

4. Proposed Development and Alternatives

4.1. Introduction

- 4.1.1. Schedule 4 of the 2017 EIA Regulations sets out the information for inclusion in Environmental Statements (ES), which includes Part 1 “a description of the development”.
- 4.1.2. This chapter and the accompanying figures define the Proposed Development and the maximum quantum of development proposed, the means of access proposals and describes the Proposed Development in line with Schedule 4 of the EIA Regulations as far as possible considering the outline nature of part of the application. A description of the broad construction methods and processes is presented towards the end of this chapter.
- 4.1.3. The information presented in this chapter alongside the accompanying figures form the basis of the EIA and provides the level of detail required to enable the assessment of likely significant environmental effects in line with the EIA Regulations. This chapter also sets out the main reasonable alternatives that have been considered and the main reasons for selecting the chosen option.

4.2. The Proposed Development

- 4.2.1. The Application seeks planning permission for

“The erection of up to 190 residential dwellings comprising:

Phase A – Full planning application for the erection of 93 dwellings with associated works (including access, public open space, landscaping, sustainable urban drainage systems and other associated works); and

Phase B – Outline planning application for up to 97 dwellings (with all matters reserved for future approval). (‘the Proposed Development’).”

- 4.2.2. Whilst there are a number of detailed plans submitted with the planning application which are seeking formal planning permission, this ES has set appropriate development parameters, of which the detail seeking permission lies within (and any future Reserved Matters applications for the area seeking outline, is also expected to lie within).
- 4.2.3. These parameters are illustrated on **Figure 4.1, Parameters Plan** (1474-PMP-3-01c) and include the disposition of land uses, the development footprint and maximum heights. It is this Figure, along with the Site Location Plan, which forms the basis of the ES assessments and illustrates the Proposed Development which is being assessed for any likely significant effects.

Table 4.1: Parameter Plans used within the assessment of environmental effects

Planning Application Drawing Title	ES Figure Reference
Site Location Plan 1474-RE-02	Figure 3.1: Site Location Plan
Parameters Plan 1474-PMP-3-01c	Figure 4.1 Parameters Plan

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- 4.2.1. These plans have been assessed against baseline conditions within each environmental discipline and along with the written description of the Proposed Development, allow the likely significant effects of the proposals to be fully assessed and appropriate mitigation measures secured.
- 4.2.2. In addition to the plans set out in Table 4.1, a suite of detailed layout plans for Phase 3a form part of the planning application submission (included in **Appendix 4.1** for ease), the detail of which lies within the parameters shown on **Figure 4.1**. These plans include Landscape Proposals, Housetypes, Demise Layout, EVC Strategy, Materials Layout, Planning Layout (colour), Refuse Strategy, Storey Heights, Indicative Street Scenes, Surfacing Layout, Boundary Treatments, Parking Layout, Gate, Wall and Fencing Plans.
- 4.2.3. Details of the Proposed Development suitable for assessment are provided below, with further information contained with the Design and Access Statement (DAS) accompanying this planning application.

Land Use

- 4.2.4. The quantum of each land use proposed is provided in **Table 4.1**.

Table 4.1: Land Use

Land Use	Quantum / Description
Development parcels	190 dwellings over c. 5.8 ha, including incidental open space/landscaping, internal road network and parking and supporting infrastructure
Green Infrastructure	c.2.9 ha including public open space, natural green space, proposed strategic planting, retained vegetation and proposed Sustainable Drainage System/ponds (not including incidental open space within development parcels which is shown on detailed plans)

Residential

- 4.2.5. The Proposed Development will provide up to 190 dwellings across the Site in the areas depicted in **Figure 4.1**. The Proposed Development will provide a range of house types, with the detailed layout for Phase 3A including 3, 4 and 5 bedroom properties over c.10 different house types. All residential dwellings will have access to private amenity space and associated parking.
- 4.2.6. The homes will vary in height, with the majority being 2 storey with a number of 2.5 storey dwellings (max 9.5m above proposed ground level) being located throughout the development. Further information is provided within the Design and Access Statement accompanying this application.

Green Infrastructure and Landscape Strategy

- 4.2.7. The Proposed Development includes c.3 ha of 'green infrastructure' which includes public open space, natural green space, proposed strategic planting, retained vegetation and proposed Sustainable Drainage System/ponds.
- 4.2.8. The Landscape Strategy for the Site provides a robust landscape led approach – in keeping with Garden Village principles. **Figure 4.2** illustrates the indicative landscape strategy. Public areas have been designed to be multi-functional open spaces to bring people together and boost

health and wellbeing. Multi functional benefits include space for recreation, areas for ecological enhancement, visual amenity, flood alleviation, and protection of existing valued landscape features.

- 4.2.9. Existing vegetation will largely be retained and the Proposed Development will provide a range of new planting to enhance the existing features in the Site's context such as woodland, hedges and ponds as well as introducing planting to contribute to the character areas within the Site.
- 4.2.10. A generous green buffer is proposed along the Site's southern boundary with the M62. This will provide a focus for general recreation. The open space will have a series of SUDs features designed to add ecological value and to retain low levels of water throughout the year to create more visual interest.
- 4.2.11. Green buffers are also proposed between new houses and existing properties on adjacent areas, including along the northern boundary with Halsnead Park. The northern boundary of the Site will have a swathe of native planting to provide a naturalistic buffer to the existing residents. Biodiversity will be a key component of the landscape scheme. A wide number of flowering, fruiting and berrying plants will be included to provide foraging potential for birds, invertebrates and mammals.
- 4.2.12. A series of greenspaces are located throughout the Site, focused around existing and new landscape features, or at the heart of the new residential areas.
- 4.2.13. The broad principles of the greenspace network are:
- Provide a clear hierarchy of public open spaces catering for a range of different needs;
 - Create attractive and naturalistic amenity spaces through planting of new trees, hedgerows and wildflower meadows;
 - Enhance biodiversity and wildlife habitats through the implementation of native shrub, hedge and tree planting where possible;
 - Properties set back from the street to allow for front gardens and planting along property boundaries to help define public and private space;
 - Locate hedge and shrub planting to the development frontages and boundaries, and to the front gardens of homes to define public and private space, add structure to the street scene and frame views;
 - Provide tree planting alongside the roads in front gardens, and verges where space permits, to frame views along the main access road and into public open spaces to soften the built form; and
 - Plant low-growing native and ornamental shrubs, perennials and grasses within front gardens and focal areas to provide year-round interest.
- 4.2.14. The areas of public open space will consist of mostly amenity grassland with swathes of wildflower mixes and native trees planted as single specimens and in groups of three, five and seven to reflect the parkland character of the former Halsnead Park Estate. There is also opportunity to manage the surrounding area as a wildflower meadow with designated cut paths for the public to travel around the development. A Landscape and Ecological Management Plan

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will be produced that details how new habitats (and retained habitats) will be managed to ensure successful establishment and on-going functionality.

Vehicle Access and Circulation

- 4.2.15. Vehicular access to the Site is proposed via Taylor Wimpey's Phase 2a scheme which is approved and currently under construction (planning application reference 20/00417/FUL) adjacent to the east of the Site. Two points of access are proposed which will require extension of the 'streets', as shown on **Figure 4.1**. These access points and routes will form a general loop within the development, from which a hierarchy of other access routes will be taken e.g. smaller streets, lanes, mews and private drives. The layout has also been designed to ensure service vehicles can enter the site, turn and exit in a forward gear. Car parking across the site will comply with the Councils' current parking standards and includes on plot spaces and integrated, single and double garages, as shown on the detailed layout.
- 4.2.16. The Proposed Development will also facilitate access to the car park serving Big Water and Prescot Angling Club, via a 5.5m wide street.
- 4.2.17. New pedestrian and cycle links through the Site will allow increased connectivity to existing recreational routes, public open spaces and new non-residential facilities. These routes will benefit new residents and the existing local community. The new routes, which will be comprised of a network of footpaths and cycleways, will be based on key desire lines to connect new homes with new and existing community facilities and onwards to the surrounding network. Key routes will be off-road, passing through green corridors within the development. Other routes will use the network of streets to ensure maximum permeability through the Site.
- 4.2.18. The promotion of cycling as a primary sustainable mode of transport is a key priority. Cycle parking will be implemented in key public spaces within the public realm. Each dwelling benefits from secure cycle parking, provided either within an appropriately sized garage or via a dedicated, secure cycle storage unit located within the rear garden. These step-free, weather-protected facilities encourage sustainable, everyday cycling journeys.

Offsite Transport Improvements for the Wider Halsnead Masterplan

- 4.2.19. The scale of the wider Halsnead Garden Village development (refer to Chapter 2 and 3 for further information on the wider Halsnead Garden Village) will necessitate various off-site highway works together with transport and junction improvements to facilitate access and egress to the wider development site, mitigate local traffic impacts, facilitate links through to existing facilities and encourage sustainable transport.
- 4.2.20. Substantial work in relation to identifying such infrastructure requirements was undertaken at the strategic stage when allocating this area for development. A summary of these requirements, which have been established by Knowsley Council, is set out below:
- Windy Arbor Road/Lickers Lane Junction – a two lane apporahc on Lickers Lane, a right turn pocket on Windy Arbor Lane northbound and the introduction of controlled pedestrian crossing facilities on two arms of the junction [implemented];
 - Lickers Lane/Fox's Bank Lane – the introduction of traffic signals to allow the controlled movement of traffic out of Lickers Lane, and also the controlled movement of pedestrians on two arms of the junction [implemented];

- Windy Arbor Road/Dragon Lane – Windy Arbor Road approach to Dragon Lane widened to accommodate a two-lane approach [implemented];
- Stoney Lane/Dragon Lane/Meadway – two lanes on each of the Dragon Lane approaches to the junction [implemented];
- Stoney Lane/Cumber Lane – provision of traffic signals and controlled pedestrian crossing facilities on all arms of the junction [implemented]; and
- Cronton Road/Fox's Bank Lane – realignment of Prescott Road to the south to opposite Fox's Bank Lane to provide a new roundabout arrangement with uncontrolled pedestrian crossing facilities, and relocation of the existing bus stops to the west of the junction [implemented].

4.2.21. The Liverpool City Region Strategic Investment Fund (LCR SIF) is funding the off-site highway improvements detailed above.

4.2.22. In addition, there are major improvements proposed to the following locations:

- Improvements to M62 Junction 6 (Tarbock Island) [under construction]; and
- Former Mineral Railway.

4.2.23. Further information on these improvements are provided within the Transport Assessment accompanying the planning application.

Surface Water Drainage

4.2.24. Based on the cohesive ground conditions, infiltration is not likely to offer a suitable surface water management solution for all the development proposals, therefore an alternative strategy in accordance with the sustainable drainage hierarchy (i.e. surface water reuse, discharge to ground, discharge to a watercourse and then finally to a public sewer network) has been considered.

4.2.25. It is understood that at present, any run-off generated onsite would naturally drain with the existing ground towards western boundary and ultimately into the adjacent waterbody known as Big Water. The proposals are to mimic the existing regime and discharge surface water run-off formally into Big Water, west of the Site via a new formal connection.

4.2.26. A SuDS system will be designed with multifunctional naturalistic interventions that provide ecological, recreational, and amenity benefits, using creative solutions to allow rainwater capture to be a visible feature which makes use of the topographical falls across the Site. SuDS features including permeable surfaces, ponds, basins, and swales will be created as integral parts the greenspace network, specifically in the south of the Site as shown on **Figure 4.1**, in line with the guidance set out in the Halsnead Garden Village Masterplan SPD and accompanying Design and Local Distinctiveness Guide. The surface water scheme for this will be designed to cater for the run-off generated in the events up to and including the 1 in 100yr return period event with a 45% allowance for climate change. In terms of water quality, the proposals are to incorporate polishing swales downstream of the proposed stormwater storage features/attenuation basins.

4.2.27. Further information regarding the proposed drainage strategy is provided within the Flood Risk Assessment and Drainage Management Strategy accompanying the planning application.

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Service Infrastructure / Utilities

- 4.2.28. Discussions are currently ongoing with the statutory undertakers in relation to the provision of the necessary services. For the purpose of this ES, the Proposed Development is likely to be serviced as follows:
- Electricity: The electricity connection will be provided from a substation which will feed from the HV network in the existing development
 - Foul Drainage: The foul drainage connection will be pumped to a gravity connection into the pump station of the existing development
 - Water: The water point of connection will be from a point of connection within the existing development
 - Gas: At present gas is assumed and the point of connection will also be off the supply within the existing development
- 4.2.29. In order to facilitate these connections, it is envisaged this will require the laying of pipework / cables within trenches to the relevant point of connections. Once in position the equipment will not be visible.
- 4.2.30. Consideration to the impacts of provision of these services has been given, where necessary and to the appropriate detail at this stage, within this ES.

Construction

Programme and Phasing

- 4.2.31. The Proposed Development will include a period of mobilization / site set up, including relevant ecological protection works, however the intention is to continue construction once other adjacent areas have been completed, starting with the northern area Phase 3a (seeking detailed permission). For the purpose of assessments, it has therefore been assumed that construction will commence in late 2026, with first completions in 2027. The construction of the Site as a whole is likely to last c. 5 years, with completion and operation of the development assumed to be in 2031. Whilst it is acknowledged that these timelines could alter, it is not considered minor changes to this anticipated programme would significantly change the conclusions drawn within the ES. It is therefore considered this timeline is reasonable to assume for assessment purposes.
- 4.2.32. It is anticipated that construction would commence with the main road within Phase 3a, along with incorporating the services, utilities and drainage provisions, before the majority of built form begins.

Construction Methodology

- 4.2.33. Preliminary works in the form of site set-up, and the implementation of any required ecological protection works would initially be carried out and would be undertaken in accordance with construction best practice and ecological guidance and/or license as appropriate to the species/habitat.
- 4.2.34. It is anticipated that a site compound providing site office, welfare facilities, storage cabins and external materials setting down areas, would initially be set up in proximity to the application site's entrances, albeit the site compound is likely to be relocated throughout the construction programme as appropriate for the works being carried out. It is anticipated that the site compound would be hard-surfaced, security fenced with CCTV cameras and external temporary lighting for use during hours when illumination falls below safe working levels and for

security. The temporary lighting will adhere to best practice guidance outlined in Guidance Notes for the Reduction of Light Pollution.

- 4.2.35. A Construction Environmental Management Plan (CEMP) will be prepared so to ensure that the likely significant effects that may arise from the construction of the Proposed Development are actively managed and reduced to an acceptable level. It is anticipated the CEMP will evolve as the project progresses to ensure its content reflects the current construction programme. An outline CEMP is submitted separately with the planning application.
- 4.2.36. The CEMP will likely provide information such as:
- Details of the site set-up, site compound facilities and services;
 - The plan of the phasing of the works;
 - Prohibited or restricted operations (location, hours etc.);
 - Details of construction operations highlighting any operations likely to result in disturbance and/or working hours outside the core working period, with an indication of the expected duration of key phases and dates;
 - The details of proposed routes for HGVs travelling to and from the Site;
 - Details of all works involving interference with a public highway, including temporary carriageway/footpath closures, realignment and diversions;
 - Housekeeping procedures and environmental control measures;
 - Procedures for managing environmental risks and responding to environmental incidents;
 - Standard measures to control and mitigate potential for noise, dust, air quality and water pollution;
 - Standard measures for the management of run-off due to construction activities to reduce the risk of pollution and elevated flood risk on and off site;
 - Any requirement for monitoring and record keeping;
 - Contact details during normal working hours and emergency details outside working hours;
 - The mechanism for the public to register complaints and the procedures for responding to complaints;
 - Provision for reporting, public liaison, prior notification etc; and
 - Procedures for regular dialogue with the Council, relevant authorities and the local community.
- 4.2.37. The standard construction best practice measures are likely to include:
- Selection of construction methodologies to minimise generation of noise, vibration and/or dust;
 - All vehicles and/or plant to be switched off when not in use;

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- All vehicles and/or plant to be used in accordance with the manufacturer's instructions and subject to regular maintenance;
- The site compound / storage of materials to be appropriately sited to reduce environmental risk and appropriately secured;
- Stockpiles of soil materials to be appropriately sited to reduce environmental risks, of an appropriate height/batter to avoid slippage, with appropriate surface water management and subject to dust control measures;
- Implementation of surface water drainage traps/attenuation, where required, with appropriate arrangements for discharge and/or collection as appropriate;
- All liquids and solids of potentially hazardous nature (e.g. diesel fuels, oils and solvents) to be stored on surfaced areas with appropriate bunding to reduce the risk of spillage;
- Use of plant that may give rise to nuisance (noise and/or dust) to be adequately screened (where deemed necessary);
- Wheel and/or vehicle body washing facilities to be used to prevent tracking out of mud/dust onto the public highway using wheel wash or wash skip out as appropriate (where deemed necessary);
- Deployment of a road sweeper/road cleaning for use on the public highway (where deemed necessary);
- Programme of cleaning traffic management cones, lights and signs where deployed (as necessary); and
- Vehicles carrying materials to/off-site to be enclosed and/or sheeted as appropriate.

4.2.38. Any proposed departures from the approved CEMP will be submitted to relevant authorities and affected parties in advance.

4.2.39. The construction of the Proposed Development would use standard construction plant and machinery. Likely plant and equipment would include (but not limited to):

- Long-reach Excavators;
- Bulldozers;
- Tippers;
- Front-end loaders;
- Scrapers;
- Hydraulic excavators;
- Backhoe Loaders; and / or
- generators.

Hours of Work

4.2.40. It is anticipated that the working hours will be as set out below:

- 07.00 – 19.00 Monday to Friday; and
- 08.00 – 13.00 Saturday

4.2.41. All work outside these hours will be subject to prior agreement, and/or reasonable notice, with Knowsley Council, who may impose certain restrictions. Night time working will be restricted to exceptional circumstances. These working hours will be agreed with the Council prior to the commencement of the works.

Traffic Management and Vehicle Routing

4.2.42. Construction traffic will include the movements of workers associated with the construction of infrastructure and individual plots along with the movement of material. Detailed Construction Traffic Management Plans (CTMPs) will be agreed with the highway authority prior to commencement of construction activities. This approach will facilitate flexibility and allow the contractor(s) to reflect the nature of their own operations. Notice regarding any planned closures and diversions of roads and footpaths (if required) shall be given by the Applicant or their Contractor(s) to the Highways Authority, the Police, the Fire Brigade and other emergency services sufficiently in advance of the required closure or diversion dates.

4.2.43. Whilst the timing and generation of construction traffic is not yet fully known and will depend upon the contractors appointed, Table 4.2 shows the estimated average daily vehicle trips that could be generated during this stage. It has been estimated based on experience of other similar residential developments.

Table 4.2 Estimated Average Daily Construction Vehicles

Arrivals		Departures	
Cars/Vans	HGVs	Cars/Vans	HGVs
150	14-16	150	14-16

4.2.44. Construction traffic is likely to access the Site via Phase 2a to the east, which itself is taken from Fox's Bank Lane. It is expected that the majority of construction workers would originate within the local residential areas of Knowsley, Liverpool and Manchester and will all approach the Site from the M57 or the M62. The HGV traffic generated during the construction phase of the Development is anticipated to originate predominantly from the wider strategic network, travelling to the Site via the M62. The construction routing detail will be secured via the CTMP, which will form part of the CEMP and will be secured via planning condition.

4.2.45. All vehicle unloading will take place within the Site and will not affect public highways or adjacent occupiers.

4.2.46. On-site parking will be managed to ensure that site staff and visitors do not park along or obstruct the access and circulation roads. The site will be set up to:

- Designate an area on site for site personnel and visitor parking;

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- Prevent delivery vehicles from queuing outside the site boundary; and
 - Make delivery drivers aware of traffic restrictions on and around the site.
- 4.2.47. Construction workers would be encouraged to access the Site by sustainable means of travel. Information would be provided on convenient walking and cycling routes together with the local bus and rail services to ensure workers are aware of the choices available to them. Workers who choose to drive to the Site will be encouraged to car share, where practical.
- 4.2.48. The contractor(s) would co-ordinate all deliveries and collections to and from the Site, ensuring that as far as possible:
- All delivery and collection vehicles are aware of the proposed routing;
 - Larger vehicle movements would be scheduled to avoid peak hours on the local road network if possible;
 - The relevant highway authorities will be advised in advance of any large or abnormal construction traffic and appropriate routing agreed; and
 - If an alternative construction traffic route is required, this would first be agreed with the highway authority.
- 4.2.49. All management of construction traffic and access will be carried out in accordance with the CTMP as set out below:
- Planning and managing both vehicle and pedestrian routes;
 - The elimination of reversing, where possible;
 - Safe driving and working practices;
 - Protection to the public;
 - Adequate visibility splays and sight lines;
 - Provision of signs and barriers; and
 - Adequate parking for off-loading storage areas.
- 4.2.50. Most materials will be ordered in bulk and will be delivered to the Site as required by the construction programme. The arrangements for deliveries and traffic routes will be communicated to all suppliers and sub-contractors.
- 4.2.51. Construction plant deliveries will be managed in coordination with traffic police who may need to escort abnormal loads. The timing and route of all such deliveries will be arranged at times when disruption can be minimised.
- 4.2.52. A detailed traffic plan will be produced prior to commencement of construction clearly stating the routes to be used and identifying any local site rules and directional requirements. Contractors will be required to share this with staff and operatives during the Site induction process and include it within supply chain sub-contracts to ensure that it will be enforced.

- 4.2.53. Pedestrian routes through the Site for the workforce will be segregated from vehicle routes using barriers and crossing points will be clearly defined in appropriate locations with good visibility of approaching traffic.

Construction Materials and Resources Use

- 4.2.54. Materials and resources used during construction of the Proposed Development would be sourced from sustainable and/or local sources where practicable.
- 4.2.55. Where possible materials arising from the breaking out of hard surfaced areas would be recycled and reused on-site or transferred to an appropriately licensed recycling facility.

Waste Management, Recycling and Disposal

- 4.2.56. The construction process is likely to give rise range of waste arisings including demolition spoil (concrete, brick rubble, steel, aluminum, plastics, wood etc.), soils, packaging (plastics, pallets, expanded foams etc.), and liquids (dirty water, fuels etc.). In addition, waste materials may be generated from inaccurate ordering, poor usage, badly stored materials, poor handling, spillage etc. if not controlled.
- 4.2.57. All contractors will be required to investigate opportunities to minimise waste arisings at source and, where such waste generation is unavoidable, to maximise the recycling and reuse potential of demolition and construction materials. A SWMP would be prepared to set out the procedures to sort, reuse and recycle construction waste. Adherence to the SWMP would support better control over materials handling and waste, compliance with relevant waste legislation for the handling, transport and disposal of wastes, compliance with environmental management systems and management of waste-related costs.

Prior Notice

- 4.2.58. In the event of unusual activities or events, these will be notified to Knowsley Council as appropriate, and relevant property owners or occupiers in advance. The relevant activities will be agreed, once the detailed programme of construction is defined. This will include:
- Necessary night-time, weekend or evening working (outside core areas) of a type which may affect properties; and
 - Road or footpath closures/diversions and movements of wide loads (unlikely to be required).
- 4.2.59. The community will be kept informed during the construction phase, as appropriate.

Management of Contracts

- 4.2.60. Individual contracts (for example for demolition and waste removal) will incorporate relevant requirements in respect of environmental control, based largely on the standard of 'good working practice' as well as statutory requirements. Any sub-contractors (where used) will be required to demonstrate how they will achieve best practice, how targets will be met and how potential effects will be minimised.

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Public Liaison

- 4.2.61. There will be a designated Construction Liaison Officer who will deal with public and other complaints and enquiries. This nominated individual will be identified to Knowsley Council prior to the start of site activities, and whenever a change of responsibility occurs.

Responses to Complaints

- 4.2.62. Any complaints will be logged on Site, where necessary. The procedures will specify the roles and responsibilities of the Construction Liaison Officer and the Council in respect of breaches and complaints from the public. The required actions will be different in each specific case, depending on the operation, equipment or location or applying additional controls.

Decommissioning

- 4.2.63. Given the design life of the Proposed Development, decommissioning has been scoped out of this EIA (as agreed at the Scoping stage).

4.3. Alternatives

- 4.3.1. The EIA Regulations (Schedule 4, paragraph 2) require for inclusion in an ES:

"A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects".

- 4.3.2. The main alternatives to the Proposed Development include:

- The 'No Development' Alternative;
- Alternative Locations for the Proposed Development;
- Alternative Uses for the Site; and
- Alternative designs.

The 'No Development' Alternative

- 4.3.3. The 'No Development' alternative evaluates the likely environmental conditions at the Site in the absence of implementing the Proposed Development. Schedule 4 of the EIA Regulations states that the assessment of alternatives provides *"an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed"*. A description of the baseline scenario is set out in Chapter 3: The Site.
- 4.3.4. The 'No Development' alternative means leaving the Site in its current use. The beneficial and adverse effects outlined in this ES would not occur. There is no indication that in the absence of the Proposed Development, the use of the Site would alter and therefore the environmental conditions of the Site would remain at its baseline level as described in Chapter 3: The Site.
- 4.3.5. As the Site has now been allocated for housing, and forms an integral part of Policy CS3 'Housing Supply and Distribution' in the Local Plan. The 'no development' scenario would fail to assist in meeting housing targets.

- 4.3.6. The Proposed Development will make a significant contribution towards meeting housing needs in the area and employment opportunities along with the wider allocation, which ensure that the scheme constitutes sustainable development.
- 4.3.7. A “no development” scenario could seriously undermine the effectiveness of the Local Plan and the Site’s contribution towards the achievement of sustainable development.

Alternative Locations and Uses for the Proposed Development

- 4.3.8. The Local Plan was subject to a lengthy site selection process, including the consideration of reasonable alternatives at a strategic level through the SEA process, and as such considered multiple locations and individual sites for development, with this confirmed as being as a suitable and sustainable location. The site was subsequently identified as one just 14 pilot Garden Village across the whole country, further confirming its suitability for this form of development.
- 4.3.9. The Site’s allocation for residential use within the Local Plan also clearly demonstrates its suitability for residential development and its importance in meeting Knowsley’s housing need. It is therefore considered that other uses would unlikely be reasonable alternatives.
- 4.3.10. The wider Garden Village does propose alternative uses including employment space and a country park located on the land to the south of the M62. However the residential element is clearly better suited to the northern parcel as it connects to the existing settlement of Whiston and its associated services, whilst the land to the south is separated from existing residential areas and is better connected to the highway network making it much more suitable for employment use, with significant areas of woodland making it more suitable for a country park.

Alternative Designs

- 4.3.11. As part of the iterative EIA and design process, the design of the Proposed Development has evolved to take account of various environmental constraints and opportunities. In this respect, environmental desktop reviews, interim assessments of the emerging Proposed Development and relevant knowledge gained from environmental baseline surveys and consultation with consultees, have influenced the evolution of the proposals at an early stage in the design process. In adopting this iterative design process has enabled the early identification of mitigation measures which have then become inherent in the design.
- 4.3.12. The Design and Access Statement (DAS) that accompanies the planning application describes the design evolution and concepts. However, in essence, over the period of the development of the masterplan and the associated environmental work, the early design of the Proposed Development has been influenced by the key constraints and opportunities, which in turn have helped refine and structure the scheme. The key constraints and opportunities at the Application Site were identified as:

Constraints:

- The traffic noise associated with the M62 to the south of the Application Site;
- The need to protect amenity and privacy of existing properties in Halsnead Caravan Park to the north and to respond to existing and proposed adjacent properties;
- The recommended buffer to existing Old Wood North Ancient Woodland and adjacent Ancient Woodland to the Site’s west;

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- Protection of Big Water; and
- Avoid areas of surface water flood risk and strategic infrastructure/utility corridors.

Opportunities:

- The opportunity to create new green and active travel links through the Site and to surrounding areas so to respond to the structure of the wider masterplan;
- Enhance and manage the network of trees, hedgerows and other valued habitats on the Site and achieve a biodiversity net gain;
- The potential to facilitate access to a car park associated with visitors to Big Water;
- Provide a range of public open spaces in line with local policy; and
- The opportunity to promote biodiversity and recreation through creation of an environmental corridor along the southern boundary.

4.3.13. A number of design responses have been considered as part of the design process. Initially, this involved a process of reviewing and refining of the previous Halsnead Garden Village masterplan against updated constraints information, technical surveys and the specific commercial requirements and design approach of the developer. Various iterations of the site layout have been produced and considered which have included changes to:

- The housing mix, number of units and mix of uses;
- The treatment of sensitive boundaries, particularly the northern boundary adjacent to the existing Caravan Park;
- The proposed street hierarchy and road layout;
- The design and form of the proposed environmental corridors;
- Block structure, layout and location of green linkages within the Site; and
- The design of key nodal points and areas of public realm

4.3.14. The preferred option which forms the Proposed Development conforms to the Development Parameters that have been subject to environmental impact assessment, as reported in this ES.

OPPORTUNITIES AND CONSTRAINTS

- Direction of Fall
- Site Access Locations
- Existing Bodies of Water
- Existing Trees
- Proposed Frontage
- Proposed POC for foul and surface water sewers
- Proposed POC locations for all Utilities (Excl. HV Substation)
- BNG Assessment
 - H - Heathland and Shrub
 - W1H - Other Woodland Mixed
 - W1G - Other Woodland-Broadleaved
 - W1E - Upland Birchwoods
- Feature Nodes

