

Growing Baldock

Environmental Statement Volume 1: Text
Chapter 4: Transport



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Urban&Civic



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4.1 INTRODUCTION

- 4.1.1 This Chapter assesses the likely significant effects of the Proposed Development on the environment in relation to transport. In particular, it considers the potential effects on receptors within the highway environment in the vicinity of the Site.
- 4.1.2 This Chapter describes the methods used to assess the likely significant effects, the baseline conditions currently existing at the Site and in its surroundings, the potential direct and indirect effects of the Proposed Development arising from the Construction and the Post-Completion stages, the mitigation measures required to prevent, reduce, or offset the identified significant effects and the residual effects.
- 4.1.3 This Chapter is supported by a Transport Assessment (TA) and a Framework Travel Plan (FTP). The TA (**Appendix 4.1**) establishes baseline traffic flows, baseline road safety data, the derivation and distribution of the Proposed Developments' traffic, junction capacity modelling and the access and parking strategy. The FTP (**Appendix 4.2**) sets out the approach to support the Vision-Led transport strategy via a Monitor and Manage Framework (MMF) to reduce reliance on travel by private car and to promote more sustainable modes of travel.
- 4.1.4 Furthermore, detailed Construction Environmental Management Plans (CEMP), including details of construction traffic, will be provided at the phase and reserved matters stage, containing details of measures to manage, monitor and enforce the numbers, routes and timing of construction traffic movements.
- 4.1.5 This Chapter of the Environmental Statement (ES) has been prepared by Ryan Eldon, an Associate Transport Planner with ITP by Haskoning. Ryan is a Member of the Chartered Institute of Highways and Transportation (MCIHT) and holds a Civil Engineering Degree from Nottingham Trent University. Ryan has over 14 years' experience in the private sector, with extensive involvement in Environmental Impact Assessments (EIAs) for major infrastructure projects delivered through both the Development Consent Order (DCO) process and the Town and Country Planning Act route.
- 4.1.6 The proposed 'Growing Baldock' development is a phased development that includes NHC Local Plan allocation sites BA1, BA2, BA3 and BA10 and seeks to deliver:

Outline planning application with all matters reserved except for means of highway access into the development from the A505/Royston Road, North Road and Clothall Road for: up to 3,200 homes, up to 16ha of employment, waste and leisure infrastructure, a mixed use local centre, up to 1 secondary school, up to 2 x primary schools, up to 1 SEND school, health hub, green infrastructure (including parks, formal sports provision, play, habitat areas, informal open space and structural planting), internal street network, access junctions and railway crossing, public transport infrastructure, pedestrian/cycle network (including PRoW diversions, active travel routes, mobility hubs and crossing of

the railway), utilities and drainage infrastructure (including diversions of existing and provision of new infrastructure, pumping stations, sustainable drainage, primary substations, rising main/strategic sewer and renewable energy infrastructure), ground remodelling/earthworks and any necessary demolitions.

4.2 RELEVANT POLICY

- 4.2.1 This section summarises the key traffic and transport planning policies relating to Baldock and the proposed 'Growing Baldock' site.

National Policy

National Planning Policy Framework

- 4.2.2 The National Planning Policy Framework (NPPF) (Ministry of Housing Communities & Local Government, 2024) was first published in March 2012 by the Department for Communities and Local Government and has been the subject of several updates, with the latest update being submitted in December 2024.

- 4.2.3 The NPPF is defined as being the document that sets out the Government's planning policies for England and how these should be applied.

- 4.2.4 Regarding transport considerations for new development, paragraph 118 of the NPPF states that,

"all developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored".

- 4.2.5 This should also take into account that:

"sustainable transport modes are prioritised taking account of the vision for the Site, the type of development and its location;

"safe and suitable access to the Site can be achieved for all users;

"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

"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."

- 4.2.6 With respect to planning decisions based on transport considerations, at paragraph 116 the NPPF 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."

4.2.7 Within this context, the NPPF requires that development applications should:

- a) *"give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
- b) *address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- c) *create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- d) *allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- e) *be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."*

4.2.8 The principles of sustainable development as established within the NPPF have been considered during the development of the Growing Baldock scheme, as set out in subsequent sections of this report.

Planning Practice Guidance – Travel Plans, Transport Assessment and Statements

4.2.9 For the purpose of assessing the effect of the Projects, the relevant Planning Practice Guidance (PPG) is 'Travel Plans, Transport Assessment and Statements' (henceforth referred to as the Transport PPG).

4.2.10 The Transport PPG (Department for Levelling Up, Housing and Communities, 2014) sets out the key principles to be adopted when developing a Transport Assessment as follows:

- Proportionate to the size and scope of the Proposed Development to which they relate and build on existing information wherever possible;
- Established at the earliest practicable possible stage of a development proposal;
- Be tailored to particular local circumstances (other locally determined factors and information beyond those which are set out in this guidance may need to be considered in these studies provided there is robust evidence for doing so locally); and
- Be bought forward through collaborative ongoing working between the local authority / transport authority, transport operators, rail network operators, Highways Agency (now National Highways) where there may be implications for the strategic road network and other relevant bodies.

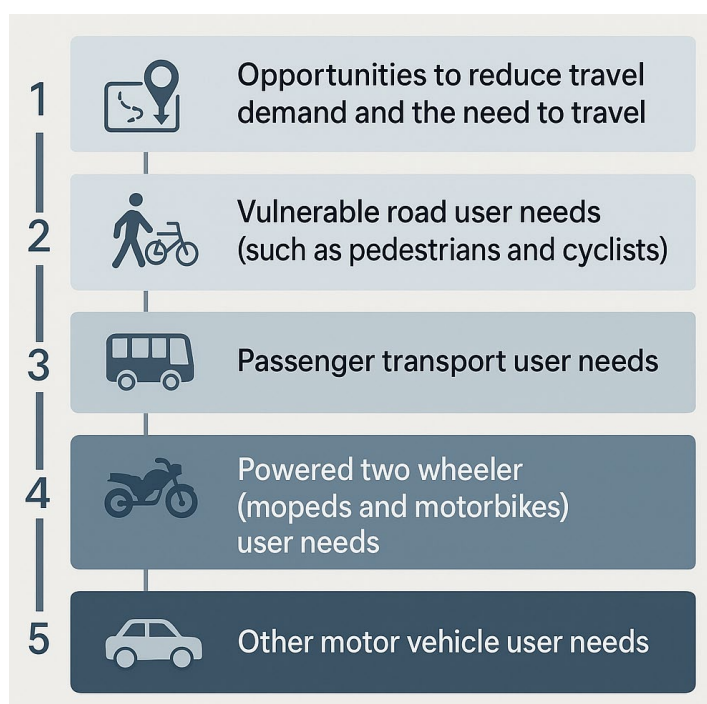
- 4.2.11 The Transport PPG key principles have shaped the development of the ES and accompanying TA (**Appendix 4.1**) and can be seen throughout this chapter.

Local Policy

Local Transport Plan 2018-2031, Hertfordshire County Council (May 2018)

- 4.2.12 The Local Transport Plan 2018-2031 (Hertfordshire County Council, 2018) outlines key planning and transport policies influencing development in Hertfordshire. It references the National Planning Policy Framework and highlights both the documents' roles in shaping sustainable growth and infrastructure planning.
- 4.2.13 Policy 1 in the HCC's Local Transport Plan sets out a Transport User Hierarchy, which *"represents a shift in emphasis to increase rates of travel by more sustainable modes"*
- 4.2.14 The Transport User Hierarchy is indicated in **Figure 4.1**.

Figure 4.1 - Transport User Hierarchy (Policy 1, LPT4, HCC)



- 4.2.15 Growing Baldock has been developed with the Transport User Hierarchy at the centre of all transport design development. There has been a focus on promoting active and sustainable travel at all stages of design development, as reflected in the relevant sections of the TA (**Appendix 4.1**).

North Hertfordshire's Local Plan 2011-2031, North Herts Council (November 2022)

- 4.2.16 The North Hertfordshire Local Plan 2011-2031 (North Herts Council, 2022) outlines the district's strategy for delivering housing, employment, and infrastructure. Adopted in

November 2022, the plan provides a framework for sustainable development and guides planning decisions across the region.

- 4.2.17 Policy SP6: Sustainable transport of the NHDC Local Plan sets out the requirements of new developments to promote sustainable development:

"We will deliver accessibility improvements and promote the use of sustainable transport modes insofar as reasonable and practicable. We will:

a) Comply with the NHDC Transport Strategy and the provisions of the Local Transport Plan and other supporting documents as relevant;

b) Encourage development in locations which enable sustainable journeys to be made to key services and facilities;

c) Work with Hertfordshire County Council, neighbouring authorities, Highways England and service providers to ensure that a range of sustainable transport options are available to all potential occupants or users. This may involve new or improved pedestrian, cycle and passenger transport (including rail and/or bus) links and routes;

d) Seek the earliest reasonable opportunity to implement sustainable travel infrastructure on Strategic Housing Sites and other development sites in order to influence the behaviour of occupiers or users, along with supporting Travel Plans in order that sustainable travel patterns become embedded at an early stage;

e) Assess development proposals against the parking standards set out in this Plan and having regard to relevant supplementary advice;

f) Require applicants to provide assessments, plans and supporting documents to demonstrate the safety and sustainability of their proposals; and

g) Protect existing rights of way, cycling and equestrian routes and, should diversion be unavoidable, require replacement routes to the satisfaction of the Council."

- 4.2.18 In accordance with the plan, the supporting TA (**Appendix 4.1**) and the MMF has met all the criteria above, with the Vision-Led approach meaning that sustainable travel is a priority of the development, which is demonstrated throughout this document.

Any Other Relevant Policy, Legislation or Guidance

Environmental Assessment of Traffic and Movement

- 4.2.19 The Guidelines for the Environmental Assessment of Traffic and Movement (EATM) (ISEP, 2024) published July 2023 are guidelines for the assessment of the environmental impacts of road traffic associated with new developments, irrespective of whether the developments are to be subject to formal EIAs.

- 4.2.20 The purpose of the guidelines is to provide the basis for systematic, consistent and comprehensive coverage for the appraisal of traffic impacts arising from development projects.
- 4.2.21 EATM is the principal guidance that informs this assessment, Section 4.3 of this report contains full details of how the guidance has been applied.

4.3 ASSESSMENT METHODOLOGY

- 4.3.1 This section describes the assessment methodology, including data collection, impacts and impact assessment criteria used in the assessment.

Scope

- 4.3.2 The Transport Study Area (TSA) has been informed by the most probable routes for traffic during the construction and post-completion phases of the Proposed Development. The TSA is illustrated in **Figure 4.2 (Appendix 4.7)** with relevant highway links marked in green and numbered. The various plots of the Growing Baldock sites are outlined in red. Further description of the links is provided within **Table 4.4**.

Data Sources

Consultation

- 4.3.3 A formal Scoping Report was prepared by David Lock Associates (DLA) on behalf of Hertfordshire County Council (HCC) and Urban&Civic (U&C) to support a request to North Herts Council (NHC) for a formal scoping opinion under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017. A formal Scoping Response was received from NHC in September 2025, and this chapter has been written in accordance with the responses.
- 4.3.4 The scope of the TA (**Appendix 4.1**) has been subject to separate pre-application scoping discussions with both HCC, NHDC and NH and a number of Public Consultation events were undertaken. Full details of all consultation is provided in Section 1.4 of the TA (**Appendix 4.1**) with all comments (and ITPs responses) received during pre-application scoping included in Appendix C of the TA (**Appendix 4.1**).

Assessment Approach

- 4.3.5 The scoping report indicated that the following impacts would need to be considered for assessment:
- 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 and large loads
- 4.3.6 The above impacts have been taken forward for assessment within this Chapter.

Construction Stage

- 4.3.7 The construction stage of the Proposed Development will be temporary in nature and traffic flows will be significantly less than during the post-completion phase.

Post-Completion Stage

- 4.3.8 The Proposed Development's Post-Completion stage will bring about permanent change in traffic flows within the TSA. This change has the potential to result in significant impacts and is therefore assessed below and within the supporting TA (**Appendix 4.1**).
- 4.3.9 As detailed in the TA (**Appendix 4.1**), the Proposed Development is assessed as three separate scenarios. The scenarios are identical with the exception of the delivery of site BA3:
- In Option 1, relocation and expansion (up to 12FE) of Knights Templar School to BA3. BA3 to accommodate SEND school and secondary school;
 - In Option 2, expansion of Knights Templar School on the existing site (up to 10FE). BA3 to accommodate SEND school and residential (c. 250 units); and
 - In Option 3, provision of additional secondary school (up to 5FE) on BA3. BA3 to accommodate SEND school, secondary school and residential (c.90 units)
- 4.3.10 All three scenarios have been assessed in the trip generation undertaken within the TA (**Appendix 4.1**), and subsequently the scenarios with the highest and lowest trip generations have been carried forward into the TA (**Appendix 4.1**) modelling scenarios – Option 1 and 2.
- 4.3.11 In accordance with the TA, Options 1 and 2 have been carried forward for initial screening within this Chapter.
- 4.3.12 For the impacts of severance and amenity, an evaluation of the TSA has been undertaken to identify potential locations with a concentration of receptors which may be sensitive to changes in traffic conditions. Definitions of the different sensitivity levels for highway traffic receptors are given in **Table 4.2**.

Guideline Criteria for Assessing the Magnitude of Impacts on Traffic and Transport Receptors

- 4.3.13 EATM suggests application of the following rules to define the extent and scale of the assessment required:
- Rule 1: Include highway links where traffic flows are predicted to increase by more than 30% (or where the number of HGVs [Heavy Goods Vehicles] is predicted to increase by more than 30%).
 - Rule 2: Include highway links of high sensitivity where traffic flows are predicted to increase by 10% or more.

- 4.3.14 In justifying these rules EATM examines the science of traffic forecasting and states:

"Traffic forecasting is not an exact science, and the accuracy of projections is open to debate. It is generally accepted that accuracies greater than 10% are not achievable. It should also be noted that the day-to-day variation of traffic on a road is frequently at least + or -10%. At a basic level, it should therefore be assumed that projected changes in traffic of less than 10% create no discernible environmental impact."

- 4.3.15 Therefore, changes in traffic flows below the EATM Rules (thresholds) are assumed to result in no discernible or negligible environmental effects and have therefore not been assessed further as part of the assessment.

- 4.3.16 EATM however notes that the Rule 1 and Rule 2 'criteria' process may not be appropriate for some impacts, and it is generally accepted by regulators and practitioners that it should not be applied to assessments of road safety and driver delay. These impacts can be potentially significant for lower changes in traffic flow when high baseline traffic flows are evident. Full details of the methodology adopted for these impacts are set out later in this section.

- 4.3.17 Following initial screening, EATM, sets out considerations and, in some cases, thresholds in respect of changes in the volume and composition of traffic to facilitate a subjective judgement of traffic effect and significance. The following sub-sections provide detail of the adopted methodology for assessing each of these impacts.

Severance (Including Delay)

- 4.3.18 Severance is the perceived division that can occur within a community when it becomes separated by a major traffic artery. 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 the road itself. It can also relate to relatively minor traffic flows if they impede pedestrian access to essential facilities. Severance impacts could equally be applied to residents, cyclists, or pedestrians (this includes users of public rights of way). EATM also identifies that pedestrian delay and severance are closely related effects and can be grouped together.

- 4.3.19 EATM suggests that changes in total traffic flows of 30%, 60% and 90% are considered to be slight, moderate, and substantial respectively. These are transposed into the EIA magnitude of impact matrix (**Table 4.4**) as less than 30% as negligible, 30 – 60% as small, 60 – 90% as moderate and greater than 90% as large respectively.

- 4.3.20 However, EATM notes that these figures should be used cautiously, and the assessment should pay full regard to specific local conditions, e.g. sensitivity of adjacent land uses, prevalence of vulnerable people, whether or not crossing facilities are provided, traffic signal settings, etc. It is identified that the addition of traffic flow to low baseline traffic

could present an exaggerated magnitude of change and overestimate the severance effects likely to occur on such links.

Amenity (Including Fear and Intimidation)

- 4.3.21 Amenity is broadly defined as the relative pleasantness of a journey, and is considered to be affected by traffic flow, traffic composition, and separation from traffic. It can affect a range of NMUs such as pedestrians, cyclists, and equestrians (this includes users of public rights of way).
- 4.3.22 This definition also includes pedestrian fear and intimidation and can be considered to be a much broader category considering the overall relationship between pedestrians and traffic.
- 4.3.23 EATM suggests that a tentative threshold of a doubling of total traffic flow or the HGV component may lead to a negative effect upon amenity. However, EATM notes that this threshold should be used cautiously, and the assessment should pay full regard to specific local conditions.

Road and Pedestrian Safety

- 4.3.24 The relevant EATM guidance on road safety states that collision rates taken from existing data should be used and an assessment made based upon the forecasted increase in traffic levels on different types of roads. In addition, a 'collision cluster' assessment is frequently required to identify impacts in more detail.
- 4.3.25 To assess the effects on road and pedestrian safety, the TA (**Appendix 4.1**) includes an examination of the existing collisions occurring within the TSA to identify any areas where there are concentrations of collisions (clusters) or locations with similar patterns of collisions. These sites are considered to be sensitive to changes in traffic flows (sensitive receptors) and therefore a more detailed analysis of local factors has been undertaken in the context of the proposals. Further details of sensitivity are provided within paragraphs 4.6.13 to 4.6.34 for the Construction Stage and paragraphs 4.6.75 to 4.6.111 for Post-Completion Stage.

Driver Delay

- 4.3.26 The EATM screening thresholds do not apply to the impact of Driver Delay. The impact is defined as potentially significant when the highway network surrounding the development under consideration is at or close to capacity (congested).
- 4.3.27 EATM outlines that values for driver delay can be determined by the use of proprietary software packages such as Junctions 9/10 software packages for roundabouts (ARCADY) and priority Junctions (PICADY), LinSig for traffic signalised intersections and other suitable programs such as VISSIM.

- 4.3.28 The TA (**Appendix 4.1**) provides a detailed analysis of the Proposed Development's traffic upon 12 key junctions within the TSA identified to be potentially sensitive to changes in traffic during the Post-Completion stage, namely:
- A1(M) Junction 10
 - BA1 Access / North Road
 - Station Road / Royston Road / Whitehorse Street / Clothall Road
 - Wallington Road / Clothall Road / South Road
 - BA2 Access / Clothall Road
 - High Street / South Road / London Road
 - A1(M) Junction 9
 - BA3 Access, Wallington Road
 - BA10 Access, Royston Road (western access)
 - BA10 Access, Royston Road (eastern access)
 - Royston Road Roundabout
- 4.3.29 The TA (**Appendix 4.1**) concludes that the Proposed Development would have a minimal impact upon the overall performance of all the junctions studied during the Post-Completion stage. As such, no further consideration of driver delay is provided within this ES.
- 4.3.30 Section 10.3 of the TA (**Appendix 4.1**) states that during the Construction Stage, construction activity will be restricted to the times noted below:
- Monday to Friday: 08:00–18:00;
 - Saturdays: 08:00–13:00;
 - Sundays and Bank Holidays: No operations.
- 4.3.31 In addition (in accordance with HCC guidance) construction vehicle movements would be restricted to the hours of 9.30am to 4.30pm (7 hours) on weekdays and between 8.00am and 1.00pm (5 hours) on Saturdays. Furthermore, if there is a school in the vicinity of the relevant allocation sites to be constructed or on the proposed access routes, deliveries will be further restricted to the hours of 9.30am and 3pm (5.5 hours) on weekdays during term time.
- 4.3.32 Section 4.6 outlines that the Construction stage is expected to generate peak daily flows of 160 vehicle movements (of which 144 would be HGVs).
- 4.3.33 This equates to a worst-case scenario of 144 HGV movements averaged over a 5.5 hour period, resulting in 13 arrivals and 13 departures to site every hour, outside of the network peak hours.
- 4.3.34 Noting these low levels of hourly flows, no further assessment of driver delay for the Construction stage is presented. Notwithstanding, it is proposed that the construction traffic movements are managed through detailed CEMPs. The CEMPs are to be provided

at phase and reserved matters stage which would be developed and agreed with the relevant highway and planning authorities and contain details of measures to manage, monitor and enforce the numbers, routes and timing of construction traffic movements.

Hazardous and Large Loads

4.3.35 The EATM guidance defines hazardous loads as:

"Some developments may involve the transportation of dangerous or hazardous loads by road and this should be recognised within any traffic and movement assessment. Such movements should include specialist loads that might be involved in the construction or decommissioning phases of the development, in addition to movements associated with the operation of the establishment"

4.3.36 The Construction stage will primarily comprise the movement of standard building materials such as concrete, steel, timber, and aggregates. These materials do not fall under the classification of hazardous loads. The Post-Completion stage will not involve the use or transport of hazardous substances. Thus, based on the nature of the development and the materials involved, the assessment of hazardous loads has been scoped out of this ES chapter.

4.3.37 The development proposals do not include the requirement for large loads (including Abnormal Indivisible Loads), therefore, no further assessment of large loads is undertaken in the ES.

Significance Criteria

4.3.38 **Table 4.1** details the assessment framework used herein adapted from EATM. These thresholds are guidance only and provide a starting point from which additional evidence (for example more detailed traffic analysis and site observations) and professional judgement will be used to inform an analysis of the magnitude of effect.

Table 4.1 - Magnitude of Impacts

Impacts	Large	Moderate	Small	Negligible
Severance (including Delay)	Changes in total traffic flows of over 90%	Change in total traffic flows of 60-90%	Change in total traffic flows of 30-60%	Change in total traffic flow of less than 30%
Amenity (inc Fear and Intimidation)	Greater than 100% increase in traffic (or HGV component) and a review based upon the quantum of vehicles, vehicle speed and pedestrian/cycle demand			Changes in traffic flow (or HGV component) less than 100%
Road Safety	Analysis of collision records to identify clusters and/or trends.			

Identification of Sensitive Receptors

- 4.3.39 EATM identifies that it is necessary to identify particular user groups ('receptors') and associated locations, which may be sensitive to changes in the traffic and transport network conditions. **Table 4.2** provides a summary of the potential impacts and an indication of the receptors affected and potential locations that will be considered within the assessment.

Table 4.2 - Potential Impacts and Receptors

Impacts	Receptors	Locations
Severance (including delay)	Pedestrians, cyclists and equestrians	Local communities adjoining the TSA, designated routes (e.g. public rights of way, National Cycle Network)
Amenity (including Fear and Intimidation)		
Road Safety	All road users	TSA

- 4.3.40 Definitions of the different sensitivity levels for highway traffic receptors are given in **Table 4.3**.

Table 4.3 - Link Characteristics

Link Sensitivity	Link Characteristics
High	Concentrations of sensitive receptors (e.g. hospitals, schools, residential dwellings, areas with high footfall) and limited separation from traffic provided by the highway environment; or a low concentration of sensitive receptors and no separation from traffic provided by the highway environment.
Medium	A low concentration of sensitive receptors (e.g. residential dwellings, pedestrian desire lines, etc.) and limited separation from traffic provided by the highway environment.
Low	Few sensitive receptors and / or highway environment can accommodate changes in volumes of traffic.
Negligible	Links that fall below EATM screening thresholds

- 4.3.41 A desktop exercise has been undertaken to identify the sensitive receptors in the TSA. **Table 4.3** provides broad definitions of the different sensitivity levels (derived from EATM) which have been applied to the assessment. All 23 links within the TSA have been assessed and assigned a sensitivity as detailed within **Table 4.4**.

Table 4.4 - Link Sensitivity

Link	Link Description	Link Sensitivity	Rationale for Link Sensitivity
1	A1(M) (north of J10)	Negligible	This link is a major road (motorway) with no pedestrian, cycle or equestrian environment. The link is therefore assessed to be of negligible sensitivity.

Link	Link Description	Link Sensitivity	Rationale for Link Sensitivity
2	A507 (North Road) Between the A1(M) and the Services Roundabout)	Low	An A-road with no receptors along the link. Footways are provided to the northern verge. The link is therefore assessed to be of low sensitivity.
3	A507 (North Road) Between the Services Roundabout and the BA1 Northern Access	Medium	An A-road with sporadic residential properties set back from the carriageway. A mixture of segregated and carriageway adjacent footways are provided along the extent of the link. The link is therefore currently assessed as of medium sensitivity. Embedded mitigation measures are also outlined in the TA (Appendix 4.1) which will include a new junction for the BA1 access providing shared active travel routes to link to the proposed Greenway/PRoW network with dedicated pedestrian crossings. With the addition of these embedded mitigation measures the sensitivity of the link would on balance be assessed to still be of medium sensitivity.
4	A507 (North Road) Between the BA1 Northern Access and northern extent of Baldock	Low	An A-road with sporadic frontage development. Footways are provided along the carriageway edge. The link is therefore currently assessed as of low sensitivity. Embedded mitigation measures are outlined in the TA (Appendix 4.1) and include, a new shared active travel route set back from carriageway by a vegetation buffer and a new bus gate junction with dedicated NMU crossing facilities. With the addition of these embedded mitigation measures the sensitivity of the link would on balance be assessed to still be of low sensitivity.
5	A507 (North Road / Station Road) Between the northern extent of Baldock to the B656 Junction.	High	An A-road with a high number of residential properties, commercial properties and a public house. Footways are provided along the carriageway edge. The link is therefore currently assessed as of high sensitivity. Embedded mitigation measures are outlined in the TA (Appendix 4.1) to reduce vehicle speeds along the link with narrowed road space, while wide pedestrian footways will be provided. The addition of parking lay-bys will also create greater segregation between traffic and the NMUs on the proposed footways and segregated cycleways. The embedded mitigation measures also include the closure of Football Close and Icknield Way West to the A507 with associated active travel improvements. Whilst the embedded migration would provide enhancements for NMUs on balance

Link	Link Description	Link Sensitivity	Rationale for Link Sensitivity
			the link would still be assessed to be of high sensitivity.
6	A507 (Clothall Road) Between B656 and Wallington Road.	High	An A-road with residential receptors throughout including recreational facilities and a school. Footways are provided along the carriageway edge. The link is therefore assessed to be of high sensitivity.
7	A507 (Clothall Road) Between Wallington Road to extents of the A505.	Low	A B-road with sporadic frontage development set back from the road. Footways are provided along the carriageway edge. The link is therefore assessed to be of low sensitivity. Link 20 will serve the proposed Growing Baldock BA2 allocation site, which is proposed to include an additional c.200 residential dwellings. Embedded mitigation measures are outlined in the TA (Appendix 4.1) to improve active travel routes such as roundabout improvements, narrowing of the carriageway with new rumble strips to reduce vehicle speeds. With the addition of these embedded mitigation measures the sensitivity of the link would on balance be assessed to still be of low sensitivity.
8	B656 (Royston Road) Between the A507 and Icknield Way	Medium	A B-road with residential properties set back from the road. Footways are provided along the carriageway edge. The link is therefore assessed to be of medium sensitivity. Embedded mitigation measures are outlined in the TA (Appendix 4.1) to improve active travel routes including footway and junction improvements. Whilst the embedded migration would provide enhancements for NMUs on balance the link would still be assessed to be of medium sensitivity.
9	B656 (Royston Road) Between Icknield Way and the A505.	Medium	A B-road with sporadic frontage development and commercial properties set back from the road. A very narrow footway is provided along the southern carriageway edge. The link is therefore assessed to be of medium sensitivity. Link 9 runs adjacent to the proposed Growing Baldock BA10 allocation site, which is proposed to include a new medical centre, waste transfer stations, gym, and various industrial and office land use which could impact the existing level of sensitivity of link 9. Embedded mitigation measures are outlined in the TA (Appendix 4.1) to significantly improve active travel routes including widening footways, providing new dedicated segregated cycleways, Shared active travel routes with associated parallel zebra

Link	Link Description	Link Sensitivity	Rationale for Link Sensitivity
			crossings, junction improvements and improved soft landscaping areas. Whilst the embedded migration would provide enhancements for NMUs on balance the link would still be assessed to be of medium sensitivity
10	A505 Between London Road and the B656	Negligible	An A-road with no receptors along the link. The link is also a modern standard dual carriageway with no pedestrian, cycle or equestrian environment. The link is therefore assessed to be of negligible sensitivity.
11	A505 Between London Road and the J9 of the A1(M)	Negligible	An A-road with no receptors along the link. The link is also a modern standard dual carriageway with no pedestrian, cycle or equestrian environment. The link is therefore assessed to be of negligible sensitivity.
12	A1(M) (south of J9)	Negligible	This link is a major road (motorway) with no pedestrian, cycle or equestrian environment. The link is therefore assessed to be of negligible sensitivity.
13	B197 / B197 (London Road) from the A505 to Weston Way	Low	A B-road with one sensitive receptor (a Public House). A footway is provided along the entire western carriageway edge with a footway provided along the eastern carriageway edge to link to the Public House. The link is therefore assessed to be of low sensitivity.
14	B197 (London Road) Between Weston Way the A505 and South Road.	Medium	A B-road that passes many residential properties set back from the carriageway and a Hospital. Footways are provided on both sides of the road with dedicated pedestrian crossing facilities. The link is therefore assessed to be of medium sensitivity.
15	South Road	High	A road that passes many residential properties. Footways are provided on both sides of the road with dedicated pedestrian crossing facilities. There are existing proposals to reduce the speed limit to 20mph, with supporting traffic calming measures including speed tables and the raising of the existing Zebra crossing. Whilst the embedded migrations would provide enhancements for NMUs, on balance the link would still be assessed to be of high sensitivity.
16	B197 (High Street)	High	A B-road with residential and commercial properties and a public house. Footways are provided on both sides of the road with dedicated pedestrian crossing facilities. The link is therefore assessed to be of high sensitivity.

Link	Link Description	Link Sensitivity	Rationale for Link Sensitivity
17	B656 (Whitehorse Road) Between the A507 and the High Street.	High	A B-road with residential and commercial properties. Footways are provided on both sides of the road with dedicated pedestrian crossing facilities. The link is therefore assessed to be of high sensitivity.
18	B656 (Hitchin Street) Between the High Street and Weston Way	High	A B-road with residential and commercial properties. Footways are provided on both sides of the road with dedicated pedestrian crossing facilities. The link is therefore assessed to be of high sensitivity.
19	B656 (Hitchin Street) West of Weston Way	Medium	A B-road with sporadic development. A Footways and cycleways are provided along the link with dedicated pedestrian crossing facilities. The existing Knights Templar School and Sports Centre is accessed by NMU off Western Way and a dedicated signalised junction with pedestrian crossing are provided at the junction with the B656 allowing NMUs to cross over the B656 to the Sports field north of the B656. The link is therefore assessed to be of medium sensitivity. The Growing Baldock BA3 development Options would have an impact on link 19 for the following reasons. Option 1 would remove and relocate the Knights Templar School to BA3. Option 2 would expand the Knights Templar School. Option 3 would constitute no change on Link 19. It is therefore considered that all future Growing Baldock BA3 development options would not alter the existing assessed sensitivity level of the Link 19, therefore the link would still be of medium sensitivity.
20	Wallington Road	Low to High	A road with sporadic development. A footway is provided along the northern verge of the carriageway. The link is therefore assessed to be of low sensitivity. The Growing Baldock development Options for BA3 which would be accessed off Link 20 provides for some form of school to be developed which could increase the sensitivity level of the link.

Link	Link Description	Link Sensitivity	Rationale for Link Sensitivity
			The Growing Baldock development Options at BA3 could potentially have a number of impacts on link 20 for the following reasons: Option 1 there is proposed to be one SEND school (circa 150 pupils) and one secondary school (12-form) on BA3, Option 2 there is proposed to be one SEND school (circa 150 pupils) and c.250 dwellings on BA3, and Option 3 there is proposed to be one SEND school (circa 150 pupils) and c.90 dwellings on BA3, and Embedded mitigation measures are outlined in the TA (Appendix 4.1) to improve active travel routes such as a new junction with continuous footway crossings and two zebra crossings to improve access to the BA3 development site and existing PRow routes. As the final options and layouts of BA3 are to be determined by the Education Review Group, later in the development programme, it is considered to adopt a precautionary approach for the assessment and raise the sensitivity of the link to be of high sensitivity.
21	A1(M) Between J9 and J10	Negligible	This link is a major road (motorway) with no pedestrian, cycle or equestrian environment. The link is therefore assessed to be of negligible sensitivity.
22	A505 North of B656	Negligible	An A-road with no receptors along the link. The link is also a modern standard dual carriageway with no pedestrian, cycle or equestrian environment. The link is therefore assessed to be of negligible sensitivity.

- 4.3.42 The assessment of the significance of an effect is a function of the sensitivity of the receptor and the magnitude of the effect. The determination of significance is guided by the use of a significance of effect matrix, as shown in **Table 4.5**. Definitions for the magnitude of effect are provided in **Table 4.1**.

Table 4.5 - Significance of Effects

Negative / Beneficial Magnitude	Sensitivity			
	High	Medium	Low	Negligible
Large	Major	Major	Moderate	Minor
Moderate	Major	Moderate	Minor	Negligible
Small	Moderate	Minor	Minor	Negligible
Negligible	Minor	Negligible	Negligible	Negligible

4.3.43 Note that for the purposes of the EIA, major and moderate impacts are deemed to be significant. For each effect, it has been concluded whether the effect is 'beneficial' or 'adverse' except where negligible.

4.3.44 Embedded mitigation and existing commitments to good practice are included in the initial assessment of impact and are detailed in Section 4.5. If the impact does not require further mitigation (or none is possible), the residual impact will remain the same. If additional mitigation is required there will be an assessment of the post-mitigation residual impact.

Uncertainties and Limitations

4.3.45 A comprehensive traffic data collection exercise has been undertaken, however, as identified by EATM:

"Traffic forecasting is not an exact science, and the accuracy of projections is open to debate. It is generally accepted that accuracies greater than 10% are not achievable. It should also be noted that the day-to-day variation of traffic on a road is frequently at least + or -10%. ...".

4.3.46 Where routine assumptions have been made in the course of undertaking the assessment, these are noted in the accompanying TA (**Appendix 4.1**).

4.4 BASELINE CONDITIONS

4.4.1 Characterisation of the existing environment in relation to transport has been informed by a number of sources, including;

- Commissioned traffic surveys;
- Desktop studies and site visits;
- Traffic count information sourced from the Department for Transport; and
- Personal injury collision data sourced from Hertfordshire County Council.

4.4.2 Details of link characteristics for all links within the TSA are detailed in the following sections:

- Current (2025) traffic flows (**Appendix 4.3**);
- Forecast construction assessment year baseline (2033) traffic flows (**Appendix 4.4**);
- Forecast Post-Completion year (2040) traffic flows (**Appendix 4.6**);
- An audit of the sensitive receptors in the TSA (**Table 4.4**); and
- A detailed review of the baseline highway safety conditions (**paragraphs 4.6.44 to 4.6.89**).

The Current Baseline

4.4.3 The following section provides a brief overview of the existing highway network within the vicinity of the Site. A detailed appraisal is provided within Section 3 of the supporting TA (**Appendix 4.1**).

4.4.4 Baldock is situated northeast of Letchworth Garden City and Hitchin, with approximately 3km and 6.5km respectively between town centres. The larger towns of Stevenage and Luton lie 10km south and 20km southwest respectively.

4.4.5 Growing Baldock is formed of four allocation sites, which are located in the following locations (refer to **Figure 4.3**):

- Site BA1 lies on agricultural land around 1km northeast of central Baldock. It is bounded by the Hitchin to Cambridge railway to the south and North Road to the west. A public bridleway runs along the northern site boundary. BA1 also extends to the west of North Road adjacent to the Community Gardens.
- Site BA2 is the southern-most land package and is located on empty agricultural land to the south-east of Baldock town centre. It is bordered by Clothall Road to the north and A505 to the east.
- Site BA3 is located on empty agricultural land around 1km east of the town centre. It is bounded by the A505 to the east and by existing development to the west. Royston Road and Clothall Road bound the north and south of the Site respectively. BA3 also includes the Urban Open Land to the southwestern extents and the scheduled monument of Walls Field to the northwest of Wallington Road.

- Site BA10 is located around 1km east of the town centre and lies between sites BA1 and BA3 on agricultural land. It is bounded by the Hitchin to Cambridge railway to the north and Royston Road to the south.

Figure 4.2 - Growing Baldock Development Site



- 4.4.6 The Site is served by an established network of roads that provide direct connection to the centre of Baldock and the surrounding environment. The Site is well connected to open space such as green space east Clothall Common and the Weston Hills and Ivel Springs Local Nature Reserves. The main commercial and retail areas are located close to Whitehorse Street and along the High Street.
- 4.4.7 The closest railway station to the Growing Baldock site is Baldock Station, located approximately 300m from the nearest site (BA1) and approximately 1.2km from BA2. This proximity offers significant opportunities to access the Proposed Development by rail, including on foot or by bike.
- 4.4.8 There are multiple bus services serving the roads local to the Site, with several bus stops surrounding the development.
- 4.4.9 The Site benefits from existing transport networks, including numerous bus routes, rail services, the National Cycle Network (NCN), footpaths and bridleways.
- 4.4.10 Further detail on the accessibility of the Site is outlined in Section 3.2 of the TA (**Appendix 4.1**).

The Projected Future Baseline

- 4.4.11 In the absence of the Proposed Development, traffic volumes across Baldock and the surrounding area would be expected to increase in line with regional growth forecasts. This growth will be driven by broader trends in population expansion, economic activity, and development across Hertfordshire and the wider region. Strategic routes such as the A1(M), A505, and key local roads are likely to experience gradual increases in congestion, particularly during peak travel periods, placing additional pressure on existing infrastructure.

4.5 POTENTIAL EFFECTS

- 4.5.1 The following sections describes the impacts upon the transport receptors that have the potential to arise during the Construction and Post-Completion Stage of the Proposed Development.
- 4.5.2 The identification of the transport environmental effects is based on an assessment of the volume of traffic demand associated with the Proposed Development. The TA (**Appendix 4.1**) contains the derivation of the Proposed Development's Post-Completion Stage and the background (baseline) traffic flows that have informed this assessment.
- 4.5.3 The derivation of the construction stage traffic flows and respective background (baseline) traffic flows are described in detail within this document.

Construction Stage

- 4.5.4 Section 10 of the TA (**Appendix 4.1**) provides details on the outline construction phasing plan associated with the Growing Baldock Development. It is anticipated that work on the Site would commence in 2028, with the build programme continuing until 2042.
- 4.5.5 Section 10.6 of the TA (**Appendix 4.1**) outlines the anticipated construction vehicle movements which are expected to occur in 2033 (coinciding with the construction of plots BA1 and BA10).
- 4.5.6 During the peak construction period in 2033, it is projected that during an average weekday there could be approximately 80 construction vehicle arrivals, of which around (72 vehicles) will be heavy goods vehicles (HGVs). A detailed breakdown of vehicle movements associated with each Growing Baldock plot throughout the construction programme is provided in **Appendix 4.5**.
- 4.5.7 Based on the phasing plan shown in Figure 10.1 of the TA (**Appendix 4.1**) construction vehicles serving plot BA1 are expected to originate from the north via the A1(M), utilising links 1, 2, 3 and 4 to access the BA1 temporary construction accesses points (Option A and B). Construction vehicles associated with BA10 are anticipated to approach from the east via the A505, north of the B656 and utilise links 22 and 9 to reach the Site.
- 4.5.8 There is a potential risk that focusing solely on the peak 2033 construction year, would mean that the 22 construction vehicle movements associated with plot BA2 (of which 22 movements are HGVs) may not be fully captured in the initial assessment during the construction years of 2028 to 2031. These vehicles are expected to originate from the south via the A1(M) south of Junction 9, accessing the BA2 plot via links 7, 11, 12, 13 and 15. To ensure a comprehensive assessment, these movements have been incorporated into the 2033 assessment to fully account for the impacts associated with BA2 construction.

Traffic Impact Screening

- 4.5.9 With reference to the EATM (Rule 1 and Rule 2), a screening process has been undertaken for the TSA to identify routes that are likely to have significant changes in traffic flows and therefore require further assessment.
- 4.5.10 **Appendix 4.4** summarises the assigned peak daily construction vehicle trips generated by the Proposed Development. **Appendix 4.4** also provides a comparison of the peak daily flows with the forecast annual average day (AADT) background traffic flows for a 2033 future year and identifies the links exceeding the EATM screening thresholds (highlighted in purple).
- 4.5.11 In accordance with EATM, only those links that are showing greater than 10% increase in total traffic flows for sensitive links, or greater than 30% increase in total traffic (or HGV component) for all other links, are considered when assessing the impacts of severance (including delay) and Amenity (including fear and intimidation).
- 4.5.12 Disaggregating from **Appendix 4.4**, no links are forecast to experience an increase in traffic flows above the EATM screening thresholds. Therefore, all links have been screened out and no further assessment for the impacts of severance (including delay) and Amenity (including fear and intimidation) have been undertaken.

Road and Pedestrian Safety

- 4.5.13 Section 3.7.1 of the TA (**Appendix 4.1**) provides a comprehensive analysis of existing collisions within the TSA. To contextualise the collision data presented in this section, reference has been made to the Reported Road Casualties Great Britain: Annual Report 2021. This national dataset provides a benchmark for assessing severity, road user types, and casualty rates.
- 4.5.14 Key national statistics include:
- 21% of all personal injury collisions (PICs) resulted in killed or seriously injured (KSI) casualties.
 - Of all PICs:
 - 13% involved pedestrians,
 - 13% involved pedal cyclists, and
 - 12% involved motorcyclists.
 - The most common contributory factors nationally were driver error, failure to look properly, and inexperienced drivers.
- 4.5.15 Within the TSA, 18.5% of recorded collisions resulted in KSIs which is lower than the national average of 21%.
- 4.5.16 Collisions involving pedestrians (14.5%) cyclists (15.5%) were slightly higher than national averages. This may reflect the urban character of the TSA, which typically sees

greater NMU activity. In respect to motorcyclists, 11.8% of collisions were recorded similar to national averages.

- 4.5.17 It should be noted that the TSA does not encompass a representative range of road types or contexts, which limits direct comparability with national data.
- 4.5.18 The TA (**Appendix 4.1**) also identified three locations where specific collision clusters were found, these include:
- Central Baldock, specifically, Whitehorse Street, High Street, Hitchen Street and adjoining junctions
 - The roundabout junction of the A505 and the B197 to the south of Baldock
 - Junction 9 of the A1(M).
- 4.5.19 A review of the collision locations, alongside the lower proportions of KSIs incidents reported in the TA (**Appendix 4.1**) below the national average has been undertaken. It is considered that links not associated with identified collision clusters can reasonably be considered to have a low sensitivity.
- 4.5.20 In terms of magnitude of change, Links 3, 4 and 5 are forecast to experience the highest increase in total traffic of 1.0% of all links within the TSA. A 1.0% change in traffic would be assessed to represent a negligible magnitude of change.
- 4.5.21 Thus, it is considered that for links not associated with a collision cluster, the magnitude of impact for road and pedestrian safety would be no greater than negligible on receptors of low sensitivity. This results in a Negligible adverse effect (which is not significant in EIA terms).
- 4.5.22 It is therefore considered proportional to focus the assessment on links within the TSA that are associated with identified collision clusters which have the potential to be impacted by construction traffic. These clusters are examined in greater detail throughout the remainder of this section.
- 4.5.23 Of the collision clusters identified in paragraph 4.6.22, only the cluster located at the roundabout between the A505 and the B197 south of Baldock is forecast to be used by construction traffic. The cluster comprises links 10, 11 and 13, of which only links 11 and 13 are expected to be utilised by construction traffic. The collisions at this cluster on links 11 and 13 have therefore been considered further for the locations and contributory factors of collisions to determine if there are any identified or emerging patterns of collisions.
- Link 11 – A505 (Baldock By-pass) East*
- 4.5.24 Link 11 is a modern-standard dual carriageway A-road with no adjacent receptors and no provision for pedestrian, cyclist, or equestrian access.

- 4.5.25 A single slight collision was recorded involving a vehicle that lost control due to excessive speed for the conditions.
- 4.5.26 Noting the low frequency and severity of collisions and the absence of any recurring patterns, the link is assessed as low sensitivity.
- 4.5.27 Link 11 is forecast to experience an increase in total traffic of 0.1% and 1.1% in HGV traffic. It is assessed that a change in HGV traffic of up to 1.1% represents a negligible magnitude of impact.
- 4.5.28 Thus, for Link 11, it is considered the magnitude of impact for road and pedestrian safety would be no greater than negligible on a receptor of low sensitivity. This results in a Minor adverse effect (which is not significant in EIA terms).

Link 13 – B197 London Road

- 4.5.29 Link 13 is a B-road with one sensitive receptor (a Public House). A footway is provided along the entire western carriageway edge with a footway provided along the eastern carriageway edge to link to the Public House.
- 4.5.30 Two collisions (one slight and one serious) occurred on approach or on the roundabout circulatory lanes with one collision involving a motorcyclist. Contributing factors included driver error and alleged alcohol impaired.
- 4.5.31 Noting the low frequency and severity of collisions and the absence of any recurring patterns, the link is assessed as low sensitivity.
- 4.5.32 Link 13 is forecast to experience an increase in total traffic of 0.2% and 9.0% HGV. It is assessed that a change in HGV traffic of up to 9.0% represents a small magnitude of impact.
- 4.5.33 It is assessed that for Link 13, the magnitude of impact for road and pedestrian safety effect would be no greater than small on a receptor of low sensitivity resulting in a **Minor Adverse** effect (which is not significant in EIA terms).

Post-Completion Stage

- 4.5.34 As detailed in the TA (**Appendix 4.1**), the Proposed Development is assessed as three separate scenarios. The scenarios are identical with the exception of the delivery of site BA3:
- In Option 1, Relocation and expansion (up to 12FE) of Knights Templar school to BA3. BA3 to accommodate SEND school and secondary school
 - In Option 2, Expansion of Knights Templar on existing site (up to 10FE). BA3 to accommodate SEND school and residential (c. 250 units), and

- In Option 3, Provision of additional secondary school (up to 5FE) on BA3. BA3 to accommodate SEND school, secondary school and residential (c.90 units)

4.5.35 All three scenarios have been assessed in the trip generation undertaken within the TA (**Appendix 4.1**), and subsequently the scenarios with the highest and lowest trip generations have been carried forward into the TA (**Appendix 4.1**) modelling scenarios – Option 1 and 2.

4.5.36 In accordance with the TA, Options 1 and 2 have been carried forward for initial screening within this Chapter.

Embedded Mitigation

4.5.37 Section 5 of the supporting TA (**Appendix 4.1**) describes in detail a series of Vision-Led transport strategies that are to be embedded into the design of the Proposed Development. These Vision-Led strategies include:

- Active Travel Strategy
- Public Transport Strategy
- Roadspace Reallocation Strategy
- Parking Strategy

4.5.38 The Vision-Led approach has been prepared in accordance with National and Local planning policy that seeks to ensure that the development delivers sustainable transport, healthy lifestyles and lower environmental impacts. The Transport Vision has been agreed with NHDC and HCC through extensive pre-application discussions.

4.5.39 A brief summary of the Vision-Led strategies is provided below.

Active Travel Strategy

4.5.40 The Active Travel Strategy forms a central component of the Vision-Led approach for the sustainable growth of Baldock. Its primary objective is to provide genuine travel choices by making walking and cycling viable alternatives to private car use for a significant proportion of daily journeys. The strategy aims to establish seamless connections between existing urban streets and green corridors, thereby integrating Baldock into the broader active travel network.

4.5.41 A package of proposals has been identified that would have a transformational impact on transport within the town, designed to lock in positive travel patterns for new residents and to give the existing communities the opportunity to travel more confidently on foot and by bicycle if they wish. **Table 4.6** provides a summary of the new and enhanced links proposed for the development.

Table 4.6 - New and Enhanced Links

Links	Locations	Description
New Links	Railway Overbridge	• Dedicated and segregated routes for all users. Reduces severance between BA1 and BA10. • Shortens journeys and supports active travel. • Enables road space reallocation on the Station Road corridor.
	Active Travel Underpass and Active Travel Spine	• Dedicated pedestrian/cyclist route under railway connecting BA1, BA10, BA2, BA3; • Supports access to a potential secondary school in the future.
	Bygrave Road	• Closed to through traffic and converted to low-traffic greenway; maintains property access via new internal roads
Existing Link Enhancements	Royston Road Corridor	• Continuous segregated footway/cycle track; Improves connections to overbridge and underpass; • Controlled crossings improve north-south movement and site connectivity between BA1, BA10 and Clothall Common.
	North Road / Station Road	• Segregated cycle route linking BA1 to railway station. • Three new crossings on North Road to reduce severance. • Road closures of Icknield Way and Football Close creates low-traffic routes to town centre and Knights Templar school. • Increased pedestrian space close to entrance of the railway station.
	South Road	• Introduction of 20mph speed limit on south Road (existing proposals) • Traffic calming measures including speed cushions (existing proposals) • Raising the existing controlled pedestrian crossing (existing proposals)

Public Transport Strategy

- 4.5.42 The strategy aims to create strong public transport links between new development sites, Baldock Railway Station, the town centre, and key destinations like schools. It focuses on improving accessibility, frequency, and integration of transport modes to encourage sustainable travel. **Table 4.7** provides a summary of the key public transport proposals.

Table 4.7 - Public Transport Strategy Proposals

Focus Area	Key Proposals
Baldock Railway Station	- Improve access and environment around the station. - Enhance Station Road public realm. - Reopen pedestrian access from North Road. - Potential new pedestrian link from BA1.
Local Buses	- Introduce high-frequency 'Baldock Flyer' shuttle bus. - Connect station, development sites, employment areas, and town centre. - Use intelligent traffic signals and bus gates for priority. - Phased delivery aligned with housing rollout.
Mobility Hubs	- Create a hierarchical network of hubs. - Community Hubs: Full range of facilities. - Neighbourhood Hubs: Moderate facilities at local hotspots. - Street Hubs: Basic, widely distributed.

Roadspace Reallocation Strategy

- 4.5.43 Reconfigures key junctions and corridors to prioritise sustainable modes. Notable changes include banned turns at Whitehorse Street crossroads and shuttle working under the Station Road railway bridge. **Table 4.8** provides a summary of the key roadspace reallocation proposals.

Table 4.8 Roadspace Reallocation Key Proposals

Focus Area	Key Proposals
Junction 9 - A1(M)	Capacity at A1(M) Junction 9 will be increased to reduce congestion and discourage through traffic in Baldock, encouraging vehicles to remain on the strategic road network instead of using the town as a cut-through
BA1 Access Road	- New low-speed access road connecting North Road to Royston Road via A505 - Includes a multi-modal railway overbridge and link to Bygrave - Designed for all transport modes with footways, cycleways, and bus routes - Replaces Bygrave Road for primary access, converting it into a greenway - Aligns with local and neighbourhood planning policies

North Road / Station Road Corridor	• Whitehorse Street Junction redesign to improve pedestrian access and reduce through traffic. • Banned turns between Station Road and Royston Road (dependent on BA1 road completion). • One-way shuttle system under railway bridge to reduce lorry traffic and improve pedestrian/cycle space.
Royston Road Corridor	• New crossing points, access junctions to BA10, and a bus gate to Clothall Common. • Gateway feature to slow traffic and deter HGVs. • Enlarged A505 roundabout to connect with BA1 access road, improving network resilience and reducing town centre traffic

Parking Strategy

- 4.5.44 Reduces parking provision below NHDC standards, supported by connectivity mapping. Introduces car clubs, EV charging, and mobility hubs to support modal shift.

Traffic Impact Screening

- 4.5.45 With reference to the EATM (Rule 1 and Rule 2), a screening process has been undertaken for the TSA to identify routes that are likely to have significant changes in traffic flows and therefore require further assessment.
- 4.5.46 **Appendix 4.6** summarises the assigned daily peak vehicle trips generated by the Proposed Development for both Option 1 and Option 2 development scenarios. **Appendix 4.6** also provides a comparison of the peak daily flows with the forecast annual average day (AADT) background traffic flows for a 2040 future year and identifies the links exceeding the EATM screening thresholds (highlighted in purple for % increases or yellow for % decreases) for each development scenario.
- 4.5.47 As can be seen by **Appendix 4.6**, both Option 1 and Option 2 have similar forecast 2040 development flows and percentage changes for the majority of the links. Notable exceptions are Link 6 (A507 Clothall Road) which shows AADT flow percentage change of 19.5% (Option 1) to 11.2% (Option 2) and Link 20 (Wallington Road) which shows an AADT flow percentage change of 48.1% (Option 1) to 35.1% (Option 2) on link 20.
- 4.5.48 Noting the above, in order to present a proportional assessment, Option 1 has been taken forward for the purposes assessing the worst case impacts.
- 4.5.49 In accordance with EATM, only those links that are showing greater than 10% increase in total traffic flows for sensitive links, or greater than 30% increase in total traffic (or HGV component) for all other links, are considered when assessing the impacts of severance (including delay) and Amenity (including fear and intimidation).
- 4.5.50 Disaggregating from **Appendix 4.6**, five of the 22 links are expected to experience an increase in traffic flows above the EATM screening thresholds (links 6, 15, 17, 18 and

- 20). These links have been taken forward for further assessment for the impacts of severance (including delay) and Amenity (including fear and intimidation).
- 4.5.51 Some links within the TSA are expected to experience reductions in total traffic/ HDV traffic flows. This is a result of the proposed interventions that will mean that background trips will be displaced and redistributed across the local and strategic networks. Section 7.4.2 of the TA (**Appendix 4.1**) provides a complete description of the proposed interventions, justification of redistribution and the impacts to traffic flows on the local and strategic networks.
- 4.5.52 Disaggregating from **Appendix 4.6**, six of the 22 links are expected to experience a decrease in traffic flows above the EATM screening thresholds (Links 2, 3, 4, 5, 6 and 7). These links have been taken forward for further assessment for the impacts of severance (including delay) and Amenity (including fear and intimidation),
- 4.5.53 The remaining links (Links 1, 8 to 14, 16, 19 and 21) are forecast to experience an increase in traffic flows below the EATM screening thresholds. These links have therefore been screened out and no further assessment for the impacts of severance (including delay) and Amenity (including fear and intimidation) is presented.

Severance (including delay)

- 4.5.54 Severance (including delay) is the perceived division that can occur within a community when it becomes separated by a major traffic artery. paragraphs 4.3.17 to 4.3.19 provides details of the adopted impact assessment methodology.
- 4.5.55 **Table 4.9** provides a summary of the magnitude of impact, sensitivity of each receptor and overall significance of the severance effect for each of the screened links.

Table 4.9 - Significance of Severance Summary

Links	Rationale for Magnitude	Magnitude of Impact	Sensitivity	Significance of Effect	Significant in EIA Terms
7	Decrease in total traffic flow of less than 30%	Negligible	Low	Negligible	Not Significant
18	Increase in total traffic flow of less than 30%	Negligible	Medium	Minor adverse	Not Significant
6, 15			High	Minor adverse	
2,3,4	Decrease in total traffic flow of between 30% and 60%	Small	Low	Minor beneficial	Not Significant
5			High	Moderate beneficial	Significant

Links	Rationale for Magnitude	Magnitude of Impact	Sensitivity	Significance of Effect	Significant in EIA Terms
17, 20	Increase in total traffic flow of between 30% and 60%	Small	High	Moderate adverse	Significant

4.5.56 **Table 4.9** identifies that Links 5, 17 and 20 could potentially experience significant effects. Therefore, a more detailed assessment has been undertaken of the factors that may be influencing the magnitude of impact to determine whether additional mitigation measures are required.

4.5.57 **Appendix 4.6** identifies that Link 5 (A507 - North Road / Station Road) could experience a reduction in total AADT flow of up to 45.4% in Option 2. This would result in NMU users experiencing a small reduction in the impacts of severance and delays.

4.5.58 A further examination of the Vision-Led proposals for the link reveals extensive and robust embedded mitigation measures. This can be seen in detail in the TA Section 5 (**Appendix 4.1**) and includes the following measures:

- Introduction segregated cycle route linking BA1 to railway station.
- Three new crossings on North Road to reduce severance.
- Road closures of Icknield Way and Football Close creates low-traffic routes to town centre and Knights Templar school.
- Increased pedestrian space close to entrance of the railway station.

4.5.59 These measures would result in a narrowing of carriageways, and therefore reduced crossing distances and vehicle speeds. In addition, dedicated pedestrian and cycle crossing facilities will be embedded in the street design while planting and street trees provide buffers, ensuring greater separation between active travel users and the road space.

4.5.60 When considering the mitigation measures, the significance of the severance effect at Link 5 is reassessed as no greater than negligible on a receptor of high sensitivity, resulting in a Minor adverse effect (which is not significant in EIA terms).

4.5.61 **Appendix 4.6** indicates that Link 17 (B656 – Whitehorse Road) could experience a worst-case increase in total AADT flow of up to 30.5% within Option 2, which marginally exceeds the EATM thresholds for a small magnitude of change. Under Option 1, the total AADT flow increase is up to 24.5%, remaining below the threshold. Therefore, both options are considered to represent a small magnitude of change and are assessed further.

4.5.62 A review of Link 17 reveals that there is currently one controlled pedestrian crossing located on the western section, near the High Street mini-roundabout, and a signal controlled pedestrian crossing at the Whitehorse Street crossroads signalised junction.

- Both crossings provide facilities for NMUs. Whitehorse Street (link 17) also features footpaths on both sides most of which are buffered from moving traffic by marked parking bays.
- 4.5.63 Further examination of the Vision-Led proposals associated with Link 17 reveals a range of embedded mitigation measures detailed in Section 5 of the TA (**Appendix 4.1**). This includes the reconfiguration of the Whitehorse Street crossroads junction to prioritise sustainable modes.
- 4.5.64 The Whitehorse Street junction (which forms part of Link 17) is currently characterised by constrained carriageway and narrow footways. The proposed junction design simplifies the junction layout, enabling wider footways, direct pedestrian crossings and safer vehicle movements. These improvements will enhance accessibility to the town centre from the railway station and growth areas by NMUs.
- 4.5.65 Taking into account the existing pedestrian facilities and the proposed mitigation measures, the significance of the severance effect at Link 17 is reassessed as no greater than negligible on a receptor of high sensitivity, resulting in a Minor adverse effect (which is not significant in EIA terms).
- 4.5.66 **Appendix 4.6** identifies that Link 20 (Wallington Road) could experience a worst-case increase in total AADT flow of up to 48.1% in Option 1 and up to 35.1% in Option 2.
- 4.5.67 The anticipated increase in traffic on Link 20 under Option 1 and 2 is attributed to vehicles diverting to access Plot BA3, where the Knights Templar School would be relocated and expanded alongside the development of a new SEND school under Option 1. Under Option 2, the Knights Templar school would not be relocated and Plot BA3 would accommodate a new SEND school and residential dwellings (c. 250 units) only.
- 4.5.68 A review of Link 20 reveals that there are currently two uncontrolled pedestrian crossings located at the extremities of the link, offering limited crossing opportunities for NMUs. Additionally, there is only a single footpath on the northern verge of the link. No crossing facilities are provided within the link itself, which increases severance for NMUs.
- 4.5.69 The current characteristics of Link 20 suggest that its sensitivity level can be considered low. However, by 2040, with the full development of either Option 1 or 2 (including the introduction of school facilities and residential developments) the potential sensitivity of Link 20 is expected to increase to high due to the forecast increase in NMu activity.
- 4.5.70 To mitigate the severance effects (if either Option 1 or 2 is progressed) it is proposed that additional mitigation measures be included, which may include (but not limited to):
- Controlled pedestrian crossing points at appropriate locations within the link;
 - Provision of a continuous footpath along the southern verge of the carriageway;

- Traffic calming measures (e.g. raised tables, speed cushions) to reduce vehicle speeds and improve pedestrian safety;
- Improved lighting and signage to enhance visibility and awareness of NMU routes; and/or
- Safe routes to school mapping and infrastructure upgrades to support active travel.

4.5.71 These measures would significantly enhance connectivity along the link and help to reduce severance for NMUs.

4.5.72 Taking into account the proposed mitigation measures, the significance of the severance effect at Link 20 is reassessed as no greater than negligible on a receptor of high sensitivity, resulting in a Minor adverse effect (which is not significant in EIA terms).

Amenity (including fear and intimidation)

4.5.73 Amenity is broadly defined as the relative pleasantness of a journey and is considered to be affected by traffic flow, traffic composition, pavement width and separation from traffic. It can affect a range of NMUs such as pedestrians, cyclists and equestrians. Paragraphs 4.3.20 to 4.3.22 provides details on the adopted impact assessment methodology for Amenity (inc Fear and Intimidation).

4.5.74 **Appendix 4.6** indicates that all links within the TSA experience traffic flows significantly below the 100% threshold, resulting in a negligible magnitude of effect on links of low to high sensitivity. This results in a Negligible to Minor adverse effect (which is not significant in EIA terms).

4.5.75 Furthermore, as with severance, the extensive package of embedded mitigation measures should also be noted. These measures are designed to improve separation between active travel users and vehicular traffic, enhance the provision of crossing facilities and reduce vehicle speeds. Collectively, these interventions will contribute to improved amenity across the local highway network and within the specific links where they are implemented.

4.5.76 In addition to improving amenity, the embedded mitigation measures will also help to reduce associated fear and intimidation by enhancing physical separation, improving crossing safety, and reducing vehicle speeds. These embedded mitigation measures will contribute to a more comfortable and secure environment for NMUs, particularly vulnerable groups across the local highway network and affected links where they are implemented.

Road and Pedestrian Safety

4.5.77 The assessment of Road and Pedestrian Safety in the Post-Completion Stage follows the methodology as detailed in paragraphs 4.6.16 to 4.6.22 of the Construction Stage

assessment and thus it is considered that links not associated with identified collision clusters can reasonably be considered to have a low sensitivity.

4.5.78 In terms of magnitude of change, Link 20 (Wallington Road) is forecast to experience the highest increase in total traffic (48.1%) of all links within the TSA during the Post-Completion Stage, which would represent a medium magnitude of change.

4.5.79 Thus, it is considered that for links not associated with a collision cluster, the significance of road and pedestrian safety effect would be no greater than negligible to medium on receptors of low sensitivity. This results in a Negligible or Minor adverse/beneficial effect (which is not significant in EIA terms).

4.5.80 It is therefore considered proportional to focus the assessment on links within the TSA that are associated with identified collision clusters. These clusters are examined in greater detail throughout the remainder of this section.

Central Baldock

4.5.81 The collision clusters identified in the TA (**Appendix 4.1**) for central Baldock include the following links of the TSA:

- Link 16 – High Street;
- Link 17 – Whitehorse Street; and
- Link 18 – Hitchen Street.

4.5.82 These links have therefore been considered further for the locations and contributory factors of collisions to determine if there are any identified or emerging patterns of collisions.

Link 16 – High Street

4.5.83 Link 16 is 650m long B-road with residential and commercial properties and a public house. Footways are provided on both sides of the road with dedicated pedestrian crossing facilities.

4.5.84 A total of nine collisions (eight slight and one serious) have been recorded along the link of which, three involved a pedestrian, two involved a motorcyclist, three involved a cyclist and one involved a vehicle. Eight were a failure to look properly (five drivers and three pedestrians). The locations of the collisions are spread out along the entire link.

4.5.85 Taking the above summary into account, whilst there is a clear pattern of collisions involving vulnerable road users (particularly linked to failure to look properly) the spatial distribution of these collisions does not indicate a specific concentration area. Therefore, noting the behavioural risk factors, the overall collision patterns support an assessment of medium sensitivity.

- 4.5.86 Link 16 is forecast to experience an increase in total traffic of 5.9% (Option 1 & 2). It is assessed that a change in total traffic of up to 5.9% represents a negligible magnitude of impact.

Link 17 - Whitehorse Street

- 4.5.87 Link 17 is a 230m long B-road with residential and commercial properties. Footways are provided on both sides of the road with dedicated pedestrian crossing facilities.

- 4.5.88 One single slight collision involving a pedestrian and a vehicle that lost control was recorded along the link. Noting, the low number and severity of the collisions and the link is assessed as low sensitivity

- 4.5.89 Link 17 is forecast to experience an increase in total traffic of 24.5% (Option 1) and 30.5% (Option 2). It is assessed that a change in total traffic of up to 30.5% represents a small magnitude of impact.

Link 18 - Hitchen Street

- 4.5.90 Link 18 is a 260m long B-road with residential and commercial properties. Footways are provided on both sides of the road with dedicated pedestrian crossing facilities.

- 4.5.91 Four collisions (three slight and one serious) have been recorded along Link 18 of which two involved a pedestrian, one a motorcyclist and one a cyclist.

- 4.5.92 The contributory factors in the collisions along Link 18 are varied including, loss of control, misjudged speed, pedestrian error and alleged alcohol impairment. These collisions occurred at discrete geographical locations along the link without recurring causes and therefore would not indicate an emerging pattern of collisions. Taking the above summary into account, the link is assessed as low sensitivity.

- 4.5.93 Link 18 is forecast to experience an increase in total traffic of 10.9% (Option 1) and 14.8% (Option 2). It is assessed that a change in total traffic of up to 14.8% represents a small magnitude of impact.

Roundabout between the A505 and the B197 Collision Cluster

- 4.5.94 The collision clusters identified in the TA (**Appendix 4.1**) for central Baldock include the following links of the TSA:

- Link 10 – A505 (Baldock By-pass) West;
- Link 11 – A505 (Baldock By-pass) East; and
- Link 13 – B197 London Road.

- 4.5.95 These links have been investigated further for the locations and contributory factors of collisions to determine if there are any identified or emerging patterns of collisions.

Link 10 – A505 (Baldock By-pass) West

- 4.5.96 Link 10 is a modern-standard dual carriageway A-road with no adjacent receptors and no provision for pedestrian, cyclist, or equestrian access. A total of six collisions were recorded (four slight and two serious) with one involving a motorcyclist.
- 4.5.97 An emerging pattern of five rear end shunt collisions have been identified. A review of the collisions notes that these were caused by vehicles travelling southwest towards the roundabout on Baldock Bypass and failing to slow or stop in time. This then resulted in collisions with other vehicles or the roundabout itself. Notably, the roundabout is at the end of a long stretch of downhill carriageway, meaning vehicles may quickly gain speed.
- 4.5.98 Given the recurring nature of these incidents and the influence of road layout on driver behaviour, Link 10 is assessed as of high sensitivity.
- 4.5.99 Link 10 is forecast to experience an increase in total traffic of 1.2% (Option 1 and Option 2). It is assessed that a change in total traffic of up to 1.2% represents a negligible magnitude of impact.

Link 11 – A505 (Baldock By-pass) East

- 4.5.100 Link 11 is a modern-standard dual carriageway A-road with no adjacent receptors and no provision for pedestrian, cyclist, or equestrian access.
- 4.5.101 A single slight collision was recorded involving a vehicle that lost control due to excessive speed for the conditions. Noting the low frequency and severity of the collision and the absence of any recurring patterns, the link is assessed as low sensitivity.
- 4.5.102 Link 11 is forecast to experience an increase in total traffic of 1.2% (Option 1 and Option 2). It is assessed that a change in total traffic of up to 1.2% represents a negligible magnitude of impact.

Link 13 – B197 London Road

- 4.5.103 Link 13 is a B-road with one sensitive receptor (a Public House). A footway is provided along the entire western carriageway edge with a footway provided along the eastern carriageway edge to link to the Public House.
- 4.5.104 A total of two collisions (one slight and one serious) occurred on approach or on the roundabout circulatory lanes with one collision involving a motorcyclist. Contributing factors included driver error at the roundabout and alleged alcohol impairment.
- 4.5.105 Noting the low frequency and severity of collisions and the absence of any recurring patterns, the link is assessed as low sensitivity.

- 4.5.106 Link 13 is forecast to experience an increase in total traffic of 18.2% (Option 1) and 17.5% (Option 2). It is assessed that a change in total traffic of up to 18.2% represents a small magnitude of impact.

Junction 9 of the A1(M) – Links 11, 12 and 21

- 4.5.107 Junction 9 of the A1(M) is a large, grade-separated partially signalised roundabout providing access to Baldock from the south and Letchworth from the east.
- 4.5.108 Analysis of the collision data presented in the TA (**Appendix 4.1**) indicates that 14 of the 17 recorded collisions occurred on the on/off slip roads or approach arms to the roundabout from the A505 or Letchworth Gate. The remaining three collisions occurred on the main carriageway of the A1(M) in the vicinity of J9 (Links 12 and 21 of the TSA). As there are no identifiable patterns of collisions in either the locations or contributory factors, the collision assessment focuses on the roundabout and approaches (Link 11).
- 4.5.109 Of the 14 collisions associated with the roundabout, one was serious and 13 were slight. Eleven of the collisions took place on exit slip-roads while vehicles were queuing to enter the roundabout. These incidents typically involved rear end shunts, attributed to a failure to look, excessive speed or following too closely. Further investigation on the locations identifies that:
- Nine collisions occurred on the A1(M) northbound exit slip;
 - One occurred on the A1(M) southbound exit slip; and
 - One on the A505 approach arm (Link 11 of the TSA).
- 4.5.110 There is a clear emerging pattern of rear-end shunt type collisions on the approaches to Junction 9, particularly on the A1(M) northbound exit slip road. These types of collisions can typically be influenced by high traffic volumes causing queueing.
- 4.5.111 The Vision-Led embedded mitigation measures identified within the Active Travel and Roadspace Reallocation Strategy propose changes to the layout of Junction 9 of the A1(M) to address capacity and congestion issues. These improvements also include clearer lane definition with new markings and wayfinding, helping to minimise 'weaving' and improve driver awareness on the roundabout. Collectively, these capacity improvements would also help to address the existing pattern of rear end shunt collisions.
- 4.5.112 Given the recurring nature of these incidents and the potential influence of road geometry and traffic conditions, Junction 9 (Link 11) of the A1(M) is assessed as of high sensitivity.
- 4.5.113 Link 11 is forecast to experience an increase in total traffic of 1.2% (Option 1 and Option 2). It is assessed that a change in total traffic of up to 1.2% represents a negligible magnitude of impact.
- 4.5.114 **Table 4.10** provides a summary of the sensitivity of each receptor, the magnitude of impact and an evaluation of the significance of road and pedestrian safety effect.

Table 4.10 - Summary of Road and Pedestrian Safety

Links	Link Sensitivity	Magnitude of Impact	Significance of Effect	Significant in EIA Terms
Central Baldock				
16	Medium	Negligible	Minor adverse	Not Significant
17	Low	Small	Minor adverse	
18	Low	Small	Minor adverse	
Roundabout between the A505 and the B197 south of Baldock				
10	High	Negligible	Minor adverse	Not Significant
11	Low	Negligible	Negligible	
13	Low	Small	Minor adverse	
Junction 9 of the A1(M)				
11	Low	Negligible	Negligible	Not Significant

4.5.115 It can be noted from **Table 4.10** that for links associated with a collision cluster, the significance of road and pedestrian safety effect would be **Negligible to Minor Adverse** effect (which is not significant in EIA terms).

4.5.116 Furthermore, it is worth noting that a number of the Vision-Led embedded mitigation measures identified within the Active Travel and Roadspace Reallocation Strategy are expected to deliver direct benefits to pedestrian and road safety. In particular, the proposed layout changes to Junction 9 of the A1(M) aim to address capacity and congestion issues which would also help to address the emerging pattern of rear end shunt collisions. These improvements include clearer lane definition with new markings and wayfinding, helping to minimise 'weaving' and improve driver awareness on the roundabout.

4.6 MITIGATION MEASURES

Construction Stage

- 4.6.1 No additional mitigation is considered necessary during the Construction Stage as a result of identified effects. However, to manage potential construction traffic movements, a Construction Traffic Management Plan (CTMP) will be secured via planning condition.
- 4.6.2 The CTMP would be developed and agreed with the relevant highway authorities and contain details of measures to manage, monitor and enforce the numbers, routes and timing of construction traffic movements.
- 4.6.3 Monitoring of CTMP implementation will be undertaken throughout the Construction Stage, with regular reviews and coordination with the highway authorities to ensure compliance and effectiveness.

Post-Completion Stage

- 4.6.4 Further mitigation measures are proposed to avoid, reduce, or offset potential significant adverse effects, particularly in relation to severance. These measures are designed to complement the embedded mitigation strategies and are expected to be effective in enhancing connectivity and reducing risk for vulnerable road users. Where relevant, monitoring of implementation and effectiveness will be undertaken through the planning and delivery phases, in coordination with the local highway authority.

Severance (Including Delay) Mitigation Measures

- 4.6.5 To address severance impacts on Link 20 (Wallington Road), it is proposed that additional mitigation measures are to be provided, which may include (but not limited to):
- Controlled pedestrian crossing points at appropriate locations within the link.
 - Continuous footpath provision along the southern verge of the carriageway.
 - Traffic calming measures, such as raised tables or speed cushions, to reduce vehicle speeds.
 - Improved lighting and signage to enhance visibility and awareness of NMU routes.
 - Safe routes to school mapping and infrastructure upgrades to support active travel and reduce risk for school-age pedestrians.
- 4.6.6 The above severance mitigation measures would be applicable to both Option 1 or Option 2, depending on which was taken through to development.
- 4.6.7 In addition to addressing severance (including delay), these mitigation measures are also expected to deliver significant beneficial impacts to both amenity (including fear and intimidation) and road and pedestrian safety impacts by reducing the risk of collisions involving vulnerable road users and improving overall accessibility.

- 4.6.8 Monitoring of implementation and effectiveness will be coordinated with the local highway authority during the planning and delivery phases.

4.7 RESIDUAL EFFECTS

Construction Stage

- 4.7.1 A total of 22 highway links within the TSA have been assessed for the impacts of severance (including delay), amenity (including fear and intimidation) and road and pedestrian safety as part of the Construction Stage assessment. The residual effects upon all receptors was assessed to be **not significant** in EIA terms, as shown in **Table 4.11**.

Post-Completion Stage

- 4.7.2 A total of 22 highway links within the TSA have been assessed for the impacts of severance (including delay) amenity (including fear and intimidation) and road and pedestrian safety.
- 4.7.3 With the application of embedded mitigation measures detailed in Section 4.5 and additional mitigation measures detailed in Section 4.7 the residual effect upon all receptors was assessed to be **not significant** in EIA terms, as shown in **Table 4.11**.

Summary of Effects

- 4.7.4 The effects identified are summarised in **Table 4.11** below:

Table 4.11 - Residual Effect Summary

Potential Effect	Significance (pre-mitigation)	Mitigation Measure	Significance of residual effect
Construction Stage			
Severance (including delay)	Negligible to Minor Adverse	None	Negligible to Minor Adverse
Amenity (including fear and intimidation)	Negligible to Minor Adverse		Negligible to Minor Adverse
Road and Pedestrian Safety	Negligible to Minor Adverse		Negligible to Minor Adverse
Post-Completion Stage			
Severance (including delay)	Negligible to Moderate adverse	Link 20 Controlled pedestrian crossing points at appropriate locations within the link. Continuous footpath provision along the southern verge of the carriageway. Traffic calming measures, such as raised tables or	Negligible to Minor adverse

		speed cushions, to reduce vehicle speeds. Improved lighting and signage to enhance visibility and awareness of NMU routes. Safe routes to school mapping and infrastructure upgrades to support active travel and reduce risk for school-age pedestrians.	
Amenity (including fear and intimidation)	Negligible to Minor adverse	None	Negligible to Minor adverse
Road and Pedestrian Safety	Negligible or Minor adverse/beneficial	None	Negligible or Minor adverse/beneficial

4.8 CUMULATIVE EFFECTS

4.8.1 The scoping report indicated that the following Projects would need to be considered for the Cumulative Assessment:

- BA4 – Land East of Rhee Spring - 42 dwellings; and
- LG1 – North of Letchworth – 900 dwellings.

4.8.2 The approach to the cumulative assessment follows the approach set out within Growing Baldock EIA Scoping Report, appended to the NHC Scoping Opinion (**Appendix 1.3**) which stated in Paragraph 3.1.18 that only LG1 and BA4 were to be scoped into the Traffic assessment and as such this differs to those sites set out in ES Chapter 2.

4.8.3 **Table 4.12** below provides a rationale for the identified projects potential inclusion into a cumulative assessment.

Table 4.12 - Proposed Projects for Cumulative Assessment

Project	Project Type	Status	Potential for Significant Cumulative Effects	Rationale
BA4	Residential	Planning Granted	No	The most recent proposal for BA4 site was rejected by the North Herts planning committee on 21 March 2024 with an appeal allowed on 20 May 2025 and planning permission granted (with conditions) for the residential project. The Transport Statement (TS) in support of the planning Application (21/01882/FP) stated that the Site is expected to generate approximately 21 two-way trips during the morning peak hour and 18 two-way trips during the evening peak hour. This number of additional vehicle trips is low (less than 1 extra vehicle every two minutes in the peak hours), and the development would therefore not have a material impact on the local highway network. A supplementary Transport Note (July 2021) expanded on the developments expected 24hr AADT flows of 179 vehicle movements. It is not proposed to consider the potential for cumulative effects with BA4 further noting that:

Project	Project Type	Status	Potential for Significant Cumulative Effects	Rationale
				• There is no certainty regarding temporal overlap (no published plans to develop the Site); and • The TS indicates no significant material impact on the local highway network.
LG1	Residential	Pre-application	Yes	At this stage only a strategic masterplan has been produced for LG1 and the Scoping Report notes that an Outline Planning Application is to be prepared in the future. At this stage there is no data available in regard to construction or operational traffic demand and temporal overlap (opening/construction years). It is therefore not possible to undertake any meaningful cumulative assessment at this stage.

4.8.4 As outlined in **Table 4.12**, a review of the available data for BA4 or LG1 has not identified the requirement for further cumulative assessment. Notwithstanding, it is worth noting that future changes in traffic flows from cumulative projects (such as BA4 and LG1) would largely be captured as part of the TEMPro factors applied to background flows. The Trip End Model Presentation Programme (known as TEMPro) provides forecasts for future changes in traffic flows resulting from changes in travel patterns and sub-regional growth in housing and employment. These TEMPro factors have been applied to the future year baseline traffic forecasts contained within **Appendix 4.6**. Details of the derivation and application of the TEMPro factors is provided within the TA (**Appendix 4.1**).

4.9 REFERENCE LIST

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