15. Transport and Access

15.1. Introduction

15.1.1. This chapter of the Environmental Statement (ES) reports the outcome of the assessment of the likely significant transport effects of the proposed development during the construction stage and operational stage.

15.1.2. The chapter and the supporting appendices describe the planning policy context; the assessment methodology; the baseline conditions currently existing at the Application Site and surrounding area; the likely significant effects; the mitigation measures required to prevent, reduce, or offset any significant negative effects; and the likely residual effects after these measures have been adopted.

15.1.3. This chapter is supported by **Appendix 15.1: Transport Assessment** and **Appendix 15.2: Framework Travel Plan** which provide increased levels of detail beyond the scope of this ES chapter, and which have been produced separately and submitted in support of the planning application. These reports have been prepared with regard to relevant best practice guidance and with input from key stakeholders.

15.1.4. This Chapter, and its associated appendices, is intended to be read as part of the wider Environmental Statement (ES) with particular reference to the introductory chapters of this ES (**Chapter 1 to Chapter 4**).

15.2. Assessment Approach

Methodology

15.2.1. The following section outlines the methodologies applied to identify and assess the range of potential transport effects likely to result from the Proposed Development.

15.2.2. This Chapter has been produced in accordance with current, good and best practice guidance and has been informed through discussions held with the Transport Working Group. The Transport Working Group is attended by members of the local planning authority, North West Leicestershire District Council (NWLDC), and the local highway authority, Leicestershire County Council (LCC), within whose areas the development is located. Neighbouring areas will also be affected, and therefore representatives from Derbyshire County Council and Nottinghamshire County Council also attend. The Proposed Development will impact on the Strategic Road Network, and so National Highways and their advisors attend, as do members of the Applicants' consultant team.

15.2.3. The Transport Working Group has considered all matters associated with the Proposed Development, although there has been a primary focus on the strategic traffic modelling necessary to understand the traffic impacts. The Transport Working Group have guided and agreed the inputs to that modelling, grappling with matters such as the cumulative assessment and the status of surrounding planned and emerging development proposals such as the redevelopment of the Ratcliffe on Soar power station, the Freeport and draft local plan allocations.

15.2.4. Potentially significant effects to be considered in this assessment include temporary effects on road users as a result of construction activity, and the longer-term effects due to the complete and operational development.

15.2.5. For the operational phase it was agreed with the Transport Working Group that the Proposed Development would be assessed using LCC's Freeport Model, which is a cordoned off part of the larger PRTM (Pan-Regional Transport Model). That model has recently been revised to a 2019 base year and has been validated in the local area around the Freeport sites.

15.2.6. The modelling work assesses a cumulative scenario, and the Transport Working Group has agreed the schemes included in the cumulative scenario, given the significant changes planned for the area. Those changes include schemes already being built on the west side of Castle Donington, at East Midlands Gateway, planned development around the airport, the Freeport, HS2, and aspirations for Ratcliffe on Soar power station. The planning status of those different schemes varies, and not all are committed – defined as consented or allocated and reasonably likely to proceed in the next three years.

15.2.7. As agreed with the Transport Working Group, the PRTM modelling is staged with the first stage comprising of the forecast modelling. This modelling has been completed and informs the assessment of the highway impacts of the Proposed Development on the local and strategic road network as detailed in Transport Assessment (**Appendix 15.1)**.

15.2.8. The next stages of the PRTM modelling comprise of the following.

- Stage 2 – Using outputs from the Stage 1 modelling, a mitigation strategy incorporating highway interventions and strategies for walking, cycling, and public transport would be identified and agreed with the Transport Working Group. This strategy would be tested using the Freeport model, demonstrating that the proposed mitigation strategies successfully limit residual impacts to acceptable levels.

- Stage 3 – Testing the proposed phasing strategy for the Proposed Development.

15.2.9. The assessment presented takes into account the legislative and policy context at a local and national level, both directly and through the scoping process described. It is informed by current and best practice, and will examine the environmental impacts of the changing transport conditions based on the following guidance:

- Environmental Assessment of Traffic and Movement, the Institute of Environmental Management and Assessment (IEMA)[1]

- Design Manual for Roads and Bridges (DMRB) LA104 Environmental assessment and monitoring[2] and DMRB LA112 Population and human health[3].

[1] The Institute of Environmental Management and Assessment (July 2023) Environmental Assessment of Traffic and Movement

[2] National Highways (August 2020) Design Manual for Roads and Bridges Sustainability & Environment Appraisal LA 104 Environmental assessment and monitoring

[3] National Highways (January 2020) Design Manual for Roads and Bridges Sustainability & Environment Appraisal LA 112 Population and human health

15.2.10. The technical scope of the assessment reported in this ES chapter comprises the assessment of the likely significant effects of the proposed development with respect to transport network users across the following criteria from the IEMA Guidelines and the DMRB guidance as follows:

- Severance of communities
- Road vehicle driver and passenger delay
- Non-motorised user delay
- Non-motorised user amenity
- Fear and intimidation on and by road users
- Road user and pedestrian safety
- Hazardous/large loads

15.2.11. Given the nature of the Proposed Development, it is not envisaged that it will generate any hazardous loads and therefore this ES does not consider the effects of hazardous loads.

Assessment of Significance

15.2.12. The assessment process identifies the potential effects pre-mitigation that may arise because of the Proposed Development. It subsequently identifies appropriate mitigation measures, and considers the changes (i.e., the residual effects) that are predicted to take place to the existing condition of the environment as a result of the Proposed Development.

15.2.13. Guidance provided by IEMA and the DfT has been consulted in order to identify significance criteria applicable to the assessment. For a number of residual effects, there are no established thresholds of significance, in which case interpretation and professional judgement is applied based on prior knowledge of the Application Site or quantitative data where available. The approach to each is described in the following sections.

15.2.14. In the assessment of transport effects, 'significance' often arises where the effect of a development causes infrastructure demand to approach or exceed the capacity available. Regarding roads this may relate to link capacity, or as is more common, junction capacity. More widely, public transport capacity, pedestrian infrastructure capacity, and cycle infrastructure effects may be of concern.

15.2.15. Transport effects may be either beneficial or adverse, apply in the short, medium or longer terms and be either temporary or permanent:

- **Beneficial effect**: One that is generally considered a positive aspect for users, receptors and/or the environment, such as a reduction in motor vehicle traffic or an improvement in the sustainability of transport undertaken. It should be noted that this is potentially subjective.
- **Adverse effect**: One that is generally considered a negative aspect for users, receptors and/or the environment, such as an increase in motor vehicle traffic or a degradation in the accessibility of a site. Again, this is also potentially subjective.

- **Short term**: Of limited (i.e., temporary) duration that does not last beyond the period of construction; or

- **Long term**: Of indefinite duration, i.e., extends beyond the period of construction and/or can be considered either practically or actually permanent.

15.2.16. The magnitude for assessing an effect will be characterised as either:

- **Substantial:** Total loss or major/substantial alteration to key elements/features of the without development conditions such that due to the Proposed Development, character/composition/attributes will be fundamentally changed. These effects will usually be of measurable effect and may be expected to have a substantive effect on the capacity and/or capability of existing/proposed infrastructure.

- **Moderate:** Loss or alteration to one or more key elements/features of the without development conditions such that due to the Proposed Development, character / composition / attributes will be materially changed. These effects will usually be of measurable effect and may be expected to have a noticeable effect on the capacity and/or capability of existing/proposed infrastructure.

- **Minor:** A minor shift away from without development conditions. Change arising from the loss / alteration will be discernible / detectable but not material. The underlying character / composition/attributes of the without development condition will be similar to the without development circumstances / situation. These effects will usually be of measurable effect but would be expected to be substantially within the capacity and/or capability of existing/proposed infrastructure; or

- **Negligible/Nil:** Very little, or nil change from without development conditions. Change barely or not distinguishable, of no consequence, being or approximating to a 'no change' situation. Effects would be within the range of daily variation.

15.2.17. Each highway link will be assigned an Environmental Value, or 'sensitivity' based on their scale or importance.

15.2.18. These 'Sensitive Receptors' are key in determining the significance of the transport effects of a new development. The sensitivity of a receptor is based on a number of factors such as the vulnerability or activity of the user. In line with the IEMA Guidelines, the sensitivity of receptors is outlined in **Table 15.1** below.

Table 15.1: Scale of sensitivity for receptors

Scale of sensitivity used in the assessment	
Sensitivity	**Detail**
High	The receptor / resource has little ability to absorb change without altering its present character or is of international or national importance. Receptors of greatest sensitivity to traffic flows: • Schools, colleges and other educational institutions. • Retirement/care homes for the elderly or infirm. • Roads with no footway that may be used by pedestrians; or • Accident 'black spots.
Moderate	The receptor / resource has moderate capacity to absorb change without altering its present character, or is of high importance Receptors with moderate sensitivity to traffic flows: • Hospitals, surgeries and clinics. • Parks and recreation areas. • Shopping area with roadside frontage. • Residential areas; or • Roads with narrow footway that may be used by pedestrians.
Low	The receptor / resource is tolerant of change without detriment to its character, is of low importance. Receptors with some sensitivity to traffic flow: • Open spaces. • Tourist/visitor attractions. • Historic buildings; or • Churches and other places of worship.
Negligible	Receptor with no sensitivity to traffic flows and those sufficiently distance from affected roads and junctions.

15.2.19. A significance of environmental effect can also be determined by the interaction of magnitude and sensitivity, whereby the effects can be beneficial or adverse. The Effect Significance Matrix is set out in **Table 15.2** below.

Table 15.2: Effect Significance Matrix

Magnitude	High Sensitivity	Moderate Sensitivity	Low Sensitivity
Substantial	Substantial	Substantial/Moderate	Moderate/Minor
Moderate	Substantial/Moderate	Moderate/Minor	Minor
Minor	Moderate/Minor	Minor	Minor
Negligible	Negligible	Negligible	Negligible

15.2.20. The resulting significance of an effect will be reported considering its duration (long or short term), permanence (permanent or temporary) and the type of impact (beneficial or adverse). For the purpose of this assessment, an effect of moderate or above is considered a significant effect in EIA terms.

15.2.21. The IEMA Guidelines suggest the following assessment criteria:

Severance of communities

15.2.22. Severance is defined in the IEMA Guidelines as "the perceived division that can occur within a community when it becomes separated by a major transport infrastructure. The term is used to describe a complex series of factors that separate people from places and other people. Severance may result from the difficulty of crossing a heavily trafficked road or a physical barrier created by infrastructure".

15.2.23. The IEMA Guidelines suggest that changes in traffic flow of 30%, 60% and 90% are regarded as producing 'slight' (minor), 'moderate' and 'substantial' (major) changes in severance, respectively.

Road vehicle driver and passenger delay

15.2.24. The IEMA Guidelines suggest that driver delay to non-development traffic can occur at several points on the network surrounding the site including at the site entrance point(s) where there will be additional turning movements, and at key junctions on the network which might be affected by increased traffic. These delays are only likely to be significant (in ES terms) when the traffic on the network is already at, or close to, the capacity of the system.

15.2.25. The determination of driver delay has therefore been informed from the analysis of those junctions within the area of assessment and assessed as part of the Transport Assessment (**Appendix 15.1)**.

Non-motorised user delay

15.2.26. Non-motorised user delay is considered to be affected by changes in the volume, composition or speed of traffic that may impact on the ability of pedestrians to cross a road. The IEMA Guidelines does not suggest any thresholds for judging the significance of absolute or actual changes in levels of delay, instead it is recommended that assessors use their judgement to determine whether pedestrian delay is a significant impact.

15.2.27. For consistency within the ES, the same thresholds are adopted for pedestrian delay as have been adopted for severance (<30% negligible, 30% minor, 60% moderate, 90% major).

Non-motorised user amenity

15.2.28. The IEMA Guidelines broadly defines non-motorised user amenity as the relative pleasantness of a journey. Pedestrian amenity is considered to be affected by traffic flow, traffic composition and footway width/separation from traffic.

15.2.29. The IEMA Guidelines suggests a tentative threshold for judging the significance of changes in pedestrian amenity would be where the traffic flow (or HGV component) is halved or doubled. The IEMA guidelines also note however that the assessment should pay full regard to specific local conditions.

15.2.30. Where traffic flows are less than halved or doubled, the this has been assessed as negligible. Where the magnitude of change is greater than this, professional judgement has been used taking into account the magnitude of change in flow, the proportion of HGVs) the availability of footways and separation of pedestrian desire lines from the carriageway.

Fear and intimidation on and by road users

15.2.31. A further impact traffic may have on pedestrians is fear and intimidation. The IEMA Guidelines considers that the impact of this is dependent on the volume of traffic, its HGV composition, its proximity to people or the lack of protection caused by such factors as narrow footway widths.

15.2.32. The IEMA Guidelines define a weighting system to assess the likelihood of pedestrian fear and intimidation on a highway link. The degree of hazard is assessed with reference to the established thresholds that are set out in **Table 15.3** below. A score is then provided for each combination that occurs on the highway link under consideration.

Table 15.3: Fear and Intimidation Degree of Hazard

Average traffic flow over 18-hour day - all vehicles/hour 2-way (a)	Total 18-hour heavy vehicle flow (b)	Average vehicle speed (c)	Degree of hazard score
+1,800	+3,000	>40	30
1,200 – 1,800	2,000 – 3,000	30 - 40	20
600 – 1,200	1,000 – 2,000	20 – 30	10
<600	<1,000	<20	0

15.2.33. The total score from all three elements is combined to provide level of fear and intimidation for all three elements as set out in **Table 15.4**.

Table 15.4: Levels of Fear and Intimidation

Level of fear and intimidation	Total hazard score (a)+ (b) +(c)
Extreme	71+
Great	40-70
Moderate	21-40
Small	0-20

15.2.34. The magnitude of impact is approximated with reference to the change in the level of fear and intimidation from the baseline conditions defined in **Table 15.5**.

Table 15.5: Fear and Intimidation Magnitude of Impact

Magnitude of impact	Change in step/traffic flows (AADT) from baseline conditions
High	Two step changes in level
Medium	One step changes in level, but with >400 vehicle increase in average 18 hour two way all vehicle flow and/or >500 HGV increase in total 18 hour HGV flow
Low	One step changes in level, but with <400 vehicle increase in average 18 hour two way all vehicle flow and/or <500 HGV increase in total 18 hour HGV flow
Negligible	No change in step changes

15.2.35. Where the magnitude of impact is low or above, professional judgement has been used to determine the significance of effect taking into account the characteristics of each link including its purpose and the type and availability of pedestrian and cycle infrastructure.

Road user and pedestrian safety

15.2.36. The IEMA Guidelines provides only limited information on the assessment of accidents and safety, suggesting that existing accident rates can be obtained from Highway Authority records. For the purposes of this assessment accident records have been obtained from the Local Highway Authority and detailed analysis has been undertaken as detailed in the Transport Assessment (**Appendix 15.1).**

Legislative and Policy Framework

15.2.37. This section provides an overview of the relevant national and local transport policies.

National Planning Policy Framework

15.2.38. The National Planning Policy Framework[4] (NPPF) sets out the government's planning policies for England and how these should be applied. The NPPF was first published in March 2012 and was last updated in December 2024.

15.2.39. Chapter 9 of the NPPF is titled Promoting sustainable development. Paragraph 109 states that: *'Transport issues should be considered from the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places. This should involve:*

a) making transport considerations an important part of early engagement with local communities;

b) ensuring patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places;

c) understanding and addressing the potential impacts of development on transport networks;

d) realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage – for example in relation to the scale, location or density of development that can be accommodated;

e) identifying and pursuing opportunities to promote walking, cycling and public transport use; and

f) identifying, assessing and taking into account the environmental impacts of traffic and transport infrastructure – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains'.

15.2.40. Paragraph 115 states that *'In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*

[4] Ministry of Housing, Communities and Local Government (December 2024) National Planning Policy Framework

a) sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location

b) safe and suitable access to the site can be achieved for all users;

c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code48; and

d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach'.

15.2.41. Paragraph 116 states that *'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios'.*

Department for Transport Circular 01/22

15.2.42. Circular 01/22[5] provides an overview of the principles of sustainable development in the context of the Strategic Road Network (SRN). The guidance notes that new development should be located in sustainable locations or locations that can be made sustainable, and that sustainable infrastructure must be delivered alongside or ahead of occupancy. Sustainable travel must be the natural first choice for those able to use it.

15.2.43. The Circular recognises that transport planning needs to move away from predicting future demand to provide capacity, to instead set an ideal outcome and provide solutions to deliver this vision (moving from 'Predict and Provide' to 'Decide and Provide'). Capacity enhancements to the SRN will be considered on a case-by-case basis. Enhancements should improve community connectivity and public transport accessibility. Any scheme proposing modifications to the SRN is required to undertake a Walking, Cycling, and Horse-riding Assessment (WCHAR) to identify improvement opportunities and follow the Road Safety Audit Assessment process. It is noted that planned improvements to the SRN must include the consideration or development of safe and integrated networks for pedestrians, wheelers, cyclists, and horse-riders.

15.2.44. The Circular provides information on the role of National Highways in decision-taking. In decision making, it is expected that developers promote sustainable transport ahead of new capacity enhancements to the SRN. In residential developments, consideration should be given to street layout, broadband, cycle parking and access to amenities/open space. Large schemes should provide mobility or micro-mobility hubs. High-powered, open-access EV chargepoints should be provided where developments include on-street or communal parking.

[5] Department for Transport and National Highways (December 2022) Circular 01/22 Strategic road network and the delivery of sustainable development,

Leicestershire Local Transport Plan 4 (LTP4)

15.2.45. The LTP4 sets out a vision for transport in Leicestershire to 2050 and will be developed in three phases. The first phase comprises the Core Document[6] and was adopted on 22 November 2024. The remining phases will be under development between summer 2024 and spring 2026.

15.2.46. The LTP4 vision for transport across Leicestershire is 'Delivering a safe and connected transport network which is resilient and well-maintained to support the ambitions and health of our communities, deliver economic prosperity whilst safeguarding our environment'.

15.2.47. LTP4 has six core policies as set out below:

'Core Policy 1: Delivering the vision - Delivering a safe and connected transport network which is resilient and well-maintained to support the ambitions and health of our communities, deliver economic prosperity whilst safeguarding our environment.

Core Policy 2: Managing demand - Delivering a safe, accessible, connected and resilient transport network that is well managed and enables communities to access jobs, education and services. The network will also enable efficient movement and delivery of goods to support the local, regional and international markets.

Core Policy 3: Enabling travel choice - Enabling travel choice in all of our communities that reflects their unique needs which ensures their safety whilst promoting health & wellbeing and protecting the environment.

Core Policy 4: Delivering solutions - Work collaboratively to identify and develop innovative transport related solutions which provide good value for money and enable travel choice, improve our transport network users' experiences, and benefit the environment and the health and wellbeing of our communities.

Core Policy 5: Embracing innovation - Embrace innovation and collaboration, which enables us to decarbonise transport and adapt to climate change to ensure a resilient transport network, while benefiting the environment and promoting the health and wellbeing of our communities.

Core Policy 6: Evaluating progress - Utilise data, monitoring and evaluation of our transport solutions to enable evidence based programmes, provide a flexible approach to policy development, technology, and innovation to address changes and challenges which impact our communities'

North West Leicestershire Local Plan (2011 – 2031)

15.2.48. The adopted Local Plan (2011-2031) was formally adopted on 21 November 2017. Subsequently the plan was subject to a partial review, and the amended Local Plan was adopted in March 2021[7].

15.2.49. The adopted Local Plan details the need for a range of infrastructure to be provided. Policy IF1 – Development and Infrastructure, outlines how new development should support and make contributions to physical, social, and green infrastructure in order to mitigate its impact upon

[6] Leicestershire County Council (November 2024) A Local Transport Plan for Leicestershire Core Document 2026-2040

[7] North West Leicestershire District Council (March 2021) North West Leicestershire Local Plan

the environment and communities. The policy details the type of infrastructure required to support new developments which includes, but is not limited to:

'a) Affordable housing; and

b) Community Infrastructure including education, health, cultural facilities and other public services; and

c) Transport including highways, footpaths and cycleways, public transport and associated facilities; and

d) Green infrastructure including open space, sport and recreation, National Forest planting (either new provision or enhancement of existing sites) and provision of or improvements to sites of nature conservation value; and

e) The provision of superfast broadband communications; and

f) Utilities and waste; and

g) Flood prevention and sustainable drainage'.

15.2.50. Policy 1F4 – Transport Infrastructure and new development, details the requirements of new development in terms of transport infrastructure provision. The policy highlights how land use and transport must be planned together to give people genuine choice of travel and increase the use of sustainable transport modes. Policy lF4 outlines how new and improved transport infrastructure, and making the best of existing infrastructure, is vital to achieving the objective of sustainable development.

The Council, working with the highway authorities, will ensure that development takes account of the impact upon the highway network and the environment, including climate change, and incorporates safe and accessible connections to the transport network to enable travel choice, including by non-car modes, for residents, businesses and employees. In assessing proposals regard will be had to any Transport Assessment/Statement and Travel Plan prepared to support the application.

New development will be expected to maximise accessibility by sustainable modes of transport, having regard to the nature and location of the development site, and contribute towards improvement of the following where there is a demonstrable impact as a result of the proposed development:

(a) The provision of cycle links within and beyond sites so as to create a network of cycleways across the district, including linkages to key Green Infrastructure;

(b) The provision of public footpath links within and beyond sites so as to enhance the network of footpaths across the district, including linkages to key Green Infrastructure;

(c) The provision of new public transport services, or the enhancement of existing services, to serve new developments so that accessibility by non-car modes to essential services and facilities, such as shops, schools and employment, is maximised.

Where new development has a demonstrable impact upon the highway network contributions towards improvements will be sought commensurate with the impact'.

North West Leicestershire New Local Plan

15.2.51. NWLDC are currently preparing a new Local Plan (2020 – 2040), which is scheduled to be adopted in October 2026. The Plan has progressed through various stages. In January 2024 the Council published the proposed housing and employment allocations[8]. Isley Woodhouse was identified as a new settlement and a draft allocation under policy IW1. NWLDC undertook a period of consultation in February/March 2024 and are analysing the responses to the consultation. In November 2024 the Council confirmed their commitment to the new settlement following the consultation.

15.2.52. Draft policy IW1 states the following.

New Settlement: Isley Woodhouse (IW1)

(1) Land to the south of East Midlands Airport and Donington Park Circuit and to the west of Diseworth (316Ha) is allocated for a new, standalone village. When complete, Isley Woodhouse village will comprise:

(a) Some 4,500 new homes, around 1,900 of which will be built by 2040.

(b) A mix of market and affordable homes, including plots of land for those who want to build their own home in accordance with draft Local Plan Policies H4, H5, H7 and H10.

(c) Homes suited to the elderly, and those who need care, such as bungalows, sheltered and extra care facilities, nursing or care homes in accordance with draft Local Plan Policies H4 and H11. 63 64

(d) Some 23,000sqm of employment floorspace (industry and warehousing) located along the A453 frontage to include start-up premises suitable for small businesses. By 2040 some 4,600 sqm of employment floorspace will have been delivered.

(e) Primary and secondary schools.

(f) A main village centre plus smaller neighbourhood centres with facilities such as convenience stores, pub/restaurant/cafes, health services, community venue etc.

(g) Formal and informal open space to include children's play areas, sports pitches, recreation routes and cycling and walking links.

(2) The planning and delivery of Isley Woodhouse will be underpinned by the following key principles:

(a) Putting the health and wellbeing of residents and workers at the forefront by creating an accessible, safe, sociable and inclusive environment where healthy choices are easy to make.

[8] North West Leicestershire District Council (January 2024) Draft North West Leicestershire Local Plan 2020 -2040 Proposed Housing and Employment Allocations for Consultation

(b) Striving for carbon neutrality, including by incorporating measures to minimise energy consumption whilst maximising the benefits from on-site renewable energy generation and energy efficient buildings.

(c) Achieving exceptional design quality based on a bespoke design code.

(d) Delivering the infrastructure needed to serve the development.

(e) Making sustainable travel - walking cycling, public transport and the use of electric vehicles - a realistic option for residents and workers.

(f) Creating a village which caters for all stages of life.

(g) Ensuring residents' day to day needs can be met as far as possible within the village.

(h) Enabling people to live close to where they work by creating a village with a range of house types and tenures, including plentiful affordable housing, with sustainable transport links to nearby employment areas.

(3) A comprehensive masterplan and phasing plans are needed to bring the development forward. These must be approved by the District Council and should provide for:

(a) A mix of house sizes, tenures and types, including provision suited to older people and for self- and custom-built homes and which reflects the requirements of those in greatest need, in particular for affordable housing.

(b) The identification of essential infrastructure, including all necessary on-site and off-site highway improvements, and its delivery in a co ordinated and timely way.

(c) A comprehensive landscaping strategy that retains, enhances and capitalises on existing landscape features and is informed by the Council's Landscape Sensitivity Study (2020).

(d) The achievement of national biodiversity net gain requirements as a minimum.

(e) The conservation and enhancement of heritage assets both on-site and within the vicinity of the site.

(f) A strategy to address the noise from East Midlands Airport and Donington Park Racing Circuit, including mitigation measures to protect the amenity of residents.

(g) Linked phasing plans for housing, employment and infrastructure.

(4) To ensure that a cohesive development is delivered which meets the principles and requirements outlined, the Council will only approve planning applications that adhere to the comprehensive masterplan (or any updated masterplan agreed with the Council) and the bespoke design code.

Scoping Criteria

15.2.53. Engagement with key stakeholders has been undertaken throughout the pre-application process for the Proposed Development. As set out above, this engagement has taken place through the establishment of a Transport Working Group which has met on an approximately monthly basis since May 2021.

15.2.54. An ES Scoping Report was submitted to NWLDC in December 2023. The proposed scope of the transport ES chapter was set out in Chapter 15 of the report. NWLDC issued their formal Scoping Opinion on 19 April 2024. Feedback was also received from LCC and National Highways.

15.2.55. The LCC response is dated 22 January 2024 and states that *'The Local Highway Authority (LHA) note the screening opinion request has been submitted with a scoping opinion report and location plan provided in support.*

Following consideration of these documents and noting the scale and complexity of development proposed the Local Highway Authority would typically welcome opportunity to be involved in the early scoping of the necessary transport assessment work alongside relevant stakeholders. The LHA can confirm that it has been attending Transport Working Group meetings over a significant period of time and has played an active role in this process. This work has helped shape the emerging scope of transport assessment identified within the submitted scoping opinion report and the LHA is pleased to see that the intended approach to assessment and further development of the scheme proposals is in line with the positive and productive engagement undertaken to date'.

15.2.56. With regards to the proposed scope of the transport assessment work the LCC response states that's *'The note confirms agreement to the strategic highway impact of the development being investigated through the use of the Leicestershire County Council Pan Regional Transport Model (PRTM) and in support of a full Transport Assessment, Sustainable Transport Strategy, Construction Management and Travel Plan documents. The LHA would endorse ongoing engagement and consultation with relevant stakeholders to ensure the various assumptions and inputs are agreed as the assessment and development proposals continue to emerge. The LHA also note that given the potential cumulative development impact in this area it is recommended that a collaborative approach be taken with relevant parties to best manage the development of respective transport strategies and in the preparation of associated programme and delivery strategies.*

Given the significant scale of access and infrastructure proposals indicated within the scoping report the LHA would welcome early sight and review of these proposals to help identify the extent and deliverability of the schemes. Not least the sustainable transport connections to fully understand how these proposals will integrate with the local network and strategic highway improvements. For example, successful integration of walking and cycling connections will require an engineering solution developing to realign the A453 with appropriately located and designed crossing points

15.2.57. As noted above, the Transport Working Group meetings are continuing to allow the scheme proposals to be discussed and agreed with all interested parties.

15.2.58. LCC's response also highlights the Public Rights of Way (PRoW) in the vicinity of the Application Site which could be affected by the Proposed Development. The potential impact on the PRoW has been considered in the development of the Application Site masterplan.

15.2.59. National Highways response to the ES scoping was received on 3 January 2024. It states that *'It is understood that the Applicant will undertake a Transport Assessment which will form the basis of the Transport Chapter of the Environmental Statement.*

Due to the scale and nature of the proposed development, traffic generated from the proposed development is likely to have an impact on the M1 motorway, A453 trunk road and other sections of the SRN in the vicinity of the site. As such, National Highways would expect

to be consulted on the Transport Assessment which would form a key submission of any forthcoming planning application.

We recommend that the Transport Assessment is undertaken in a staged approach with the contents and methodology scoped out with National Highways and Leicestershire County Council in advance. However, as a starting point, we would suggest that the Transport Assessment be prepared in accordance with Planning Practice Guidance on Travel Plans, Transport Assessments and Statements (March 2014). In addition, due to the proximity of the site to the SRN, the Transport Assessment should be produced in accordance with DfT Circular 01/2022: The Strategic Road Network and the Delivery of Sustainable Development. In particular, the Transport Assessment may need to include the following to satisfy National Highways:

1. Development proposal details– information about the scale of the proposed development including any phasing, parking, access points, hours/days of operation, and anticipated year of opening.

2. Trip generation – information about the anticipated levels of traffic the development would generate. This should include a breakdown of trips generated for staff/visitor vehicles and HGV movements. The data should include a separate breakdown for the SRN peak hours.

3. Trip assignment – information about traffic routings in relation to the SRN. This should be presented in absolute numbers and percentages.

4. Depending on the scale and distribution of new trips, it may also be necessary to indicate how traffic associated with the development proposal will impact on the SRN in the peak hours. These impacts should be considered for the site both as a standalone operation, and cumulatively with any wider committed developments. This is necessary to consider whether the development will result in material implications for SRN junctions.

5. Where further assessments are deemed necessary, these should be carried out for the development at the time of first opening. This is the opening year assessment and is to comply with DfT Circular 01/2022.

6. Depending on staff numbers, a separate Travel Plan may be required setting out how staff trips by private vehicle will be minimised as far as possible.

15.2.60. The Transport Assessment provided in **Appendix 15.1** sets out the above information requested by National Highways and it is noted the scoping response includes the following *'As mentioned above, we recommend the above assessment work is agreed in a staged approach and in that regard, I can confirm that we have already been liaising closely with ADC Infrastructure as transport consultants for the Applicant. This has resulted in some of the above elements for assessing the traffic impacts already agreed'*.

15.2.61. In relation to non-transport related environmental impacts, the National Highways response also noted that *'Given that the site does not share a common boundary with the SRN, we consider that the proposed scope for assessing the non-transport related environmental impacts can be left for local determination.*

Notwithstanding the above, National Highways will assess any forthcoming planning application with respect of any potential impacts related to HGV movements on the SRN. Given the nature of the development, we will particularly be interested to see that appropriate measures are proposed to prevent the depositing of dust and detritus onto the highway

network from vehicles entering and leaving the site. We would therefore expect the applicant to produce a Construction Environmental Management Plan (or similar) which clearly sets this out. We are content that this could be undertaken post-planning consent via an appropriately worded planning condition'.

15.2.62. In addition to the above, a consultation response was also received from South Derbyshire District Council on 18 January 2024 as follows:

'Note local roads such as Blackwell Lane and Station Road would likely receive increased traffic and the narrow roads and on-street parking of Conservation Areas of historic villages need to be accurately reflected in Transport Statement. Consultation with the Derbyshire County Council Highway Department (as well as Derby City Council Highways to a slightly lesser extent) would also be important'.

15.2.63. The Transport Assessment provided in **Appendix 15.1** details the impact of the Proposed Development traffic on the strategic and local roads surrounding the site. Also, as noted above, the Transport Working Group meetings are continuing to allow the scheme proposals to be discussed and agreed with all interested parties which include Derbyshire County Council.

15.2.64. In line with the Transport Chapter of the ES Scoping report and the responses detailed above, this ES chapter considers the following potential effects:

- Construction phase – construction traffic
- Operational Phase - severance of communities
- Operational Phase - road vehicle driver and passenger delay
- Operational Phase - non-motorised user delay
- Operational Phase - non-motorised user amenity
- Operational Phase - fear and intimidation on and by road users
- Operational Phase - road user and pedestrian safety

Extent of Study Area

15.2.65. The Transport Assessment (**Appendix 15.1**) includes a detailed analysis of the stage 1 PRTM forecast modelling and details the changes across the highway network due to the proposed development in the 2051 assessment year scenario through analysis of the following:

- changes to the volume to capacity ratios at junctions and nodes
- changes in traffic flow across the network including total flow difference due to the proposed development and consideration of background traffic reassignment
- changes to the traffic delay in the network.

15.2.66. Based on this analysis the Transport Assessment assesses the initial study area as set out in **Table 15.6**.

Table 15.6: Transport Assessment Study Area

Junction Number	Location
Local road network	
1	A453/north-eastern Application Site access traffic signal junction
2	A453/EMA perimeter road/central Application Site access roundabout
3	A453/Melbourne Road/north-western access roundabout
4	A453/south-western Application Site access roundabout
5	Station Road/Donington Lane/Trent Lane roundabout
6	Station Road/Broad Rushes roundabout
7	Broad Rushes/Trent Lane/Back Lane/Arundel Ave/Distribution Centre
8	Park Lane/Castle Donington bypass roundabout
9	A453/The Green priority T-junction
10	A453/EMA access traffic signal controlled T-junction
Strategic road network	
16	A50 Junction 1
17	A42 Junction 14 Tongue interchange

15.2.67. It is acknowledged that traffic increases at junctions along the A6 towards Derby, the A512 Ashby Road West in Shepshed, and the A6 towards Loughborough, may also require detailed assessment as the highway mitigation strategy evolves. However, it is important to note that the Growth Point scheme in particular is likely to alter traffic patterns local to the Application Site, but especially on the strategic road network, which would influence the impact of the Proposed Development at locations further afield from the Application Site.

15.2.68. Hence, there will be opportunity to extend the study area dependent upon the results of the stage 2 mitigation modelling and the identification of residual impacts. This will be assessed through the Transport Assessment process.

15.2.69. Leading on from the Transport Assessment study area detailed in **Table 15.6**, the following rules from the IEMA guidelines have been applied to determine the study area for the assessments in this ES chapter:

- Rule 1: include highway links where traffic flows will increase by more than 30% due to the proposed development (or the number of heavy goods vehicles will increase by more than 30%).

- Rule 2: include any other specifically sensitive areas where traffic flows will increase by 10% or more.

15.2.70. The guidelines are formed on the basis that, in environmental terms, a 30% increase in traffic flow on a standard highway link is considered to be of significant impact. An increase in traffic flow of less than 10% would not be discernible to highway users as background traffic flows can fluctuate by this amount on a daily basis.

15.2.71. The increase in traffic flows between the 2051 without and with development scenarios have been calculated using the PRTM AADT traffic flow output set. The links where the change in traffic flows exceeds 30% are summarised in **Table 15.7**. It should be noted that the change in traffic flows between the two scenarios is attributable to a combination of the Proposed Development traffic as well as the redistribution of background traffic as a result of the additional traffic on the network.

Table 15.7: Assessment Links

Link number	Link name	AADT Percentage increase
1	Station Road - south of Station Road/Broad Rushes roundabout	60%
2	Trent Lane – the Broad Rushes/Back Lane/Trent Lane roundabout	131%
3	Castle Donington bypass - south of Trent Lane	54%
4	Castle Donington bypass - north of Park Lane	82%
5	Park Lane - east of the bypass	58%
6	Castle Donington bypass - south of Park Lane	81%
7	The Green - north of Park Lane	150%
8	Castle Donington bypass - north of the bypass roundabout	68%
9	Airport Perimeter Road - north of the A453	49%
10	Airport Road - south of DHL roundabout	35%
11	Airport Road - east of DHL roundabout	59%
12	Ambassador Road - north of airport road	174%
13	Ambassador Road - east of airport road	66%
14	A453 - east of eastern Application Site access junction	73%
15	A453 Walton Hill - west of Airport Perimeter Road roundabout	36%
16	Main Street - east of Breedon Quarry	76%
17	The Green, Diseworth	53%
18	The Green - east of Diseworth	40%
19	A453 - north of Tonge	134%
20	A453 - south of Tonge	81%
21	A42 exit onto the Tonge Interchange	96%
22	A453 - bridge over A42	66%
23	Top Brand - south of A452/A42 roundabout	43%
24	Mill Lane - south of Gelscoe Lane	77%

15.2.72. The Transport Assessment (**Appendix 15.1**) includes a detailed assessment of the routing of the Proposed Development traffic. It also highlights where the existing background traffic has redistributed onto alternative routes to avoid congestion.

15.2.73. In relation to the above, the PRTM modelling shows an increase in vehicles routing through the airport from the A453/DHL roundabout (links 10 to 13). A review of the PRTM data has identified that the increase is due to congestion on the Strategic Highway Network and at the A453/Airport access junction, which results in the background traffic rerouting and using the A453/DHL roundabout and the internal airport road to access the airport.

15.2.74. Similarly due to congestion on key routes in the model, the PRTM outputs shows the background traffic switching routes to travel around Castle Donington leading to increases on links 2, 5 and 7.

15.2.75. Mitigation measures are currently being devised which will address the congestion at the strategic network junctions and along the A453. The mitigation measures will be modelled in the next stages of the PRTM modelling and it is anticipated that this will resolve the background traffic route switching identified above. Hence, links 2, 5, 7 and 10 to 13 have been excluded from the assessments in this ES chapter.

Limitations to the Assessment

15.2.76. To enable an assessment of the effect of the Proposed Development, a number of reasonable assumptions have been made on the basis of professional judgement and standard practice. These assumptions and other influences also lead to some identifiable limitations to the work undertaken. Together, the assumptions and limitations are:

- The existing Application Site use (as agricultural land) generates a negligible number of trips.
- In the absence of the Proposed Development, the current Application Site would be left 'as is' (i.e., there is a without development scenario).
- Construction will be phased and delivered continuously through to completion, which has been assumed as a full build out by 2051.
- Future trip generation behaviours have been calculated using the standard methodology and the full details of this are set out in the Transport Assessment at **Appendix 15.1.**
- Further assessments may be required following the stage 2 and 3 PRTM modelling and these will be assessed through the Transport Assessment process.

15.3. Baseline Conditions

Site Description and Context

15.3.1. The Application Site comprises of approximately 313.4ha of land that is primarily in agricultural use. The significant scale of the Application Site means that various other features are included in the red line including farm dwellings, agriculture buildings, access tracks and the A453.

15.3.2. The Application Site is approximately 800m west of Diseworth, 3.5km south of Castle Donington, 14km southeast of Derby, and 20km southwest of Nottingham.

15.3.3. The Application Site is bound by the A453, East Midlands Airport and Isley Walton to the north and agricultural land to the east, north west, west, and south.

Baseline Survey Information

Highway network

15.3.4. In the vicinity of the Site, the A453 provides access to East Midlands Airport including the main airport site, the DHL distribution centre, Pegasus Business Park and the various ancillary businesses and facilities connected with the airport.

15.3.5. To the east the A453 provides access to the M1 southbound and Donington service station at M1 Junction 23a. The A453 continues to the north of M1 Junction 23a, providing access to EMG SRFI and the Kegworth Bypass at a signalised roundabout before meeting the M1 Junction 24. From M1 Junction 24 access is provided to the M1 northbound, the A50, and the A453 towards Nottingham.

15.3.6. To the south of Isley Walton, the A453 connects with the A42 at Junction 14 providing connectivity to Birmingham and the West Midlands. Junction 14 of the A42 provides a westbound on-slip and an eastbound off-slip, only.

15.3.7. Castle Donington and the employment sites located on its northern edge are approximately 3.5km north of the Application Site and are accessible from the Application Site via the A453 and the Airport Perimeter Road.

15.3.8. Northwest of the Application Site, Melbourne Road runs from east to west, meeting the A453 at Isley Walton via a simple priority-controlled T-junction. The single carriageway road is subject to a 40mph speed limit in the vicinity of the junction, but the speed limit increases to the national speed limit approximately 230m west of the junction. Melbourne Road provides access to the town of Melbourne and the village of Wilson.

15.3.9. To the east of the Site, Diseworth Lane runs south from its junction with the A453, becoming The Green as it enters the settlement of Diseworth approximately 500m beyond the eastern border of the site. East of the village, The Green continues under both the A42 and M1 through Long Whatton before meeting the A60 near Hathern, approximately 5km north of Loughborough. The A453/Diseworth Lane junction is a simple priority controlled T-junction and sits adjacent to the northeastern corner of the Site.

15.3.10. The Castle Donington bypass opened in February 2020 and routes around the western side of the town. It provides a link between the A453 and the employment sites north of Castle Donington including the East Midlands Distribution Centre, as well as providing access to the A50 via the Sawley Interchange (A50 Junction 1), removing the need for vehicles to travel through the centre of Castle Donington.

Pedestrian Infrastructure

15.3.11. The Transport Assessment (Appendix 15.1) includes a detailed assessment of the opportunities for pedestrians to travel to and from the Application Site and identifies that Diseworth, Donington Park Circuit and the DHL freight terminal at EMA are within convenient walking distance. However, due to the rural location of the Site, the existing pedestrian infrastructure in its vicinity is limited.

15.3.12. Footway infrastructure at the A453/Airport Perimeter Road signal controlled junction comprises of a short section of footway on the southern side of the A453, and an uncontrolled pedestrian crossing over the A453 on the western arms of the junction. A footway is provided on the northern side of the A453 which continues east to the A453/DHL roundabout and continues into the airport. There is no footway provision along the A453 to the east of this roundabout.

15.3.13. Footways including a shared footway/cycleway are provided adjacent to the Airport Perimeter Road which provide connectivity to; Donington Park, East Midlands Aeropark and Castle Donington.

15.3.14. Footpath L89a/1 is in the east of the Application Site and provides connectivity to Diseworth. The L89a/1 runs along the Application Site's northern boundary, where it intersects with the L89/1 and L89/2 footpaths just south of the two reservoirs. From this intersection footpath L89/1 runs north out of the Application Site and passes immediately west of two reservoirs, before emerging onto the A453/DHL roundabout and crossing the A453, into the airport site. From the same intersection the L89/2 runs south through the Application Site, intersects with footpath L98a/1 where it converts from the L89/2 to the L89/3, and exits the Application Site west of Woodhouse Farm.

15.3.15. At the point the L89/3 exits the Application Site, the L96/7 runs eastwards along the Application Site's southern border south of Woodhouse farm, to Mill Lane. This footpath forms part of the Cross Britain Way. The L98a/1 runs east to west for 727m through the centre of the Application

Site, passing immediately south of High Barn Farm and intersecting with the L89/2 to the east and the L98/3 to the west. The L98/3 runs north from the point of intersection the L98a/1 and exits the Application Site at Isley Walton. South from the point of intersection the L98/3 converts to the L98/2 and runs directly south before exiting the Application Site.

15.3.16. In addition to the public rights of way described above, there is a permissive path, known as the airport trail, which runs around the perimeter of East Midlands Airport. In the west, the airport trail uses the shared footway/cycleway alongside the Airport Perimeter Road, however, the majority of the trail is on unmetalled paths.

Cycle Infrastructure

15.3.17. The existing cycle infrastructure in the vicinity of the Application Site is limited and the Application Site is not connected to the available infrastructure.

15.3.18. There are no dedicated cycle facilities along the A453 between the Application Site and the employment centres on, and around, the airport site. The A453 is governed by a 50mph speed limit as it passes along the southern boundary of the airport and is not considered appropriate for on-carriageway cycling. Within the airport site, traffic volumes are reasonably low, making them appropriate for on-carriageway cycling.

15.3.19. There is a shared footway/cycleway along the Airport Perimeter Road from the junction with Donington Park circuit access, to its junction with Hill Top on the outskirts of Castle Donington. This route connects with the shared footway/cycleway along the Castle Donington bypass which provides cycle links to the employment areas to the north of Castle Donington.

15.3.20. Although it has no dedicated cycle infrastructure, Diseworth Lane forms part of the National Cycle Network route 15, which links Loughborough and Shepshed with East Midlands Airport.

15.3.21. In addition, the Application Site is in the vicinity of National Cycle Network (NCN) Route 6 which is designated as the Cloud Trail Greenway. The Cloud Trail Greenway passes to the west of the Application Site and provides access to Derby to the northwest, Nottingham to the northeast and Loughborough and Leicester to the southeast. The Cloud Trail Greenway utilises a disused railway and is a high quality, paved, car-free route. Currently the nearest points of access to the Cloud Trail Greenway from the Application Site are at Wilson and Tonge. The nearest point of access with car parking facilities is located off Breedon Lane, north of Worthington.

Bus Services

15.3.22. The nearest existing bus stops to the Application Site are in Isley Walton, on the A453. They are approximately 200m northeast of the junction with Melbourne Road, where there is a layby on the northeastbound carriageway, however neither stop is formally marked. The 9 and the 125 services pass along the A453 through Isley Walton.

15.3.23. Other services run along the airport interior road network, calling at stops opposite DHL, and at the Main Terminal Building, before running along Hill Top into Castle Donington. The Trent Barton Skylink Services and the Midland Classic Number 9 all serve both the airport and the neighbouring EMG site.

15.3.24. The airport and EMG are also served by an on-demand bus service, the 'Nottsbus Connect' which is operated by Nottinghamshire County Council. The airport and EMG fall within the West Rushcliffe zone which also includes East Midlands Parkway station and extends to the Clifton Park and Ride site. The Nottsbus Connect is an on-demand service, which means that it does

not follow a fixed route like a conventional bus. Users must pre-book their journeys via the app, or phone.

Rail Services

15.3.25. The nearest railway station to the Application Site is East Midlands Parkway, which is approximately 8km northeast of the Application Site adjacent to the former Ratcliffe-on-Soar Power Station. The station is located on the Midland Mainline, and provides services to destinations including Nottingham, Leicester, Loughborough, Derby, Lincoln and London St Pancras.

15.3.26. The station has a large car park, with 885 spaces. It is accessible 24 hours a day, and tariffs range from £8 for a day ticket, up to £800 for an annual pass.

15.4. Assessment of Likely Significant Effects

Construction

15.4.1. The planning application is in outline and therefore the detailed construction phasing and exact build-out rate for the Application Site are therefore yet to be confirmed, although an indicative Phasing Plan showing potential sequencing of phases for the residential elements is included in Appendix 4.2. Assumptions regarding build out have been made for the purposes of the Transport Assessment (**Appendix 15.1**), that assumes full build-out by the 2051 future assessment year.

15.4.2. The temporary construction phase associated with the Proposed Development would result in:

- temporary increases in HGV movements on the highway network in the vicinity of the Application Site; and
- introduction of construction workers to the Application Site.

15.4.3. The detailed construction programme will be developed with the contractors in due course, and it would be for them to prepare and implement the programme taking into account traffic management requirements, temporary diversions, site hours, material deliveries and other programme constraints.

15.4.4. Normal hours of work are expected to be Monday to Friday 07.00 to 18.00 hours and Saturday 07.00 to 13.00 hours. However, site working hours will vary depending on seasons and the weather conditions. To progress the scheme and comply with any restrictions, night time and Sunday work may be necessary. Examples of this need would be working on the A453 outside of the busy daytime hours to avoid causing additional traffic congestion, and diversion of statutory utilities.

15.4.5. Construction traffic will include the movement of workers associated with the construction of infrastructure and individual dwellings, along with the movement of material in the form of importing or exporting material. The quantum of workers on Application Site at any one time will primarily depend on factors such as the timing of the primary infrastructure along with the phasing of the Proposed Development. The provision of infrastructure will include the construction of the internal highway network and drainage along with the installation of utilities.

15.4.6. Typically, construction workers operate what can be broadly termed a standard working day in terms of duration, although the working days tends to start earlier, and finish earlier. Thus, their journeys fall outside of the morning and evening commuter peak hours.

15.4.7. The volume of construction related HGVs will depend on the construction period, on the construction programme, and phasing of the Proposed Development. The construction of the primary infrastructure will involve the movement of material around the Application Site along with the minimal importing and exporting of material. However, it will be necessary to import aggregates and material for the roads, pavement and construction of dwellings and car parking. The Application Site is ideally located close to the A453, A50, A42 and M1, and contractors will be required to adhere to routing agreements along with likely measures included in the Construction Environmental Management Plan (CEMP)

15.4.8. Construction traffic will make up a progressively lower proportion of the overall traffic volumes generated by the Application Site as the Application Site is developed, with overall traffic volumes anticipated to be highest on completion.

15.4.9. The increase in both light and HGV traffic as a result of construction would affect road users on the A453. However, the level of construction traffic is likely to be low in the highway peak hours, less than a 30% increase in baseline traffic flows, and the sensitivity of the receptors is also low. Hence, the impact of construction traffic is assessed as **negligible,** which is **not significant** in EIA terms.

15.4.10. Construction of the proposed Application Site access junctions on the A453 would cause some disruption to traffic as traffic management measures will be required. The realignment of the western section of the A453 would also cause some disruption to traffic, although much of the route is offline. The construction process is therefore likely to result in a **moderate adverse** short term effect, which is **significant** in EIA terms.

Operation

Severance of communities

15.4.11. The percentage changes in the 2051 AADT traffic flows between the without and with development scenarios is detailed in **Table 15.7**. The changes in the level of severance on each link is detailed in **Table 15.8**.

Table 15.8: Change in Severance

Link number	Link name	Severance
1	Station Road - south of Station Road/Broad Rushes roundabout	moderate
3	Castle Donington bypass - south of Trent Lane	slight
4	Castle Donington bypass - north of Park Lane	moderate
6	Castle Donington bypass - south of Park Lane	moderate
8	Castle Donington bypass - north of the bypass roundabout	moderate
9	Airport Perimeter Road - north of the A453	slight
14	A453 - east of eastern Application Site access junction	moderate
15	A453 Walton Hill - west of Airport Perimeter Road roundabout	slight
16	Main Street - east of Breedon Quarry	moderate
17	The Green, Diseworth	slight
18	The Green - east of Diseworth	slight

19	A453 - north of Tonge	substantial
20	A453 - south of Tonge	moderate
21	A42 exit onto the Tonge Interchange	substantial
22	A453 - bridge over A42	moderate
23	Top Brand - south of A452/A42 roundabout	slight
24	Mill Lane - south of Gelscoe Lane	moderate

15.4.12. The above table shows that there will be an increase in severance on each of the links. However, it is important to consider the characteristics of each link and whether there is a pedestrian desire line across each link that would be affected by the increase in traffic flows. These characteristics are set out in **Table 15.9**.

Table 15.9: Link Characteristic

Link number	Link description	Severance
1	A footway is provided on the western side for the full link extent. A footway is provided on the eastern side to the south of the railway bridge.	moderate
3	A footway/cycleway if provided on the western side of the bypass between Trent Lane and Short Lane which provide access to the East Midlands Distribution Centre.	slight
4	Footway/cycleway on the eastern side of the bypass only. One dwelling located on the western side accessed from Park Lane.	moderate
6	Footway/cycleway on the eastern side of the bypass only. No development on the western side.	moderate
8	Footway/cycleway on the eastern side of the bypass only. No development on the western side.	moderate
9	Footway/cycleway on the western side of the carriageway. Airport parking areas and runway on the eastern side.	slight
14	No pedestrian/cycle infrastructure on this link. The Proposed Development will be located to the south of the link.	moderate
15	No pedestrian/cycle infrastructure on this link. The Proposed Development will be located to the south of the link.	slight
16	No pedestrian/cycle infrastructure on this link	moderate
17	Footway provided on the northern side of the carriageway only. Limited development to the south of the road.	slight
18	No pedestrian/cycle infrastructure on this link	slight
19	No pedestrian/cycle infrastructure on this link	substantial
20	No pedestrian/cycle infrastructure on this link	moderate
21	No pedestrian/cycle infrastructure on this link	substantial
22	No pedestrian/cycle infrastructure on this link	moderate
23	No pedestrian/cycle infrastructure on this link	slight
24	No pedestrian/cycle infrastructure on this link	moderate

15.4.13. Taking into account the characteristics of each link as detailed above, the effect of the increase in severance should be considered in further detail on links 1, 3, 14 and 15.

15.4.14. There are footways and development on both sides of link 1 (Station Road) to the south of the railway bridge. There are no crossing facilities on this link. The change in traffic flows between the without and with development scenarios will result in a moderate increase in severance on

this link. Without mitigation, it is considered that there will be a **moderate adverse** long term effect on severance on this link which is **significant** in EIA terms.

15.4.15. **Table 15.8** identifies that there will be a slight increase in severance on link 3. The East Midlands Distribution Centre is located on the western side of this link with the residential areas of Castle Donington located to the east. Crossing facilities in the form of dropped kerbs and tactile paving are provided at the three roundabout junctions on this link, the Trent Lane/Arundel Avenue/Back Lane roundabout, the Beck Lane/Short Lane roundabout, and the Castle Donington bypass/Short Lane roundabout. These crossing facilities facilitate pedestrian and cycle movements across the bypass. Due to the limited pedestrian/cycle demand in this location and the availability of crossing facilities, it is considered that there will be a **negligible** effect on pedestrian severance on this link which is **not significant** in EIA terms.

15.4.16. The Proposed Development will introduce a pedestrian/cycle demand across the A453 on links 14 and 15. However, signal controlled crossing facilities will be provided on the A453 as part of the Application Site access junctions at the A453/Perimeter Road junction and at the A453/Eastern Application Site access junction. Dropped kerb crossings with tactile paving will also be provided at the proposed A453/Melbourne Road/Application Site access roundabout. This infrastructure will safely facilitate pedestrian movements across the A453. It is therefore considered that there will be a **negligible** effect on pedestrian severance on links 14 and 15 which is **not significant** in EIA terms.

Road vehicle driver and passenger delay

15.4.17. The Transport Assessment provided in **Appendix 15.1** provides a detailed analysis of the capacity of the study area junctions listed in **Table 15.6**. The junctions on the local road network were assessed in a future year scenario of 2051, and those on the strategic road network in a future year of 2029.

15.4.18. The modelling identifies that the four proposed Application Site access junctions would operate within capacity in the 2051 with development scenario. It is therefore considered that the site access junctions would have a **negligible** effect on driver delay which is **not significant** in EIA terms.

15.4.19. The assessments of the other study area junctions found that there could be a need for mitigation measures at the following junctions:

- Broad Rushes/Trent Lane/Back Lane/Arundel Ave/Distribution Centre Access roundabout.
- A453/The Green priority controlled T-junction.
- A453/EMA access traffic signal controlled T-junction
- A50 Junction 1.

15.4.20. Therefore, the effect on driver delay on the junctions included within the study area without any mitigation in place would be a **moderate adverse** long term effect which is **significant** in EIA terms.

Non-motorised user delay

15.4.21. Non-motorised user delay is considered to be affected by changes in the volume, composition or speed of traffic that may impact on the ability of pedestrians to cross a road. For consistency

within the ES, the same thresholds are adopted for pedestrian delay as have been adopted for severance.

15.4.22. Following the assessment of the links set out in the section of severance, the effect on non-motorised user delay should only be considered in further detail on the following links

- 1 - Station Road - south of Station Road/Broad Rushes roundabout
- 3 – Castle Donington bypass - south of Trent Lane
- 14 - A453 - east of eastern Application Site access junction
- 15 – A453 Walton Hill - west of Airport Perimeter Road roundabout.

15.4.23. There are footways and development on both sides of link 1 (Station Road) to the south of the railway bridge. There are no crossing facilities on this link. The change in traffic flows between the without and with development scenarios will result in a moderate increase in non-motorised user delay on this link. Without mitigation, it is considered that there will be a **moderate adverse** long term effect on non-motorised delay on this link which is **significant** in EIA terms.

15.4.24. As detailed above, crossing facilities in the form of dropped kerbs and tactile paving are provided at the three roundabout junctions on this link, the Trent Lane/Arundel Avenue/Back Lane roundabout, the Beck Lane/Short Lane roundabout, and the Castle Donington bypass/Short Lane roundabout. Due to the limited pedestrian/cycle demand in this location and the availability of crossing facilities, it is considered that there will be a **negligible** effect on non-motorised delay on this link which is **not significant** in EIA terms.

15.4.25. The Proposed Development will introduce a pedestrian/cycle demand across the A453 on links 14 and 15. However, signal controlled crossing facilities will be provided on the A453 as part of the Application Site access junctions at the A453/Perimeter Road junction and at the A453/Eastern Application Site access junction. Dropped kerb crossings with tactile paving will also be provided at the proposed A453/Melbourne Road/Application Site access roundabout. This infrastructure will safely facilitate pedestrian movements across the A453. It is therefore considered that there will be a **negligible** effect on non-motorised delay on these links which is **not significant** in EIA terms.

Non-motorised user amenity

15.4.26. The IEMA guidelines suggests a tentative threshold for judging the significance of changes in pedestrian amenity would be where the traffic flow (or HGV component) is halved or doubled.

15.4.27. The majority of links within the study area comprise of inter urban routes such as the A453 and the Castle Donington bypass which are designed to accommodate large numbers of vehicles and HGVs.

15.4.28. A review of the modelling data confirms that HGV flows are not predicted to double on any of the assessment links and total traffic flows are identified to double only on link 19 which is the section of the A453 north of Tonge and south of the A453/A453 Moor Lane junction.

15.4.29. There are no footways along this section of carriageway and hence very limited pedestrian presence which would be affected by the increased number of vehicles over a typical day.

15.4.30. Therefore, the effect on non-motorised users amenity would be **negligible** which is **not significant** in EIA terms.

Fear and intimidation on and by road users

15.4.31. Following the IEMA criteria the magnitude of change in fear and intimidation has been identified for each of the study area links and this is set out in **Table 15.10**.

Table 15.10 Change in Fear and Intimidation

Link	Link name	2051 without development	2051 with development	Magnitude of impact
1	Station Road - south of Station Road/Broad Rushes roundabout	small	moderate	Low
3	Castle Donington bypass - south of Trent Lane	small	moderate	Low
4	Castle Donington bypass - north of Park Lane	small	moderate	Low
6	Castle Donington bypass - south of Park Lane	small	moderate	medium
8	Castle Donington bypass - north of the bypass roundabout	moderate	moderate	Negligible
9	Airport Perimeter Road - north of the A453	great	great	Negligible
14	A453 - east of eastern Site access junction	moderate	great	medium
15	A453 Walton Hill - west of Airport Perimeter Road roundabout	moderate	great	Low
16	Main Street - east of Breedon Quarry	moderate	moderate	Negligible
17	The Green, Diseworth	small	moderate	Low
18	The Green - east of Diseworth	small	moderate	Low
19	A453 - north of Tonge	moderate	moderate	Negligible
20	A453 - south of Tonge	moderate	moderate	Negligible
21	A42 exit onto the Tonge Interchange	moderate	moderate	Negligible
22	A453 - bridge over A42	moderate	moderate	Negligible
23	Top Brand - south of A452/A42 roundabout	moderate	moderate	Negligible
24	Mill Lane - south of Gelscoe Lane	moderate	moderate	Negligible

15.4.32. As outlined in **Table 15.10** the magnitude of change on the majority of the study area links is negligible. Hence the effect of the Proposed Development on fear and intimidation on these links would be **negligible** which is **not significant** in EIA terms.

15.4.33. The magnitude of change in the levels of fear and intimidation on link 1 (Station Road - south of Station Road/Broad Rushes roundabout) has been calculated as low. As detailed above, footways are provided on both sides of the carriageway and whilst Station Road is a main route into Castle Donington the increase in traffic would be noticeable. However, it is considered that mitigation measures are not required The effect of fear and intimidation on Station Road is therefore considered to be a **minor adverse** long term effect which is **not significant** in EIA terms.

15.4.34. Links 3, 4 and 6 comprise of section of the Castle Donington bypass and generally include a footway/cycleway on one side of the carriageway which includes a painted margin strip. For the section of link 3 immediately south of Trent Lane a verge is provided between the footway/cycleway and the carriageway.

15.4.35. The magnitude of change on links 3 and 4 is low with a medium magnitude of change on link 6 due to the increase in total vehicle flow. However, these links form part of the bypass which was designed to accommodate HGV and high vehicle flows. Due to the design of the bypass it is expected that any pedestrians and cyclist travelling on these links would be aware of its strategic nature and would not be affected by the increase in traffic flows. It is therefore considered that the effect of fear and intimidation on these links is therefore considered to be **negligible** which is **not significant** in EIA terms.

15.4.36. Link 14 comprises the section of the A453 to the east of the eastern Application Site access junction. There are currently no footways or cycleways adjacent to the carriageway. The Proposed Development will introduce signal controlled crossing facilities at the eastern access junction to enable pedestrians and cyclists to safely cross the A453. In addition, it is proposed that the existing Airport Trail is upgraded to provide a bi-directional cycle route with a segregated footway which is separated from the A453 by planting. Therefore, the effect of fear and intimidation on this link is considered to be **negligible** which is **not significant** in EIA terms

15.4.37. There are no footways or cycleways on link 15 which is the section of the A453 west of the A453/Airport Perimeter Road roundabout. Hence, the effect of fear and intimidation on this link is considered to be **negligible** which is **not significant** in EIA terms

15.4.38. The magnitude of change in the levels of fear and intimidation on link 17 (The Green, Diseworth) has been calculated as low. As footway is provided on the northern side of the carriageway. Whilst it is anticipated that the increase in traffic flows on this link would lead to a noticeable change compared to the baseline scenario, it has been determined that mitigation measures are not required Therefore it is considered that there will be a **minor adverse** long term effect on fear and intimidation on this link which is **not significant** in EIA terms,

15.4.39. There are no footways or cycleway on link 18 (The Green east of Diseworth). Hence, the effect of the Proposed Development on fear and intimidation on this link is considered to be **negligible** which is **not significant** in EIA terms.

Road user and pedestrian safety

15.4.40. The delivery of the Proposed Development is proposed on land that is currently undeveloped, and any new roads provide the potential for accidents to occur where that was not possible previously. However, the new roads within the Proposed Development will be designed in line with the prevailing design standards and will be subject to the Road Safety Audit process. The practical effect for existing people in the area is likely to be **negligible** which is **not significant** in EIA terms.

15.4.41. Where new junctions are introduced or where changes to existing highway links or junctions are made as part of the development proposals, the designs will undergo a series of Road Safety Audits to ensure design proposals are acceptable in highway safety terms. Given the new Application Site access junctions will be designed to current design standards, it is reasonable to expect that the effect of the creation of such junctions will not result in an accident concern.

15.4.42. The effect of the Proposed Development on road safety is therefore considered to be **negligible** which is **not significant** in EIA terms.

15.5. Mitigation, Enhancement and Residual Effects

Mitigation by Design

15.5.1. The development proposals include for the provision of education, healthcare, retail, and leisure facilities on the Application Site to reduce the need for external car trips. The Proposed Development would be focussed around three local centres, and would have two primary schools, with each effectively serving one half of the site, as a well as a centrally located secondary school. All residents of the Proposed Development will be within 1km of a local centre, and 95% will be within 1km of a primary school. The secondary school is proposed to be located in the centre of the development, meaning that approximately 70% of residents will be within 1km walking distance, and all within 2km.

15.5.2. The internal movement network will be designed in accordance with LCC's design standards and will comprise of primary and secondary active travel routes designed with pedestrians and cyclists in mind, with integration into the primary streets network and the extensive green corridors. Residents and visitors would therefore have multiple routing options on high-quality infrastructure when travelling within the settlement.

15.5.3. The access strategy for the Proposed Development includes four new access junctions onto the A453 and these are detailed in the Transport Assessment (**Appendix 15.1**). In summary they include the following pedestrian/cycle infrastructure.

- Segregated footways and cycleways on the Application Site access roads on the approaches to the A453/access junctions.
- Crossing points at the north-western and south-western A453/access roundabouts comprising of dropped kerbs and tactile paving.
- Signal controlled pedestrian and cycle crossings across the A453 at the A453/central access roundabout.
- To the north of the central access roundabout a bi-directional cycle track and segregated footway on the eastern side of the Airport Perimeter Road.
- Signal controlled pedestrian and cycle crossings of the A453 at the A453/eastern access junction.
- A Toucan crossing to the west of the A453/DHL roundabout.
- A Toucan crossing to the west of the proposed eastern Application Site access junction to provide a connection to the airport highway network and bus stops.
- Footway/cycleway provisions along the A453 between the central and eastern Application Site access junctions.
- To the east of the eastern Application Site access junction a bi-directional cycle track with segregated footway on the northern side of the A453 to provide a connection to the airport, Pegasus Business Park and the EMG and EMG2 employment developments. .

Additional Mitigation

Construction process

15.5.4. A Construction Environmental Management Plan (CEMP) will be produced. The CEMP will address the potential adverse effects of the construction on the local surrounding highway network in advance of construction. This will encompass all the necessary measures required to ensure that works potentially affecting the highway are adequately addressed. It will provide a framework to help ensure that all necessary mitigation and remedial measures are in place to deal with these during construction. The CEMP will be covered by a condition attached to any outline planning consent.

15.5.5. A Construction Traffic Management Plan (CTMP) will also be produced, or be part of the CEMP. The CTMP will be prepared to establish how traffic flows on the A453 will be managed during construction of the new access junctions and realigned section of the A453, including signage, temporary speed limits etc. The CTMP will be prepared as part of the S278 Agreement required to provide the access works.

15.5.6. With the introduction of the CEMP the construction process will result in a **minor adverse** short term effect which is **not significant** in EIA terms.

Severance of communities

15.5.7. The above assessment of severance identified a potential need for a crossing facility on Station Road. A suitable crossing facility will be provided and the form and location of the crossing will be identified through the Transport Assessment process.

Road vehicle driver and passenger delay

15.5.8. The junction modelling in the Transport Assessment identified a potential need for mitigation measures to be introduced at the Broad Rushes/Trent Lane/Back Lane/Arundel Ave/Distribution Centre Access roundabout, the A453/The Green junction, the A453/EMA access traffic signal controlled T-junction and A50 Junction 1. Mitigation measures will be introduced at these junctions the design of which will be identified through the Transport Assessment process.

15.5.9. The Transport Assessment (**Appendix 15.1**) details the proposals to introduce bus services to the development which will reduce the number of vehicles trips generated by the Proposed Development.

15.5.10. In addition, a Framework Travel Plan (**Appendix 15.2**) has been prepared for the Proposed Development which will include a package of measures to encourage residents and employees on the Application Site to travel by sustainable modes rather than the private car.

Non-motorised user delay

15.5.11. The above assessments have identified that there will be a **moderate adverse** effect on non-motorised user delay on Station Road in Castle Donington. To mitigate this it is proposed that a crossing facility is provided as detailed in the above section on severance. The form and location of the crossing will be identified through the Transport Assessment process.

Fear and intimidation

15.5.12. The above assessments have identified that there will be a **minor adverse** effect on fear and intimation on Station Road in Castle Donington and The Green in Diseworth. This is **not significant** in EIA terms, Mitigation measures are not considered to be required on these links.

Summary

15.5.13. **Table 15.11** provides a summary of the identified mitigation measures.

Table 15.11: Mitigation

Ref	Measure to avoid, reduce, or manage any adverse effects and/or to deliver beneficial effects	How measure would be secured		
		By Design	By S106	By Condition
1	Creation of new pedestrian and cycle routes through the Proposed Development	X		
2	Pedestrian/cycle facilities at the Application Site access junctions	X		
3	Construction Environmental Management Plan (CEMP)			X
4	Construction Traffic Management Plan (CTMP)			X
6	Public transport strategy		X	X
7	Framework Travel Plan		X	X
8	Crossing facility on Station Road			X
9	Mitigation measures at the Broad Rushes/Trent Lane/Back Lane/Arundel Ave/Distribution Centre Access roundabout (details of which are ongoing in tandem with relevant highways authorities and will be subject to condition)			X
10	Mitigation measures at the A453/The Green junction (details of which are ongoing in tandem with relevant highways authorities and will be subject to condition)			X
11	mitigation measures at the A453/EMA access traffic signal controlled T-junction (details of which are ongoing in tandem with relevant highways authorities and will be subject to condition)			X
12	mitigation measures at the A50 Junction 1 (details of which are ongoing in tandem with relevant highways authorities and will be subject to condition)			X

Enhancements.

15.5.14. It is not anticipated that any transport related enhancements (additional benefits) will be introduced.

Residual Effects

15.5.15. With the introduction of the CEMP and CTMP it is considered that residual effect of the construction process would be a **minor adverse** short term effect which is **not significant** in EIA terms.

15.5.16. Whilst the design of the crossing facility on Station Road is ongoing, it is anticipated that the provision of such a crossing facility would result in a residual **minor adverse** long term effect on severance on this link which is **not significant** in EIA terms. Similarly, with the crossing in place the residual effect on non-motorised user delay would also be a **minor adverse** long term effect which is **not significant** in EIA terms.

15.5.17. The design of the mitigation schemes at the four junctions listed in **Table 15.11** is ongoing and will ultimately be agreed with the highway authorities. It is therefore considered that with the mitigation schemes in place the residual effect on road vehicle driver and passenger delay would be a **minor adverse** long term effect which is **not significant** in EIA terms.

15.6. Cumulative and In-Combination Effects

15.6.1. The cumulative impact of committed developments and wider strategic growth has been taken into account within the PRTM model. All committed developments are contained within the model and, as such, the cumulative assessment is inherent in this chapter.

15.7. Summary

Introduction

15.7.1. This chapter of the Environmental Statement reports the outcome of the assessment of the likely significant transport effects of the Proposed Development. The supporting Transport Assessment and Travel Plan are provided in **Appendix 15.1 and 15.2**, respectively.

15.7.2. This chapter assess the effect of the Proposed Development during the construction process as well as when it is operational. This chapter considers the effect of the operational phase of the Proposed Development on the following:

- Severance of communities
- Road vehicle driver and passenger delay
- Non-motorised user delay
- Non-motorised user amenity
- Fear and intimidation on and by road users
- Road user and pedestrian safety

Baseline Conditions

15.7.3. The Application Site comprises of approximately 313ha of land which is primarily in agricultural use. The significant scale of the Application Site means that various other features are included in the red line including farm dwellings, agriculture buildings, access tracks and the A453.

15.7.4. The Application Site is located approximately 800m west of Diseworth, 3.5km south of Castle Donington, 14km southeast of Derby, and 20km southwest of Nottingham. The Application Site is bound by the A453, East Midlands Airport and Isley Walton to the North and agricultural land to the east, north west, west, and south

Likely Significant Effects

15.7.5. Construction of the proposed Application Site access junctions on the A453 and the realignment of the western section of the A453 would cause some disruption to traffic on these routes as traffic management measures will be required. It was therefore concluded that the construction process would result in a significant effect.

15.7.6. The assessments of the operational phase of the Proposed Development concluded that the increases in traffic due to the Proposed Development would have a significant effect on severance and non-motorised user delay on Station Road in Castle Donington.

15.7.7. There would be a significant effect on road vehicle driver and passenger delay at the Broad Rushes/Trent Lane/Back Lane/Arundel Ave/Distribution Centre Access roundabout, the A453/The Green junction, the A453/EMA access junction and A50 Junction 1.

15.7.8. The effect of the Proposed Development on fear and intimidation was found to be not significant.

15.7.9. The effect of the Proposed Development on non-motorised user amenity and road safety was found to be negligible.

Mitigation and Enhancement

15.7.10. The development proposals include provision for education, healthcare, retail, and leisure facilities on Site. The provision of a mixed-use scheme such as this provides a significant opportunity for trips which would otherwise be made to the wider area, to be contained within the development site.

15.7.11. The access strategy for the Proposed Development includes dedicated crossing facilities to allow pedestrians and cyclists to safely cross the A453. Additional off-site footway and cycleway infrastructure is proposed to provide a connection to East Midlands Airport, the Pegasus Business Park, the East Midlands Gateway, and East Midlands Gateway 2 employment developments.

15.7.12. A Construction Environmental Management Plan and Construction Traffic Management Plan will be secured by planning condition to effectively manage and mitigate the effect of the construction process. With the introduction of these measures the effect of the construction process will not be significant.

15.7.13. To mitigate the operational effects of the Proposed Development a crossing facility is proposed on Station Road in Castle Donington and mitigation measures are proposed at the Broad Rushes/Trent Lane/Back Lane/Arundel Ave/Distribution Centre Access roundabout, the A453/The Green junction, the A453/EMA access junction and A50 Junction 1. The design of these mitigation measures is ongoing in tandem with relevant highways authorities and will be subject to planning conditions. With the introduction of these measures the operational effects of the Proposed Development will not be significant.

Conclusion

15.7.14. In conclusion, the result of this assessment has indicated that the potential environmental effects resulting from the construction and operational process for the Proposed Development will not be significant following the implementation of the identified mitigation measures.

15.7.15. **Table 15.12** provides a summary of effects, mitigation, and residual effects.

Table 15.12: Summary of Effects, Mitigation and Residual Effects

Receptor/ Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Construction								
Construction traffic	Increase in light vehicles and HGV traffic	Temporary	N/A	N/A	Borough/District/ & Local	Moderate Adverse	Construction Environmental Management Plan and Construction Traffic Management Plan	Minor Adverse not significant effect
Operation								
Severance		Permanent	N/A	N/A	Local	Moderate Adverse	Crossing facility on Station Road	Minor Adverse not significant effect
Road traffic and driver delay		Permanent	N/A	N/A	Local	Moderate Adverse	Mitigation schemes (detail to be determined with highway authorities through the continuing assessment process) at the following junctions: Broad Rushes/Trent Lane/Back Lane/Arundel Ave/Distribution Centre Access roundabout	Minor Adverse not significant effect

							A453/The Green junction A453/EMA access junction A50 Junction 1	
Non-motorised user delay		Permanent	N/A	N/A	Local	Moderate Adverse	Crossing facility on Station Road	Minor Adverse not significant effect
Non-motorised user amenity		Permanent	N/A	N/A	Local	Negligible	N/A	Negligible non-significant effect
Fear and intimidation		Permanent	N/A	N/A	Local	Minor Adverse	N**/A**	Minor Adverse not significant effect
Road user and pedestrian safety		Permanent	N/A	N/A	Borough/District/ & Local	Negligible	N/A	Negligible non-significant effect
Cumulative and In-Combination								
The cumulative impact of committed developments and wider strategic growth has been taken into account within the PRTM model. All committed developments are contained within the model and, as such, the cumulative assessment is inherent in the above assessment.								