ARCADIS Design & Consultancy for natural and built assets

Wigan Council

PEEL Land & Property

SOUTH HINDLEY

Non-Technical Summary

FEBRUARY 2018

Incorporating

EC HARRIS BUILT ASSET CONSULTANCY

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CONTENTS

1 INTRODUCTION

This document is the Non-Technical Summary of the Environmental Statement which has been prepared to support Peel Land and Property Ltd and Wigan Council's outline planning application for a residential-led mixed use development in South Hindley, Wigan (hereinafter referred to as 'the proposed development'). This document summarises the environmental effects reported in the Environmental Statement that are considered likely to occur during the construction and operation of the proposed development.

The proposed development situated between Manchester to the south east and Liverpool to the south west. The towns of Wigan and Warrington lie to the north and south respectively. The application site is well connected to the surrounding key destinations via a comprehensive network of strategic vehicular routes including the A58, A577 and A578. The application site is approximately 121.7ha in total and is bound by Liverpool Road to the west and the former mineral railway line to the south. It currently consists of rough grassland and tree groups. The application site is intersected by Park Road as well as a number of formal Public Rights of Way and informal footpaths.

2 THE PROPOSED DEVELOPMENT

The proposal is for a residential led development which consists of:

- Up to 2,000 residential units;
- Up to 12ha of new employment;
- Open space (including formal open space, outdoor sports facilities, sustainable transport routes and 53.01ha of Green Infrastructure);
- Educational facility (Primary school);
- Local community centre.
- New planting;
- Parking; and
- Road networks.

The Illustrative Indicative Masterplan (presented below) allows for a variety of housing typologies to accommodate family housing consisting of 2, 3 and 4-bedroom homes with some apartments along with employment provisions, primary education facilities, associated infrastructure and open space.

The majority of the urban blocks would be made of a mix of terraced housing, townhouses, semi-detached and detached, with some apartments. Buildings of increased scale would be used in key locations to provide the definition suggested above. The average density within the proposed development would be 37 dwellings per hectare with a maximum density of 40 dwellings per hectare. The density would vary according to the location and position within the application site, and likely increase within the core of the proposed development where there would be an increased number of smaller units.

The employment zone is proposed to be a 12ha area located to the eastern extent of the proposed development. This comprises a mix of the following use classes:

- B8 (Data Centres) - 62.50%;
- B1c (Light Industrial) - 15.00%;
- B2 (Storage & Distribution) - 17.50%; and
- B1a (Offices) - 5.00%.

3 DESIGN STRATEGY

The vision for the South Hindley masterplan is to: “Provide a high quality sustainable urban extension at South Hindley which provides new family homes and future opportunities for employment, creating a place for people to live, work and enjoy.”. The development will provide a strong landscape framework which incorporates existing site features, and include the following Design Principles:

- Provide much needed new ‘Homes’ and job opportunities;
- Deliver a new road through the site, to alleviate heavy traffic congestion through Hindley;
- Provide new areas for sport and play;
- Regenerate and improve Leyland Park and integrate the park with the development through new and inclusive access routes;
- Be well connected with adjacent areas, including for walking and cycling, and opportunities to use public transport;
- Provide good connections and accessibility to the countryside to the south and west as part of the wider Greenheart countryside park;
- Provide attractive sustainable drainage features to protect against flooding maintain and enhance wildlife habitats and provide natural green corridors between them; and
- Be of a high standard of design that is well integrated with its surroundings.

4 ENVIRONMENTAL EFFECTS

4.1 AIR QUALITY

Existing air quality conditions surrounding the application site were identified through a desk study and consultation to provide a baseline for the assessment.

Wigan Council has declared five Air Quality Management Areas[1] (AQMAs) within its administrative boundary – all for exceedances of Nitrogen Dioxide (NO_2). AQMAs include:

- Atherton Road A577 on the northern boundary of the application site;
- A continuous stretch of the M6 from Junction 27 to Junction 24 including the Junction 25 slip road;
- The A49 (Warrington Road) from the M6 Junction 25 through Hawkley;
- An area of central Wigan comprised of the A49 from Chapel Lane, north towards Central Parkway, Darlington Street, King Street and the B5376 from New Market Street to North Way; and
- Stretches of the A580 from Golborne to Walkden.

There is one automatic monitoring station operated by Wigan Council, however, no exceedances of the annual Air Quality Strategy (AQS) objective ($40\mu g^{-3}$) were monitored between 2011 and 2015 for NO_2 or Particulate Matter (PM_{10}). In addition, there are 50 diffusion tubes located within Wigan Councils administrative boundary and 19 in the air quality study area. Only one exceedance of the NO_2 AQS objective was recorded in the air quality study area between 2013 and 2014 - adjacent to A49.

Highways England also undertakes diffusion tube monitoring. Out of 60 sites, seven of these are located within the air quality study area and five recorded exceedances of annual mean AQS objective for NO_2 in 2014.

Mitigation measures specific to the control and reduction of construction dust will be set out in a Construction Environmental Management Plan (CEMP).

There are no air quality specific mitigation measures proposed for the operation phase of the proposed development however, vehicle trips and emissions associated with the development would be minimised through the development of a Travel Plan.

A qualitative assessment of construction dust effects has been undertaken for the proposed development and concluded that with mitigation dust impacts are predicted to be not significant.

Air quality effects as a result of the operational proposed development have been considered at receptors, using an atmospheric dispersion model. Overall impacts were concluded to be not significant. Concentrations of NO_2 and PM_{10} were modelled to be well below AQS objectives at receptors – the highest NO_2 being 21.5 $\mu g/m^3$ at Atherton Road, Hindley (A577) and the highest PM_{10} being 14.7 $\mu g/m^3$ at the same receptor. The proposed development is therefore considered suitable for development in terms of air quality.

4.2 CULTURAL HERITAGE

There are no scheduled monuments, World Heritage Sites, registered parks and gardens, registered battlefields, conservation areas or listed buildings located within the application site. However, there are 10 grade II listed buildings within the 1km study area. In addition, there are 17 non-statutory archaeological assets within the application site and a potential for unknown archaeology.

The Historic Landscape Character of the application site consists mainly of 20th Century land use with smaller areas of 19th Century and 18th to 19th Century land uses dominated mainly by the previous mining activity on the site.

[1] Since December 1997 each local authority in the UK has been carrying out a review and assessment of air quality in their area. This involves measuring air pollution and trying to predict how it will change in the next few years. If a local authority finds any places where the objectives are not likely to be achieved, it must declare an Air Quality Management Area there. This area could be just one or two streets, or it could be much bigger (Defra, 2017).

Mitigation for non-statutory and unknown archaeological features within the application site would be determined by a phased programme of archaeological investigation implemented on a plot-by-plot basis in advance of reserved matters applications. The investigations would seek to determine the presence, extent and significance of the archaeological resource. If significant archaeology as a result of investigations is present, this would most likely be mitigated through preservation by record. However, all archaeological fieldwork would be undertaken in accordance with a Written Scheme of Investigation approved by Wigan Council.

The only listed building with a reported sight line from the site is the grade II listed Church of St Peter. However, the potential change to the setting of the church from the proposed development would be minimal.

The historic character of the area in landscape terms will undergo a high degree of change as a result of the proposed development resulting in an overall negative effect on the historic character of the area following the implementation of mitigation.

4.3 ECOLOGY AND NATURE CONSERVATION

Reservoirs east of Leyland Park Site of Biological Importance (SBI) and Field by Scowcroft Farm SBI are both located within the application site with Low Hall Park SBI and Local Nature Reserve (LNR) and Platt Bridge Heath SBI located adjacent to the application site. Amberswood Common SBI, Barlow's Farm SBI and Wetland and Scrub at Hindley Green SBI are all located between 150m and 370m away from the proposed development. There are a number of medium value habitats of principal importance present within the application boundary these include: Lowland fen, Hedgerows and Waterbodies.

The presence of great crested newts was confirmed in seven of the 18 surveyed waterbodies within the application site and a number of buildings were identified within the application site which had the potential to support bat roosts. Bat surveys confirmed the presence of low numbers of common and widespread bats using the application site to forage and commute. The presence of water voles was also confirmed in the 'Reservoirs east of Leyland Park' SBI and existing records show recordings further downstream along Borsdane Brook, and within Low Hall Park SBI and LNR, Amberswood Common SBI and Barlow's Farm SBI. An outlier badger sett and foreging habitat would be lost as a result of required

The areas of woodland, dense scrub and hedgerows within the application site provided abundant nesting opportunities for passerine birds. However, the application site is only likely to support common species of nesting birds typical of farmland and urban fringe habitats. The application site supports significant areas of potential suitable habitat for hedgehog. There were many records of brown hare within the search area, none of them within the application site.

A number of mitigation measures have been included within the design of the proposed development including for the development footprint to avoid as much as possible of the two SBIs located within the application site and linked up through a series of linear green corridors. Impacts during construction would be controlled through a development-specific CEMP. Hedgerows would be translocated where possible. Works would avoid periods of particular sensitivity for protected species. Relevant protected species licences would also be obtained from Natural England prior to construction.

During the operational phase, valuable habitats within the application site would be protected through a management strategy for these areas and site lighting will follow guidance to prevent impacts on nocturnal species sensitive to light.

Where priority habitats and waterbodies are lost these would be compensated for through the recreation of wet woodland, marshy grassland and waterbodies.

The proposed development offers considerable scope for the delivery of ecological enhancements through the preparation of a Landscape and Ecological Management Plan and the management of woodland. Retained hedgerows would be reinforced, and new hedgerows would be planted using native tree and shrub species, the design of the drainage strategy provides opportunities for ecological gain and provision would be made for bat/bird boxes that provide transitional, breeding and overwintering opportunities.

Following the implementation of mitigation measures the highest effect recorded effects on ecological receptors during construction / operation was minor adverse on SBI/LNR habitats. All other effects were noted to be negligible or beneficial.

4.4 GROUND CONDITIONS

The site has been undeveloped land from at least the 1950s however extensive mineral extraction took place on site from the 1890s along with the development of numerous railways leaving a legacy of potentially impacted ground across the site. Other historical on-site and off-site industrial uses such as the adjacent asbestos factory may have further increased the potential for contaminated material to be present on site.

The site is also underlain by Coal Measures which have the potential to produce hazardous ground gas and migration of these gases may occur due to the presence of mine shafts, abandoned workings, faults and disturbed ground and impact upon the development.

A legacy of historic mine workings have been identified on site which may have resulted in unmarked mine entries, crown holes, unstable ground, insufficient bearing capacity, coal mining gas and spoil with colliery spoil with a high calorific value.

Geotechnical issues arising from historic mine workings on site may be mitigated through the use of reinforcement techniques, removal of colliery spoil to landfill, creation of safe exclusion zones and remediation of abandoned shafts.

Following good construction practice, the appointed Contractor would produce and work in accordance with a Construction Environmental Management Plan which would also include a Soil Management Plan.

Measures to protect property receptors from potential risks arising due to contamination within the application site would be designed for; such measures are likely to include the introduction of appropriate concrete classification and design, installation of gas protection measures and use of appropriate pipework for services such as drinking water pipes.

Following completion of the construction phase, it is not considered that any additional mitigation measures would be required, over and above those already incorporated within the ground investigation and the design of the proposed development.

The potential receptors at risk from these identified potential hazards following development of the site are considered to be human health, controlled waters and buildings.

Following the adoption of mitigation measures based on a robust intrusive site investigation, and adherence to relevant legislation, guidance and current construction best practice, residual effects during construction would be negative with no significant effects predicted to occur during operation of the proposed development.

There would be a loss of approximately 120ha of agricultural land. The land is considered likely to be Grade 3b and thus not ‘best and most versatile’ therefore no significant effects are likely to occur.

An intrusive site investigation is recommended to confirm the ground conditions on the site. This will address the large number of data gaps which exist and allow for a more robust risk assessment as specified under regulatory guidance. It is recommended that this be carried out as soon as possible so that the information can be used in the further design of the development and any potential constraints or liabilities are identified early.

4.5 HYDROLOGY, DRAINAGE AND FLOOD RISK

The application site and much of the study area lies within the catchment of Borsdane Brook, a designated main river and minor tributary of the Glaze Brook. Westleigh Brook, a designated main river and tributary of the River Mersey, is located to the east of the proposed development and its drainage catchment covers the eastern extent of the study area.

Baseline information indicates Borsdane Brook, Dog Pool Brook and Westleigh Brook generally have unconstrained floodplains, which contain limited (less than ten) industrial/residential properties and have a low probability of flooding. The application site is scattered with localised areas that have a high risk of surface water flooding, these correspond to depressions in the local topography and/or drainage channels and have been assigned a flood risk/land drainage value of High. No works are proposed within medium or high-risk flood risk areas (Flood Zone 2 and Flood Zone 3).

Baseline flood data indicates that the main source of flooding is surface water and fluvial flooding. There is predicted to be low risk to the application site from groundwater, sewers and artificial sources, including reservoirs.

Surface water resources support one licensed abstraction that supplies water to a golf course that is used for spray irrigation, to the southwest of the application site. A reservoir fed by surface water drainage supplies this abstraction. Wigan Council records indicate there are no private water supplies within 1km of the application site.

The application site is noted for having severe drainage issues, and changes in impermeable land cover and the modification to flow pathways have the potential to result in unfavourable changes in the risk of surface water flooding, during both the construction and operational phases. However, the implementation of a Drainage Strategy and the application of a Construction Environmental Management Plan mean that the likely impacts to surface water flood risk are Not Significant during both phases of the proposed development.

Minor tributaries of Borsdane Brook as well as several drainage ditches and channels have been identified as having the potential to be impacted by the proposed development. There is the potential for impacts to surface water quality from the proposed development, particularly from sedimentation and pollution. These impacts are most likely during the construction phase and for areas in proximity to watercourses. However, following the application of the embedded mitigation measures, including the application of the Construction Environmental Management Plan and the Drainage Strategy, as well as no works being proposed in vicinity to the main rivers, the effects are deemed to be Not Significant.

It is predicted that there would be no change in the water quality or quantity attributes of surface water receptors, during either the construction or operational phases.

It is anticipated that there would be no significant residual effects from the proposed development to hydrology, drainage or flood risk.

4.6 LANDSCAPE AND VISUAL IMPACTS

The Landscape Character Area is described as a fragmented landscape created as a result of mining and industrial activity this interspersed with housing, in a scattered settlement pattern, which is underlain by coal measures. Woodland cover is limited although community woodlands have been established on many post-industrial sites. Field patterns are medium to large mostly rectangular with poorly defined hedgerows or post and wire fence. Pockets of agriculture remain principal permanent grassland or cereal production, with some horse grazing and stabling. Ground subsistence is common caused by coal mining activity resulting ion subsidence flashes, creating areas of open water, and wetlands. The landscape is also heavily influenced by transport and utilities.

The proposed development is located to the south of the residential edge of Hindley and Hindley Green. The landscape contains a mix of low quality fragmented pastoral agriculture, areas directly affected by mining and extraction activities, areas of derelict land, containing re-graded colliery spoil mounds, and roughly reclaimed land. Landscape features here are generally of a low quality, damaged as a result of previous activities, or present from recolonization such as coarse grasslands and tree species. The landscape is generally contained by surrounding features but where elevated positions occur from spoil mounds, views are far reaching. Disused or derelict former mineral railway lines cuttings and embankments are common features these providing potential for wildlife and recreational open space. The industrial elements of neighbouring factory results in a dominant feature within the local landscape.

Potential visual receptors include residential properties at Hindley and Hindley Green, users of the network of Public Right of Way including those which presently traverse the application site and those surrounding it and recreational users of Leyland Park, the recreational open space at Low Park Hall and users of sports pitches.

Mitigation measures have been developed to build on and enhance the existing green infrastructure and to improve the overall character and qualities of the proposed development. These measures have also been provided to also help reduce the scale of the proposed development on local visual amenity by breaking it into smaller built parcels connected with green corridors, open space and structural planting.

Due to the existing generally poor landscape character, it is considered that the change in use of the wider site will result in a net positive change, with the current poor quality reclaimed and grazing land converted to a primarily residential area of a high quality and a distinct sense of design style and character. It is considered that all four character areas would experience a negative effect. After 15 years, as a result of the establishment of mitigation and green infrastructure planting all Landscape Character Area's would experience a positive effect.

Despite the overall improvement in landscape character, the nature and scale of the proposed development would potentially result in some notable negative effects on the views experienced by several visual receptors as a result of the loss of the existing open space in the view and where the new built form forms the dominant element. One year after the completion of the proposed development, the effect is considered to be negative for 11 viewpoints. After 15 years following the establishment of the green infrastructure and mitigation measures, the effect is considered to be positive for three viewpoints, not significant for five viewpoints and negative for three.

4.7 NOISE AND VIBRATION

The area is dominated by traffic noise from the surrounding road network, noise was also audible from limited industrial activities, but these were in no way dominant. Whilst in general, traffic noise was the prevalent source of noise in the area, noise was also audible from limited industrial activities, but these were in not dominant. More localised noise sources to each location were also noted, but these were not considered to dominate the prevailing noise climate in general. This included noise from the adjacent residential properties, human activities and natural noises. There is the potential for the noise climate of the area surrounding the application site to change as a result of development, especially as a result of the proposed link road.

No existing prominent sources of vibration were identified in the vicinity of the site.

The following mitigation measures should be considered though the design of the residential areas of the site:

- Appropriate glazing and ventilation provision;
- Layout considerations to ensure that noise is controlled by layout design; and
- Provision for acoustic screening where necessary

Noise from the existing industrial facility located at the eastern end of the development site needs to be considered when developing the detailed layout for both the employment and residential component. Careful consideration of the types of use proposed in the Employment provision, along with attention to the site layout to maximise screening effects from the industrial facility site should be used as a means to mitigate the potential for negative effects on the newly proposed residential provision.

Noise associated with the proposed employment provision has the potential to result in negative effects on sensitive receptors in the vicinity, either proposed or existing. Mitigation measures should include:

- Controlling certain industrial types that operate on the site; and

- Consider the layout to ensure that noisy aspects of the employment provision are removed or screened from sensitive receptors and incorporating acoustic screening where necessary.

Assessment of the suitability of the Development site for the proposed end uses has been undertaken in accordance with appropriate methodologies detailed within this chapter. It is concluded that the conditioning of the investigation and implementation of appropriate acoustic control measures within the detailed design of the site should be paramount and would therefore result in acceptable residual impacts within the final scheme.

4.8 TRAFFIC AND ACCESSIBILITY

The environmental effects of traffic generated by the South Hindley proposals (new link road and supporting mixed use development) have been considered. In respect of the construction phase, construction traffic, particularly HGV traffic, can have an adverse impact if routeing via residential streets, and in this regard no vehicular connection would be made to the site from Park Road or any other residential streets to the north of the site. To minimise impact during construction, access would only be permitted via Liverpool Road and/or Leigh Road (the link road access junctions would be constructed first to provide access into each end of the site). The physical connection to Park Road would only be made once the full Liverpool Road to Leigh Road link has been completed

Other design measures would include:

- Reuse of existing spoil heaps on site to minimise the volume of HGV activity associated with the import/export of fill;
- Traffic management of the construction of the access junctions to minimise the delay to existing traffic using these sections of road;
- As part of the CEMP a Hauliers Code of Practice and a Routeing Agreement would be put in place and construction traffic would be confined to Wigan's strategic road network.

With careful management of the construction activity, its impacts can be controlled, and therefore it is considered that the environmental impacts of construction traffic would be negligible.

In respect of the operational phase there are a number of sensitive receptors within the area of influence of the scheme. Based on these sensitivities, and percentage changes in traffic demand, the assessment indicates that some links would see major/moderate adverse impacts, whilst others would see major/moderate beneficial impacts.

In summary the key areas seeing beneficial impacts would be Bickershaw Lane, Liverpool Road, Market Street and Atherton Road in the centre of Hindley, and on Atherton Road towards Hindley Green. The key areas of adverse impact would be Park Road area, some of the residential streets on the north side of Atherton Road, Nel Pan Lane and Westleigh Lane. The Park Road area would be subject to a traffic management review to help reduce impacts, and a highway improvement scheme identified through the TA process should help reduce delay to vehicles passing through the Westleigh Lane / Nel Pan Lane junction.

A number of the links have particularly sensitive receptors such as schools or nurseries (including Swan Lane, Borsdane Avenue, Nel Pan Lane and Westleigh Lane) and elsewhere on the link the impacts would be much lower. Also, particularly in respect of the identified residential roads on the north side of Atherton Road, whilst some of the forecast percentage increases in traffic may be high, they are not so in absolute terms.

The adverse Major / Moderate impacts would be isolated to a few areas. These adverse impacts must be balanced against the beneficial impacts, and overall the impact of the proposed development is not considered to have a detrimental environmental impact.

4.9 SOCIO-ECONOMICS

The number of people in Wigan who were considered to be economically active is higher than the figures for both the North West and Great Britain suggesting a strong potential workforce across Wigan. The proportion

of these economically active people who were unemployed in Wigan is lower than unemployment rates at both regional and National levels. On a local scale, Hindley and Hindley Green also demonstrate relatively high numbers of people who are economically. However, figures for Hindley are lower than the borough and national percentages however figures for Hindley Green are above both borough and national averages.

The number of unemployed economically active people in Hindley is higher than national unemployment figures. Slightly lower unemployment levels were recorded in Hindley Green which are lower than national unemployment. Rates of claimants claiming Job Seekers Allowance in Hindley and Hindley Green are slightly lower than the national average.

The dominant employment sectors in Hindley were elementary occupations and skilled trade occupations whilst skilled trade occupations were the dominant employment sector in Hindley Green. The high level of occupations in skilled trades in both Hindley and Hindley Green and elementary trades in Hindley and adjacent wards, together with the high percentage of Wigan's work force in the construction industry, may prove beneficial to the proposed development regarding available local labour.

The most dominant mode of travel in the commute to work for both Hindley and Hindley Green is 'driving a car or a van'. This is also the case for Wigan, the North West and England.

There are 14 Public Right of Ways that fall within the application site including footpaths 6, 7, 11,13A, 14, 15, 16, 18, 19, 27, 28, 29, 30 and 31. There is also one aspirational cycle route within the study area that follows the boundary of the application site to the south and the former mineral railway line (National Route 55).

Economic mitigation measures during the construction phase include the local sourcing of equipment and the use of the local labour supply for construction wherever possible, to ensure maximum benefit to local communities.

No mitigation proposed during the operation phase in relation to employment or economy.

The masterplan of the proposed development includes for a number of new public routes that would be created as part of the proposed development.

The proposed development would result in positive effects on the local economy during the construction and operational phases of the development due to increased spend from construction workers and the increased population once operational.

The proposed development would result in positive effects on employment during the construction phase of the proposed development due to the temporary increase in constructions jobs created.

The effects on Public Right of Ways within the application site during construction are anticipated to be negative as some may need to be diverted during the construction works. However, during operation positive effects are predicted due to the creation of new footpaths which would improve accessibility through the application site along with the aspirational cycle route.

4.10 HEALTH IMPACT ASSESSMENT

Life expectancy is 12.2 years lower for men and 9.8 years lower for women in the most deprived areas of Wigan than in the least deprived areas. The life expectancy of both male and female residents for the ward of Hindley is lower than for Wigan and England as a whole. Life expectancy for residents in Hindley Green is equivalent to that for England.

The rate of people killed and seriously injured on roads are lower than average. Rates of long-term unemployment and early deaths from cardiovascular diseases are higher than average. The rate of violent crime is lower than the average for England. The borough population is ageing with the prevalence of dementia projected to rise. One in eight people aged over 80 years has dementia.

Residents living within the Hindley and Hindley Green wards report poorer levels of health when compared to Wigan, the North-West and England as a whole. Standardised mortality rates for all causes of death are

highest within the ward of Hindley compared to Wigan and England, as a whole. Childhood obesity is higher in the study area than the England average, for both children in Reception Year and Year 6

The nearest doctor's surgery to the proposed development is Hindley Green Surgery. There are three dental facilities in Hindley. The nearest hospital is Avenue Day Hospital, located 4km away in Leigh. The hospital provides a range of secondary care services, including day surgery, outpatient services, urology and endoscopy units. The closest hospital which provides Accident and Emergency Services is the Royal Albert Edward Infirmary located in Wigan, which is 4.2km away from the proposed development.

Through the provision of construction employment opportunities, the proposed development will have a positive impact on mental health and general well-being as a result of improved lifestyles, income and feelings of self-worth. Although the health effects are likely to be temporary in nature, given that the construction works would take place over a finite period. Health effects as a result of access to work and training are therefore likely to be significant.

Through the provision of new employment opportunities, the proposed development would have a positive effect on physical and mental health and general well-being as a result of improved lifestyles, income and feelings of self-worth. Health effects on the local population in relation to access to work and training are therefore considered to be significant.

The proposed development incorporates new footpaths and a shareway together with multi-user routes. The proposed development would therefore have a positive effect on the health of local residents, by virtue of improvements in accessibility and active travel.

There is likely to be a positive effect on health and well-being of residents as a result of improved access to open space and nature from the proposed development.

The proposed development would have a positive effect on health through the provision of new housing which includes for a proportion of affordable housing. The scale and range of new housing proposed would have a significant effect on health and well-being of existing and future residents through the scale of new housing proposed.

4.11 CUMULATIVE EFFECTS

Six developments were identified by Wigan Council as having the potential to result in inter-project effects with the proposed development.

The inter-project cumulative effects assessment took into account the effects of the proposed development and six other developments. The worst of the recorded effects were brought about through all six developments in conjunction with the proposed development resulting in mainly negative effects on landscape and visual and noise and vibration. The majority of the six developments would bring about positive cumulative effects for socio-economic reasons.

The intra-project cumulative effects assessments considered the receptors that received multiple effects as a result of the proposed development. As a result of the proposed development, residential property receptors would experience an overall negative intra-project cumulative effect during the construction phase. No Significant intra-project cumulative are predicted to occur during the operation phase of the proposed development.