase in population could increase demand on local education services, depending on the demographics of the residential properties, however this is considered to be limited given the number of dwellings proposed (up to 230 dwellings). Furthermore, any capacity issue of the local education facilities would be appropriately managed through a financial contribution to SMDC, if considered necessary, to help ease pressures on local education provisions in the local community [M8].</p> <p>As such, any increased demand for education provision is not considered to be significant.</p>
Increased demand for health care infrastructure (GPs, dentists, urgent care)	Local health care infrastructure	<p>As above, the increase in population could increase demand on local health care services, however this is not considered to be significant given the scale of the Proposed Scheme (up to 230 dwellings). Furthermore, any capacity issues would be appropriately managed through a financial contribution to SMDC, if considered necessary and in accordance with SMDC's guidelines, to help ease pressure on local health care provisions in the local community [M8].</p> <p>As such, increase demand for health care infrastructure is not considered to be significant.</p>
Crime levels and community safety	Future users of the Proposed Scheme	<p>The Proposed Scheme will be designed in line with appropriate national guidance and standards with respect to crime prevention and safety [M4]. Furthermore, the Proposed Scheme will be in 24hour use due to its residential nature, which will provide a level of security through active</p>

²⁸ Design Manual for Roads and Bridges, Volume 11 Environmental Assessment, Section 3 Environmental Assessment Techniques, Part 7 Noise and Vibration.

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
		surveillance. Therefore, the Proposed Scheme is not considered to result in a significant change to crime levels or decrease in community safety.
Changes to traffic flows on the local road network as a result of operational vehicles	Local community	<p>The Proposed Scheme will increase the number of vehicles accessing the Site due to the new residential population. An initial appraisal of the Proposed Scheme has demonstrated that 230 dwellings would generate a total of (arrivals and departures) 1061 movements daily. This would include 113 movements in the AM peak and 115 movements in the PM peak.</p> <p>It is understood that the surrounding junctions to be assessed in the Transport Assessment currently being prepared to support the forthcoming Application (Site Access/A521 Signalised Junction; A521/Uttoxeter Road Priority Junction; Uttoxeter Road Slip/Woodlands Road Priority Junction; Cheadle Road/Uttoxeter Road Crossroads; and A50/A521 Roundabout) operate with significant reserve capacity and as a result the Proposed Scheme is unlikely to result in a significant effect on these junctions.</p>
Increased demand / pressure on local waste facilities	Local waste facilities	<p>The residential dwellings proposed will generate waste during operation. Appropriate waste storage facilities will be provided and refuse collection will be in accordance with SMDC requirements. Such measures will be managed by an approved Waste Strategy [M9], in line with Controlled Waste (England and Wales) Regulations, 2012 and local guidance.</p> <p>Therefore, increased demand / pressure on local waste facilities are considered unlikely to be significant.</p>
Changes to surface water flows and increase in flooding / changes to groundwater recharge	<p>The Proposed Scheme</p> <p>Local community</p> <p>Waterbodies</p>	<p>The Proposed Scheme will lead to an increase in the impermeable area (from hardstanding associated with the dwellings and internal roads) across the Site, which is currently greenfield land. As described in Section 2, the proposed drainage system will retain surface water runoff at greenfield rates at 1 in 1,30 and 100 year plus climate change storm events. Attenuation will be provided as part of the Proposed Scheme and the use of SuDS to manage surface water and control the rate at which it is discharged into the network [M5]. It is proposed that surface water will be discharged into the existing watercourse at the south east of the Site, which is culverted underneath the A50 and flows into the River Blythe. The Flood Risk Statement prepared for the Application considers that groundwater flows underlying the Site will not be significant, and the</p>

Likely Environmental Effect	Sensitive Receptor	Discussion of Likely Effect and any Requirement for Mitigation
		<p data-bbox="891 325 2042 469">risk of groundwater flooding will be mitigated through the design of earthworks and provision of land drainage into SUDS features [M5]. This would result in minimal changes to groundwater recharge. The Proposed Scheme will not increase flood risk to the local surrounding area or the Site.</p> <p data-bbox="891 485 2020 549">Therefore, changes to surface water flows and groundwater recharge are not considered to be significant.</p>

7. In-Combination Effects

- 7.1 In line with the methodology set out within **Section 5**, a review of SMDC's and Stafford Borough Council's planning portals has been undertaken and two approved projects are considered to meet the selection criteria for in-combination effects as set out in **Section 5**.

Table 7.1: Projects Identified for Appraisal

Application Location/ Number	Description	Status	Distance from Site
SMD/2018/0790 (Phase 1 of Blythe Bridge Allocation)	Development of 146 dwellings (Use Class C3), access and internal roads for vehicles, pedestrian and cycle linkages; car and cycle parking; associated play and open space, landscaping, ecological habitats; sustainable drainage measures, earthworks and all ancillary enabling works including the demolition of building and structures.	Under construction	Immediately north west
SMD/2014/0576	Outline planning application with all matters reserved (save access) for creation of up to 168 residential dwellings (Use Class C3), up to 33,480 square metres of Use Class B1, B2 and B8 floorspace, ancillary uses to include community centre and a shop (Use Class A1), together with highway works, landscaping, public realm, car parking and other associated works.	SMD/2014/0576: Approved	0.9km south east
SMD/2018/0789 (Variation of conditions 10, 11, 12, 18 and 39 in relation to SMD/2014/0576)		SMD/2018/0789: Live	

- 7.2 The in-combination appraisal has identified the potential for in-combination effects using receptors categories, defined by the 'factors' categories outlined in Schedule 4, Paragraph 4 of the EIA Regulations. The appraisal is not a complete in-combination assessment nor does it define if the in-combination effect is significant, rather it identifies where a potential in-combination effect may be present between the Proposed Scheme and the identified approved projects. Furthermore, the appraisal does not take account of any form of mitigation associated with the identified approved projects. The in-combination appraisal is outlined within **Table 7.2**.
- 7.3 In **Table 7.2** where a potential in-combination effect between the Proposed Scheme and approved project is considered to be possible, this has been identified with a tick (✓). In contrast, where a potential in-combination effects is considered unlikely, this has been identified with a cross (X). Where it is uncertain if a potential in-combination effect is likely, this has been identified with a question mark (?).

Table 7.2: In-Combination Appraisal

Receptor Category	SMD/2018/0790	SMD/2014/0576
Population and Human Health	✓	✓
Biodiversity	X	X
Land	X	X
Soil	?	X
Water	X	X
Air	?	X
Climate	?	?
Material Assets	X	X
Cultural Heritage	X	X
Landscape	?	X

- 7.4 As shown in **Table 7.2**, there is the potential for in-combination effects on the population and human health receptor group. This is not unexpected given that this category encapsulates a range of receptors for different environmental topics.

SMD/2018/0790 – Phase 1 of Blythe Bridge Allocation

- 7.5 Phase 1 of the Blythe Bridge Allocation is immediately north west of the Site and currently under construction. Given there is uncertainty regarding potential in-combination effects on the air, soil and landscape receptor groups with this approved project, as identified in **Table 7.2**, further analysis is provided below.
- 7.6 The Air Quality Assessment prepared for the Application for the Proposed Scheme included analysis of the in-combination effects of the Proposed Scheme with Phase 1 from construction dust. As the 350m construction study area of the Proposed Scheme and Phase 1 overlap there is the potential for cumulative effects from construction dust to occur. However it is considered unlikely that the construction phase for all development phases would run either concurrently or sequentially. Additionally, dust mitigation measures as stated within the IAQM guidance would be implemented by both the Proposed Scheme and approved project. Therefore, significant in-combination effects are unlikely.
- 7.7 Regarding the soil receptor group, in-combination the Proposed Scheme and approved project would result in the loss of approximately 16.6ha of agricultural land. This combined total would still be below the 20 hectare threshold whereby Defra recommend consultation with Natural England so is considered unlikely to be significant in-combination.

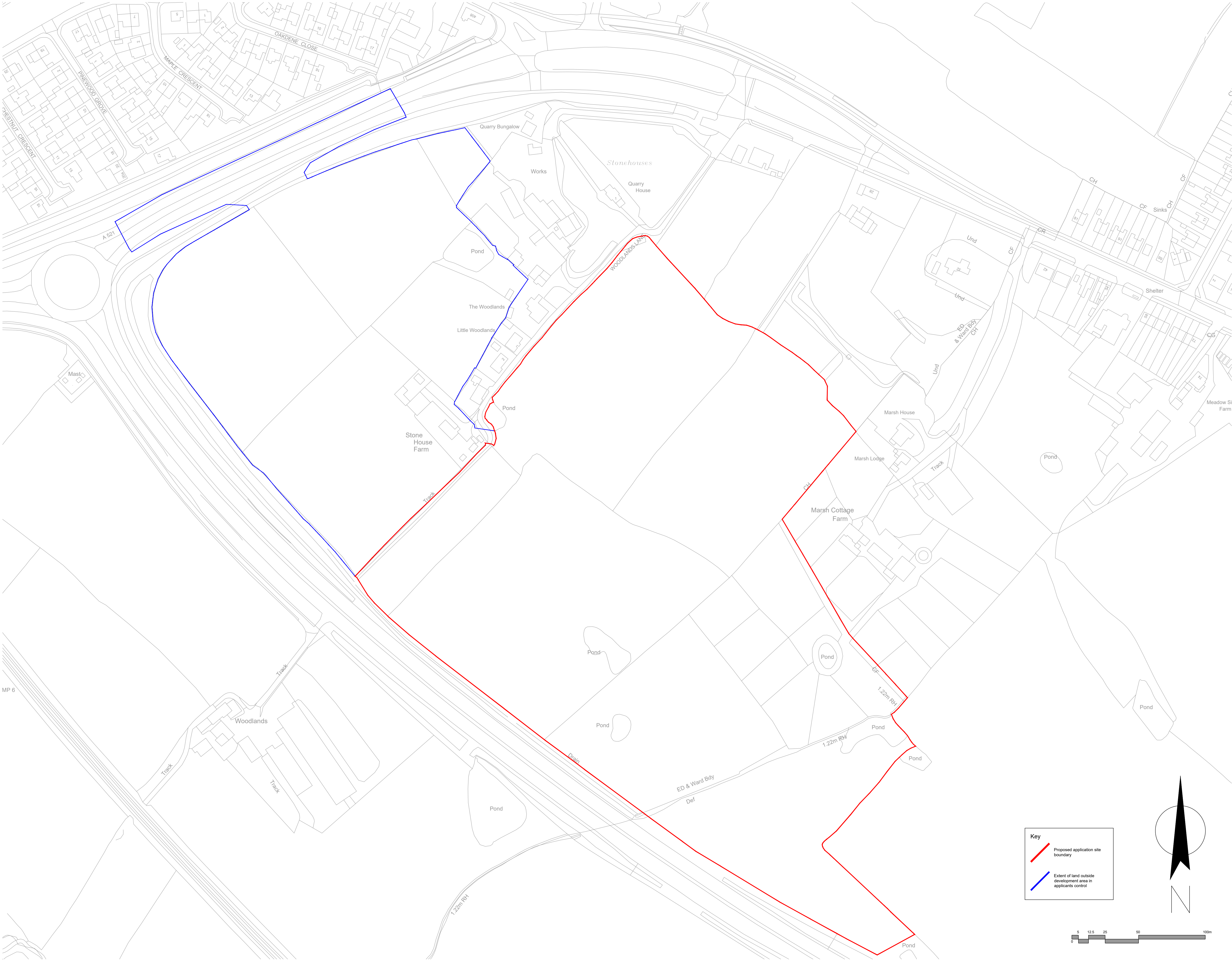
- 7.8 Given the Site is immediately adjacent to the approved project, there is the potential for in-combination landscape and visual effects. A Landscape and Visual Appraisal was submitted with the Phase 1 application which concluded that the project would not result in any unacceptable harm to landscape character and includes landscape proposals to ensure effects are minimised. As such, significant in-combination effects are unlikely.

8. Summary

- 8.1 This EIA Screening report has been prepared in order to obtain an Environmental Impact Assessment (EIA) Screening Opinion from SMDC in accordance with Part 2 of the EIA Regulations and to provide all information required to support SMDC in reaching their EIA Screening Opinion, as set out in Regulation 6, Paragraph 2 of the EIA Regulations.
- 8.2 The characteristics of the Proposed Scheme and the Site surrounds have been set out within **Sections 2** and **3** respectively. Both sections have been used to inform the appraisal of likely environmental effects arising from the Proposed Scheme (**Section 6**) in line with the methodology defined within **Section 5**, with specific consideration of mitigation, in line with Regulation 6, Paragraph 2(e) of the EIA Regulations and best practice. In line with the methodology set out within **Section 5**, where mitigation has been considered, this has been clearly defined within **Section 6** and catalogued into a comprehensive Schedule of Mitigation provided as **Appendix 1**.
- 8.3 Environmental effects were considered across both the construction and operational phases. For 15 environmental effects there was no identified receptor (informed by **Section 2**) or source of effect (informed by **Section 3**). For the 24 environmental effects where there was a potential effect or receptor identified, a more detailed appraisal was carried out in **Table 6.1**, informed by reporting prepared for the Application where available. Throughout the appraisal, mitigation is identified to ameliorate likely significant effects.
- 8.4 A high-level appraisal of potential in-combination effects has been provided within **Section 7**. A review of SMDC's planning portal, in line with selection criteria set out within **Section 5**, identified two projects where a potential in-combination effect could occur with the Proposed Scheme.
- 8.5 The high-level in-combination appraisal found there is the potential for in-combination effects on the on the population and human health receptor group and uncertainty regarding possible in-combination effects on the biodiversity, climate change, landscape and visual, soil and air quality receptor groups largely for the Phase 1 of the Blythe Bridge Allocation project immediately north west of the Site which is under construction. It should be noted that significant effects to these receptors have not been identified in the appraisal of effects from the Proposed Scheme in isolation, and each identified project would be required to include its own suitable mitigation and it is assumed no significant effects were identified for Phase 1²⁹.

²⁹ No EIA was required to support the application.

Figure 1: Site Location Plan



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rev.	date	description
A	20-04-21	Redline amended to suit comments from client. "Bedson" land removed
B	21-05-21	"Bedson" land reinstated. Key added to drawing

Roberts Limbrick
ARCHITECTS

project
RESIDENTIAL DEVELOPMENT
PHASE 2
BLYTHE VALE
-

client
ST. MODWEN HOMES

drawing
SITE LOCATION PLAN
-
-

status
PRELIMINARY

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scale	1/1250 @ A1	originator code	8722
date	Jan' 21	author	-

drawing number	rev.
R9074-RLA-21-XX-DR-A-1001	B
region originator year level type code number	

Appendix 1: Schedule of Mitigation

Purpose

In line with Regulation 6, Paragraph 2(e) of the EIA Regulations project specific measures to avoid and/or prevent significant adverse environmental effects (i.e. mitigation measures) have been considered when appraising likely environmental effects. The EIA Regulations state that the inclusion of such measures and the extent to which they avoid and/or prevent adverse environmental effects should be considered by the local planning authority when formulating an EIA Screening Opinion.

In order to support the local planning authority, mitigation measures identified within **Section 6** have been collated into a single Schedule of Mitigation, set out below. The aim of the schedule is to provide confidence to the local planning authority that mitigation identified is sufficient to avoid or prevent significant adverse effects and thus validate the determination of likelihood of significant effects as concluded within **Sections 6 and 7**.

It is envisaged that mitigation will be secured by a suitably worded condition(s) to any planning approval, where appropriate, and the Schedule of Mitigation will be utilised by the Applicant and principal contractor to control mitigation commitments and assurance over their implementation.

Approach

The schedule has been compiled using specific mitigation measures identified within **Section 6**.

As detailed within **Section 6**, mitigation reference codes (M1, M2, etc.) have been used to link specific mitigation with the relevant appraisal of likely environment effects.

The following types of mitigation have been considered:

Mitigation Category	Definition of Mitigation
Primary Mitigation	Inherent mitigation, comprising fundamental aspects of the project design
Secondary Mitigation	Foreseeable mitigation, requiring further input and assessment in order to achieve the desired outcome of the assessment
Tertiary Mitigation	Inexorable mitigation, in that it would be compulsory regardless of environmental impact assessment

Schedule of Mitigation

Mitigation Measure	Mitigation Ref.	Responsibility	Applicable Phase (C/O)	Detail of Mitigation
Construction Environmental Management Plan	M1	Principal Contractor	C	<p>The CEMP should be prepared by the principal contractor in advance of construction works and submitted to SMDC for approval. The document should provide details and principles to avoid and effectively manage potential adverse effects upon the environment.</p> <p>The CEMP should include measures in line with all relevant government and industry standards, codes of practice and best practice measures, inclusive of but not limited to:</p> <ul style="list-style-type: none"> • The Construction (Design and Management) Regulations 2015. Statutory Instruments 2015 No. 51); • CIRIA C741 Environmental Good Practice on Site Guide (2015); CIRIA C670 Site Health Handbook (2008); • B.S. 5228 1:2009 'Code of practice for noise and vibration control on construction and open sites'; • ILP Guidance Note 1 for the reduction of obtrusive light 2020; • IAQM Guidance on the Assessment of Dust from Demolition and Construction (2016); • Guidance for Pollution Prevention (GPPs); • CIRIA Report C572: Treated ground engineering properties and performance; and • British Research Establishment document FB75: Building on Fill – Geotechnical Aspects and BS 6031:2009: Code of Practice for Earthworks. <p>Measures to be outlined in the CEMP that have been identified through the appraisal in Section 6 will include:</p> <ul style="list-style-type: none"> • A Soil Management Plan to ensure the reuse of soils on Site;

Mitigation Measure	Mitigation Ref.	Responsibility	Applicable Phase (C/O)	Detail of Mitigation
				<ul style="list-style-type: none"> • Erection of hoarding around the Site; • Implementation of all necessary groundworks to provide suitable construction platforms in accordance with regulatory standards; • Safe working methods in line with industry practice and measures for if any unforeseen contamination is encountered; • Site-won topsoil will be placed in all gardens and landscaped areas to provide a clean growing medium; • During site preparation works, all topsoil will be stripped and stockpiles separately for re-use; • Control of waste and adoption of practice to minimise waste generation; • Clearance works will be undertaken outside of the nesting birds season (March to August inclusive); • Measures for the removal of invasive species if encountered on Site; • Best practice measures to prevent damage to hedgerows, trees and woodland, including root protection zones; • Careful sourcing of construction materials to reduce associated GHG emissions as well as direct emission reducing practices on Site; • Pollution prevention measures such as bunded storage, designated wheel washing areas, etc.; • Any lighting required to focus on the area needed, kept to a minimum and reduce the glare of lighting through the angle; and • Traffic management measures such as: <ul style="list-style-type: none"> – Management and proposed routing of construction related traffic, including details of HGV booking/management systems;

Mitigation Measure	Mitigation Ref.	Responsibility	Applicable Phase (C/O)	Detail of Mitigation
				<ul style="list-style-type: none"> – Delivery of large oversized plant/machinery to the Site should take place outside of peak highway hours (where possible); and – Vehicular parking, within the Site.
Landscape strategy	M2	Applicant / Design Team	O	<p>A landscape buffer will be created along the A50 which includes attenuation features, buffer planting (a minimum of 20m along the northern boundary of the Site and 15m along the east) and retained landscape features. The buffer to the north will include sufficient space to accommodate belts of woodland planting and a diverted footpath route. Dwellings will be set back from the north eastern Site boundary.</p> <p>Planting will include native species that are also tolerant to changing climatic conditions.</p> <p>Retention and enhancement of boundary features.</p> <p>The landscaping proposals will be managed by a Landscape Management Plan.</p> <p>A variety of open space is proposed throughout the Site to provide amenity space for existing and new residents. A children's play area (LEAP) is proposed within the landscaped open space in the southern part of the Site. The open space will include the diverted existing PRoW (Forsbrook CP 6) in the north of the Site.</p>
Archaeological mitigation	M3	Project Archaeologist	C	<p>Archaeological works at the Site would comprise an archaeological evaluation trial trenching exercise to determine the presence or absence of significant archaeological remains and the need or otherwise for further archaeological mitigation measures, which would comprise preservation by record. The Written Scheme of Investigation for Archaeological Evaluation submitted with the Application sets out the methodology for this.</p>
Building design	M4	Applicant / Design Team	O	<p>The Proposed Scheme will be designed in accordance with the Building Regulations, which will ensure the effects of climate change are dealt with.</p>

Mitigation Measure	Mitigation Ref.	Responsibility	Applicable Phase (C/O)	Detail of Mitigation
				<p>All buildings will be designed and constructed in line with fire preventative measures (i.e. fire doors, etc.) and all external façades and materials will meet the necessary fire resistance standards set out within Building Regulations Approved Document B and by law.</p> <p>Prior to occupation of all buildings all necessary emergency producers/practices (i.e. Fire Emergency Evacuation Plan (FEEP)) or apparatus/instruments (i.e. smoke detectors/sprinklers) will be in place as required by law.</p> <p>The Proposed Scheme will be designed in line with appropriate national guidance and standards with respect to crime prevention and safety.</p> <p>Residential dwellings will meet the specific standards covered within Building Regulations (Part L1A) which is focused on the conservation of fuel and power in order to improve dwelling efficiency (and therefore require less energy and indirect GHG emissions).</p>
Surface water drainage strategy	M5	Applicant / Design Team	C / O	<p>The proposed drainage system will retain surface water runoff at greenfield rates at 1 in 1,30 and 100 year plus climate change storm events. Attenuation will be provided as part of the Proposed Scheme and the use of SuDS to manage surface water and control the rate at which it is discharged into the network. It is proposed that surface water will be discharged into the existing watercourse at the south east of the Site, which is culverted underneath the A50 and flows into the River Blythe. The risk of groundwater flooding will be mitigated through the design of earthworks and provision of land drainage into SUDS features.</p>
Lighting strategy	M6	Applicant / Design Team	O	<p>All future lighting installations will be designed and installed in line with relevant standards and guidance, including:</p> <ul style="list-style-type: none"> • CIE 150: 2017 – Guide on the Limitation of the Effects of Obtrusive Light from Outdoor Lighting Installations, 2nd Edition; • ILP GN01 - Guidance Notes for the Reduction of Obtrusive Light 2020;

Mitigation Measure	Mitigation Ref.	Responsibility	Applicable Phase (C/O)	Detail of Mitigation
				<ul style="list-style-type: none"> • BS 5489-1 : 2013 – Code of Practice for the Design of Road Lighting; • BS EN 13201-2:2015 – Road Lighting – Part 2: Performance Requirements; • BS EN 12464 – 2 2014 – Outdoor Work Spaces; SLL Guide to Limiting Obtrusive Light 2012; • SLL Lighting Handbook 2009; LG 6 (CIBSE) – The Exterior Environment 2016; and • ILP Guidance Note 08/18 Bats and Artificial Lighting in the UK.
Acoustic mitigation	M7	Applicant / Design Team	O	<p>The Proposed Scheme will include noise mitigation which will include a 1:3 landscaped acoustic bund (barrier fencing of a minimum mass of 10kgm is being provided on garden boundaries of any plots which face the A50) along the southern boundary of the Site, between the proposed residential development and A50, setting back residential development from the A50.</p> <p>In addition, glazing on bedrooms facing the A50 will ensure a minimum manufacturer's rating of Rw 35dB and be provided with propriety wall or window mounted trickle vents to achieve background ventilation in accordance with the Building Regulations.</p>
Financial contributions	M8	Applicant	O	Financial contributions will be made to SMDC, where necessary, to help ease pressure on local education provisions and local health care provisions.
Waste strategy	M9	Applicant / Design Team	O	Appropriate waste storage facilities will be provided and refuse collection will be in accordance with SMDC requirements. Such measures are likely to be managed by an approved Waste Strategy, in line with Controlled Waste (England and Wales) Regulations, 2012 and local guidance.
Biodiversity strategy	M10	Applicant / Design Team	O	<p>Retention and enhancement of boundary features.</p> <p>Avoidance of lighting of habitat corridors hedgerows and biodiversity features to the east, in addition to new bat boxes located in retained trees.</p>

Mitigation Measure	Mitigation Ref.	Responsibility	Applicable Phase (C/O)	Detail of Mitigation
				<p>An existing Great Crested Newt reserve area is located within the south-eastern corner of the Site which is to be enhanced to comprise two new breeding ponds, native woodland planting, scrub, hibernacula and managed long grass. A pathway / trim trail (to be flanked on either side by knee-rail fencing) will be provided through this area. The wider area of landscaped open space will also include ponds, scrub, hedgerows and meadow grassland. The additional habitats in the reserve will also create habitat for amphibians, reptiles, nesting birds, invertebrates, foraging and commuting bats.</p> <p>A Great Crested Newts Mitigation Strategy has been prepared for the Site. The proposed works will be completed under a Natural England European Protected Species (EPS) Licence.</p>
Sustainable transport	M11	Applicant	O	Electric vehicle infrastructure and sustainable transport to be implemented through the Travel Plan, which will include measures to promote methods of sustainable transport.
Site suitability	M12	Applicant / Design Team	O	<p>The following mitigation will be implemented as part of the Proposed Scheme should exceedances be identified (as part of the Site suitability assessment being prepared for the Application). Either:</p> <ul style="list-style-type: none"> • The layout would be amended to remove proposed dwellings / locations of relevant exposure from the predicted area of exceedance; or • Appropriately located air intakes as part of a ventilation system to source ventilated air from a location where exceedances are not predicted to occur, or scrubbing units to reduce the concentrations of air pollutants from within the ventilated air.

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