Homes England

The Housing and Regeneration Agency

West of Ifield, Crawley
Environmental Statement: Volume 1: Main Report

CHAPTER 15: TRANSPORT
Version 1 - Planning submission

July 2025

15 TRANSPORT

15.1 Introduction

15.1.1 This chapter of the ES reports on the identification and assessment of likely significant transport effects to arise from the demolition and construction stage and operational stage of the Proposed Development.

15.1.2 The chapter describes the transport legislation, policy and guidance framework; the methods used to assess the potential impacts and likely effects; the baseline conditions at the Site and within the study area; the likely transport effects and the setting out of proposed mitigation measures, where feasible, in respect of any identified likely significant effects; proposed additional mitigation and any enhancement measures where applicable; the significance of residual effects; and inter-project cumulative effects.

15.1.3 The chapter is supported by the following technical appendices in ES Volume 2:

- Appendix 15.1: Annual average daily traffic (AADT) and Annual average weekday traffic (AAWT) Methodology Technical Note;
- Appendix 15.2: Full List of AADT and AAWT Data;
- Appendix 15.3: List of Committed Developments included in Crawley Town Model (CTM); and
- Appendix 15.4: Proposed Pedestrian and Cycle Routes

15.1.4 Detailed information is provided in the Transport Assessment (TA) (WOI-HPA-DOC-TA-01) which accompanies the application as a standalone document.

15.2 Policy Context and Guidance

15.2.1 The assessment has been informed by the following policies and published guidance:

- National Policy:
  - National Planning Policy Framework[1] (NPPF) (2024).
  - National Planning Practice Guidance (NPPG) (2019)
- Regional Policy:
  - West Sussex Active Travel Strategy 2024-2036[2];
  - Transport for the South East (TfSE) Strategic Investment Plan[3] (2023);
  - Transport for the South East (TfSE) Transport Strategy for the South East[4] (2020);
  - West Sussex Transport Plan[5] 2022-2036;
  - West Sussex Walking and Cycling Strategy[6] (WSWCS) 2016-2026;
  - West Sussex County Council Guidance for Parking in New Developments[7] (2020);
  - West Sussex Cycling Design Guide - A Guide for Developers, Planning and Engineers[8] (2019); and

[1] Ministry of Housing, Communities and Local Government, updated in December 2024, with an additional update in February 2025. National Planning Policy Framework. HMSO
[2] West Sussex Active Travel Strategy 2024-2036
[3] Transport for the South East, 2023. A Strategic Investment Plan for the South East.
[4] Transport for the South East, 2020. Transport Strategy for the South East.
[5] West Sussex County Council, 2022. West Sussex Transport Plan 2022 to 2036.
[6] West Sussex County Council, 2016. Walking and Cycling Strategy 2016-2026.
[7] West Sussex County Council, 2020. Guidance for Parking in New Developments
[8] West Sussex County Council, 2019. West Sussex Cycling Design Guide – A Guide for Developers, Planners and Engineers.

  - West Sussex Development Travel Plan Policy[9].
- Local Policy and Guidance:
  - Horsham District Planning Framework (2015)[10];
  - Horsham District Local Plan (emerging) [11] (2030-20240);
  - Crawley Local Plan 2023-2040[12] (2024);
  - Crawley Transport Study (2021)[13];
  - Horsham Transport Study (2021)[14]; and
  - Crawley Transport Strategy[15] – New Directions for Crawley: Transport and access for the 21st century (January 2020).
- National Guidance and Industry Standards:
  - Manual for Streets[16] (MfS);
  - Manual for Streets 2[17] (MfS2);
  - Design Manual for Road and Bridges[18] (DMRB);
  - Local Transport Note (LTN) 1/20 Cycle Infrastructure Design[19];
  - Active Design (Active Travel England / Sport England / Department for Health and Social Care)[20] (2023); and
  - Department for Transport (DfT) Policy Paper: Gear Change – a bold vision for cycling and walking[21] (July 2020); and
  - IEMA Environmental Assessment of Traffic and Movement[22] (July 2023).

15.2.2 More details of the Policy context are included within Appendix D of the Transport Assessment (WOI-HPA-DOC-TA-01) which accompanies the application as a standalone document.

15.3 Consultation

15.3.1 Horsham District Council (HDC) originally adopted a scoping opinion for a potential, outline application in November 2020 (HDC ref. EIA/19/0004). A revised scoping opinion request was submitted to HDC for a proposed hybrid application in October 2023. On 27th November HDC issued a revised scoping opinion (HDC ref. EIA/23/0007). Since November 2023, the design of the Proposed Development has altered slightly with the addition of proposed groundwater abstraction wells, and therefore it was considered necessary to reassess the scope of the EIA once again for the further amended Proposed Development and request a new scoping opinion from the HDC. A revised scoping report was issued to HDC on 21st May 2024, with a scoping opinion received on 15th Jul 2024 (HDC ref. EIA/24/0003). For the purpose of the evolution of this chapter, all of the relevant scoping responses have been considered.

[9] West Sussex County Council, 2023. Travel Plans [Online}. Available at: https://www.westsussex.gov.uk/roads-and-travel/travel-and-public-transport/travelwise-sustainable-transport/travel-plans/
[10] Horsham District Council, 2015. Horsham District Planning Framework.
[11] Horsham District Local Plan (2030-20240}
[12] Crawley Local Plan 2023-2040 (2024.
[13] Crawley Transport Study (2021)
[14] Horsham Transport Study (2021)
[15] Crawley Borough Council, 2020. New Directions for Crawley – Transport and Access for the 21st Century.
[16] Department for Transport, 2007. Manual for Streets.
[17] Chartered Institution of Highways and Transportation, 2010. Manual for Streets 2 – Wider Application of the Principles
[18] National Highways, 2021. Design Manual for Roads and Bridges - LA series. National Highways.
[19] Department for Transport, 2020. LTN 1/20 Cycle Infrastructure Design. DfT.
[20] Sports England, 2023. Active Design – Creating Active Environments Through Planning and Design.
[21] Department for Transport. Gear Change – A Bold Vision for Cycling and Walking.
[22] IEMA, 2023. Environmental Assessment of Traffic and Movement.

15.3.2 Table 15.1 summarises the key EIA Scoping Opinion responses and separate consultations that have been undertaken with respect to the Transport Assessment.

Table 15.1: Summary of Consultation

Consultee and Form/ Date of Consultation	Summary of Comments	Where in this Chapter Comments are addressed
Gatwick Airport Limited (GAL) (Formal Scoping Opinion, 28th October 2020)	Gatwick Development Consent Order (DCO) for second runway project should be included in the cumulative assessment.	The cumulative scheme has been considered in the TA (WOI-HPA-DOC-TA-01) and the cumulative assessment section of this ES Chapter. In the interest of adopting a precautionary approach, the cumulative effects assessment has included the proposed alterations of Gatwick Airport to support dual runway operations through the routine use of the existing northern runway and to accommodate up to 80.2 million passengers per annum. The Planning Inspectorate on behalf of the Secretary of State accepted the application for Development Consent Order on 3rd 2023.
	GAL supports the confirmation that the assessment and study area will ensure that the identified cumulative scheme impacts are taken into account, particularly Gatwick Airport. We wish to emphasise that this should include the Northern Runway Project and we would be happy to share data on the transport assessment on the Northern Runway Project as we progress our studies.	
HDC (Formal Scoping Opinion, 30th November 2020)	Comments received on design and layout of masterplan, and mode shares used in assessment.	The design and layout of the masterplan has been considered within the assessment of this ES Chapter, and assessed and addressed in the TA (WOI-HPA-DOC-TA-01). All consultation activities have been captured in this table, as well as in the Statement of Community Involvement (SCI) (WOI-HPA-DOC-SCI-01) which has been submitted with the planning application.
	WSCC Highways have stated that they have no comments to make on the methodology within the EIA Scoping. As set out in the Scoping, separate discussions are progressing with WSCC regarding the assessment of transport related matters with these to be presented as part of a Transport Assessment. It's understood that the TA will then feed into the EIA. Various transport guidance documents are listed on page 144. LTN 1/20 should be added to these.	
	The only other comment at this stage would be in respects of the committed developments. Both Kilnwood Vale (DC/10/1612) and the redevelopment of the former Novartis site (DC/18/2687) are missing from the list within Appendix B.	As part of the Transport Assessment, Kilnwood Vale (DC/10/1612) has been included within the Crawley Town Model reference cases and the former Novartis Site (DC/18/2687) has been accommodated within the additional growth factored in using the Tempro growth rates.
CBC (Formal Scoping Opinion, 27th October 2020)	Bus route frequency and contribution to be discussed and aligned with Metrobus.	Ongoing discussions have been held with Metrobus throughout the project period to discuss existing services, route choices and opportunities. Assumptions were agreed, and these have informed the TA analysis and subsequent ES analysis. Contributions form part of the S106.

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	Improvements to cyclist safety on Rusper Road (south of the Proposed Development) are needed within the application.	Addressed in TA by way of reductions in traffic flows on Rusper Road which will make the carriageway a more cycle friendly environment. Any improvements to lining and signing will be included within S106 contributions.
	CBC consider that the detailed advice from WSCC as the Local Highway Authority should be relied upon in respect of transport modelling and traffic impacts	This advice has been used to inform the basis of the TA and subsequent ES analysis.
	Impact on the local road network within Crawley is a key concern as there are existing problems with traffic and congestion on the west side of Crawley. The Council's position with regard to any further development on the western side of Crawley is that there is a requirement for a Western Link Road. This has been ignored by this development proposal and a deviation from such a requirement should at the very least be robustly demonstrated. It is difficult to see how the Link Road issues could be adequately addressed by an outline application with all matters reserved. The Link Road would form a fundamental part of the development, not something that could be added later.	The scheme is being submitted as a hybrid application, with the provision of the Crawley Western Multi-Model Corridor (CWMMC) being applied for in detail. The CWMMC will provide access to the Site via Charlwood Road, and has been designed to support multiple modes of transport. Highway modelling within the ES and TA demonstrates that the strategy for the delivery of the CWMMC is sound.
	The cumulative impact of this development and others planned on the highway network is also of particular concern. In advance of any certainty on housing numbers with future Local Plans, and ahead of any transport modelling outputs for the emerging Local Plans, modelling for this development is considered at best challenging. The ES should not ignore the fact that the applicants have already suggested publicly that more extensive development to the west of Crawley, beyond the current scheme, could be promoted and must be mindful of future further development and how this infrastructure could be accommodated.	The analysis in the ES and TA provides the total cumulative impact including Gatwick DCO growth to provide a robust worst-case assessment as set out in Section 15.6 of this chapter.
	In respect of cycling, the following documents should be referred to: • West Sussex Cycling Design Guide - A Guide for Developers, Planning and Engineers (2019) • DfT Policy Paper: Gear Change – a bold vision for cycling and walking (July 2020)	These documents have been considered as part of this assessment.

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	• DfT Local Transport Note LTN1/20 – Cycle Infrastructure Design (July 2020)	
	The content of the TA and associated ES chapter should also address: • Pedestrian facilities (including seating to enable walking by those less mobile) • Accessibility for people on bikes • Permeability of the site for people walking and on bikes • Connections for active and sustainable travel across the development boundary	The Transport Strategy within the TA and the ES assessment of severance, pedestrian (and cyclist) amenity, pedestrian delay and fear and intimidation address these points.
	For cycling the study impacts are suggested to include: • Route diversion and severance for all modes (walking, by bike, public transport) to all required services (including those outside the development) • Cycle amenity • Directness and coherence of pedestrian routes • Directness and coherence of cycle routes • Parking policy (for bikes and cars)	There are no diversions anticipated for cyclists as a result of the Proposed Development. The Proposed Development would provide off-Site improvements and significant enhancements to the connections to/from the Site for cyclists and pedestrians. Additionally, the cycle parking strategy (see TA, Chapter 4) delivers above WSCC standards and the parking strategy helps support sustainable transport in a way that can be monitored and adapted as necessary to inhibit any undue impact of parking restraint.
	It is noted that paragraph 14.3.5 states that the assessment of the pedestrian, cycle and public transport network effects will be based on the fully completed development. CBC consider that this should be changed to and assessed from the first phase occupied, as transport behaviour is embedded from first occupation. Pedestrian, cycle and public transport facilities need to be in place on first occupation, otherwise car use becomes embedded.	Off-Site infrastructure improvements will be phased in-line with agreements with WSCC. This will be secured through Section 106 legal agreement. This will include some infrastructure coming forward prior to first occupation of the Proposed Development. Public transport infrastructure on-Site will be provided prior to first occupation. The details of which will be secured through the Section 106 legal agreement .
	It is noted in paragraph 14.4.3 that baseline data includes pedestrian and cycle routes. To fully assess this data, the quality, coherence, directness and safety of any existing/connecting pedestrian and cycle facilities needs to be considered to fully understand linkages and movement patterns	The TA includes a full Active Travel England Assessment and review of existing pedestrian and cycle infrastructure.
	Under paragraph 14.5.3 permanent traffic and transport effects during operation should	The impacts on journey time for walking and cycling has been

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	include both the changes in journey times for walking and cycling and the potential severance of established routes for those walking and cycling	considered using professional judgement, and where necessary interventions have been identified.
	In relation to potential mitigation measures during construction, the following measures should be included: • To minimise changes to pedestrian and cycle routes, please consult traffic management guidance for walking and cycling • Ensure that any temporary cycle paths or footways have all weather surfaces The construction worker travel plan should enable and not just encourage the use of other transport modes	These mitigation measures will be included as part of the Construction Logistics Plan (CLP) which will be secured as part of the S106 agreement.
	In respect of mitigation measures during operation, the following measures should be included: • Sustainable travel needs to be enabled not just promoted • Reducing delays and journey times for pedestrians, people on bikes and public transport should be prioritised over delays to drivers Reference is made to provision for pedestrian and cyclist movements at junctions and links to reduce severance. This needs to be separate provision for pedestrians and cyclists (see Gear Change and LTN1/20), cyclists must be separated from volume traffic, both at junctions and stretches of road in between, cyclists should be treated as vehicles, and cyclists must be separated from pedestrians.	The transport strategy prioritises sustainable modes and this is addressed throughout the measures presented in the TA and this ES Chapter, including improvements to key corridors for walking and cycling as part of the Local Cycling and Walking Infrastructure Plan (LCWIP) and Crawley Western Multi-Modal Corridor (CWMMC). The mode shares and subsequent vehicle trip generation are impacted by these, and the ES assessment therefore relies upon these being delivered. Improvements to off-site walking and cycling infrastructure will be secured through the Section 106 legal agreement
WSCC (Pre-App Feedback, 1st October 2021)	Modal split should be more ambitious for sustainable (non-car) modes.	Mode shares were agreed as part of pre-application discussions with WSCC and considered to be suitably robust.
	Use of Crawley Town Model and Gatwick DCO flows have been requested to be used in all assessments.	The Crawley Town Model (CTM) and Gatwick DCO has been used to inform the TA, and therefore the assessment within this ES.
HDC (Formal Scoping Opinion, 15th July 2024)	WSCC Highways have previously commented on an earlier iteration of the EIA scoping note. Discussions continue to be on-going with WSCC concerning the scope of the highways and transport information that will support the application, and feed into the EIA. The only	This ES chapter has been prepared in accordance with the 2023 EIA guidance.

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Consultee and Form/ Date of Consultation	**Summary of Comments**	**Where in this Chapter Comments are addressed**
	comment WSCC would make at this stage is to note that 'Guidelines for Environmental Impact Assessment (2004)' document was updated last year. As such, the EIA should be prepared in accordance with the 2023 guidance rather than the 2024 guidance.	
	National Highways (NH) have commented that the EIA Screening Appraisal provides high level information on the main elements of an EIA, but does not provide any information on the parameters that should be considered as part of the EIA. These being the significance effects (construction and operational), proposed methodology (baseline, assessment, receptor sensitivity, magnitude of impact, effect significance). If the LPA requires such a report, these parameters will require agreement with NH.	The Screening Report is inherently a high-level document. This ES chapter provides the additional information requested.
	National Highways (NH) have commented that The EIA Screening Appraisal outlines that a Construction Logistics Plan (CLP) and Construction Environmental Management Plan (CEMP) will be prepared and submitted alongside a future planning application submission, as will a TA, which will identify traffic impacts associated with the proposed development. These reports are welcomed and will provide the primary highway information that we require, in determining the scale of traffic impacts on the SR.	A TA has been submitted as part of the planning application. The planning application also includes the submission of a Phase 1 Outline CEMP (OCEMP)(10051123-ARC-XXX-ZZ-TR-CM-00001) for the detailed element, and a separate OCEMP for the outline element (ES Volume 2 Technical Appendix 5.1). Detailed CEMPs will follow in reserved matters stages. A Construction Logistics Plan (CLP) will be secured as part of the S106 agreement or by way of planning condition.
HDC (Formal Scoping Opinion, 27th November 2023)`	WSCC Highways has commented that, for the purposes of the EIA scoping, it is accepted that the majority of the transport related sections of the ES will be drawn from the TA prepared to review the transport impacts of this development.	No response needed; the ES Chapter has drawn on the assessment and result undertaken in the TA.
	The use of an opening year of 2026 seems optimistic considering no planning application has yet been submitted or accounting for potential approvals being required ahead of works commencing.	Opening Year is now assumed to be 2029 and this has been used in the assessment of this ES chapter. The reasoning behind this is set out in the Temporal Scope section of the assessment.
CBC (Formal Scoping Opinion, 17th November 2023)	The scoping, design and delivery of the comprehensive Western Multi-Modal Transport Link should be agreed and provided prior to the completion of properties unless	CWMMC is included within the detailed component of the application, and will be delivered prior to the occupation of the first homes.

Table 15.1: Summary of Consultation		
Consultee and Form/ Date of Consultation	**Summary of Comments**	**Where in this Chapter Comments are addressed**
	otherwise agreed by the three local authorities.	
	CBC wish to ensure that the junction design future proofs this infrastructure and that the development does not impede the wider delivery of this transport link.	The design of the CWMMC has been delivered to ensure onward connections for any future transport link are possible.
	An effective reliable high quality bus service to/from Crawley, including Manor Royal and Gatwick, should be integral to transport strategy and the appropriate infrastructure designed into the enabling infrastructure works.	Ongoing discussions have been held with Metrobus throughout the project period to discuss existing services, route choices and opportunities. Assumptions were agreed, and these have informed the TA analysis and subsequent ES analysis. Contributions form part of the S106.
HDC (Pre-Application Meeting, Wednesday 5th March 2025)	The following items were discussed during the meeting: • Cumulative traffic modelling • Traffic impacts on Horsham and Crawley • Rusper Road closure • Modal share and public transport provisior • WSCC liaison • Active Travel England Assessments • Walking and cycling improvements • Overarching mitigation package	These items have been considered and addressed within this ES chapter and TA.

15.3.3 Additionally, a number of pre-application discussions and document reviews have been undertaken by Steer since Spring 2020 when the concept of the scheme was brought forward. The pre-application discussions and document reviews are listed below.

- West of Ifield Mobility Strategy (4 March 2020);
- Transport & Highways Pre-Application discussion (2 June 2020);
- Meeting with Highways England / National Highways – presented scheme and Strategic Modelling Note (10 June 2020);
- Transport & Highways Pre-Application discussion (9 September 2020);
- Rusper Road and Link Road (December 2020);
- General Masterplan Pre-Application discussion (28 January 2021);
- Bus strategy – WSCC, HDC, CBC (5 July 2021);
- West of Ifield Transport Strategy, issued December 2021 (see Appendix A of the TA);
- Trip Generation and Scenario Planning Scoping Note, issued 7 December 2021 (see Appendix B of the TA);
- Pre-application themed workshops (2 February 2022);
- Transport Pre-application discussion, 23 September 2022, addressing comments on Transport Strategy, travel plan measures, strategic modelling, CWL design & Charlwood Road junction, local junction modelling;

- West of Ifield Members Briefing, 3 October 2022 – scheme overview; Highways Mitigation Meeting was held on 28 April 2023 with traffic modelling, proposed highways and off-Site cycle mitigation discussed;
- Active Travel England – Pre Application discussion – August 2024; and
- Horsham District Council – Pre-Application Meeting – March 2025.

15.3.4 The scope and approach to transport modelling for this assessment has been agreed with WSCC, CBC and HDC through the TA and EIA scoping exercises.

15.4 Assessment Scope

15.4.1 Where applicable, the assessment follows the methodology set out in the Institute of Environmental Management and Assessment (IEMA) Guidelines: Environmental Assessment of Traffic and Movement (July 2023) for investigating highway impact. Otherwise, the methodology adopted has been clearly identified in the following sections. The TA also sets out in detail the methodologies adopted for the assessment of the Proposed Development for all transport modes.

Technical Scope

15.4.2 The technical scope of the assessment focusses on the impact of the additional highway traffic on the surrounding highway network and road users, as well as the impact of increased demand on the public transport network, as a result of the Proposed Development. The scope of the assessment accords with the IEMA Guidelines for investigating highway impact.

15.4.3 The following assessment criteria described in the IEMA Guidelines were scoped in or out of this assessment in the Scoping Report. The assessment criteria scoped into the assessment have been defined below.

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

15.4.4 The Proposed Development is not expected to generate or attract hazardous loads during construction or when operational. Therefore, potential impacts relating to hazardous loads have been scoped out of this assessment.

Spatial Scope

15.4.5 The assessment area has been informed by an understanding of the existing and proposed distribution of vehicular and sustainable transport trips to and from the Proposed Development, the travel modes available and where these have the potential to give rise to significant effects.

15.4.6 Appendix 15.2 sets out the annual average daily traffic (AADT0 and annual average weekday traffic (AAWT) flows for the road network surrounding the Proposed Development, inclusive of heavy goods vehicle (HGV) flows. As set out in the Assessment Method (Section 15.6), the spatial scope only comprises the Highway Links that meet a minimum threshold of 10% change in AADT and AAWT flows between the 2041 Future Year Scenarios due to the Proposed Development. A full list of the assessed Highway Links is included at Appendix 15.2, with the local highway network around the site being Highway Links presented in Figure 15.1.

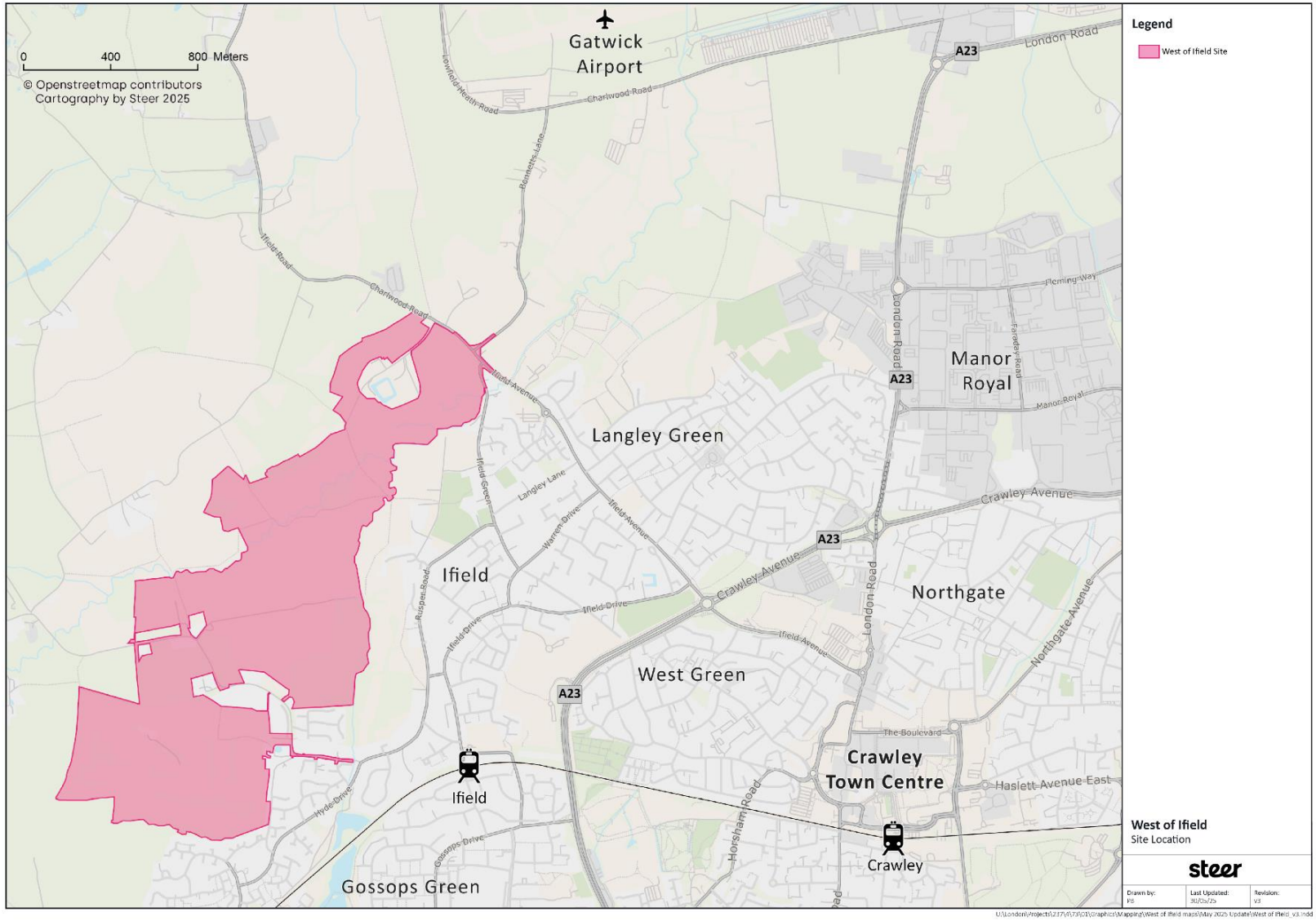

Figure 15.1: Site Location Plan

Temporal Scope

15.4.7 The assessment has considered impacts arising during the demolition and construction stage which would be expected to be temporary and short to long term (5-15 years) in nature and from the completed development stage which would be expected to be permanent and long-term in nature (i.e., more than 10 years). The peak years of the demolition and construction stage have been determined to be 2033, 2034 and 2035.

15.4.8 The transport impact assessment modelling work completed as part of the Transport Assessment, has considered a total of five scenarios. These scenarios are for operational flows only and are as follows:

- Scenario 1: 2025 Baseline Scenario;
- Scenario 2: 2029 Opening Year (without Proposed Development, without CWMMC) + cumulative developments (as modelled within the CTM);
- Scenario 3: 2029 Opening Year (first phase of Proposed Development, with CWMMC) + cumulative developments (as modelled within the CTM);
- Scenario 4: 2041 Future Year (without Proposed Development, without CWMMC) + cumulative developments (as modelled within the CTM plus GAL DCO growth); and
- Scenario 5: 2041 Future Year (full Proposed Development, with CWMMC) + cumulative developments (as modelled within the CTM) plus GAL DCO growth.
- As part of this ES Chapter, potential effects from operational activities within the Site on the surrounding highway network, excluding any demolition and construction activities, has been assessed for the weekday morning and evening peak hours for the baseline and future scenarios. As such, in line with guidance, scenarios 2 and 3 are provided for information only and have not been assessed in detail as part of the ES Chapter.

15.4.9 The year 2025 has been used as the Baseline Year (Scenario 1), as this represents the baseline full calendar year of 'normal' traffic conditions in the surrounding area.

15.4.10 For the TA, for operational activities only, the year of 2029 has been used as the anticipated 'Opening Year' and referred to as the first operational phase of the Proposed Development, as this constitutes the following Proposed Development uses being built out in addition to the construction of the CWMMC being completed:

- Secondary School – 2 Years worth of 6/8 form entry (FE) which equates to 360 pupils; and
- Residential – anticipated 25 Dwellings.

15.4.11 The above infrastructure (secondary school and residential homes) would result in the first stage of operational vehicle flows from the Proposed Development. The above quantum of development has been used for the assessment of Scenario 2 and 3, as it constitutes the 'Opening Year' and first operational year of the Proposed Development which is set at 2029 when the first 25 dwellings are constructed.

15.4.12 From opening of the secondary school, attendance will be from students located outside of the Proposed Development area given the lack of occupation of dwellings within the Site, for example in Crawley Town or from the wider Horsham area. Over time, it is expected that the school will be attended by more and more pupils from the Proposed Development as the residential dwellings are built out, but initially the catchment will be larger.

15.4.13 Due to the build out going beyond the Local Plan timescales, the TA has tested against the year of 2041 rather than 2035 set out within the Crawley Local Plan 2023-2040 (2024). The following weekday peak hours have been used to inform the assessment of the impact of the operational traffic increase on the surrounding transport networks:

- AM Peak: 08:00-09:00; and
- PM Peak: 17:00-18:00

15.4.14 Demolition and construction vehicles flows have been predicted for two scenarios, which are summarised below:

- Construction Scenario 1: 2035 Construction Year (without Proposed Development, with CWMMC) + cumulative developments (as modelled within the CTM);
- Construction Scenario 2: 2035 Construction Year (without Proposed Development, with CWMMC) + 2035 demolition and construction vehicle traffic + cumulative developments (as modelled within the CTM).

Cumulative Stage

15.4.15 The cumulative assessment within this ES Chapter uses data within the CTM which is a strategic highways model of the wider Crawley area. Within the base of the model, there is a comprehensive assessment of committed schemes, and also includes the expected Local Plan growth associated with both Crawley and Horsham (i.e. cumulative development). As a result, both committed and cumulative schemes have been considered within the assessment.

15.4.16 In adopting a precautionary approach, the cumulative effects assessment has considered the proposed alterations at Gatwick Airport to support dual runway operations. This includes the use of the existing northern runway and the capacity to accommodate up to 80.2 million passengers per annum. The alterations are expected to be operational by 2029, with usage increasing towards 2047 . Until the second runway becomes operational, GAL has provided Business as Usual (BAU) demand figures. However, to ensure that the modelled flows used in the CTM represent worst case scenario, the CTM has assumed a higher proportion of vehicle movements than those projected by GAL. The Planning Inspectorate on behalf of the Secretary of State (SoS) accepted the application for Development Consent Order on 3rd August 2023.

15.4.17 GAL have also proposed additional sustainable transport measures, particularly for staff, however the growth in passenger numbers is still expected to generate additional highway demand. To facilitate this, GAL have proposed highway mitigation in terms of significant improvements to the North and South terminal access junctions and Longbridge roundabout. The designs for this '*Northern Runway Project highway scheme'* have been coded into the model for the 2041 scenarios as they will be operational from 2032.

15.4.18 Although GAL employs its own traffic assignment model which channels a substantial volume of traffic toward the M23, the TA has instead utilised the CTM. This approach ensures a more comprehensive and robust evaluation of traffic impacts, particularly in the area of west of Gatwick Airport.

15.4.19 The potential impact of the GAL DCO application within each of the scenarios tested has been used to provide the worst case cumulative assessment.

15.4.20 As set out in the Gatwick Modelling Note (May 2023, Appendix I of the TA (WOI-HPA-DOC-TA-01)) Gatwick growth has been included in the modelling and assessed as below:

- 2025 – existing operations at Gatwick as per modelling in the CTM;
- 2029 – Gatwick flows as modelled in the CTM (some low level growth); and
- 2035 – Gatwick DCO "with project" growth added to the CTM (the second runway is to become operational in 2029 with their junction mitigation in place by 2032).

15.4.21 In summary, both committed and cumulative development schemes have been combined as shown in Technical Appendix 15.3 and included in the TA (WOI-HPA-DOC-TA-01). As such, a stand-alone cumulative assessment has not been undertaken.

15.5 Baseline Characterisation Method

Desk Study

15.5.1 This assessment uses 2025 as the baseline year; this is the most up to date and validated full calendar year data. Baseline conditions around the Site have been established by WSCC through the formation of the CTM. A summary of the tasks that have been undertaken to assess the baseline conditions are provided below and described in more detail in subsequent paragraphs.

- The existing local highway network within the immediate vicinity of the Site has been analysed;
- Review of the baseline conditions by WSCC through the formation of the CTM;
- Review of the historical Personal Injury Data (PIA) data for the latest five-year period for all roads within the vicinity of the Site (obtained from WSCC);
- Review of the existing public transport services;
- The ease of access to public transport facilities has been reviewed; and
- Review of the existing travel patterns and mode share data.

Baseline Traffic Data – Operational Vehicle Flows

15.5.2 The TA has used transport modelling from the CTM developed by Stantec to support both the HDC and CBC Local Plan review processes. The Crawley Transport Study (May 2021) and Horsham Transport Study (May 2021) has been used to undertake strategic modelling of the area. The existing traffic flows used in the assessment are those which have been modelled using the CTM. The CTM has been subject to substantial model validation and therefore forms the main method of assessment of traffic flows. The CTM is a Saturn model.

15.5.3 The development of the CTM during the HDC and CBC Local Plan review process, provides an update to each respective strategic model and includes new committed developments, site allocations, neighbouring authority growth projections and proposed highway schemes as agreed with WSCC. Within the assessment set out in this Chapter, these will collectively be referred to as “cumulative development”. The Proposed Development is considered in both transport studies ‘Local Plan’ scenarios.

15.5.4 Following agreement with local authorities on the transport strategy, the modelling undertaken and presented within the TA to test the impact of the Proposed Development has been undertaken using the mode shares presented in Chapter 8 of the submitted TA (WOI-HPA-DOC-TA-01) (i.e. Local Plan growth without West of Ifield as previously modelled by WSCC, but with agreed West of Ifield trip generation added).

15.5.5 All baseline data has been collated for the external highway network peak period, as set out below:

- AM Peak: 08:00-09:00; and
- PM Peak: 17:00-18:00.

15.5.6 The peak hour analysis has been used for capacity assessments of the highway network and is reported in the TA. The environmental impact from transport has been assessed based on the 24-hour AADT in accordance with IEMA guidelines.

15.5.7 Additionally, 24-hour AADT, 18-hour AAWT, and 6-hour AAWT flows have been provided to support the noise, air quality and climate change assessments. Details of the methodology used to produce this data has been provided in Appendix 15.1: AADT and AAWT Methodology Technical Note.

Baseline Pedestrian, Cycle and Public Transport Data

15.5.8 For travel on foot and on cycle, desktop studies and Site surveys have been undertaken to review accessibility to and from the Site using existing infrastructure, as set out in the TA (WOI-HPA-DOC-TA-01).

15.5.9 For travel by public transport modes, information on service capabilities and frequencies has been obtained from a range of sources as follows:

- National Rail and Metro Bus websites (desktop study).

15.5.10 The approach to traffic modelling is detailed in the technical note provided as Appendix 15.1: AADT and AAWT Methodology Technical Note.

Field Study

15.5.11 Field study/data collection was not required at the Site as the data provided by other sources was deemed to be adequate and representative of the Site conditions.

15.6 Assessment Method

Methodology

15.6.1 In terms of the key environmental effects arising from changes in road traffic, the scale and extent of the assessment has been considered in accordance with the IEMA guidelines for assessing highway impacts. The assessment has involved identifying the affected parties or locations which may be sensitive to changes in traffic conditions and identifying the scale of potential impact.

15.6.2 The list of environmental effects set out within the IEMA Guidelines has been assessed, where effects are deemed applicable to the Proposed Development and/or likely to be significant.

15.6.3 To ensure that this ES Chapter and the supporting modelling has assessed a robust case scenario, no reductions in background traffic have been applied as a result of the enhanced bus provision that Proposed Development will provide within the local area (i.e., to existing results beyond Proposed Development), nor additional traffic reduction through wider sustainable transport measures within the Crawley area. The CTM makes a reasonable assumption in terms of continued growth over the development period. It does not allow for substantive modal shift of background traffic which is anticipated over the development period. This is why it is considered a robust scenario to use for modelling purposes. The modelling identifies that there is greater opportunity for modal shift and this is supported by the shared objectives of HDC, CBC, WSCC and Transport for the South East (TfSE) in reducing travel demand and private car trips over time. The Crawley Transport Strategy[23] acknowledges that "*On average, over the last 20 years, people are travelling less and making fewer trips, commuter trips are down by a 5th*".

15.6.4 A Technical Modelling Note has been produced (see Appendix 15.1) which sets out the methodology for producing the anticipated operational AADT and AAWT flows for the road network surrounding the Proposed Development that are inherent in this assessment.

15.6.5 The predicted traffic generation from the Proposed Development has been assigned to the local highway network based on an understanding of trip origins and destinations for the Proposed Development. With respect to road traffic, the IEMA Guidelines recommend two rules to be considered when assessing the impact of the Proposed Development traffic on a highway link:

- Rule 1: include Highway Links where the AADT traffic flows will increase by more than 30%; and

[23] CBC New Directions for Crawley, Transport and Access for the 21st Century (March 2020)

- Rule 2: include any other specifically sensitive areas where AADT traffic flows have increased by 10% or more.

15.6.6 The IEMA guidelines provide guidance on the categorisation of receptors sensitive to traffic flow. Those with the greatest sensitivity to traffic flow are typically determined as: schools, colleges, playgrounds, hospitals, accident clusters and roads without footways that are used by pedestrians.

15.6.7 The guidance suggests traffic volume changes of less than 30% on all local and strategic roads that are deemed non-sensitive could be reasonably considered as not significant (referred to as 'Rule 1' threshold). Similarly, for sensitive links, those with an increase of less than 10% in the 2041 assessment year are deemed not significant (as per 'Rule 2 threshold').

15.6.8 A full list of the assessed Highway Links is included at Appendix 15.2.

15.6.9 For those Highway Links identified above where predicted traffic flow increases exceeds the Rule 1 or Rule 2 threshold, seven potential forms of environmental impacts have been examined in accordance with the IEMA guidelines, as described in Table 15.2.

Table 15.2: IEMA Guidelines Identified Form of Environmental Impact

Effect	Description
Changes in Traffic Flows	Increase or decrease in road traffic flows resulting from the Proposed Development, compared to baseline conditions.
Severance	The perceived division that can occur within a community when it becomes separated by a major traffic artery.
Driver Delay	Valuation of the delay (or benefit) to drivers resulting from the Proposed Development.
Pedestrian Delay (cyclists also considered)	The change in the ability of pedestrians (or cyclists) to cross a given highway link due to changes in traffic flow, speed, composition, highway design.
Pedestrian and Cycle Amenity	The change in the perceived amenity of a feature or environment influenced by a change in traffic flow but also including consideration of the overall relationship between pedestrian and traffic (e.g., air quality and noise).
Fear and Intimidation	Linked to pedestrian amenity and influenced by factors including traffic flow, composition and pavement conditions.
Accidents and Safety	Increase or decrease in risk of road traffic collisions resulting from changes in traffic flows and highway layout.

Demolition and Construction Stage

15.6.10 The demolition and construction stage considers the peak year of demolition and construction vehicle flows. In terms of daily flows operational traffic creates more trips than construction traffic does. When considered cumulatively, as construction occurs over a prolonged period and peak construction occurs early in the development phasing, the level of combined traffic in any one year does not exceed the amount anticipated in the final year of operation.

15.6.11 The traffic flows modelled for the assessment accounts for both the predicted number of construction vehicles (light goods vehicles (LGVs) and HGVs) and construction workers arriving by car (as described in the Transport Assessment and ES Volume 1, Chapter 5) in any given year between 2027 and 2041. 2033-2035 is anticipated to be the peak construction years.

15.6.12 The impacts on the highway network with construction traffic are inherent to the assessment. A review of the peak construction year is provided in the demolition and construction assessment of effects section of this chapter. This will be limited to the key Highway Links that are located on the routes used by demolition and construction vehicles.

Completed Development Stage

15.6.13 The completed development stage considers the Proposed Development being fully operational in 2041, with no construction work being active on-Site. The completed development stage assessment has considered impacts on both existing and future receptors, including all new occupants of the Proposed Development.

15.6.14 The completed development includes the Crawley Western Multi-Modal Corridor (CWMMC) which is a new road with a dedicated bus lane and regular traffic lane in each direction, to form a connection from Charlwood Road to the east and the primary access route to the development.

Trip Generation

15.6.15 A Trip Generation Technical Note (dated 7th December 2021, see Appendix B of TA (dated June 2025)) has been submitted during pre-application discussions with the local authorities. This technical note sets out the methodology for the trip generation assessment that has been agreed with the local authorities for the completed development stage of the Proposed Development. The quantum of development by land use assumed for the trip generation assessment is set out below. The figures presented reflect what has been used in the traffic model and it is acknowledged that they differ from the application parameters, however the modelling is considered to be robust and worst-case:

- Residential – up to 3,000 units;
- 15 Traveller Pitches (modelled as residential trip rate)
- Office - 28,930sqm (office land use has been selected as the most robust land use that falls within employment land);
- Secondary School – 6-8FE;
- Primary School – 3FE and Nursery;
- Retail – 5,200sqm;
- Healthcare – 1,500sqm;
- Leisure – 3,400sqm;
- Creche – 1,100sqm;
- Community Centre – 1,200sqm; and
- Hotel – 80 bedrooms.

15.6.16 In summary, the trip generation represents a detailed and balanced assessment which forecasts the anticipated trips which the Proposed Development is likely to generate across all modes of transport. This considers the latest development mix assumptions associated with the parameter plans and refines the assumptions with regards to appropriate levels of trip internalisation, supported by the transport strategy. The trip rates, levels of internalisation and mode shares have been determined to reflect the truly mixed-use nature of the development, providing a neighbourhood centre with retail, secondary school and primary school(s) and targeting 1:1 homes to jobs to provide for residents' needs locally, whilst recognising its unique location with respect to key employment centres – all of which will be easily accessible by public transport and cycle routes.

15.6.17 Rather than having individual mode shares for each land use, it has been decided following discussions with the local highway authority and for the purpose of the Proposed Development trip generation, a consistent set of mode shares has been used in the impact assessment for the majority of the development land uses. Individual mode shares have been used for the proposed retail and secondary school uses of the development.

15.6.18 Additionally, the total people trip rates used in the Crawley Transport Study[24] have also been adopted for each specific land use within the trip generation assessment. Trip rates for schools, health centre, creche, and community centre have been derived separately from the TRICS database as these are not considered specifically within the Crawley Transport Study. A summary of the total person trip rates for all land uses is provided in the submitted TA . The full analysis of the impact of the Proposed Development across all modes has been included in the submitted TA with a summary provided within this ES chapter.

Changes in Daily Vehicle Flows on Local Highway Links

15.6.19 Changes in future daily operational vehicle flows as a result of the Proposed Development is measured as an increase or decrease (in percentage terms) between Scenario 4 and 5.

Severance

15.6.20 Pedestrian severance can be described as the perceived divisions that can occur within a community when it becomes separated by a traffic route. Thresholds for assessing severance are based on changes in traffic flows as set out in the DMRB Volume 11 Section 3, Part 8. This document suggests changes in AADT traffic flow of 30%, 60% and 90% are considered equivalent to 'minor', 'moderate' and 'major' changes in severance, respectively.

15.6.21 The significance categories are based upon the Manual of Environmental Appraisal (MEA) (DfT 1993) indicators which determine the significance of the relief from severance. The categories identified are 'slight' being an increase of vehicle movements of 30%, 'moderate' being an increase of 60%. And 'substantial' being an increase of 90% or more.

15.6.22 The impact of traffic is dependent upon a wide range of factors, including volume of traffic, traffic speeds and operational characteristics and traffic composition (e.g., percentage of heavy goods vehicles).

15.6.23 Scenarios 4-5 (Future Year 2041) have been assessed.

Driver Delay

15.6.24 Driver delay can be established at key junctions using conventional modelling techniques identifying the average delay in seconds. However, the IEMA Guidelines[25] identify that such delays are:

> *"… only likely to be significant when the traffic on the network surrounding the development is already at, or close to, the capacity of the system."*

15.6.25 The guidelines suggest sources of delay for non-development traffic can include:

- At the proposed Site access where there will be additional turning movements;
- On the roads passing the Site where there is likely to be additional traffic;
- At other key intersections along the road that might be affected by increased traffic;
- At junctions where the ability to find gaps in the traffic may be reduced, thereby lengthening delays.

15.6.26 Driver delay has been established for the Future Year 2041 (Scenario 4 and 5), using industry standard computer modelling software LINSIG and Junctions 9.

Pedestrian and Cycle Delay

15.6.27 Increases in traffic flows can lead to increases in delay to pedestrians and cyclists seeking to cross roads. The IEMA guidelines do not prescribe any quantitative significance criteria for the assessment of pedestrian and cycle delay. Instead, professional judgement has been

[24] Crawley Transport Study (2021)

[25] Institute of Environmental Management and Assessment (IEMA) Guidelines: Environmental Assessment of Traffic and Movement (July 2023)

used to determine whether pedestrian delays on the local footpaths or footways if used by cyclists, if any, would be significant.

15.6.28 The majority of Highway links in the local area either have existing pedestrian activity, or will have new pedestrian and cyclist activity as part of the Proposed Development during completed development stage.

15.6.29 In order to gain an understanding of how the anticipated increase in traffic would affect pedestrian movements, reference is made to the Department of Transports Local Transport Note 1/95 '*The Assessment of Pedestrian Crossings*'[26], which provides a general guide on the average time it takes to cross a two-lane road. For able bodied people this is between 4-6 seconds on a typical urban road and between 10-12 seconds for elderly or disabled people.

15.6.30 Scenarios 2-3 (Future Year 2041) have been assessed.

Pedestrian Amenity

15.6.31 The IEMA guidelines describe pedestrian amenity as the relative pleasantness of a journey. It is affected by traffic flow, traffic composition, footway width and separation from traffic. The guidelines suggest that the threshold for judging the significance of changes in pedestrian amenity would be where the traffic flow is doubled. Significance of such an increase beyond that is based on professional judgement.

Accidents and Safety

15.6.32 The magnitude of impact and significance of the change to accidents and safety likely to be introduced by the Proposed Development is assessed by means of professional judgement based on the projected changes to daily vehicle flows and the Proposed Development trips.

Pedestrian Fear and Intimidation

15.6.33 Pedestrian fear and intimidation are caused by a number of factors, including a combination of the volume of traffic, its HGV composition, its proximity to people and the lack of protection caused by such factors as narrow footway widths. The criteria for assessing fear and intimidation in the IEMA guidelines are presented in Table 15.3. The significance is determined from the change of the classification of the degree of hazard for a particular road.

15.6.34 Note that Average Speed over 18 Hour Day (miles/hour) has not been included as part of this assessment as it is not possible to accurately calculate a figure over such an extended period, based on the modelling tools used for the assessment. Instead professional judgement based on modelling outputs has been used.

Table 15.3: Fear and Intimidation Degree of Hazard

Degree of Hazard Score	Average Traffic Flow over 18 Hour Day (vehicles/hour) - A	Total 18 Hour Goods Vehicle Flow - B
30	1,800+	3,000+
20	1,200 – 1,800	2,000 – 3,000
10	600 – 1,200	1,000 – 2,000
0	<600	<1,000

15.6.35 The total score from all two elements is combined to provide a 'level' of fear and intimidation for both elements, as shown in Table 15.4. Note that the scoring has been reasonably adjusted as pro rata, to reflect that scoring for Average Speed over 18 Hour Day (miles/hour being based on professional judgement within this assessment.

[26] DfT LTN 1/95 The Assessment of Pedestrian Crossings (1995)

Table 15.4: Levels of Fear and Intimidation	
Level of Fear and Intimidation	**Total Hazard Score (A+B)**
Extreme	47+
Great	27-46
Moderate	14-26
Small	0-13

15.7 Assessment Criteria

15.7.1 Guidance provided by IEMA and DfT has been followed where applicable to identify significance criteria applicable to the activities of walking, cycling, using public transport and vehicle trips associated with the Proposed Development.

15.7.2 As further described below, for several effects there are no commonly adopted thresholds of significance, and hence interpretation and professional judgement has been applied based on precedents or quantitative data where available.

Receptor Sensitivity/Value Criteria

15.7.3 As a general guide, the determination of receptor sensitivity is based on the criteria of value, adaptability and tolerance.

15.7.4 Given that all persons are deemed to be of equal value, sensitivity to changes in transport conditions is generally focussed on vulnerable user groups who are less able to tolerate, adapt to, or recover from changes. Table 15.5 summarises the broad criteria for identifying receptor sensitivity.

15.7.5 Highway Links with descriptions of high or medium sensitivity have been considered against the Rule 2 threshold (10% or more change in traffic flows) described above. Other links with descriptions of low have been considered against the Rule 1 threshold (30% change or more in traffic flows). Where necessary, professional judgement has been applied in identifying the relevant category for each link.

Table 15.5: Receptor Sensitivity Criteria	
Sensitivity	**Criteria**
Low	Receptors with some sensitivity to traffic flow: places of worship, public open space, nature conservation areas, listed buildings, tourist attractions and residential areas with adequate footway provision. Receptors with low sensitivity to traffic flows and those sufficiently distant from affected roads and junctions.
Medium	Traffic flow sensitive receptors, including congested junctions, doctors' surgeries, hospitals, shopping areas with roadside frontage, roads with narrow footways, unsegregated cycleways, community centres, parks, recreation facilities.
High	Receptors of greatest sensitivity to traffic flows: schools, colleges, playgrounds, accident clusters (with reference to accident data), retirement homes, urban/residential roads without footways that are used by pedestrians. Receptors of very high importance and rarity, international scale and very limited potential for substitution.

Magnitude of Impact

15.7.6 The approach to the assessment of magnitude of impact varies by impact type. The IEMA Guidelines set out thresholds to identify the magnitude of impact considering the sensitivity of potential receptors (as set out above).

15.7.7 The magnitude of impact criteria adopted in this assessment for each of the effects described below are summarised in Table 15.6.

Table 15.6: Magnitude of Impact				
Impact	Magnitude of Impact			
	Very Low	Low	Medium	High
Changes in daily vehicle flows on local Highway links	Increase or decrease of less than 10% on future baseline traffic flows	Increase or decrease of 10% to 30% on future baseline traffic flows	Increase or decrease of 30% to 60% on future baseline traffic flows	Increase or decrease of over 60% on future baseline traffic flows
Severance	Change in total traffic of less than 10%	Change in total traffic up to 30%	Change in total traffic up to 60%	Change in total traffic of more than 60%
Driver Delay	No perceivable change in driver delay	Slight improvement or worsening in driver delay – up to 30% increase in peak hour delays for congested junctions/links	Moderate improvement or worsening in driver delay between 30% -60% increase in peak hour delays for congested junctions/links	Substantial improvement or worsening in driver delay between 60 - 90% and above increase in peak hour delays for congested junctions/links
Pedestrian and Cycle Delay	Change in total traffic of less than 100% (Doubling of traffic flows) based on professional judgement		A judgement based on any links with change in total traffic of over 100% (Doubling of traffic flows) in the context of individual characteristics	
Pedestrian Amenity	Change in total traffic of less than 100% (Doubling of traffic flows) based on professional judgement		A judgement based on any links with change in total traffic of over 100% (Doubling of traffic flows) in the context of individual characteristics	
Accidents and Safety	A judgement based on existing accident patterns and the change in collision risk for links and junctions where traffic growth exceeds the 10% threshold			
Fear and Intimidation	No change in step changes[27] in residual effect.	One step change in level of residual effect, but with: <400 vehicle increase in average 18hr average two-way all vehicle flow; and/or; <500 HV increase in total 18hr HV flow.[28]	One step change in level of residual effect, but with: >400 vehicle increase in average 18hr average two-way all vehicle flow; and or >500 HV increase in total 18hr HV flow.	Two step changes in level of residual effect.

Sustainable Travel Mode Effects - Public Transport

15.7.8 Potential effects on the capacity of the existing public transport services have been assessed based on the predicted increase in trips as a result of the Proposed Development and the significance criteria set out Table 5.7below applied.

15.7.9 The assessment focuses on the impact that the Proposed Development would have on public transport travel demand, including a quantitative review on the impact on future bus and rail services. Further details on the existing public transport located nearby the Site is included in the Transport Assessment.

[27] Described in latest IEMA Guidance as the jump from one residual effect to the next.

[28] HV relates to Heavy Goods Vehicle as per IEMA Guidance

Sustainable Travel Mode Effects - Walking and Cycling

15.7.10 In addition to the anticipated effects of the traffic flows on pedestrians, the potential effects of the Proposed Development including increased walking and cycling trips and the provision of pedestrian and cycle facilities, have been assessed using the significance criteria set out in Table 5.7, which is also based on professional judgement.

Table 15.7: Magnitude of Impact of Sustainable Travel Modes

Impact	Significance of effect			
	Very Low	Low	Medium	High
Change in Rail Demand to Capacity Ratio (based on total capacity including standing passengers)	No perceivable change in the demand to capacity ratio	Increase or decrease of the demand to capacity ratio on services below capacity	Increase or decrease of the demand to capacity ratio on services close to capacity	Increase or decrease of the demand to capacity ratio on services above capacity
Change in Bus/Coach Demand	No perceivable change in passenger demand	Increase or decrease in passenger demand on services below capacity	Increase or decrease in passenger demand on services close to capacity	Increase or decrease in passenger demand on services above capacity
Walking and Cycling	No perceivable change in convenience or quality of routes	Slight improvement or reduction in convenience or quality of routes	Moderate improvement or reduction in convenience or quality of routes	Significant improvement or reduction in convenience or quality of routes

Scale of Effect Criteria

15.7.11 The scale of effects has been assigned below in Table 15.8 using a matrix as provided by DMRB LA 104, with minor adjustments in terminology for consistency across this ES chapter.

Table 15.8: Significance of Effects Matrix

Magnitude	Sensitivity of Receptors		
	Low	Medium	High
Very Low	Negligible	Negligible	Negligible-Minor
Low	Negligible	Negligible - Minor	Minor
Medium	Negligible - Minor	Minor	Moderate
High	Minor	Moderate	Major

15.7.12 In accordance with ES Volume 1 Chapter 2: EIA Process and Methodology, moderate and major effects are considered significant in EIA terms (shown in grey).

15.7.13 In determining the significance of reported effects, consideration has been given to the type of effect i.e. direct, indirect or secondary, the geographical extent of the effect and permeance of the effect i.e. temporary or permanent.

15.7.14 Duration of effect has been described as short, medium or long-term, in accordance with the criteria set out in Chapter 2 of this ES.

Nature of Effect Criteria

15.7.15 The nature of effect has been described as either adverse, neutral or beneficial as follows:

- **Beneficial** – An advantageous effect to a receptor;
- **Neutral** – An effect that on balance, is neither beneficial nor adverse to a receptor or equally beneficial and adverse; or
- **Adverse** – A detrimental effect to a receptor.

15.7.16 The scales have been defined as follows in respect of significance:

- Major effect – where the Proposed Development could be expected to have a very significant effect (either beneficial or adverse) on a highway link and its users;
- Moderate effect - where the Proposed Development could be expected to have a noticeable effect (either beneficial or adverse) on a highway link and its users;
- Minor effect – where the Proposed Development could be expected to result in a small, barely noticeable effect (either beneficial or adverse) on a Highway Links and its users;
- Negligible to Minor effect – where the Proposed Development could occasionally be expected to result in a small, barely noticeable effect (either beneficial or adverse) on a highway link and its users); and
- Negligible effect – where no discernible effect is expected as a result of the Proposed Development on traffic volumes on a highway link and its users.

15.7.17 Where the matrix offers more than one significance option, the highest scale of residual effect has been used to reflect a robust and worst-case assessment.

15.8 Assumptions and Limitations

15.8.1 The following assumptions and limitations have been applied during the preparation of this Chapter:

- The overarching target baselines for each potential mode of transport have been specifically established for the Proposed Development and agreed through discussions with WSCC, HDC and CBC (September 2022) :
  - Train 6%, Bus 20%, Car Driver 36%, Car Passenger 20%, Bicycle 10%, and Walk 8% - for residential employment and commercial (Leisure, Creche, Healthcare, Community Centre and Hotel) land uses.
- The National Travel Survey (NTS) *Table NTS06014 (11-16 years)* has been used to inform the potential mode split for external secondary school trips. To consider only the external secondary school trips, those over two miles in distance have been used. All staff for the Primary School are assumed to travel by private car.
- The NTS *Table NTS0409 (trip purpose)* has been used to inform the potential mode split for external retail trips.
- Following discussions with local authorities, and the evolvement of the transport strategy and Umbrella Travel Plan (WOI-HPA-DOC-FTP-01), the external mode share that has been agreed for the residential use of the Proposed Development will be replicated for all land uses (except for the proposed retail uses and the secondary school). The same mode shares have been used for the Leisure, Creche, Healthcare, Community Centre, and Hotel land uses.

15.9 Baseline Conditions

Existing Baseline

15.9.1 To assess the potential impacts and likely significant effects of the Proposed Development, it is necessary to determine the environmental conditions and sensitive receptors that currently exist at the Site and within the surrounding vicinity.

Existing Vehicular Access and Local Highway Network

15.9.2 The Site is well connected to the highway network via Rusper Road and Charlwood Road, with easy access by road to London and Brighton, and to the strategic road network via the M23 junction 10 and 11. Charlwood Road to the north of the Site and Rusper Road to the south, are both single-lane carriageways.

Charlwood Road

15.9.3 Charlwood Road located to the north of the Site is a two-way single carriageway, with a speed limit of 40mph. A footway is provided on the southern side of the carriageway, with access to the Trivelles Gatwick Hotel, accompanied by street lighting.

15.9.4 To the south of the junction with Ifield Green, Charlwood Road becomes Ifield Avenue with a footway on the eastern side.

Ifield Avenue

15.9.5 Ifield Avenue is a two-way single carriageway with central hatching, providing intermittent pedestrian refuge at informal crossings. It is subject to a speed limit of 30mph. There is a footway on the eastern side of the carriageway along the entire road (north of the roundabout with Rokewood Drive), with an additional footway on the western side at intervals. An off-street cycle lane also runs along the eastern side between the junction with Popes Mead and the A23 Crawley Avenue. There is street lighting along the entire road.

15.9.6 Ifield Avenue provides direct access to A23 Crawley Avenue via Ifield Roundabout, which is a large roundabout with grade separated pedestrian and cycle access via long ramps above the roundabout.

Ifield Wood

15.9.7 Ifield Wood is a narrow two-way road, with a 40mph speed limit, located to the west of the Site. There are no footways or street lighting provided along this road. The road primarily provides access to residential properties. Ifield Wood road also provides an east-west link between Charlwood Road to the north of the Site and the western extent of Rusper Road.

Rusper Road

15.9.8 Rusper Road is a country lane and provides access to the Site from the south. Rusper Road also runs parallel to the eastern boundary of the Site, passes through the southern part of the Site, and travels out to the west of the Site. The road provides access to residential properties, Ifield Golf Club, and other local amenities in Ifield.

15.9.9 In the south of the Site, Rusper Road has a speed limit of 30mph. To the north of the Site, the speed limit on Rusper Road increases to 60mph as vehicles move further away from the built environment in the area.

15.9.10 To the east and south of the Site, Rusper Road has footways on both sides of the carriageway and the presence of streetlights up until Trist Way, located approximately 130m west of the Junction with Ifield Green. When Rusper Road passes Drughorn Way to the south of the Site, and into the Site, there are no footways or street lighting.

Ifield Green

15.9.11 Ifield Green is a two-way single carriageway with a speed limit of 30mph, located to the northeast of the Site. There are footways on both sides of the carriageway with street lighting along Ifield Green (heading northbound) from the junction with Warren Drive until the turning to Rectory Lane, then there are only footways on the eastern side of the carriageway until Ifield Green meets Ifield Avenue.

15.9.12 Ifield Green provides access to residential properties and other local amenities, such as the Royal Oak Public House, village store and GP surgery.

Bonnetts Lane

15.9.13 Bonnetts Lane is a two-way single carriageway with a speed limit of 60mph speed limit, located to the north of the Site. There are no footways and no street lighting along this road. Bonnetts Lane provides access to the Gatwick Airport perimeter roads.

The A23, Crawley Avenue

15.9.14 The A23, Crawley Avenue, is a two-way dual carriageway with a speed limit of 60mph. There is a grass central reservation separating the traffic flows. The A23 and subsequently A2011 provides access to M23 to the east of the Site and the A23 also provides access to M23 at junction 11 (Pease Pottage) to the south-east of the Site. The A23 also continues south to Brighton.

M23

15.9.15 The M23 is located to the east of the Site. Access to the M23 is taken from junction 10 located east of the Site, via The A2011, or from junction 11 located north of the Site, via Crawley Avenue. The M23 routes north to London and south to join the A23 to Brighton.

Personal Injury Accident (PIA) Data

15.9.16 To understand baseline conditions for road traffic accidents, Personal Injury Data (PIA) records for the surrounding key routes and junctions have been obtained from Sussex Roads Partnership on behalf of Sussex Police. These have been reviewed for the most recent five-year period from 1 January 2020 to 31 December 2024.

15.9.17 The data indicated that during the five-year period a total of 262 accidents were recorded for the surrounding key routes and junctions, some of which resulted in more than one injury. Within the 262 accidents, there was a total of 357 injuries, 1 of which was fatal, 56 were serious, and the remaining 300 were slight.

15.9.18 The PIA analysis for each of the key routes/junctions is set out herein.

15.9.19 A summary of the PIA data is shown in Figure 15.2 below.

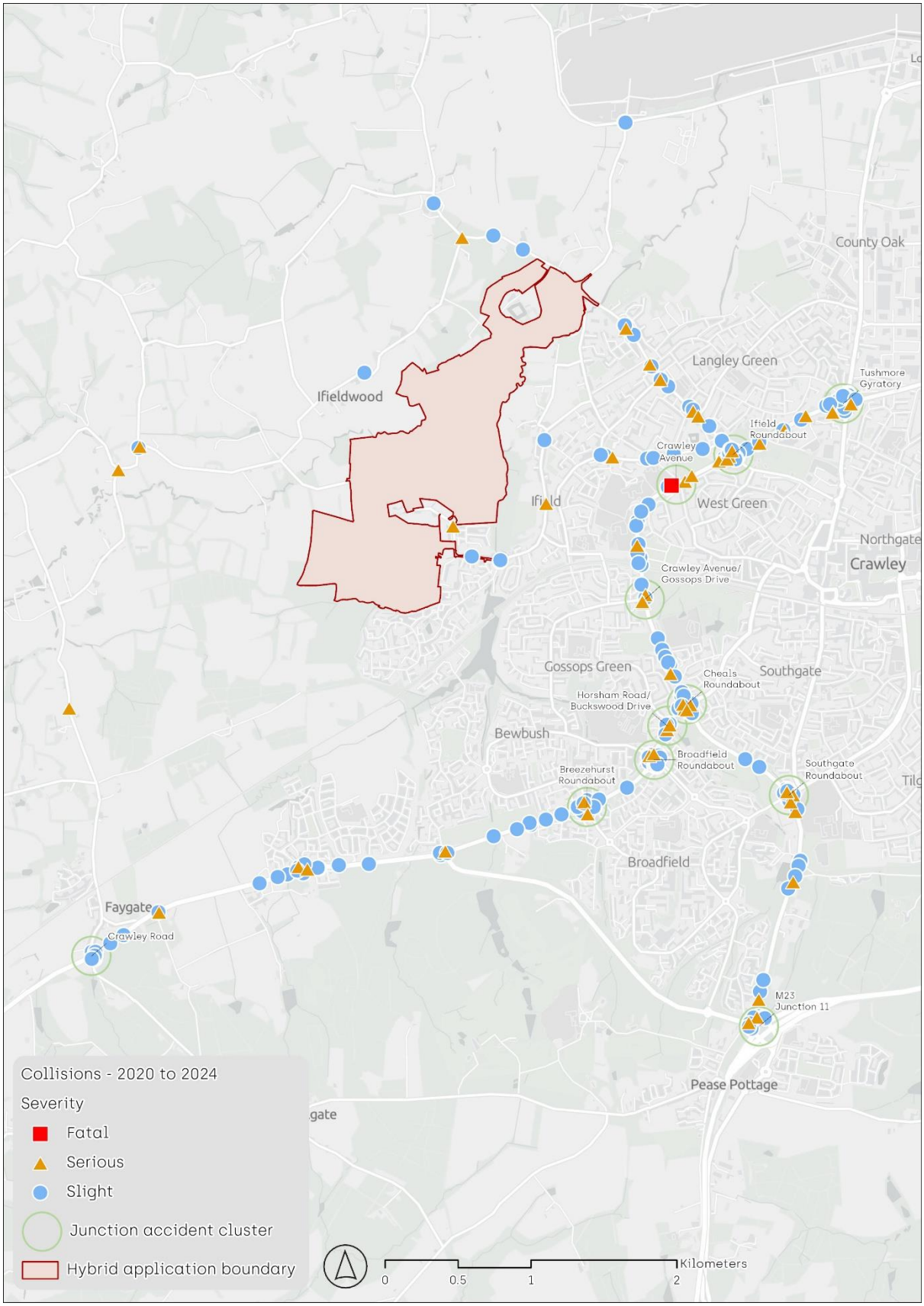

Figure 15.2: PIA Data

Tushmore Gyratory

15.9.20 A cluster of 21 slight accidents and 3 serious accidents occurred at Tushmore Gyratory. Details of the accidents are below:

- One serious accident on 7 June 2022 at 21:02 (daylight) in dry conditions. The incident involved 1 car and occurred because of the driver was exceeding the speed limit/ driving carelessly due to distraction in their vehicle.
- One serious accident on 22 June 2022 at 08:10 (daylight) in dry conditions. The incident involved 1 car and 1 van and occurred because of the sun shining and impairing sight of driver.
- One accident on 26 March 2024 at 07:10 (darkness, streetlights present) in wet/damp conditions. The incident involved 1 motorbike and 1 car and occurred when the car moved into the same lane as the motorbike, causing the rider to fall. The car did not stop to exchange details.

M23 Junction 7

15.9.21 A cluster of 10 slight accidents and 3 serious accidents occurred at M23 Junction 7. Details of the accidents are below:

- One serious accident on 16 June 2023 at 20:35 (darkness, streetlights present) in dry conditions. The incident involved 1 car and 1 stationary vehicle, caused by the car failing to negotiate a roundabout and mounting the verge, colliding with the second vehicle at a separate set of traffic lights. This resulted in 6 casualties from both vehicles.
- One accident on 27 August 2023 at 13:01 (daylight, streetlights present) in dry conditions. The incident involved 1 car and 1 motorcycle, caused by the motorcycle moving contrary to lane markings, leading to a collision with the car. The collision occurred at low speed, and the motorcycle rider fell, resulting in a broken hand and shock.
- One accident on 12 May 2024 at 10:50 (daylight, streetlights present) in dry conditions. The incident involved 3 vehicles, where Vehicle 1 was following Vehicle 3, which allegedly stopped suddenly, causing Vehicle 2 to collide with the rear of Vehicle 1.

Southgate Roundabout

15.9.22 A cluster of 10 slight accidents and 4 serious accidents occurred at Southgate Roundabout. Details of the accidents are below:

- One serious accident on 30 January 2020 at 11:35 (daylight) in wet conditions. The incident involved 1 car and 1 cyclist and occurred because of misjudgement of vehicle speed and behaviour from the cyclist.
- One serious accident on 19 September 2022 at 22:35 (dark) in dry conditions. The incident involved 1 motorbike and occurred because of the driver being inexperienced (a learner).
- One serious accident on 20 June 2023 at 17:30 (daylight, streetlights present) in dry conditions. The incident involved 1 bus, where the bus driver braked sharply at a roundabout, causing a passenger to slide out of his seat and bash his head.
- One serious accident on 01 October 2023 at 21:10 (darkness, street lights present) in dry conditions. The incident involved 1 vehicle, where the driver, impaired by alcohol, entered Southgate Roundabout from the A23, passed the first and second exits, and possibly intended to leave via the third or fourth.

Crawley Road

15.9.23 Along Crawley Road between Faygate Roundabout and the Horsham Road/ Sullivan Drive Roundabout, there were 26 slight accidents, and 4 serious accidents occurred. Details of the accidents are below:

- A serious accident on 12 January 2020 at 05:15 (darkness) in wet/damp conditions. The incident involved 1 vehicle, where Vehicle 1, impaired by alcohol and drugs, was traveling north-east along the A264 in lane 3.
- A serious accident on 14 August 2022 at 11:45 (daylight) in dry conditions. The incident involved 1 car and 1 motorbike and occurred as a result of careless driving from the car driver.
- A serious accident on 20 August 2023 at 10:28 (daylight) in wet/damp conditions. The incident involved 1 vehicle, where a lone driver in Vehicle 1 was traveling from Crawley to Horsham on the A264 in lane 2.
- A serious accident on 30 April 2024 at 10:45 (daylight) in dry conditions. The incident involved 2 vehicles, where both Vehicle 1 and Vehicle 2 were traveling westbound on the A264, approaching Kilnwood Vale Roundabout in the nearside lane.

Breezehurts Roundabout

15.9.24 A cluster of 10 slight accidents and 3 serious accidents occurred at or within 100m of Breezehurst Roundabout. Details of the accidents are below:

- A serious accident on 28 October 2022 at 17:36 (dark) in dry conditions. The incident involved 1 motorbike and 1 car and occurred because of careless driving from the car driver.
- A serious accident on 28 July 2022 at 13:10 (daylight) in dry conditions. The incident involved 2 cars and occurred because of one vehicle failing to judge the path or speed of the other.
- One serious accident on 18 March 2023 at 14:09 (daylight) in wet/damp conditions. The incident involved 2 vehicles, where Vehicle 2 stopped to give way to traffic at the entrance to Breezehurst Roundabout. Vehicle 1 then drove into the back of Vehicle 2, causing a slight headache to the passenger in Vehicle 1.

Broadfield Roundabout

15.9.25 A cluster of 14 slight accidents and 2 serious accidents occurred at the Broadfield Roundabout. Details of the accidents are below:

- A serious accident on 15 August 2021 at 13:16 (daylight) in dry conditions. The incident involved 1 car and 1 motorbike and occurred because of reckless behaviour from the car driver.
- One serious accident on 20 September 2024 at 15:25 (daylight) in dry conditions. The incident involved 1 vehicle and 2 pedestrians, where Vehicle 2 was stopped in lane two, and Vehicle 1, leaving a roundabout in lane one, collided with pedestrians crossing from offside to nearside.

Horsham Road / Buckswood Drive

15.9.26 A cluster of 3 slight accidents and 2 serious accidents occurred within 100m of the junction between Horsham Road and Buckswood Drive. Details of the accidents are below:

- A serious accident on 06 December 202 at 03:30 (dark) in dry conditions. The incident involved 1 car and 1 bus and occurred because of the car driver being impaired by alcohol.
- One serious accident on 11 September 2023 at 15:55 (daylight) in dry conditions. The incident involved 1 vehicle and 1 pedestrian, where Vehicle 1 was traveling north to south along A2220 Horsham Road. Vehicle 1 was in the outside lane, accelerating to the speed limit.

Cheals Roundabout

15.9.27 A cluster of 17 slight accidents and 4 serious accidents occurred at Cheals Roundabout. Details of the accidents are below:

- A serious accident on 16 May 2022 at 21:44 dark) in dry conditions. The incident involved 1 motorbike and one car and occurred because of incorrect signalling.
- A serious accident on 6 August 2022 at 19:23 (daylight) in dry conditions. The incident involved 1 car and 1 cyclist and occurred because of the vehicle being too close to the cyclist.
- A serious accident on 15 April 2023 at 17:04 (daylight) in dry conditions. The incident involved 1 vehicle and 1 cyclist, where Vehicle 1 entered the roundabout without seeing the cyclist, hitting them at around 10-15 mph.
- A serious accident on 26 September 2023 at 21:00 (daylight) in dry conditions. The incident involved 2 vehicles and 1 cyclist, where Vehicle 1 lost control due to a deposit on the road and fell off, landing in the kerb line.

Crawley Avenue / Gossops Drive

15.9.28 A cluster of 2 slight accidents and 3 serious accidents occurred at the T-junction between Crawley Avenue and Gossops Drive. Details of the accidents are below:

- A serious injury on 29 January 2023 at 01:59 (dark) in dry conditions. The incident involved 2 cars and occurred because of drunk driving.
- A serious injury on 21 December 2021 at 04:05 (dark) in wet conditions. The incident involved 1 bus and one pedestrian and occurred because of the pedestrian being impaired by alcohol and failing to look properly.
- A serious accident on 6 June 2024 at 23:44 (darkness) in dry conditions. The incident involved 2 vehicles, where Vehicle 1, traveling north, failed to stop at a red traffic signal and collided with Vehicle 2, which was turning right with a green signal. Both vehicles were damaged, and all occupants sustained injuries.

Ifield Roundabout

15.9.29 A cluster of 32 slight accidents and 4 serious accidents occurred at Ifield Roundabout. Details of the accidents are below:

- A serious injury on 14 January 2020 at 13:35 (daylight) in wet conditions. The incident involved 1 van and 2 cars and occurred because of failed judgements of other road users and sudden breaking.
- A serious injury on 29 July 2021 at 07:43 (daylight) in dry conditions. The incident involved 1 car and 1 bicycle and occurred because of the car driver failing to look properly.
- A serious accident on 04 January 2024 at 10:33 (daylight) in dry conditions. The incident involved 2 vehicles and 1 pedestrian, where the driver of Vehicle 1 suffered a medical episode at the wheel while approaching a roundabout.
- A serious accident on 13 November 2024 at 14:25 (daylight) in dry conditions. The incident involved 2 vehicles, where Vehicle 1, approaching Ifield Roundabout on Ifield Avenue, believed that Vehicle 2 had pulled away, but it had not.

Crawley Avenue

15.9.30 A cluster of 1 slight, 2 serious accidents and 1 fatal accident occurred on Crawley Avenue approximately 800m south-west of Ifield Roundabout. Details of the accidents are as below:

- A fatal injury on 25 November 2022 at 14:45 (daylight) in dry conditions. The incident involved one car and one pedestrian. The fatality was a result of the pedestrian misjudging the vehicles path or speed.

- A serious injury on 10 June 2021 at 14:50 (daylight) in dry conditions. The incident involved two cars. The accident was because of one car colliding into the back of a stationary vehicle in traffic.
- A serious injury on 20 August 2021 at 15:00 (daylight) in dry conditions. The incident involved 2 vehicles. The accident was because of one car colliding into the back of a stationary vehicle in traffic.

Ifield Drive / The Mardens

15.9.31 A cluster of 7 slight accidents and 1 serious accident occurred at or within 300m vicinity of the junction between Ifield Drive and the Mardens. Details of the accidents are as below:

- One accident on 10 November 2023 at 13:07 (daylight) in wet/damp conditions. The incident involved 2 vehicles, where Vehicle 1 was driving westbound along Ifield Road, approaching the junction with Lady Margaret Road. Vehicle 2, driving eastbound along Ifield Road, turned right into Lady Margaret Road and collided with the offside front bumper of Vehicle 1.

Summary

15.9.32 A PIA review has been undertaken and concluded, from the information available, that the incidents recorded on the local highway network are attributable to factors unrelated to the design of the local highway network.

15.9.33 The PIA data has not highlighted any potential deficiency in the design of the highway network and hence it is considered that there are no prevailing highway safety issues that need to be addressed within the study area.

Traffic Flows

15.9.34 Appendix 15.2 sets out the AADT and AAWT flows for the road network surrounding the Proposed Development, inclusive of HGV flows. The traffic flows are provided in terms of 24-hour AADT and 18-hour AAWT. A summary of the 2025 baseline year 24-hour AADT and 18-hour AAWT two-way traffic flows are shown below in Table 15.9. The Table has included Highway Links that have been predicted to have a minimum 10% change in daily vehicle flows between Scenarios 4 and 5. The minimum 10% threshold has been used as this meets the requirements of Rule 2 from the IEMA Guidelines.

Table 15.9: Baseline 2025 (Scenario 1) AADT and AAWT Traffic Flows (2-way)

Link ID	Receptor	AADT (24-hour)			AAWT (18-hour)		
		All Vehicles	HGVs	% HGVs	All Vehicles	HGVs	% HGVs
CR48	London Road, S of Lowfield Heath Roundabout	35,633	1409	4%	36,104	1428	4%
CR64	A2004 Northgate Ave, S of Hazelwick Roundabout	23,334	392	2%	23,642	397	2%
CR107	Rusper Road	10,983	80	1%	11,128	81	1%
CR66	Crighton Road (rail crossing)	9,707	168	2%	9,836	170	2%
CR60	Peglar Way (one-way)	9,108	111	1%	9,229	112	1%
CR109	Station Way	8,300	81	1%	8,410	82	1%
CR108	Station Way, Belgrave House	5,536	81	1%	5,609	82	1%
CR111	Station Way, Taj car park (one way)	6,210	59	1%	6,292	60	1%
8	Harwood Road, Horsham SE	20,350	982	5%	20,619	995	5%
2	Ifield Avenue, S of Link Road	10,454	196	2%	10,592	199	2%
4	Charlwood Road, N of Link Road	20,499	386	2%	20,769	391	2%
A13	A2044 Northgate Ave, N of Giles Dr	13,644	221	2%	13,825	224	2%

Table 15.9: Baseline 2025 (Scenario 1) AADT and AAWT Traffic Flows (2-way)

Link ID	Receptor	AADT (24-hour)			AAWT (18-hour)		
		All Vehicles	HGVs	% HGVs	All Vehicles	HGVs	% HGVs
A14	A2044 Northgate Ave, S of Woodfield Rd	18,109	288	2%	18,348	292	2%
A15	A2044 Northgate Ave, N of Woodfield Rd	23,334	392	2%	23,642	397	2%
A52	A2004 Northgate Ave, Northgate Ave Roundabout to Woodfield Rd	18,156	249	1%	18,396	252	1%
A53	A2004 Northgate Ave, Northgate Ave Roundabout to Woodfield Rd	18,156	249	1%	18,396	252	1%
A54	A2004 Northgate Ave, Northgate Ave Roundabout to Woodfield Rd	18,156	249	1%	18,396	252	1%
A68	A217, entrance to Tesco	32,565	2048	6%	32,995	2075	6%
A69	A2219 High Street, N of Northgate Rd	12,712	195	2%	12,880	197	2%
A70	A2219 High Street, N of Northgate Rd	12,712	195	2%	12,880	197	2%
A71	A2219 High Street, Northgate Rd to Pegler Way	9,191	154	2%	9,312	156	2%
A72	A2219 High Street, S of The Boulevard (1-way)	7,499	93	1%	7,598	95	1%
A73	A2219 London Rd, Kilnmead to Ifield Avenue	24,200	355	1%	24,520	360	1%
A79	A2219, High Street to Pegler Way (1-way)	17,676	203	1%	17,910	206	1%
A80	A2219, High Street to Pegler Way (1-way)	8,838	101	1%	8,955	103	1%
A122	Breezehurst Dr, N of Horsham Rd	5,426	0	0%	5,498	0	0%
A124	Brighton Rd, N of Goffs Park Rd	5,724	140	2%	5,800	141	2%
A125	Brighton Rd, N of Goffs Park Rd	5,724	140	2%	5,800	141	2%
A131	Brighton Rd, S of Goffs Park Rd	6,459	140	2%	6,545	141	2%
A132	Brighton Rd, S of Goffs Park Rd	6,459	140	2%	6,545	141	2%
A136	Brighton Road, Springfield Road to Station Way	9,707	168	2%	9,836	170	2%
A137	Brighton Road, Springfield Road to Station Way	9,707	168	2%	9,836	170	2%
A162	Harwood Rd, S of Forest Rd	20,350	982	5%	20,619	995	5%
A170	High Street, Station Way to Pegler Way	7,677	132	2%	7,778	134	2%
A177	Ifield Ave, Ifield Dr to Stagelands	18,328	296	2%	18,571	300	2%
A178	Ifield Ave, Stagelands to Warren Dr	19,039	363	2%	19,291	368	2%
A186	Ifield Ave, Warren Dr to Ifield Green	10,454	196	2%	10,592	199	2%
A189	Ifield Wood	12,512	226	2%	12,678	229	2%
A201	London Rd, Fleming Way to Lowfield Heath Roundabout	35,633	1409	4%	36,104	1428	4%
A202	London Rd, Fleming Way to Lowfield Heath Roundabout	35,633	1409	4%	36,104	1428	4%
A217	M23 J11 roundabout from Brighton Rd	38,644	1487	4%	39,154	1506	4%
A245	Pegler Way, Ifield Rd to High Street	12,824	183	1%	12,994	185	1%
A246	Pegler Way, n of Ifield Roundabout	13,669	161	1%	13,849	163	1%
A247	Pegler Way, n of Ifield Roundabout (1-way)	9,108	111	1%	9,229	112	1%
A248	Pegler Way, n of Ifield Roundabout (1-way)	9,108	111	1%	9,229	112	1%
A260	Stagelands, n of Ifield Ave	15,665	383	2%	15,872	388	2%
A266	Station Way, Friary Road to Station Road	4,135	60	1%	4,189	61	1%
A267	Station Way, Friary Road to Station Road	4,135	60	1%	4,189	61	1%

Table 15.9: Baseline 2025 (Scenario 1) AADT and AAWT Traffic Flows (2-way)							
Link ID	Receptor	AADT (24-hour)			AAWT (18-hour)		
		All Vehicles	HGVs	% HGVs	All Vehicles	HGVs	% HGVs
A268	Station Way, Friary Road to Station Road	4,135	60	1%	4,189	61	1%
A269	Station Way, Station Road to Brighton Road (1-way)	6,210	59	1%	6,292	60	1%
A270	Sullivan Dr, E of Barlow Rd	4,363	212	5%	4,420	214	5%
A271	Sullivan Dr, N of Horsham Rd	9056	212	2%	9,176	214	2%
A272	Sullivan Dr, N of Horsham Rd	9,056	212	2%	9176	214	2%
B2	Rusper Road, South of Parham Road	4,528	31	1%	4,588	31	1%
B3	Ifield Green	6557	93	1%	6,644	95	1%
B5	Link Road, S of Charlwood Road	0	0	0%	0	0	0%
B6	Link Road, South Access	0	0	0%	0	0	0%
A286	Primary link North of link road	0	0	0%	0	0	0%

Public Transport Network and Services

Bus

15.9.35 Crawley has an extensive bus service network, including the Fastway services, which run in part on guided busways and dedicated bus lanes. There are three bus corridors within the vicinity of the Site. The nearest bus stops are located on Ifield Green, Ifield Drive and Hyde Drive. The bus routes serving these stops include the 2, 21 and 200. These bus stops are located within approximately 1.4km from the Site.

15.9.36 The three nearby bus routes are illustrated in the bus plan included at Figure 15.3 below.

15.9.37 Details of the services are shown in Table 15.10.

Table 15.10: Existing Bus Services			
Bus Stop	Service	Destination	Peak Hour Frequency
Hyde Drive	2	Tilgate – Ifield West	5
Ifield Green	21	Epsom / Leatherhead – Crawley	1
Ifield Drive	200	Gatwick Airport – Horsham	1

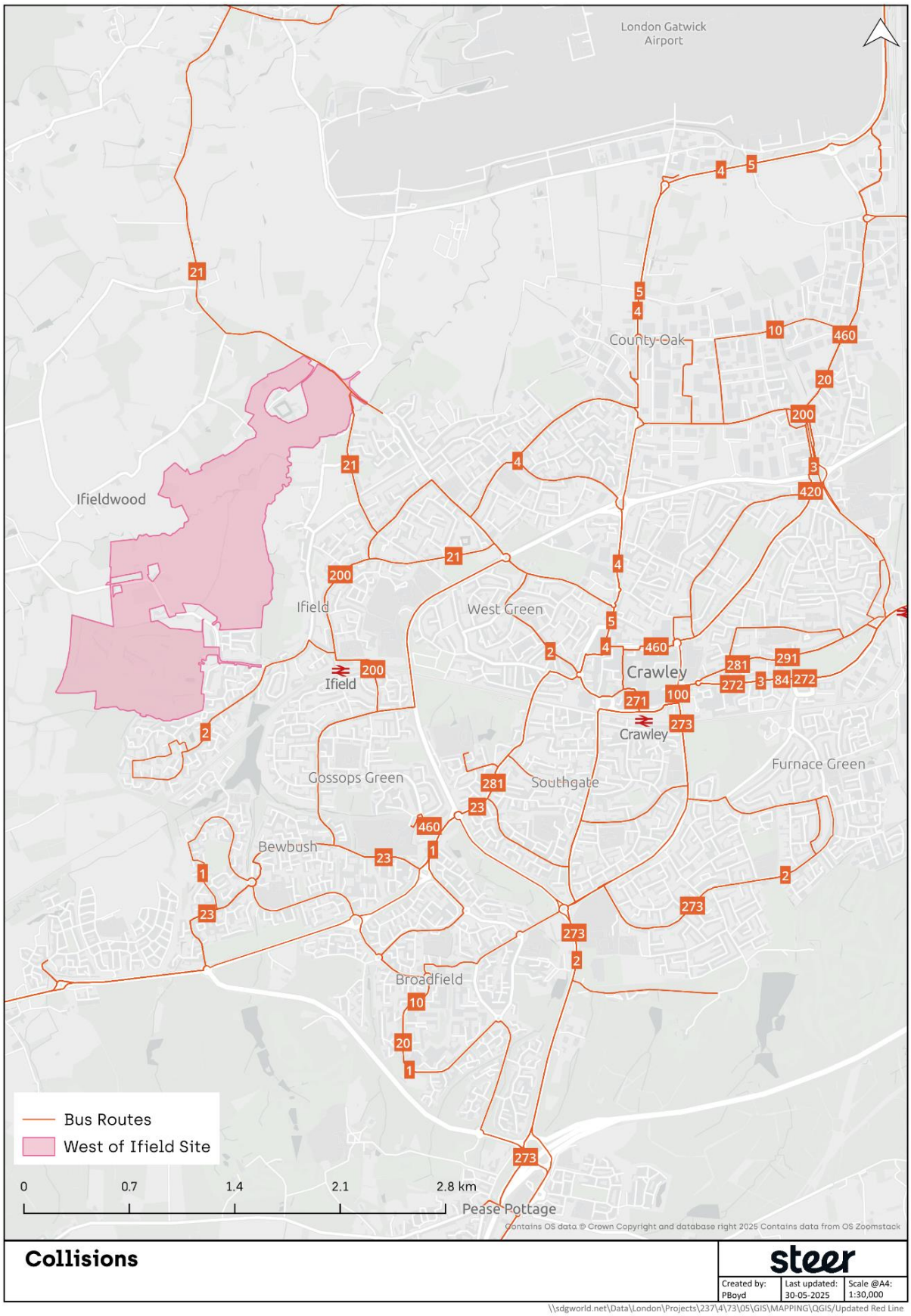

Figure 15.3: Existing Bus Routes

National Rail

15.9.38 Ifield Rail Station is located approximately 1.2km from the Site to the south-east. Ifield Rail Station currently has a regular service at all times of day. During the morning peak, two trains per hour are provided towards London, Crawley, Three Bridges and Gatwick Airport, with five trains per hour towards Horsham. During the evening peak, five trains run from London to Ifield and two trains per hour run from Horsham to Ifield. During off-peak periods, two trains per hour typically serve Ifield in each direction. Services also run through London and onwards to Stevenage and Peterborough.

15.9.39 Details of these services are shown in Table 15.11.

Table 15.11: Existing Rail Services

Destination	Journey Time (minutes)	Frequency
Crawley	3	2
Three Bridges	7	2
Gatwick Airport	12	2
London Victoria	54	2
London Blackfriars	60	2

Walking and Cycling

15.9.40 In proximity to the Site, there are a number of dedicated footways on the local road network. Footway widths and surface quality vary, but footways are generally wide enough to accommodate for all users.

15.9.41 There are also a number of Public Rights of Way (PRoW) (footpaths and bridleways) within or surrounding the Proposed Development, which link neighbouring communities in Ifield to the countryside to the west, as detailed in the extracted map from WSCC[29] (see Figure 15.4).

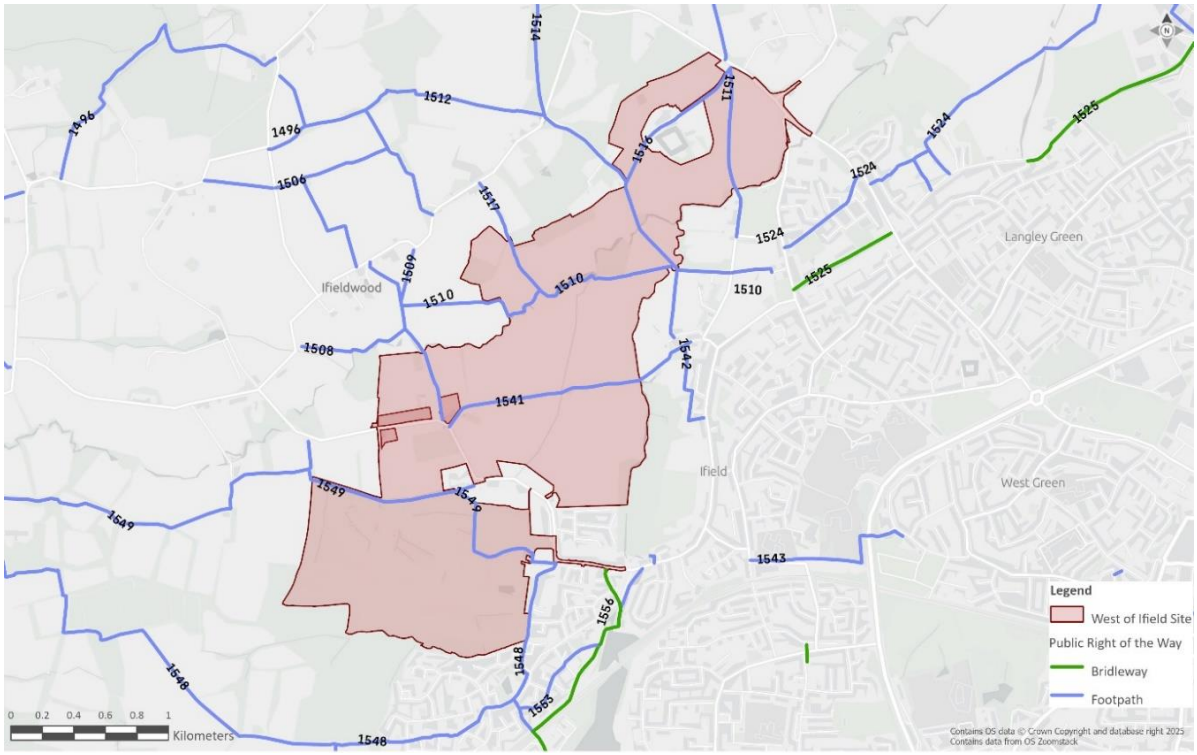

Figure 15.4: WSCC PRoW Map Extract

[29] West Sussex County Council, iMap. Available online at: https://www.westsussex.gov.uk/land-waste-and-housing/public-paths-and-the-countryside/public-rights-of-way/public-rights-of-way-imap/imap/

15.9.42 There are no formal cycle routes on the surrounding road network, however the strategic cycle network within the Site's immediate vicinity is good. National Cycle Route (NCN) 228, 20 and 21 are in the near vicinity of the Site, and NCN route 223 is south-west of the Site in Horsham. These routes connect to the wider NCN.

Future Baseline

15.9.43 The future traffic flows for the highway network in the vicinity of the Site have been predicted for the Future Year of 2041 in this ES chapter. These flows take into account both the future cumulative development schemes, as well as the Gatwick Airport DCO application

15.9.44 It is understood that there are no material changes to walk and cycle conditions arising from other cumulative developments. Details of walk and cycle improvement schemes associated to other cumulative developments would come through at a later stage but cannot be assessed at the time of this planning application.

Traffic Growth

15.9.45 TEMPRO (V8.1) growth factors have been applied to the 2035 Crawley Town Model flows in order to devise the 2041 future year scenario flows. The TEMPRO growth factors have also been applied to the 2015 Crawley Town Model to devise the 2025 baseline scenario flows. 2025 has been selected as the most representative baseline. These present the worst case scenario as the sustainable transport measures within Crawley are likely to encourage wider mode shift.

Sensitive Receptors

15.9.46 Existing sensitive receptors that may be affected by potential transport and accessibility impacts as a result of the Proposed Development include:

- Highway Links,
- Pedestrian facilities; and
- Cycle facilities.

15.9.47 Based on the baseline traffic flows, Table 15.12 describes the sensitivity assessment for each identified receptor. A full assessment of effects has been undertaken for the Highway Links against a threshold of 10% increase in traffic flow based on the IEMA guidelines; Highway Links only need to be considered whereby there is a change in traffic greater than 30% (Rule 1), or more than 10% where the links contain sensitive links (Rule 2). Highway Links that were not deemed to be sensitive to change or have low sensitivity (as displayed in Table 15.12), with had percentage change of less than 30% in traffic from Scenario 4 to Scenario 5 (as displayed in Table 15.22 and Table 15.23) have been discounted from the assessment. The remaining Highway Links followed Rule 1 and were not deemed to be Sensitive to Change and had percentage increase values of less than 30% and therefore were discounted from the assessment.

15.9.48 As such, Table 15.12 only includes those Highway Links that reach the threshold of 10% increase in traffic flow.

Table 15.12: Summary of Highway Links Sensitive Receptors

Link ID	Receptor	Sensitivity	Sensitive to Change	Qualification
CR48	London Road, S of Lowfield Heath Roundabout	Low	No	Residential properties both sides of the carriageway, set back by vegetation. Footway on both sides of the road.

Table 15.12: Summary of Highway Links Sensitive Receptors

Link ID	Receptor	Sensitivity	Sensitive to Change	Qualification
CR64	A2004 Northgate Ave, S of Hazelwick Roundabout	Low	No	Residential properties both sides of the carriageway, set back by vegetation. Footway on both sides of the road.
CR107	Rusper Road	Medium	Yes	Residential properties both sides of the road set back and separated by minor amount of vegetation. Footway both sides of the road. Close proximity to the Site.
CR66	Crighton Road (rail crossing)	Medium	Yes	High street area of central Crawley with commercial units fronting onto both sides of the road.
CR60	Peglar Way (one-way)	Medium	Yes	High street area of central Crawley with commercial units fronting onto both sides of the road.
CR109	Station Way	Low	No	Office building on south side and multi-storey car park on north side of the road. Footway provided on both sides.
CR108	Station Way, Belgrave House	Medium	Yes	Low number of properties on both sides of the road, leading into high street area of Crawley. Footway on both sides of the road.
CR111	Station Way, Taj car park (one way)	Medium	Yes	Central Crawley location surrounded by retail and commercial units and nearby entrance to Rail Station.
8	Harwood Road, Horsham SE	Low	No	Residential properties both sides of the carriageway, set back by vegetation. Footway on both sides of the road.
2	Ifield Avenue, S of Link Road	Low	Yes	Residential properties on western side and recreational facilities on eastern side of footway, set back by vegetation. Footway on the eastern side of the road. Located nearby the Site.
4	Charlwood Road, N of Link Road	Low	No	No sensitive receptors located nearby road link.
A13	A2044 Northgate Ave, N of Giles Dr	Low	No	Residential properties to the east and set back separated by vegetation. No footway provided.
A14	A2044 Northgate Ave, S of Woodfield Rd	Low	No	Residential properties both sides of the carriageway, set back by vegetation. Footway on both sides of the road.
A15	A2044 Northgate Ave, N of Woodfield Rd	Low	No	Residential properties both sides of the carriageway, set back by vegetation. Footway on both sides of the road.
A52	A2004 Northgate Ave, Northgate Ave Roundabout to Woodfield Rd	Low	No	Commercial units on both sides of the carriageway and set back separated by vegetation. Footway provided on both sides of the road
A53	A2004 Northgate Ave, Northgate Ave Roundabout to Woodfield Rd	Low	No	Commercial units on both sides of the carriageway and set back separated by vegetation. Footway provided on both sides of the road
A54	A2004 Northgate Ave, Northgate Ave	Low	No	Commercial units on both sides of the carriageway and set back separated by

Table 15.12: Summary of Highway Links Sensitive Receptors

Link ID	Receptor	Sensitivity	Sensitive to Change	Qualification
	Roundabout to Woodfield Rd			vegetation. Footway provided on both sides of the road
A68	A217, entrance to Tesco	Low	No	Tesco Superstore to south set back by vegetation. Footway on north side of road set back by vegetation
A69	A2219 High Street, N of Northgate Rd	Medium	Yes	Commercial properties on both sides of the road, leading into high street area of Crawley. Footway on both sides of the road.
A70	A2219 High Street, N of Northgate Rd	Medium	Yes	Commercial properties on both sides of the road, leading into high street area of Crawley. Footway on both sides of the road.
A71	A2219 High Street, Northgate Rd to Pegler Way	Medium	Yes	Commercial properties on both sides of the road, leading into high street area of Crawley. Footway on both sides of the road.
A72	A2219 High Street, S of The Boulevard (1-way)	Medium	Yes	High street area of central Crawley with commercial units fronting onto both sides of the road.
A73	A2219 London Rd, Kilnmead to Ifield Avenue	Low	No	Commercial uses both sides of the road. Footway provided on both sides.
A79	A2219, High Street to Pegler Way (1-way)	Medium	Yes	High street area of central Crawley with commercial units fronting onto both sides of the road.
A80	A2219, High Street to Pegler Way (1-way)	Medium	Yes	High street area of central Crawley with commercial units fronting onto both sides of the road.
A122	Breezehurst Dr, N of Horsham Rd	Medium	No	Residential properties both sides of the carriageway, set back by vegetation.
A124	Brighton Rd, N of Goffs Park Rd	Low	No	Dual carriageway not located within close proximity of the Site. Vegetation separates carriageway from nearby receptors.
A125	Brighton Rd, N of Goffs Park Rd	Low	No	Dual carriageway not located within close proximity of the Site. Vegetation separates carriageway from nearby receptors.
A131	Brighton Rd, S of Goffs Park Rd	Low	No	Residential area with properties located on both sides of the road. Adequate footway provision.
A132	Brighton Rd, S of Goffs Park Rd	Low	No	Residential area with properties located on both sides of the road. Adequate footway provision.
A136	Brighton Road, Springfield Road to Station Way	Medium	No	High street area of central Crawley with commercial units fronting onto both sides of the road. Remote from the Site .
A137	Brighton Road, Springfield Road to Station Way	Medium	No	High street area of central Crawley with commercial units fronting onto both sides of the road. Remote from the Site .
A162	Harwood Rd, S of Forest Rd	Low	No	Residential properties both sides of the carriageway, set back by vegetation. Footway on both sides of the road.

Table 15.12: Summary of Highway Links Sensitive Receptors

Link ID	Receptor	Sensitivity	Sensitive to Change	Qualification
A170	High Street, Station Way to Pegler Way	Medium	Yes	Commercial properties on both sides of the road, leading into high street area of Crawley. Footway on both sides of the road.
A177	Ifield Ave, Ifield Dr to Stagelands	Medium	Yes	Residential properties both sides of the road set back and separated by vegetation. Footway both sides of the road. Close proximity to the Site.
A178	Ifield Ave, Stagelands to Warren Dr	High	Yes	Residential properties to the west and Our Lady Queen of Heaven Catholic School to the east. Footway both sides of the road. Congested junction (based on traffic modelling and professional judgement).
A186	Ifield Ave, Warren Dr to Ifield Green	Medium	Yes	Residential properties both sides of the road set back and separated by vegetation. Footway both sides of the road. Close proximity to the Site. Congested junction (based on traffic modelling and professional judgement).
A189	Ifield Wood	Medium	Yes	Residential properties both sides of the carriageway set back separated by vegetation. No footway provided.
A201	London Rd, Fleming Way to Lowfield Heath Roundabout	Medium	No	Commercial uses both sides of the road. Footway provided on both sides.
A202	London Rd, Fleming Way to Lowfield Heath Roundabout	Low	No	No sensitive receptors located nearby road link.
A217	M23 J11 roundabout from Brighton Rd	Low	No	Residential and industrial units set back from M23 J11 roundabout. No sensitive receptors adjacent the carriageway.
A245	Pegler Way, Ifield Rd to High Street	Medium	Yes	Asda Superstore located to south and commercial units to the north. Footway on both sides of the road.
A246	Pegler Way, n of Ifield Roundabout	Medium	Yes	High street area of central Crawley with commercial units fronting onto both sides of the road.
A247	Pegler Way, n of Ifield Roundabout (1-way)	Medium	Yes	High street area of central Crawley with commercial units fronting onto both sides of the road.
A248	Pegler Way, n of Ifield Roundabout (1-way)	Medium	Yes	High street area of central Crawley with commercial units fronting onto both sides of the road.
A260	Stagelands, n of Ifield Ave	High	Yes	Church located north side of carriageway and road link located in residential area.
A266	Station Way, Friary Road to Station Road	Medium	Yes	Crawley Rail Station to the south and commercial units to the north.
A267	Station Way, Friary Road to Station Road	Medium	Yes	Crawley Rail Station to the south and commercial units to the north.
A268	Station Way, Friary Road to Station Road	Medium	Yes	Crawley Rail Station to the south and commercial units to the north.

Table 15.12: Summary of Highway Links Sensitive Receptors

Link ID	Receptor	Sensitivity	Sensitive to Change	Qualification
A269	Station Way, Station Road to Brighton Road (1-way)	Medium	Yes	High street area of central Crawley with commercial units fronting onto both sides of the road.
A270	Sullivan Dr, E of Barlow Rd	Low	No	Residential area with properties located on both sides of the road. Adequate footway provision.
A271	Sullivan Dr, N of Horsham Rd	Low	No	Residential area with properties located on both sides of the road. Adequate footway provision.
A272	Sullivan Dr, N of Horsham Rd	Low	No	Residential area with properties located on both sides of the road. Adequate footway provision.
B2	Rusper Road, South of Parham Road	Medium	Yes	Residential properties both sides of the road set back and separated by minor amount of vegetation. Footway both sides of the road. Close proximity to the Site.
B3	Ifield Green	Medium	Yes	Residential properties both sides of the carriageway set back separated by vegetation. Footway on eastern side of carriageway.
B5	Link Road, S of Charlwood Road	Low	No	No sensitive receptors located nearby road link. However, this Highway Link has been assessed going forward as part of this ES chapter as it is the key link into the Site on the CWMMC.
B6	Link Road, South Access	Medium	No	Residential properties and commercial units both sides of the road set back and separated by vegetation. Footway both sides of the road. Located within the boundary of the Site. This Highway Link has been assessed going forward as part of this ES chapter as it is the key link into the Site. The land uses surrounding the Highway Link have been designed to accommodate the traffic generated by the Proposed Development and the CWMMC.
A286	Primary link North of link road	Medium	No	Residential properties both sides of the road set back and separated by vegetation. Footway both sides of the road. Located within the boundary of the Site. This Highway Link has been assessed going forward as part of this ES chapter as it is the key link into the Site. The land uses surrounding the Highway Link have been designed to accommodate the traffic generated by the Proposed Development and the CWMMC.

15.9.49 Table 15.13 describes the sensitivity assessment for each receptor related to pedestrian flows.

Table 15.13: Summary of Pedestrian Links Sensitive Receptors

Receptor ID	Receptor	Sensitivity	Sensitive to Change	Qualification
1	Rusper Road – Site access to Hyde Drive	Low	No	Close to residential area, set back from the carriageway.
2	Rusper Road Hyde Drive junction to Tangmere Road	Low	No	Close to residential area, set back from the carriageway.
3	Tangmere Road	Low	No	Close to residential area, set back from the carriageway.
4	Ifield Drive Tangmere Road to Ifield Station	Medium	Yes	Close proximity to primary school.
5	Underpass under A23 Crawley Avenue	Medium	Yes	Close, proximity to Ifield Community College.
6	Public footpath crossing CWMMC (1) – closest to Charlwood Road	Low	No	Low traffic flows and sufficiently distant from affected roads and junctions.
7	Public footpath crossing CWMMC (2)	Low	No	Low traffic flows and sufficiently distant from affected roads and junctions.
8	Public footpath crossing CWMMC (3) closest to Rusper Road	Low	No	Low traffic flows and sufficiently distant from affected roads and junctions.

15.9.50 Table 15.14 describes the sensitivity assessment for each receptor related to cycle flows.

Table 15.14: Summary of Cycle Links Sensitive Receptors

Receptor ID	Receptor	Sensitivity	Sensitive to Change	Qualification
1	Rusper Road	Medium	Yes	Close proximity to Site, width of carriageway and lack of formal cycle infrastructure.
2	Tangmere Road	Medium	Yes	Close proximity to Site, width of carriageway and lack of formal cycle infrastructure.
3	Ifield Drive	Medium	Yes	Close proximity to secondary school.
4	Underpass	Medium	Yes	Close proximity to college.
5	Ifield Avenue	Medium	Yes	key route used by cyclists from Proposed Development to reach key destinations.
6	Rushetts Road	Medium	Yes	Close proximity to Site, width of carriageway and lack of formal cycle infrastructure
7	Charlwood Road	Medium	Yes	Close proximity to Site, width of carriageway and lack of formal cycle infrastructure.

15.9.51 Sensitivity of receptors related to public transport flows will be associated to Ifield Station for rail users and the local bus stops for bus users. The sensitivity of Ifield Station and the local bus stops are considered to be low.

15.10 Assessment of Effects

Demolition and Construction Effects

15.10.1 A full review of the level of demolition and construction vehicular traffic has been undertaken in Chapter 13 of the Transport Assessment (WOI-HPA-DOC-TA-01) and is briefly summarised in this report. Demolition and construction effects generated by the Proposed Development are considered to be temporary, and can extend across the demolition and

construction stage of the Proposed Development (2027-2041). After the construction of the first development phase for residential occupation (2029), future construction periods would run concurrently with operational phases already complete and occupied.

15.10.2 Operational flows have not been included in the demolition and construction assessment of effects due to the absence of a dedicated modelling run . As such, an impact assessment is only possible for demolition and construction flows only, without the cumulative effects of operational traffic.

15.10.3 The construction vehicle trip generation assessment indicates that the peak construction year will occur in 2033-2035, with a total of 648 one-way and 1,295 two-way (AADT) construction vehicles anticipated to be associated with the construction of the Proposed Development. Of these, 95 are two-way HGV trips

15.10.4 The OCEMP (ES Volume 2 Technical Appendix 5.1) includes measures to reduce the impact of the construction on the local highway network. Such measures include agreeing routing strategies with WSCC to avoid sensitive receptors, reducing the number of construction vehicles using the local highway network during peak hours to reduce the impact on sensitive receptors, and implementing a workforce travel plan to reduce vehicle trips. Additionally, abnormal loads would be programmed in advance and discussed with WSCC.

15.10.5 Demolition and construction vehicles flows have been predicted for two scenarios, which are summarised below:

- Construction Scenario 1: 2035 Construction Year (without Proposed Development, with CWMMC) + cumulative developments (as modelled within the CTM);
- Construction Scenario 2: 2035 Construction Year (without Proposed Development, with CWMMC) + 2035 demolition and construction vehicle traffic + cumulative developments (as modelled within the CTM).

15.10.6 The reason for not including operational traffic in Construction Scenario 2 is due to the absence of a dedicated traffic modelling run. As such, an impact assessment is only possible for demolition and construction flows only, without the cumulative effects of operational traffic.

15.10.7 The selected Highway Links that have been assessed for the demolition and construction effects is set out in Table 15.15 below. The Highway Links have been selected based on their location on the likely route used by demolition and construction vehicles. Given that the percentage impact of the demolition and construction traffic from Construction Scenarios 1 to 2 is going to be below 10%, the IEMA Guidelines of using Rule 1 and 2 has not been used for this particular assessment, and all Highway links set out in the table has been used for the assessment of effects.

Table 15.15: Highways Links Selected for Demolition and Construction Assessment of Effects

Link ID	Receptor	% Changes in Traffic Flow between Construction Scenarios 1 and 2 – All Vehicles (AADT)	Sensitivity
A183	Ifield Avenue, Ifield Drive to Crawley Avenue	5%	Medium
CR79	A2011 Crawley Avenue, w of M23 J10 (St Hildas Close)	0%	Low
CR48	London Road, s of Lowfield Heath Roundabout	1%	Low
B4	Crawley Avenue	1%	Low
CR101	A2220 Horsham Road	1%	Low
CR102	A23 Brighton Road, Pease Pottage Hill	1%	Low
CR88	Crawley Avenue (Filbert Crescent)	2%	Medium

15.10.8 Table 15.16 demonstrates the assessed Highway links for Construction Scenarios 1 and 2.

Table 15.16: Construction Year 2035 – Scenarios 1 and 2

Link ID	Receptor	Scenario 1		Scenario 2		% Increase	
		All Vehicles	HGVs	All Vehicles	HGVs	All Vehicles	HGVs
A183	Ifield Avenue, Ifield Drive to Crawley Avenue	25631	248	26927	343	5%	38%
CR79	A2011 Crawley Avenue, w of M23 J10 (St Hildas Close)	48598	2610	48793	2624	0%	1%
CR48	London Road, s of Lowfield Heath Roundabout	39297	1304	39556	1323	1%	1%
B4	Crawley Avenue	31620	959	32074	993	1%	3%
CR101	A2220 Horsham Road	51103	948	51427	972	1%	3%
CR102	A23 Brighton Road, Pease Pottage Hill	34581	796	35099	834	1%	5%
CR88	Crawley Avenue (Filbert Crescent)	37698	967	38540	1029	2%	6%

Changes in Daily Vehicle Flows on Local Roads (Links)

15.10.9 Table 15.17 provides a summary of the predicated changes in daily vehicle flows on the seven Highway Links that are being assessed. A summary of the sensitivity and residual effect of each road link is also provided.

Table 15.17: Changes in Daily Vehicle Flows AADT – Demolition and Construction Stage 2035

Link ID	Highway link	% Changes in Traffic Flow between Scenarios 1 and 2 (All Vehicles AADT)	Magnitude of Impact (Scenario 1 to 2)	Sensitivity	Residual Effect
A183	Ifield Avenue, Ifield Drive to Crawley Avenue	5%	Very Low	Medium	Negligible Adverse
CR79	A2011 Crawley Avenue, w of M23 J10 (St Hildas Close)	0%	Very Low	Low	Negligible Adverse
CR48	London Road, s of Lowfield Heath Roundabout	1%	Very Low	Low	Negligible Adverse
B4	Crawley Avenue	1%	Very Low	Low	Negligible Adverse
CR101	A2220 Horsham Road	1%	Very Low	Low	Negligible Adverse
CR102	A23 Brighton Road, Pease Pottage Hill	1%	Very Low	Low	Negligible Adverse
CR88	Crawley Avenue (Filbert Crescent)	2%	Very Low	Medium	Negligible Adverse

Severance

15.10.10 Table 15.18 below identifies the level of severance using the IEMA guidance for Construction Scenarios 1 and 2. The magnitude of impact criteria for Severance is set out in Table 15.6. A summary of the sensitivity and residual effect of each Highway Link is also provided. In general, while there will be an increase in vehicle movements, this will not be significant given the ability to cross the roads identified at controlled and uncontrolled points along the route.

Table 15.18: Construction Year 2035 – Scenarios 1 and 2								Magnitude of Impact	Sensitivity	Residual Effect
Link ID	Receptor	Scenario 1		Scenario 2		% Increase				
		All Vehicles	HGVs	All Vehicles	HGVs	All Vehicles	HGVs			
A183	Ifield Avenue, Ifield Drive to Crawley Avenue	25631	248	26927	343	5%	38%	Very Low	Medium	Temporary Negligible Adverse
CR79	A2011 Crawley Avenue, w of M23 J10 (St Hildas Close)	48598	2610	48793	2624	0%	1%	Very Low	Low	Temporary Negligible Adverse
CR48	London Road, s of Lowfield Heath Roundabout	39297	1304	39556	1323	1%	1%	Very Low	Low	Temporary Negligible Adverse
B4	Crawley Avenue	31620	959	32074	993	1%	3%	Very Low	Low	Temporary Negligible Adverse
CR101	A2220 Horsham Road	51103	948	51427	972	1%	3%	Very Low	Low	Temporary Negligible Adverse
CR102	A23 Brighton Road, Pease Pottage Hill	34581	796	35099	834	1%	5%	Very Low	Low	Temporary Negligible Adverse
CR88	Crawley Avenue (Filbert Crescent)	37698	967	38540	1029	2%	6%	Very Low	Medium	Temporary Negligible Adverse

Driver Delay

15.10.11 The average delay in terms of minutes has not been possible to calculate for the demolition and construction stage of effects. Given that the demolition and construction vehicle traffic generated by the Proposed Development will be spread across the working day and not concentrated in the AM and PM peak hour periods, it can be considered that the magnitude of impact of driver delay would be "Very Low". Therefore, based on the sensitivities outlined for the seven Highway links, it can be determined that there would be a temporary Negligible Adverse residual effect upon Driver Delay.

Pedestrian and Cycle Delay

15.10.12 In the absence of any guidance, professional judgement has been used to determine the magnitude of impact for the assessment of pedestrian and cycle delay. This has been based on a threshold of vehicle traffic doubling from Construction Scenario 1 and 2.

15.10.13 The Proposed Development is expected to have less than a doubling in vehicle flows for the seven assessed Highway links in the demolition and construction stage (between Scenarios 1 and 2). The seven Highway links are determined to have a "Very Low" magnitude of impact, with the highest increase in daily vehicle flows being 5% recorded on Highway Link A183. The demolition and construction vehicle traffic generated by the Proposed Development will be spread across the working day and not concentrated in the AM and PM peak hour periods. As such pedestrians and cyclist are unlikely to experience any material delays as a result of the increase in vehicle flows. Based on the sensitivities outlined for the seven Highway links, it can be determined that there would be a Temporary Negligible Adverse residual effect upon Pedestrian and Cycle Delay.

Pedestrian Amenity

15.10.14 This section reviews pedestrian amenity during Construction Scenarios 1 and 2. The term pedestrian amenity is included in IEMA guidance. As set out in the methodology section, the IEMA guidelines suggest that the threshold for judging the magnitude of impact in pedestrian amenity would be where the traffic flow is doubled.

15.10.15 The Proposed Development is expected to have less than a doubling in vehicle flows for the seven assessed Highway links in the demolition and construction stage (between Scenarios 1 and 2). The seven Highway links are determined to have a "Very Low" magnitude of impact, with the highest increase in daily vehicle flows being 5% recorded on Highway Link A183 and flows are spread across the day. On the routes identified, pedestrian facilities are generally set back from the carriageway, separated by a verge. Based on the sensitivities outlined for the seven Highway links, it can be determined that there would be a Temporary Negligible Adverse residual effect upon Pedestrian Amenity.

Accidents and Safety

15.10.16 Whilst there will be a level of additional traffic associated from the Proposed Development along some of the Highway Links, it is not expected that it would have a material adverse effect on accidents and safety. As outlined in the Transport Assessment (WOI-HPA-DOC-TA-01) and ES Volume 1 Chapter 4: Proposed Development Description, the Proposed Development will include the provision of new infrastructure which will be designed to the latest standards and best practice. Additionally, changes to the existing transport network infrastructure, especially those related to providing improved pedestrian and cycle infrastructure, will provide more dedicated space for more vulnerable modes, which is likely to reduce conflicts and improve safety.

15.10.17 The West Sussex Local Transport Plan has a strategy to reduce accident rates over time. Notwithstanding this, no specific mitigation measures are necessary to address any existing accident hotspots on the network and neither would the proposals lead to the creation of any accident hotspots. Hence it is expected that the Proposed Development would not significantly alter the injury accident rate across the network.

15.10.18 The seven Highway links are determined to have a "Very Low" magnitude of impact. Based on the sensitivities outlined for the seven Highway links, it can be determined that there would be a Temporary Negligible Adverse residual effect upon Accidents and Safety.

Pedestrian Fear and Intimidation

15.10.19 This section reviews pedestrian amenity during Construction Scenarios 1 and 2, and is summarised below in Table 15.19. As identified earlier, construction traffic will be routed on the most appropriate roads, will be generally outside of peak hours and spread across the day. On routes identified, there is a good network of pedestrian facilities and routes are set back from the carriageway edge, with frequent points to cross.

Demolition and Construction - Highway Links Summary

15.10.20 A detailed assessment has been undertaken above for the seven Highway Links to determine the significance of the demolition and construction effects of the Proposed Development traffic flows on receptors. A summary of the residual effects for the assessed Highway Links is shown below in Table 15.20.

Table 15.19: Assessment of Fear and Intimidation – Construction and Demolition Stage 2035

Link ID	Road Name	Scenario 1				Scenario 2				Difference (Scenario 1 vs 2)			Residual Effect	
		18hr Traffic AAWT per hour	18hr Traffic HGV	Degree of Hazard Score	Level of Fear and Intimidation	18hr Traffic AAWT per hour	18hr Traffic HGV	Degree of Hazard Score	Level of Fear and Intimidation	Change in 18hr Traffic AAWT per hour	Change in 18hr Traffic HGV	Magnitude of Change	Sensitivity	Residual Effect
A183	Ifield Avenue, Ifield Drive to Crawley Avenue	1467	255	20	Moderate	1538	350	20	Moderate	72	95	Very Low	Medium	Temporary Negligible Adverse
CR79	A2011 Crawley Avenue, w of M23 J10 (St Hildas Close)	2781	2688	50	Extreme	2791	2702	50	Extreme	11	14	Very Low	Low	Temporary Negligible Adverse
CR48	London Road, s of Lowfield Heath Roundabout	2248	1343	40	Great	2263	1362	40	Great	14	19	Very Low	Low	Temporary Negligible Adverse
B4	Crawley Avenue	1809	988	30	Great	1834	1021	40	Great	25	33	Very Low	Low	Temporary Negligible Adverse
CR101	A2220 Horsham Road	2924	976	30	Great	2942	1000	40	Great	18	24	Very Low	Low	Temporary Negligible Adverse
CR102	A23 Brighton Road, Pease Pottage Hill	1979	819	30	Great	2007	857	30	Great	29	38	Very Low	Low	Temporary Negligible Adverse
CR88	Crawley Avenue (Filbert Crescent)	2157	996	30	Great	2204	1058	40	Great	47	62	Very Low	Medium	Temporary Negligible Adverse

Table 15.20: Highways Links Summary – Demolition and Construction Stage 2035								
Link ID	Highway link	Residual Effect						
		Changes in Daily Vehicle Flows	Severance	Driver Delay	Pedestrian Delay	Pedestrian Amenity	Accidents and Safety	Fear and Intimidation
A183	Ifield Avenue, Ifield Drive to Crawley Avenue	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse
CR79	A2011 Crawley Avenue, w of M23 J10 (St Hildas Close)	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse
CR48	London Road, s of Lowfield Heath Roundabout	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse
B4	Crawley Avenue	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse
CR101	A2220 Horsham Road	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse
CR102	A23 Brighton Road, Pease Pottage Hill	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse
CR88	Crawley Avenue (Filbert Crescent)	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse	Temporary Negligible Adverse

Completed Development Effects

15.10.21 The traffic flows for the highway network in the vicinity of the Site have been predicted for the Future Year of 2041 (Scenarios 4 and 5). These flows consider both the future committed development schemes, as well as the Gatwick Airport DCO application development flows.

Proposed Development Traffic Generation

15.10.22 Future traffic flows are summarised in Table 15.21 and are provided in terms of 24-hour AADT and 18-hour AAWT for the Future Year 2041 (Scenario 4).

Table 15.21: Future Year 2041 (Scenario 4) AADT and AAWT Traffic Flows (2-way)

Link ID	Receptor	AADT (24-hour)			AAWT (18-hour)		
		All Vehicles	HGVs	% HGVs	All Vehicles	HGVs	% HGVs
CR48	London Road, S of Lowfield Heath Roundabout	39,712	1145	3%	40,895	1179	3%
CR64	A2004 Northgate Ave, S of Hazelwick Roundabout	24,467	1041	4%	25,196	1072	4%
CR107	Rusper Road	14,430	24	0%	14,860	25	0%
CR66	Crighton Road (rail crossing)	12,462	242	2%	12,833	249	2%
CR60	Peglar Way (one-way)	12,725	196	2%	13,104	202	2%
CR109	Station Way	9,727	139	1%	10,017	143	1%
CR108	Station Way, Belgrave House	7,454	118	2%	7,676	121	2%
CR111	Station Way, Taj car park (one way)	7,974	123	2%	8,211	126	2%
8	Harwood Road, Horsham SE	26,757	1220	5%	27,554	1256	5%
2	Ifield Avenue, S of Link Road	24,189	308	1%	24,909	317	1%
4	Charlwood Road, N of Link Road	18,957	378	2%	19,522	389	2%
A13	A2044 Northgate Ave, N of Giles Dr	10,937	224	2%	11,262	230	2%
A14	A2044 Northgate Ave, S of Woodfield Rd	18,468	499	3%	19,018	514	3%
A15	A2044 Northgate Ave, N of Woodfield Rd	24,467	1041	4%	25,196	1072	4%
A52	A2004 Northgate Ave, Northgate Ave Roundabout to Woodfield Rd	10,565	241	2%	10,879	249	2%
A53	A2004 Northgate Ave, Northgate Ave Roundabout to Woodfield Rd	10,565	241	2%	10,879	249	2%
A54	A2004 Northgate Ave, Northgate Ave Roundabout to Woodfield Rd	10,565	241	2%	10,879	249	2%
A68	A217, entrance to Tesco	17,813	199	1%	27,858	1693	6%
A69	A2219 High Street, N of Northgate Rd	15,610	147	1%	16,074	151	1%
A70	A2219 High Street, N of Northgate Rd	15,610	147	1%	16,074	151	1%
A71	A2219 High Street, Northgate Rd to Pegler Way	12,701	115	1%	13,079	119	1%
A72	A2219 High Street, S of The Boulevard (1-way)	9,950	36	0%	10,247	37	0%
A73	A2219 London Rd, Kilnmead to Ifield Avenue	27,840	281	1%	28,670	289	1%
A79	A2219, High Street to Pegler Way (1-way)	23,483	128	1%	24,182	132	1%
A80	A2219, High Street to Pegler Way (1-way)	11,742	64	1%	12,091	66	1%
A122	Breezehurst Dr, N of Horsham Rd	6,841	0	0%	7,045	0	0%
A124	Brighton Rd, N of Goffs Park Rd	9,330	159	2%	9,608	163	2%

Table 15.21: Future Year 2041 (Scenario 4) AADT and AAWT Traffic Flows (2-way)							
Link ID	Receptor	AADT (24-hour)			AAWT (18-hour)		
		All Vehicles	HGVs	% HGVs	All Vehicles	HGVs	% HGVs
A125	Brighton Rd, N of Goffs Park Rd	9,330	159	2%	9,608	163	2%
A131	Brighton Rd, S of Goffs Park Rd	9,972	159	2%	10,269	163	2%
A132	Brighton Rd, S of Goffs Park Rd	9,972	159	2%	10,269	163	2%
A136	Brighton Road, Springfield Road to Station Way	12,462	242	2%	12,833	249	2%
A137	Brighton Road, Springfield Road to Station Way	12,462	242	2%	12,833	249	2%
A162	Harwood Rd, S of Forest Rd	26,757	1220	5%	27,554	1256	5%
A170	High Street, Station Way to Pegler Way	11,431	156	1%	11,771	161	1%
A177	Ifield Ave, Ifield Dr to Stagelands	15,835	235	1%	16,307	242	1%
A178	Ifield Ave, Stagelands to Warren Dr	20,552	278	1%	21,164	287	1%
A186	Ifield Ave, Warren Dr to Ifield Green	10,066	196	2%	10,366	202	2%
A189	Ifield Wood	9,702	501	5%	9,990	516	5%
A201	London Rd, Fleming Way to Lowfield Heath Roundabout	39,712	1145	3%	40,895	1179	3%
A202	London Rd, Fleming Way to Lowfield Heath Roundabout	39,712	1145	3%	40,895	1179	3%
A217	M23 J11 roundabout from Brighton Rd	13,445	370	3%	13,845	381	3%
A245	Pegler Way, Ifield Rd to High Street	17,391	156	1%	17,908	161	1%
A246	Pegler Way, n of Ifield Roundabout	19,276	229	1%	19,850	235	1%
A247	Pegler Way, n of Ifield Roundabout (1-way)	12,725	196	2%	13,104	202	2%
A248	Pegler Way, n of Ifield Roundabout (1-way)	12,725	196	2%	13,104	202	2%
A260	Stagelands, n of Ifield Ave	13,848	273	2%	14,260	281	2%
A266	Station Way, Friary Road to Station Road	5,608	97	2%	5,775	100	2%
A267	Station Way, Friary Road to Station Road	5,608	97	2%	5,775	100	2%
A268	Station Way, Friary Road to Station Road	5,608	97	2%	5,775	100	2%
A269	Station Way, Station Road to Brighton Road (1-way)	7,974	123	2%	8,211	126	2%
A270	Sullivan Dr, E of Barlow Rd	7,002	316	5%	7,210	325	5%
A271	Sullivan Dr, N of Horsham Rd	12486	316	3%	12858	325	3%
A272	Sullivan Dr, N of Horsham Rd	12,486	316	3%	12,858	325	3%
B2	Rusper Road, South of Parham Road	7,941	80	1%	8,177	83	1%
B3	Ifield Green	12928	113	1%	13313	116	1%
B5	Link Road, S of Charlwood Road	NA	NA	NA	NA	NA	NA
B6	Link Road, South Access	NA	NA	NA	NA	NA	NA
A286	Primary link North of link road	8025	24	0%	8264	25	0%

Note: Highway Links located on the CWMMC (B5, B6 and A286) have included the assumption that the CWMMC is not in place .

15.10.23 The AADT and AAWT traffic flows for the operational year of 2041 (Scenario 4 and Scenario 5) for the highway network in the vicinity of the Site are shown in Table 15.22 and Table 15.23. These flows have included the committed developments included in the CTM, cumulative development and Proposed Development. Table 15.22 and Table 15.23 demonstrates the

assessed Highway Links with a predicted traffic flow percentage increase of at least 10% between Future Year 2041 without the Proposed Development (Scenario 4) and Future Year 2041 with the Proposed Development (Scenario 5). The assessment of impacts determines both the change in magnitude of the impacts as well as their absolute levels.

15.10.24 Scenarios 4 and 5 have been assessed as this replicates the period when the Proposed Development will be fully occupied and built out, and as such replicates a worst case assessment of the impact on the local highway network during the completed development stage. Any percentage reductions in traffic between Scenario 4 to 5 is due to the CWMMC being in-place and diverting traffic away from the nearby local highway network.

Table 15.22: Future Year 2041 (Scenario 4 and Scenario5) AADT Proposed Development Flows

Link ID	Receptor	Scenario 4		Scenario 5		% Increase	
		All Vehicles	HGVs	All Vehicles	HGVs	All Vehicles	HGVs
CR48	London Road, s of Lowfield Heath Roundabout	39,712	1145	45,247	1175	14%	3%
CR64	A2004 Northgate Ave, south of Hazelwick Roundabout	24,467	1041	27,327	1102	12%	6%
CR107	Rusper Road	14,430	24	8,875	0	-38%*	-100%*
CR66	Crighton Road (rail crossing)	12,462	242	13,722	240	10%	-1%**
CR60	Peglar Way (one-way)	12,725	196	14,301	246	12%	25%
CR109	Station Way	9,727	139	10,688	139	10%	0%
CR108	Station Way, Belgrave House	7,454	118	8,199	115	10%	-2%
CR111	Station Way, Taj car park (one way)	7,974	123	9,143	121	15%	-1%
8	Harwood Road, Horsham SE	26,757	1220	29,309	1210	10%	-1%
2	Ifield Avenue, S of Link Road	24,189	308	18,049	113	-25%	-63%
4	Charlwood Road, N of Link Road	18,957	378	16,507	262	-13%	-31%
A13	A2044 Northgate Ave, n of Giles Dr	10,937	224	13,021	270	19%	21%
A14	A2044 Northgate Ave, s of Woodfield Rd	18,468	499	20,707	532	12%	7%
A15	A2044 Northgate Ave, n of Woodfield Rd	24,467	1041	27,327	1102	12%	6%
A52	A2004 Northgate Ave, Northgate Ave Rbt to Woodfield Rd	10,565	241	11,854	282	12%	17%
A53	A2004 Northgate Ave, Northgate Ave Rbt to Woodfield Rd	10,565	241	11,854	282	12%	17%
A54	A2004 Northgate Ave, Northgate Ave Rbt to Woodfield Rd	10,565	241	11,854	282	12%	17%
A68	A217, entrance to Tesco	17,813	199	28,688	1629	61%	719%
A69	A2219 High Street, n of Northgate Rd	15,610	147	18,324	169	17%	15%
A70	A2219 High Street, n of Northgate Rd	15,610	147	18,324	169	17%	15%
A71	A2219 High Street, Northgate Rd to Pegler Way	12,701	115	15,298	138	20%	19%
A72	A2219 High Street, s of The Boulevard (1-way)	9,950	36	11,294	49	13%	37%
A73	A2219 London Rd, Kilnmead to Ifield Avenue	27,840	281	30,988	337	11%	20%
A79	A2219, High Street to Pegler Way (1-way)	23,483	128	26,122	154	11%	21%
A80	A2219, High Street to Pegler Way (1-way)	11,742	64	13,061	77	11%	21%
A122	Breezehurst Dr, n of Horsham Rd	6,841	0	8,135	95	19%	38405%
A124	Brighton Rd, n of Goffs Park Rd	9,330	159	10,382	155	11%	-3%
A125	Brighton Rd, n of Goffs Park Rd	9,330	159	10,382	155	11%	-3%

Table 15.22: Future Year 2041 (Scenario 4 and Scenario5) AADT Proposed Development Flows							
Link ID	Receptor	Scenario 4		Scenario 5		% Increase	
		All Vehicles	HGVs	All Vehicles	HGVs	All Vehicles	HGVs
A131	Brighton Rd, s of Goffs Park Rd	9,972	159	10,987	155	10%	-3%
A132	Brighton Rd, s of Goffs Park Rd	9,972	159	10,987	155	10%	-3%
A136	Brighton Road, Springfield Road to Station Way	12,462	242	13,722	240	10%	-1%
A137	Brighton Road, Springfield Road to Station Way	12,462	242	13,722	240	10%	-1%
A162	Harwood Rd, s of Forest Rd	26,757	1220	29,309	1210	10%	-1%
A170	High Street, Station Way to Pegler Way	11,431	156	13,044	156	14%	0%
A177	Ifield Ave, Ifield Dr to Stagelands	15,835	235	18,660	154	18%	-34%
A178	Ifield Ave, Stagelands to Warren Dr	20,552	278	23,276	124	13%	-55%
A186	Ifield Ave, Warren Dr to Ifield Green	10,066	196	15,256	110	52%	-44%
A189	Ifield Wood	9,702	501	12,347	526	27%	5%
A201	London Rd, Fleming Way to Lowfield Heath Rbt	39,712	1145	45,247	1175	14%	3%
A202	London Rd, Fleming Way to Lowfield Heath Rbt	39,712	1145	45,247	1175	14%	3%
A217	M23 J11 roundabout from Brighton Rd	13,445	370	15,099	360	12%	-3%
A245	Pegler Way, Ifield Rd to High Street	17,391	156	19,336	155	11%	-1%
A246	Pegler Way, n of Ifield Rbt	19,276	229	21,832	273	13%	19%
A247	Pegler Way, n of Ifield Rbt (1-way)	12,725	196	14,301	246	12%	25%
A248	Pegler Way, n of Ifield Rbt (1-way)	12,725	196	14,301	246	12%	25%
A260	Stagelands, n of Ifield Ave	13,848	273	15,308	219	11%	-20%
A266	Station Way, Friary Road to Station Road	5,608	97	6,310	94	13%	-3%
A267	Station Way, Friary Road to Station Road	5,608	97	6,310	94	13%	-3%
A268	Station Way, Friary Road to Station Road	5,608	97	6,310	94	13%	-3%
A269	Station Way, Station Road to Brighton Road (1-way)	7,974	123	9,143	121	15%	-1%
A270	Sullivan Dr, e of Barlow Rd	7,002	316	8,651	279	24%	-12%
A271	Sullivan Dr, n of Horsham Rd	12486	316	14656	280	17%	-12%
A272	Sullivan Dr, n of Horsham Rd	12,486	316	14,656	280	17%	-12%
B2	Rusper Road, South of Parham Road	7,941	80	4,877	66	-39%	-17%
B3	Ifield Green	12928	113	7383	74	-43%	-35%
B5	Link Road, s of Charlwood Road	3,745	36	13,127	64	250%	81%
B6	Link Road, South Access	3,745	36	8,924	47	138%	31%
A286	Primary link North of link road	3745	36	7330	27	96%	-24%

Note: Highway Links located on the CWMMC (B5, B6 and A286) have included the assumption that the CWMMC is open and operational. Where traffic composition changes, HGV percentages will also change and may decrease even if volumes increase

* Note that for CR1o7 Rusper Road, reduction in traffic is due to emergency access only being included on the Rusper Road access to the Proposed Development.

** Note that for CR66 Crighton Road (rail crossing) reduction in HGV flows is due to the nature of using a Saturn model for a large study area extent and the distribution of traffic flows.

Table 15.23: Future Year 2041 (Scenario 4 and Scenario 5) AAWT Proposed Development Flows							
Link ID	Receptor	Scenario 4		Scenario 5		% Increase	
		All Vehicles	HGVs	All Vehicles	HGVs	All Vehicles	HGVs
CR48	London Road, s of Lowfield Heath Roundabout	40,895	1179	46,594	1210	14%	3%
CR64	A2004 Northgate Ave, s of Hazelwick Roundabout	25,196	1072	28,141	1135	12%	6%
CR107	Rusper Road	14,860	25	9,140	0	-38%	-100%
CR66	Crighton Road (rail crossing)	12,833	249	14,131	247	10%	-1%
CR60	Peglar Way (one-way)	13,104	202	14,727	253	12%	25%
CR109	Station Way	10,017	143	11,006	143	10%	0%
CR108	Station Way, Belgrave House	7,676	121	8,443	119	10%	-2%
CR111	Station Way, Taj car park (one way)	8,211	126	9,415	125	15%	-1%
8	Harwood Road, Horsham SE	27,554	1256	30,182	1246	10%	-1%
2	Ifield Avenue, S of Link Road	24,909	317	18,587	116	-25%	-63%
4	Charlwood Road, N of Link Road	19,522	389	16,999	269	-13%	-31%
A13	A2044 Northgate Ave, n of Giles Dr	11,262	230	13,409	278	19%	21%
A14	A2044 Northgate Ave, s of Woodfield Rd	19,018	514	21,324	548	12%	7%
A15	A2044 Northgate Ave, n of Woodfield Rd	25,196	1072	28,141	1135	12%	6%
A52	A2004 Northgate Ave, Northgate Ave Rbt to Woodfield Rd	10,879	249	12,207	290	12%	17%
A53	A2004 Northgate Ave, Northgate Ave Rbt to Woodfield Rd	10,879	249	12,207	290	12%	17%
A54	A2004 Northgate Ave, Northgate Ave Rbt to Woodfield Rd	10,879	249	12,207	290	12%	17%
A68	A217, entrance to Tesco	27,858	1693	29,542	1677	6%	-1%
A69	A2219 High Street, n of Northgate Rd	16,074	151	18,869	174	17%	15%
A70	A2219 High Street, n of Northgate Rd	16,074	151	18,869	174	17%	15%
A71	A2219 High Street, Northgate Rd to Pegler Way	13,079	119	15,753	142	20%	19%
A72	A2219 High Street, s of The Boulevard (1-way)	10,247	37	11,630	50	14%	37%
A73	A2219 London Rd, Kilnmead to Ifield Avenue	28,670	289	31,911	347	11%	20%
A79	A2219, High Street to Pegler Way (1-way)	24,182	132	26,901	159	11%	21%
A80	A2219, High Street to Pegler Way (1-way)	12,091	66	13,450	79	11%	21%
A122	Breezehurst Dr, n of Horsham Rd	7,045	0	8,378	98	19%	38407%
A124	Brighton Rd, n of Goffs Park Rd	9,608	163	10,691	159	11%	-3%
A125	Brighton Rd, n of Goffs Park Rd	9,608	163	10,691	159	11%	-3%
A131	Brighton Rd, s of Goffs Park Rd	10,269	163	11,314	159	10%	-3%
A132	Brighton Rd, s of Goffs Park Rd	10,269	163	11,314	159	10%	-3%
A136	Brighton Road, Springfield Road to Station Way	12,833	249	14,131	247	10%	-1%
A137	Brighton Road, Springfield Road to Station Way	12,833	249	14,131	247	10%	-1%
A162	Harwood Rd, s of Forest Rd	27,554	1256	30,182	1246	10%	-1%
A170	High Street, Station Way to Pegler Way	11,771	161	13,433	161	14%	0%

Table 15.23: Future Year 2041 (Scenario 4 and Scenario 5) AAWT Proposed Development Flows							
Link ID	Receptor	Scenario 4		Scenario 5		% Increase	
		All Vehicles	HGVs	All Vehicles	HGVs	All Vehicles	HGVs
A177	Ifield Ave, Ifield Dr to Stagelands	16,307	242	19,216	159	18%	-34%
A178	Ifield Ave, Stagelands to Warren Dr	21,164	287	23,970	128	13%	-55%
A186	Ifield Ave, Warren Dr to Ifield Green	10,366	202	15,711	113	52%	-44%
A189	Ifield Wood	9,990	516	12,714	541	27%	5%
A201	London Rd, Fleming Way to Lowfield Heath Rbt	40,895	1179	46,594	1210	14%	3%
A202	London Rd, Fleming Way to Lowfield Heath Rbt	40,895	1179	46,594	1210	14%	3%
A217	M23 J11 roundabout from Brighton Rd	13,845	381	15,549	370	12%	-3%
A245	Pegler Way, Ifield Rd to High Street	17,908	161	19,912	160	11%	-1%
A246	Pegler Way, n of Ifield Rbt	19,850	235	22,483	281	13%	19%
A247	Pegler Way, n of Ifield Rbt (1-way)	13,104	202	14,727	253	12%	25%
A248	Pegler Way, n of Ifield Rbt (1-way)	13,104	202	14,727	253	12%	25%
A260	Stagelands, n of Ifield Ave	14,260	281	15,764	225	11%	-20%
A266	Station Way, Friary Road to Station Road	5,775	100	6,498	97	13%	-3%
A267	Station Way, Friary Road to Station Road	5,775	100	6,498	97	13%	-3%
A268	Station Way, Friary Road to Station Road	5,775	100	6,498	97	13%	-3%
A269	Station Way, Station Road to Brighton Road (1-way)	8,211	126	9,415	125	15%	-1%
A270	Sullivan Dr, e of Barlow Rd	7,210	325	8,908	288	24%	-12%
A271	Sullivan Dr, n of Horsham Rd	12858	325	15093	288	17%	-12%
A272	Sullivan Dr, n of Horsham Rd	12,858	325	15,093	288	17%	-12%
B2	Rusper Road, South of Parham Road	8,177	83	5,022	68	-39%	-17%
B3	Ifield Green	13313	116	7603	76	-43%	-35%
B5	Link Road, s of Charlwood Road	3,857	37	13,519	66	251%	81%
B6	Link Road, South Access	3,857	37	9,190	48	138%	31%
A286	Primary link North of link road	3857	37	7492	28	94%	-24%

Note: Highway Links located on the CWMMC (B5, B6 and A286) have included the assumption that the CWMMC is open and operational.

15.10.25 Table 15.22 and Table 15.23 demonstrates the assessed Highway Links with a predicted traffic flow percentage increase of at least 10% between Future Year 2041 without the Proposed Development (Scenario 4) and Future Year 2041 with the Proposed Development (Scenario 5). The assessment of impacts determines both the change in magnitude of the impacts as well as their absolute levels.

15.10.26 The Highway Links in Table 15.21 have been assessed based on IEMA guidelines which states that Highway Links only need to be considered whereby there is a change in traffic greater than 30% (Rule 1), or more than 10% where the links contain sensitive links (Rule 2). Highway Links that were not deemed to be sensitive to change or have low sensitivity (as displayed in Table 15.12), which had percentage change of less than 30% in traffic from Scenario 4 to Scenario 5 (as displayed in Table 15.22 and Table 15.23) have been discounted from the assessment, and therefore have not been included in the Highway Links in Table 15.24.

15.10.27 The remaining Highway Links followed Rule 1 and were not deemed to be Sensitive to Change and had percentage increase values of less than 30% and therefore were discounted from the assessment.

Table 15.24: Highway Links to be Assessed for the Completed Development Stage

Link ID	Receptor	% Changes in Traffic Flow between Scenarios 4 and 5 – All Vehicles (AADT)	Sensitive to Change	Sensitivity	Reason for being Assessed
CR66	Crighton Road (rail crossing)	10%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
CR60	Peglar Way (one-way)	12%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
CR108	Station Way, Belgrave House	10%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
CR111	Station Way, Taj car park (one way)	15%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A68	A217, entrance to Tesco	61%	No	Low	Rule 1 - non-sensitive receptor and above 30%
A69	A2219 High Street, n of Northgate Rd	17%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A70	A2219 High Street, n of Northgate Rd	17%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A71	A2219 High Street, Northgate Rd to Pegler Way	20%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A72	A2219 High Street, s of The Boulevard (1-way)	13%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A79	A2219, High Street to Pegler Way (1-way)	11%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A80	A2219, High Street to Pegler Way (1-way)	11%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A122	Breezehurst Dr, n of Horsham Rd	19%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A170	High Street, Station Way to Pegler Way	14%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A177	Ifield Ave, Ifield Dr to Stagelands	18%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A178	Ifield Ave, Stagelands to Warren Dr	13%	Yes	High	Rule 2 - sensitive receptor and above 10%
A186	Ifield Ave, Warren Dr to Ifield Green	52%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A189	Ifield Wood	27%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A245	Pegler Way, Ifield Rd to High Street	11%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A246	Pegler Way, n of Ifield Rbt	13%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A247	Pegler Way, n of Ifield Rbt (1-way)	12%	Yes	Medium	Rule 2 - sensitive receptor and above 10%

Table 15.24: Highway Links to be Assessed for the Completed Development Stage					
Link ID	**Receptor**	**% Changes in Traffic Flow between Scenarios 4 and 5 – All Vehicles (AADT)**	**Sensitive to Change**	**Sensitivity**	**Reason for being Assessed**
A248	Pegler Way, n of Ifield Rbt (1-way)	12%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A260	Stagelands, n of Ifield Ave	11%	Yes	High	Rule 2 - sensitive receptor and above 10%
A266	Station Way, Friary Road to Station Road	13%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A267	Station Way, Friary Road to Station Road	13%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A268	Station Way, Friary Road to Station Road	13%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A269	Station Way, Station Road to Brighton Road (1-way)	15%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
B5	Link Road, s of Charlwood Road	250%	Yes	Low	Rule 2 - sensitive receptor and above 10%
B6	Link Road, South Access	138%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
A286	Primary link North of link road	96%	Yes	Medium	Rule 2 - sensitive receptor and above 10%

15.10.28 The above 29 Highway Links all demonstrate a net increase in traffic flows between Scenario 4 and 5. A total of five additional Highway Links demonstrate a net reduction in traffic flows and are summarised below in Table 15.25. The net reduction is due to the CWMMC being in-place and diverting traffic away from the nearby local highway network.

Table 15.25: Additional Highway Links to be Assessed for the Completed Development Stage (Net Reduction in Traffic Flows)					
Link ID	**Receptor**	**% Changes in Traffic Flow between Scenarios 4 and 5 – All Vehicles (AADT)**	**Sensitive to Change**	**Sensitivity**	**Reason for being Assessed**
CR107	Rusper Road	-38%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
2	Ifield Avenue, S of Link Road	-25%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
4	Charlwood Road, N of Link Road	-13%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
B2	Rusper Road, South of Parham Road	-39%	Yes	Medium	Rule 2 - sensitive receptor and above 10%
B3	Ifield Green	-43%	No	Medium	Rule 2 - sensitive receptor and above 10%

15.10.29 In accordance with the IEMA guidelines, the subsequent assessment has been undertaken for the 29 Highway Links (included in Table 15.24) that demonstrate a net increase in traffic flows to determine the significance of any potential effects of traffic flows on identified receptor Highway Links as a result of the Proposed Development. A total of five additional

Highway Links that demonstrate a net reduction in traffic flows (Table 15.25) have also been reviewed. Overall, 34 Highway Links have been assessed.

Changes in Daily Vehicle Flows on Local Roads (Links)

15.10.30 Table 15.26 provides a summary of the predicted changes in daily vehicle flows on the 34 Highway Links that are being assessed. A summary of the sensitivity and residual effect of each road link is also provided. Note that bold text included in this table shows a significant effect.

Table 15.26: Changes in Daily Vehicles Flows (Scenario 4 to 5)

Link ID	Highway link	% Changes in Traffic Flow between Scenarios 4 and 5 (All Vehicles AADT)	Magnitude of Impact (Scenario 4 to 5)	Sensitivity	Residual Effect
CR66	Crighton Road (rail crossing)	10%	Low	Medium	Negligible-Minor Adverse
CR60	Peglar Way (one-way)	12%	Low	Medium	Negligible-Minor Adverse
CR108	Station Way, Belgrave House	10%	Low	Medium	Negligible-Minor Adverse
CR111	Station Way, Taj car park (one way)	15%	Low	Medium	Negligible-Minor Adverse
A68	A217, entrance to Tesco	61%	High	Low	Minor Adverse
A69	A2219 High Street, n of Northgate Rd	17%	Low	Medium	Negligible-Minor Adverse
A70	A2219 High Street, n of Northgate Rd	17%	Low	Medium	Negligible-Minor Adverse
A71	A2219 High Street, Northgate Rd to Pegler Way	20%	Low	Medium	Negligible-Minor Adverse
A72	A2219 High Street, s of The Boulevard (1-way)	13%	Low	Medium	Negligible-Minor Adverse
A79	A2219, High Street to Pegler Way (1-way)	11%	Low	Medium	Negligible-Minor Adverse
A80	A2219, High Street to Pegler Way (1-way)	11%	Low	Medium	Negligible-Minor Adverse
A122	Breezehurst Dr, n of Horsham Rd	19%	Low	Medium	Negligible-Minor Adverse
A170	High Street, Station Way to Pegler Way	14%	Low	Medium	Negligible-Minor Adverse
A177	Ifield Ave, Ifield Dr to Stagelands	18%	Low	Medium	Negligible-Minor Adverse
A178	Ifield Ave, Stagelands to Warren Dr	13%	Low	High	Minor Adverse
A186	Ifield Ave, Warren Dr to Ifield Green	52%	Medium	Medium	Minor Adverse
A189	Ifield Wood	27%	Low	Medium	Negligible-Minor Adverse
A245	Pegler Way, Ifield Rd to High Street	11%	Low	Medium	Negligible-Minor Adverse
A246	Pegler Way, n of Ifield Rbt	13%	Low	Medium	Negligible-Minor Adverse

Table 15.26: Changes in Daily Vehicles Flows (Scenario 4 to 5)					
Link ID	**Highway link**	**% Changes in Traffic Flow between Scenarios 4 and 5 (All Vehicles AADT)**	**Magnitude of Impact (Scenario 4 to 5)**	**Sensitivity**	**Residual Effect**
A247	Pegler Way, n of Ifield Rbt (1-way)	12%	Low	Medium	Negligible-Minor Adverse
A248	Pegler Way, n of Ifield Rbt (1-way)	12%	Low	Medium	Negligible-Minor Adverse
A260	Stagelands, n of Ifield Ave	11%	Low	High	Minor Adverse
A266	Station Way, Friary Road to Station Road	13%	Low	Medium	Negligible-Minor Adverse
A267	Station Way, Friary Road to Station Road	13%	Low	Medium	Negligible-Minor Adverse
A268	Station Way, Friary Road to Station Road	13%	Low	Medium	Negligible-Minor Adverse
A269	Station Way, Station Road to Brighton Road (1-way)	15%	Low	Medium	Negligible-Minor Adverse
B5	Link Road, s of Charlwood Road	250%	High	Low	Minor Adverse
B6	Link Road, South Access	138%	High	Medium	**Moderate Adverse**
A286	Primary link North of link road	96%	High	Medium	**Moderate Adverse**
CR107	Rusper Road	-38%	Medium	Medium	Minor Beneficial
2	Ifield Avenue, S of Link Road	-25%	Low	Medium	Negligible-Minor Beneficial
4	Charlwood Road, N of Link Road	-13%	Low	Medium	Negligible-Minor Beneficial
B2	Rusper Road, South of Parham Road	-39%	Medium	Medium	Minor Beneficial
B3	Ifield Green	-43%	Medium	Medium	Minor Beneficial

Severance

15.10.31 Table 15.27 below identifies the level of severance using the IEMA guidance for the Future Year 2041 (Scenario 4 and Scenario 5). The magnitude of impact criteria for Severance is set out in Table 15.6. A summary of the sensitivity and residual effect of each road link is also provided.

Table 15.27: Predicted Two-Way Traffic Impact Over a 24-Hour Day (Completed Development Stage 2041)

Link ID	Receptor	Scenario 4		Scenario 5		% Increase		Magnitude of Impact	Sensitivity	Residual Effect
		All Vehicles	HGVs	All Vehicles	HGVs	All Vehicles	HGVs			
CR66	Crighton Road (rail crossing)	12,462	242	13,722	240	10%	-1%	Low	Medium	Negligible-Minor Adverse
CR60	Peglar Way (one-way)	12,725	196	14,301	246	12%	25%	Low	Medium	Negligible-Minor Adverse
CR108	Station Way, Belgrave House	7,454	118	8,199	115	10%	-2%	Low	Medium	Negligible-Minor Adverse
CR111	Station Way, Taj car park (one way)	7,974	123	9,143	121	15%	-1%	Low	Medium	Negligible-Minor Adverse
A68	A217, entrance to Tesco	17,813	199	28,688	1629	61%	719%	High	Low	Minor Adverse
A69	A2219 High Street, n of Northgate Rd	15,610	147	18,324	169	17%	15%	Low	Medium	Negligible-Minor Adverse
A70	A2219 High Street, n of Northgate Rd	15,610	147	18,324	169	17%	15%	Low	Medium	Negligible-Minor Adverse
A71	A2219 High Street, Northgate Rd to Pegler Way	12,701	115	15,298	138	20%	19%	Low	Medium	Negligible-Minor Adverse
A72	A2219 High Street, s of The Boulevard (1-way)	9,950	36	11,294	49	13%	37%	Low	Medium	Negligible-Minor Adverse
A79	A2219, High Street to Pegler Way (1-way)	23,483	128	26,122	154	11%	21%	Low	Medium	Negligible-Minor Adverse
A80	A2219, High Street to Pegler Way (1-way)	11,742	64	13,061	77	11%	21%	Low	Medium	Negligible-Minor Adverse
A122	Breezehurst Dr, n of Horsham Rd	6,841	0	8,135	95	19%	38405%	Low	Medium	Negligible-Minor Adverse
A170	High Street, Station Way to Pegler Way	11,431	156	13,044	156	14%	0%	Low	Medium	Negligible-Minor Adverse
A177	Ifield Ave, Ifield Dr to Stagelands	15,835	235	18,660	154	18%	-34%	Low	Medium	Negligible-Minor Adverse
A178	Ifield Ave, Stagelands to Warren Dr	20,552	278	23,276	124	13%	-55%	Low	High	Minor Adverse
A186	Ifield Ave, Warren Dr to Ifield Green	10,066	196	15,256	110	52%	-44%	Medium	Medium	Minor Adverse
A189	Ifield Wood	9,702	501	12,347	526	27%	5%	Low	Medium	Negligible-Minor Adverse
A245	Pegler Way, Ifield Rd to High Street	17,391	156	19,336	155	11%	-1%	Low	Medium	Negligible-Minor Adverse
A246	Pegler Way, n of Ifield Rbt	19,276	229	21,832	273	13%	19%	Low	Medium	Negligible-Minor Adverse
A247	Pegler Way, n of Ifield Rbt (1-way)	12,725	196	14,301	246	12%	25%	Low	Medium	Negligible-Minor Adverse
A248	Pegler Way, n of Ifield Rbt (1-way)	12,725	196	14,301	246	12%	25%	Low	Medium	Negligible-Minor Adverse
A260	Stagelands, n of Ifield Ave	13,848	273	15,308	219	11%	-20%	Low	High	Minor Adverse
A266	Station Way, Friary Road to Station Road	5,608	97	6,310	94	13%	-3%	Low	Medium	Negligible-Minor Adverse
A267	Station Way, Friary Road to Station Road	5,608	97	6,310	94	13%	-3%	Low	Medium	Negligible-Minor Adverse
A268	Station Way, Friary Road to Station Road	5,608	97	6,310	94	13%	-3%	Low	Medium	Negligible-Minor Adverse

Table 15.27: Predicted Two-Way Traffic Impact Over a 24-Hour Day (Completed Development Stage 2041)

Link ID	Receptor	Scenario 4		Scenario 5		% Increase		Magnitude of Impact	Sensitivity	Residual Effect
		All Vehicles	HGVs	All Vehicles	HGVs	All Vehicles	HGVs			
A269	Station Way, Station Road to Brighton Road (1-way)	7,974	123	9,143	121	15%	-1%	Low	Medium	Negligible-Minor Adverse
B5	Link Road, s of Charlwood Road	3,745	36	13,127	64	250%	81%	High	Low	Minor Adverse
B6	Link Road, South Access	3,745	36	8,924	47	138%	31%	High	Medium	**Moderate Adverse**
A286	Primary link North of link road	3,745	36	7,330	27	96%	-24%	High	Medium	**Moderate Adverse**
CR107	Rusper Road	14,430	24	8,875	0	-38%	-100%	Medium	Medium	Minor Beneficial
2	Ifield Avenue, S of Link Road	24,189	308	18,049	113	-25%	-63%	Low	Medium	Negligible-Minor Beneficial
4	Charlwood Road, N of Link Road	18,957	378	16,507	262	-13%	-31%	Low	Medium	Negligible-Minor Beneficial
B2	Rusper Road, South of Parham Road	7,941	80	4,877	66	-39%	-17%	Medium	Medium	Minor Beneficial
B3	Ifield Green	12928	113	7383	74	-43%	-35%	Medium	Medium	Minor Beneficial

Driver Delay

15.10.32 The average delay in terms of minutes is provided in Table 15.28. The assessment for driver delay is only assessing delay in the Future Year (Scenario 4 and 5) as the worst-case scenario.

Table 15.28: Predicted Driver Delay (measured in seconds) – Completed Development Stage 2041 Scenarios 4-5

No.	Junction	Scenario 4		Scenario 5		% Increase Scenario 4 and 5		Magnitude of Impact (Scenario 5)		Sensitivity	Residual Effect
		AM	PM	AM	PM	AM	PM	AM	PM		
CR66	Crighton Road (rail crossing)	75	65	89	66	18%	2%	Low	Low	Medium	Negligible-Minor Adverse
CR60	Peglar Way (one-way)	5	11	5	11	18%	1%	Low	Low	Medium	Negligible-Minor Adverse
CR108	Station Way, Belgrave House	27	28	26	28	0%	0%	Low	Low	Medium	Negligible-Minor Adverse
CR111	Station Way, Taj car park (one way)	14	16	15	17	1%	3%	Low	Low	Medium	Negligible-Minor Adverse
A68	A217, entrance to Tesco	8	8	8	7	0%	-2%	Low	Low	Low	Negligible Adverse
A69	A2219 High Street, n of Northgate Rd	13	12	13	12	4%	1%	Low	Low	Medium	Negligible-Minor Adverse
A70	A2219 High Street, n of Northgate Rd	0	0	0	0	-	-	Low	Low	Medium	Negligible-Minor Adverse
A71	A2219 High Street, Northgate Rd to Pegler Way	35	23	35	24	0%	3%	Low	Low	Medium	Negligible-Minor Adverse
A72	A2219 High Street, s of The Boulevard (1-way)	10	12	10	13	0%	6%	Low	Low	Medium	Negligible-Minor Adverse
A79	A2219, High Street to Pegler Way (1-way)	27	11	27	11	0%	8%	Low	Low	Medium	Negligible-Minor Adverse
A80	A2219, High Street to Pegler Way (1-way)	0	0	0	0	-	-	Low	Low	Medium	Negligible-Minor Adverse
A122	Breezehurst Dr, n of Horsham Rd	9	10	9	10	1%	-2%	Low	Low	Medium	Negligible-Minor Adverse
A170	High Street, Station Way to Pegler Way	3	2	2	2	-25%	16%	Low	Low	Medium	Negligible-Minor Adverse
A177	Ifield Ave, Ifield Dr to Stagelands	38	20	31	24	-18%	15%	Low	Low	Medium	Negligible-Minor Adverse
A178	Ifield Ave, Stagelands to Warren Dr	24	10	36	23	49%	127%	Medium	High	High	**Major Adverse**
A186	Ifield Ave, Warren Dr to Ifield Green	0	0	0	0	-	-	Low	Low	Medium	Negligible-Minor Adverse
A189	Ifield Wood	142	15	125	49	-11%	219%	Low	High	Medium	**Moderate Adverse**
A245	Pegler Way, Ifield Rd to High Street	16	18	16	18	0%	1%	Low	Low	Medium	Negligible-Minor Adverse
A246	Pegler Way, n of Ifield Rbt	10	12	10	13	0%	5%	Low	Low	Medium	Negligible-Minor Adverse
A247	Pegler Way, n of Ifield Rbt (1-way)	5	11	5	11	18%	1%	Low	Low	Medium	Negligible-Minor Adverse
A248	Pegler Way, n of Ifield Rbt (1-way)	0	0	0	0	-	-	Low	Low	Medium	Negligible-Minor Adverse
A260	Stagelands, n of Ifield Ave	26	5	9	6	-63%	1%	High	Low	High	**Major Adverse**
A266	Station Way, Friary Road to Station Road	27	28	26	28	0%	0%	Low	Low	Medium	Negligible-Minor Adverse
A267	Station Way, Friary Road to Station Road	0	0	0	0	-	-	Low	Low	Medium	Negligible-Minor Adverse

No.	Junction	Scenario 4		Scenario 5		% Increase Scenario 4 and 5		Magnitude of Impact (Scenario 5)		Sensitivity	Residual Effect
		AM	PM	AM	PM	AM	PM	AM	PM		
A268	Station Way, Friary Road to Station Road	9	9	9	9	2%	1%	Low	Low	Medium	Negligible-Minor Adverse
A269	Station Way, Station Road to Brighton Road (1-way)	14	16	15	17	1%	3%	Low	Low	Medium	Negligible-Minor Adverse
B5	Link Road, s of Charlwood Road	0	0	5	6	-	-	Low	Low	Low	Negligible
B6	Link Road, South Access	7	7	11	10	68%	45%	High	Medium	Medium	**Moderate Adverse**
A286	Primary link North of link road	0	0	0	1	-39%	300%	Medium	High	Medium	**Moderate Adverse**
CR107	Rusper Road	5	6	6	6	6%	-10%	Low	Low	Medium	Negligible-Minor Adverse
2	Ifield Avenue, S of Link Road	0	0	27	23	-*	-*	Very Low	Very Low	Medium	Negligible Adverse
4	Charlwood Road, N of Link Road	4	6	2	5	-49%	-19%	Medium	Low	Medium	Minor Beneficial
B2	Rusper Road, South of Parham Road	0	0	1	1	417%	194%	High	High	Medium	**Moderate Adverse**
B3	Ifield Green	8	4	401	155	4728%	3876%	High	High	Medium	**Moderate Adverse**

15.10.33 As the magnitude of impact assessment is made for both the AM and PM peak hour periods, a residual effect is determined for both periods and as such two effects are generated. In instances where two different residual effects are determined, the worst case effect is shown in the table above.

Pedestrian and Cycle Delay

15.10.34 In the absence of any guidance, professional experience and judgement has been used to determine the magnitude of impact for the assessment of pedestrian and cycle delay. This has been based on a threshold of vehicle traffic doubling from Scenario 4 to 5.

15.10.35 Table 15.29 identifies that the Proposed Development is expected to have a below doubling in vehicle flows for 27 of the assessed 29 Highway Links (between Scenarios 4 and 5). Therefore, there are two Highway Links (Links B5 and B6) which have a doubling of vehicle flows between Scenarios 4 and 5.

15.10.36 All road links that have a below 100% increase in vehicle flows between Scenarios 4 and 5 , is determined to have a low magnitude of impact. Road link A286 is determined to have a medium magnitude of impact, as the percentage increase of 96% is determined to be close to the 100% threshold. The two Highway Links that have over 100% increase in vehicle flows (Links B5 and B6) are assessed in further detail, and are determined to have a high magnitude of impact. The percentage increase in vehicle flows for the two links is shown below in Table 15.29.

15.10.37 Highway Links B5 and B6 are located on the CWMMC. This road which forms part of the Proposed Development and has been designed to include formalised pedestrian crossing points across the full extent of the road, which will assist in minimising delays to pedestrians and cyclists, as it will afford them priority to cross, and not require them to wait for a break in traffic. These are shown on the Arcadis scheme plans which accompany the application (Drawing References: 10051123-ARC-300-1A-DR-LA-00001, 10051123-ARC-300-1B-DR-LA-00001, and 10051123-ARC-300-1A-DR-LA-00002).

15.10.38 A total of five additional Highway Links have been demonstrated to generate a net reduction in vehicle trips between Scenarios 4 and 5. The Highway Links are CR107, 2, 4, B2 and B3. This will result in a beneficial impact upon pedestrian and cycle delay for these Highway Links.

15.10.39 A summary of the assessment of pedestrian and cycle delay as a result changes in traffic from the completed development stage of the Proposed Development for each identified road link from Table 15.24, s set out below in Table 15.29**.** The magnitude of impact criteria for Pedestrian and Cycle delay is set out in Table 15.6. Note that bold text included in this table shows a significant effect.

Table 15.29: Assessment of Pedestrian and Cycle Delay – Completed Development Stage 2041

Link ID	Highway link	% Changes in Traffic Flow between Scenarios 4 and 5 (All Vehicles AADT)	Magnitude of Impact (Scenario 4 to 5)	Sensitivity	Residual Effect
CR66	Crighton Road (rail crossing)	10%	Low	Medium	Negligible-Minor Adverse
CR60	Peglar Way (one-way)	12%	Low	Medium	Negligible-Minor Adverse
CR108	Station Way, Belgrave House	10%	Low	Medium	Negligible-Minor Adverse
CR111	Station Way, Taj car park (one way)	15%	Low	Medium	Negligible-Minor Adverse
A68	A217, entrance to Tesco	61%	Low	Low	Negligible Adverse
A69	A2219 High Street, n of Northgate Rd	17%	Low	Medium	Negligible-Minor Adverse
A70	A2219 High Street, n of Northgate Rd	17%	Low	Medium	Negligible-Minor Adverse

Table 15.29: Assessment of Pedestrian and Cycle Delay – Completed Development Stage 2041					
Link ID	**Highway link**	**% Changes in Traffic Flow between Scenarios 4 and 5 (All Vehicles AADT)**	**Magnitude of Impact (Scenario 4 to 5)**	**Sensitivity**	**Residual Effect**
A71	A2219 High Street, Northgate Rd to Pegler Way	20%	Low	Medium	Negligible-Minor Adverse
A72	A2219 High Street, s of The Boulevard (1-way)	13%	Low	Medium	Negligible-Minor Adverse
A79	A2219, High Street to Pegler Way (1-way)	11%	Low	Medium	Negligible-Minor Adverse
A80	A2219, High Street to Pegler Way (1-way)	11%	Low	Medium	Negligible-Minor Adverse
A122	Breezehurst Dr, n of Horsham Rd	19%	Low	Medium	Negligible-Minor Adverse
A170	High Street, Station Way to Pegler Way	14%	Low	Medium	Negligible-Minor Adverse
A177	Ifield Ave, Ifield Dr to Stagelands	18%	Low	Medium	Negligible-Minor Adverse
A178	Ifield Ave, Stagelands to Warren Dr	13%	Low	High	Minor Adverse
A186	Ifield Ave, Warren Dr to Ifield Green	52%	Low	Medium	Negligible-Minor Adverse
A189	Ifield Wood	27%	Low	Medium	Negligible-Minor Adverse
A245	Pegler Way, Ifield Rd to High Street	11%	Low	Medium	Negligible-Minor Adverse
A246	Pegler Way, n of Ifield Rbt	13%	Low	Medium	Negligible-Minor Adverse
A247	Pegler Way, n of Ifield Rbt (1-way)	12%	Low	Medium	Negligible-Minor Adverse
A248	Pegler Way, n of Ifield Rbt (1-way)	12%	Low	Medium	Negligible-Minor Adverse
A260	Stagelands, n of Ifield Ave	11%	Low	High	Minor Adverse
A266	Station Way, Friary Road to Station Road	13%	Low	Medium	Negligible-Minor Adverse
A267	Station Way, Friary Road to Station Road	13%	Low	Medium	Negligible-Minor Adverse
A268	Station Way, Friary Road to Station Road	13%	Low	Medium	Negligible-Minor Adverse
A269	Station Way, Station Road to Brighton Road (1-way)	15%	Low	Medium	Negligible-Minor Adverse
B5	Link Road, s of Charlwood Road	250%	High	Low	Minor Adverse
B6	Link Road, South Access	138%	High	Medium	**Moderate Adverse**
A286	Primary link North of link road	96%	Medium	Medium	Minor Adverse
CR107	Rusper Road	-38%	Low	Medium	Negligible-Minor Beneficial

Table 15.29: Assessment of Pedestrian and Cycle Delay – Completed Development Stage 2041					
Link ID	Highway link	% Changes in Traffic Flow between Scenarios 4 and 5 (All Vehicles AADT)	Magnitude of Impact (Scenario 4 to 5)	Sensitivity	Residual Effect
2	Ifield Avenue, S of Link Road	-25%	Low	Medium	Negligible-Minor Beneficial
4	Charlwood Road, N of Link Road	-13%	Low	Medium	Negligible-Minor Beneficial
B2	Rusper Road, South of Parham Road	-39%	Low	Medium	Negligible-Minor Beneficial
B3	Ifield Green	-43%	Low	Medium	Negligible-Minor Beneficial

15.10.40 Of the above links, new pedestrian crossing facilities are proposed on A178, A186, A260 B5, B6 and A286 incorporated as part of the Proposed Development and traffic mitigation measures, which will be secured through the Section 106 legal agreement.

15.10.41 The parameter plan included at Figure 15.5 illustrates the pedestrian and cycle routes across the Proposed Development. Additional illustrations of the pedestrian and cycle routes across the Site are included in ES Appendix 15.4.

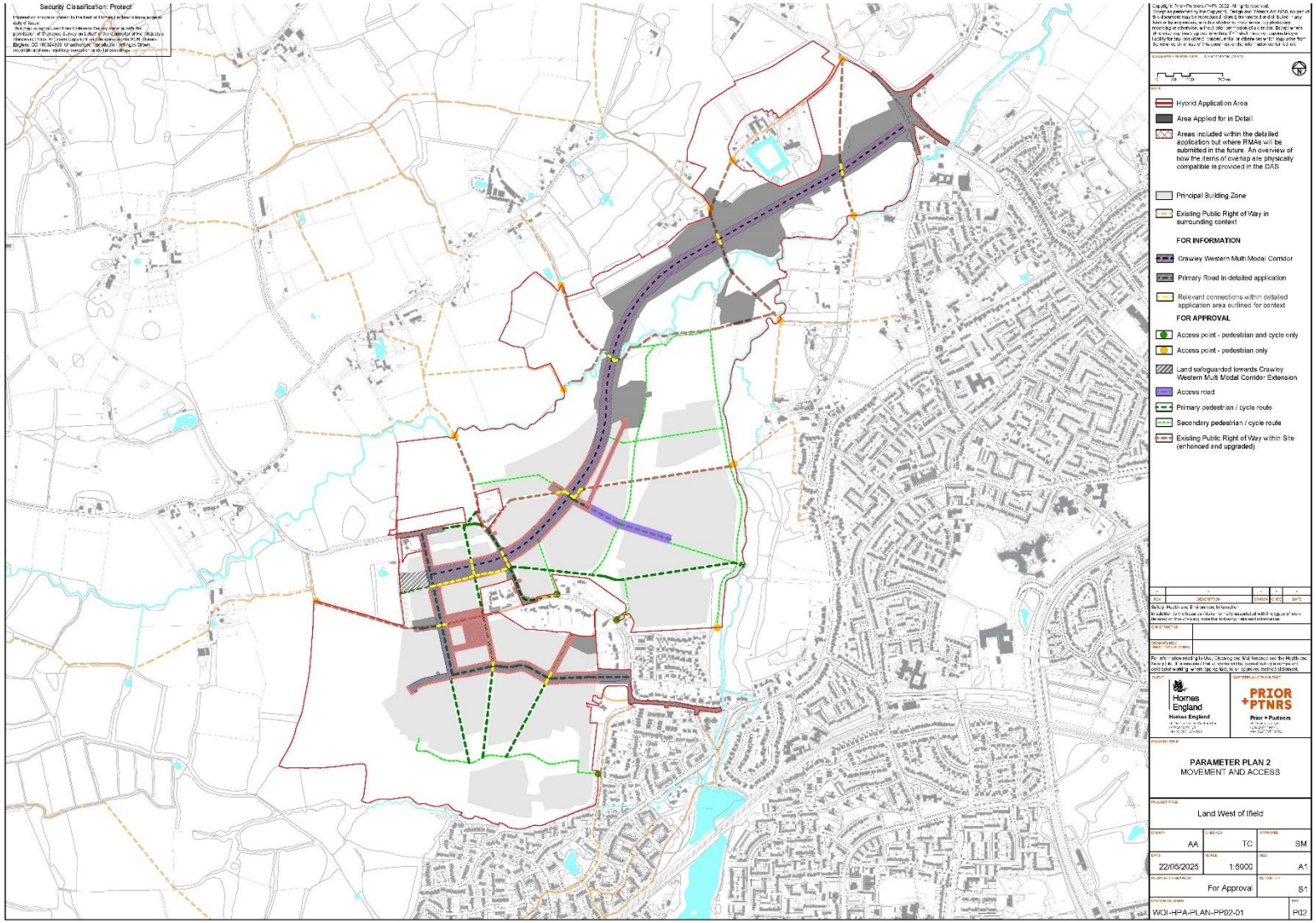

Figure 15.5: Movement and Access Parameter Plan

Pedestrian Amenity

15.10.42 This section reviews pedestrian amenity during Scenarios 4-5 (Future Year 2041). The term pedestrian amenity is included in IEMA guidance. As set out in the methodology section, the IEMA guidelines suggest that the threshold for judging the magnitude of impact in pedestrian amenity would be where the traffic flow is doubled.

15.10.43 Table 15.30 identifies that the Proposed Development is expected to have a below 100% increase in vehicle flows for 27 of the assessed 29 Highway Links and Therefore, there are two Highway Links (Links B5 and B6) which have increased flows of at least 100% between Scenarios 4 and 5. The remaining 27 Highway Links have not doubled in vehicle flows and are categorised as low in the level of magnitude.

15.10.44 A total of five additional Highway Links have been demonstrated to generate a net reduction in vehicle trips between Scenarios 4 and 5. The Highway Links are CR107, 2, 4, B2 and B3. This will result in a beneficial impact upon pedestrian and cycle delay for these Highway Links.

15.10.45 A summary of the potential effects on pedestrian amenity a result changes in traffic from the completed development stage of the Proposed Development for each identified road link is set out below in Table 15.30. The magnitude of impact criteria for Pedestrian and Cycle is set out in Table 15.6. Note that bold text included in this table shows a significant effect.

Table 15.30: Assessment of Pedestrian Amenity – Completed Development Stage 2041

Link ID	Highway link	% Changes in Traffic Flow between Scenarios 4 and 5 (All Vehicles AADT)	Magnitude of Impact (Scenario 4 to 5)	Sensitivity	Residual Effect
CR66	Crighton Road (rail crossing)	10%	Low	Medium	Negligible-Minor Adverse
CR60	Peglar Way (one-way)	12%	Low	Medium	Negligible-Minor Adverse
CR108	Station Way, Belgrave House	10%	Low	Medium	Negligible-Minor Adverse
CR111	Station Way, Taj car park (one way)	15%	Low	Medium	Negligible-Minor Adverse
A68	A217, entrance to Tesco	61%	Low	Low	Negligible Adverse
A69	A2219 High Street, n of Northgate Rd	17%	Low	Medium	Negligible-Minor Adverse
A70	A2219 High Street, n of Northgate Rd	17%	Low	Medium	Negligible-Minor Adverse
A71	A2219 High Street, Northgate Rd to Pegler Way	20%	Low	Medium	Negligible-Minor Adverse
A72	A2219 High Street, s of The Boulevard (1-way)	13%	Low	Medium	Negligible-Minor Adverse
A79	A2219, High Street to Pegler Way (1-way)	11%	Low	Medium	Negligible-Minor Adverse
A80	A2219, High Street to Pegler Way (1-way)	11%	Low	Medium	Negligible-Minor Adverse
A122	Breezehurst Dr, n of Horsham Rd	19%	Low	Medium	Negligible-Minor Adverse

Table 15.30: Assessment of Pedestrian Amenity – Completed Development Stage 2041

Link ID	Highway link	% Changes in Traffic Flow between Scenarios 4 and 5 (All Vehicles AADT)	Magnitude of Impact (Scenario 4 to 5)	Sensitivity	Residual Effect
A170	High Street, Station Way to Pegler Way	14%	Low	Medium	Negligible-Minor Adverse
A177	Ifield Ave, Ifield Dr to Stagelands	18%	Low	Medium	Negligible-Minor Adverse
A178	Ifield Ave, Stagelands to Warren Dr	13%	Low	High	Minor Adverse
A186	Ifield Ave, Warren Dr to Ifield Green	52%	Low	Medium	Negligible-Minor Adverse
A189	Ifield Wood	27%	Low	Medium	Negligible-Minor Adverse
A245	Pegler Way, Ifield Rd to High Street	11%	Low	Medium	Negligible-Minor Adverse
A246	Pegler Way, n of Ifield Rbt	13%	Low	Medium	Negligible-Minor Adverse
A247	Pegler Way, n of Ifield Rbt (1-way)	12%	Low	Medium	Negligible-Minor Adverse
A248	Pegler Way, n of Ifield Rbt (1-way)	12%	Low	Medium	Negligible-Minor Adverse
A260	Stagelands, n of Ifield Ave	11%	Low	High	Minor Adverse
A266	Station Way, Friary Road to Station Road	13%	Low	Medium	Negligible-Minor Adverse
A267	Station Way, Friary Road to Station Road	13%	Low	Medium	Negligible-Minor Adverse
A268	Station Way, Friary Road to Station Road	13%	Low	Medium	Negligible-Minor Adverse
A269	Station Way, Station Road to Brighton Road (1-way)	15%	Low	Medium	Negligible-Minor Adverse
B5	Link Road, s of Charlwood Road	250%	High	Low	Minor Adverse
B6	Link Road, South Access	138%	High	Medium	**Moderate Adverse**
A286	Primary link North of link road	96%	Medium	Medium	Minor Adverse
CR107	Rusper Road	-38%	Low	Medium	Negligible-Minor Beneficial
2	Ifield Avenue, S of Link Road	-25%	Low	Medium	Negligible-Minor Beneficial
4	Charlwood Road, N of Link Road	-13%	Low	Medium	Negligible-Minor Beneficial
B2	Rusper Road, South of Parham Road	-39%	Low	Medium	Negligible-Minor Beneficial
B3	Ifield Green	-43%	Low	Medium	Negligible-Minor Beneficial

Accidents and Safety

15.10.46 Whilst there will be a level of additional traffic associated from the Proposed Development along some of the Highway Links, it is not expected that it would have a material adverse effect on accidents and safety. As outlined in the Transport Assessment (WOI-HPA-DOC-TA-01) and ES Volume 1 Chapter 4: Proposed Development Description, the Proposed Development will include the provision of new infrastructure which will be designed to the latest standards and best practice. Additionally, changes to the existing transport network infrastructure, especially those related to providing improved pedestrian and cycle infrastructure, will provide more dedicated space for more vulnerable modes, which is likely to reduce conflicts and improve safety.

15.10.47 The West Sussex Local Transport Plan has a strategy to reduce accident rates over time. Notwithstanding this, no specific mitigation measures are necessary to address any existing accident hotspots on the network and neither would the proposals lead to the creation of any accident hotspots. Hence it is expected that the Proposed Development would not significantly alter the injury accident rate across the network.

15.10.48 The sensitivity of Highway Links CR66, CR60, CR108, CR111, A69, A70, A71, A72, A79, A80, A122, A170, A177, A186, A189, A245, A256, A247, A248, A266, A267, A268, A269, B6 and A286 are assessed to be medium, and the magnitude of impact is assessed to be low. Therefore, there is likely to be a direct permanent, long-term residual effect of Negligible-Minor Adverse (not significant).

15.10.49 The sensitivity of highway link A178 and A260 is assessed to be high, and the magnitude of impact is assessed to be low. Therefore, there is likely to be a direct permanent, long-term residual effect of Minor Adverse (not significant).

15.10.50 The sensitivity of highway link A68 and B5 is assessed to be low and the magnitude of impact is assessed to be low. Therefore, there is likely to be a direct permanent, long-term residual effect of Negligible adverse (not significant).

15.10.51 The sensitivity of Highway Links CR107, 2, 4, B2 and B3 is assessed to be medium and the magnitude of impact is assessed to be low. Therefore, there is likely to be a direct permanent, long-term residual effect of Negligible-Minor beneficial (not significant).

Fear and Intimidation

15.10.52 This section reviews pedestrian amenity during Scenarios 4 and 5, and is summarised below in Table 15.31.

Highway Links Summary

15.10.53 A detailed environmental assessment has been undertaken above for the 34 Highway Links, to determine the significance of effects of the Proposed Development's traffic flows on receptors. A summary of the residual effects for the assessed Highway Links is provided below in Table 15.32.

Table 15.31: Assessment of Fear and Intimidation – Completed Development

Link ID	Road Name	Scenario 4				Scenario 5				Difference (Scenario 4 vs 5)			Residual Effect	
		18hr Traffic AAWT per hour	18hr Traffic HGV	Degree of Hazard Score	Level of Fear and Intimidation	18hr Traffic AAWT per hour	18hr Traffic HGV	Degree of Hazard Score	Level of Fear and Intimidation	Change in 18hr Traffic AAWT per hour	Change in 18hr Traffic HGV	Magnitude of Change	Sensitivity	Residual Effect
CR66	Crighton Road (rail crossing)	713	249	10	Small	785	247	10	Small	72	-2	Very Low	Medium	Negligible Adverse
CR60	Peglar Way (one-way)	728	202	10	Small	818	253	10	Small	90	51	Very Low	Medium	Negligible Adverse
CR108	Station Way, Belgrave House	426	121	0	Small	469	119	0	Small	43	-3	Very Low	Medium	Negligible Adverse
CR111	Station Way, Taj car park (one way)	456	126	0	Small	523	125	0	Small	67	-2	Very Low	Medium	Negligible Adverse
A68	A217, entrance to Tesco	1,548	1,693	30	Great	1,641	1677	30	Great	94	-16	Very Low	Low	Negligible Adverse
A69	A2219 High Street, n of Northgate Rd	893	151	10	Small	1,048	174	10	Small	155	23	Very Low	Medium	Negligible Adverse
A70	A2219 High Street, n of Northgate Rd	893	151	10	Small	1,048	174	10	Small	155	23	Very Low	Medium	Negligible Adverse
A71	A2219 High Street, Northgate Rd to Pegler Way	727	119	10	Small	875	142	10	Small	149	23	Very Low	Medium	Negligible Adverse
A72	A2219 High Street, s of The Boulevard (1-way)	569	37	0	Small	646	50	10	Small	77	14	Very Low	Medium	Negligible Adverse

Table 15.31: Assessment of Fear and Intimidation – Completed Development

Link ID	Road Name	Scenario 4				Scenario 5				Difference (Scenario 4 vs 5)			Residual Effect	
		18hr Traffic AAWT per hour	18hr Traffic HGV	Degree of Hazard Score	Level of Fear and Intimidation	18hr Traffic AAWT per hour	18hr Traffic HGV	Degree of Hazard Score	Level of Fear and Intimidation	Change in 18hr Traffic AAWT per hour	Change in 18hr Traffic HGV	Magnitude of Change	Sensitivity	Residual Effect
A79	A2219, High Street to Pegler Way (1-way)	1,343	132	20	Moderate	1,494	159	20	Moderate	151	27	Very Low	Medium	Negligible Adverse
A80	A2219, High Street to Pegler Way (1-way)	672	66	10	Small	747	79	10	Small	76	14	Very Low	Medium	Negligible Adverse
A122	Breezehurst Dr, n of Horsham Rd	391	0	0	Small	465	98	0	Small	74	98	Very Low	Medium	Negligible Adverse
A170	High Street, Station Way to Pegler Way	654	161	10	Small	746	161	10	Small	92	0	Very Low	Medium	Negligible Adverse
A177	Ifield Ave, Ifield Dr to Stagelands	906	242	10	Small	1,068	159	10	Small	162	-83	Very Low	Medium	Negligible Adverse
A178	Ifield Ave, Stagelands to Warren Dr	1,176	287	10	Small	1,332	128	20	Moderate	156	-159	Low	High	Minor Adverse
A186	Ifield Ave, Warren Dr to Ifield Green	576	202	0	Small	873	113	10	Small	297	-89	Very Low	Medium	Negligible Adverse
A189	Ifield Wood	555	516	0	Small	706	541	10	Small	151	26	Very Low	Medium	Negligible Adverse
A245	Pegler Way, Ifield Rd to High Street	995	161	10	Small	1,106	160	10	Small	111	-1	Very Low	Medium	Negligible Adverse

Table 15.31: Assessment of Fear and Intimidation – Completed Development

Link ID	Road Name	Scenario 4				Scenario 5				Difference (Scenario 4 vs 5)			Residual Effect	
		18hr Traffic AAWT per hour	18hr Traffic HGV	Degree of Hazard Score	Level of Fear and Intimidation	18hr Traffic AAWT per hour	18hr Traffic HGV	Degree of Hazard Score	Level of Fear and Intimidation	Change in 18hr Traffic AAWT per hour	Change in 18hr Traffic HGV	Magnitude of Change	Sensitivity	Residual Effect
A246	Pegler Way, n of Ifield Rbt	1,103	235	10	Small	1,249	281	20	Moderate	146	46	Low	Medium	Negligible-Minor Adverse
A247	Pegler Way, n of Ifield Rbt (1-way)	728	202	10	Small	818	253	10	Small	90	51	Very Low	Medium	Negligible Adverse
A248	Pegler Way, n of Ifield Rbt (1-way)	728	202	10	Small	818	253	10	Small	90	51	Very Low	Medium	Negligible Adverse
A260	Stagelands, n of Ifield Ave	792	281	10	Small	876	225	10	Small	84	-56	Very Low	High	Negligible Minor Adverse
A266	Station Way, Friary Road to Station Road	321	100	0	Small	361	97	0	Small	40	-3	Very Low	Medium	Negligible Adverse
A267	Station Way, Friary Road to Station Road	321	100	0	Small	361	97	0	Small	40	-3	Very Low	Medium	Negligible Adverse
A268	Station Way, Friary Road to Station Road	321	100	0	Small	361	97	0	Small	40	-3	Very Low	Medium	Negligible Adverse
A269	Station Way, Station Road to Brighton Road (1-way)	456	126	0	Small	523	125	0	Small	67	-2	Very Low	Medium	Negligible Adverse

Table 15.31: Assessment of Fear and Intimidation – Completed Development

Link ID	Road Name	Scenario 4				Scenario 5				Difference (Scenario 4 vs 5)			Residual Effect	
		18hr Traffic AAWT per hour	18hr Traffic HGV	Degree of Hazard Score	Level of Fear and Intimidation	18hr Traffic AAWT per hour	18hr Traffic HGV	Degree of Hazard Score	Level of Fear and Intimidation	Change in 18hr Traffic AAWT per hour	Change in 18hr Traffic HGV	Magnitude of Change	Sensitivity	Residual Effect
B5	Link Road, s of Charlwood Road	214	37	0	Small	751	66	0	Small	537	30	Very Low	Low	Negligible Adverse
B6	Link Road, South Access	214	37	0	Small	511	48	0	Small	296	11	Very Low	Medium	Negligible Adverse
A286	Primary link North of link road	214	37	0	Small	416	28	0	Small	202	-9	Very Low	Medium	Negligible Adverse
CR107	Rusper Road	826	25	10	Small	508	0	0	Small	-318	-25	Very Low	Medium	Negligible Beneficial
2	Ifield Avenue, S of Link Road	1,384	317	20	Moderate	1,033	116	10	Small	-351	-201	Low	Medium	Negligible-Minor Beneficial
4	Charlwood Road, N of Link Road	1,085	389	10	Small	944	269	10	Small	-140	-120	Very Low	Medium	Negligible Beneficial
B2	Rusper Road, South of Parham Road	454	83	0	Small	279	68	0	Small	-175	-14	Very Low	Medium	Negligible Beneficial
B3	Ifield Green	740	116	10	Small	422	76	0	Small	-317	-40	Very Low	Medium	Negligible Beneficial

Table 15.32: Highway Links Summary – Completed Development Stage 2041

Link ID	Highway link	Residual Effect						
		Changes in Daily Vehicle Flows	Severance	Driver Delay	Pedestrian Delay	Pedestrian Amenity	Accidents and Safety	Fear and Intimidation
CR66	Crighton Road (rail crossing)	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
CR60	Peglar Way (one-way)	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
CR108	Station Way, Belgrave House	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
CR111	Station Way, Taj car park (one way)	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A68	A217, entrance to Tesco	Minor Adverse	Minor Adverse	Negligible Adverse	Negligible Adverse	Negligible	Negligible	Negligible Adverse
A69	A2219 High Street, n of Northgate Rd	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A70	A2219 High Street, n of Northgate Rd	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A71	A2219 High Street, Northgate Rd to Pegler Way	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A72	A2219 High Street, s of The Boulevard (1-way)	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A79	A2219, High Street to Pegler Way (1-way)	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A80	A2219, High Street to Pegler Way (1-way)	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A122	Breezehurst Dr, n of Horsham Rd	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse

Table 15.32: Highway Links Summary – Completed Development Stage 2041								
Link ID	**Highway link**	**Residual Effect**						
		Changes in Daily Vehicle Flows	**Severance**	**Driver Delay**	**Pedestrian Delay**	**Pedestrian Amenity**	**Accidents and Safety**	**Fear and Intimidation**
A170	High Street, Station Way to Pegler Way	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A177	Ifield Ave, Ifield Dr to Stagelands	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A178	Ifield Ave, Stagelands to Warren Dr	Negligible	Minor Adverse	**Major Adverse**	Minor Adverse	Minor Adverse	Minor Adverse	Minor Adverse
A186	Ifield Ave, Warren Dr to Ifield Green	Minor Adverse	Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A189	Ifield Wood	Negligible-Minor Adverse	Negligible-Minor Adverse	**Moderate Adverse**	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A245	Pegler Way, Ifield Rd to High Street	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A246	Pegler Way, n of Ifield Rbt	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse
A247	Pegler Way, n of Ifield Rbt (1-way)	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A248	Pegler Way, n of Ifield Rbt (1-way)	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A260	Stagelands, n of Ifield Ave	Minor Adverse	Minor Adverse	**Major Adverse**	Minor Adverse	Minor Adverse	Minor Adverse	Minor Adverse
A266	Station Way, Friary Road to Station Road	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse

Table 15.32: Highway Links Summary – Completed Development Stage 2041

Link ID	Highway link	Residual Effect						
		Changes in Daily Vehicle Flows	Severance	Driver Delay	Pedestrian Delay	Pedestrian Amenity	Accidents and Safety	Fear and Intimidation
A267	Station Way, Friary Road to Station Road	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A268	Station Way, Friary Road to Station Road	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
A269	Station Way, Station Road to Brighton Road (1-way)	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
B5	Link Road, s of Charlwood Road	Minor Adverse	Minor Adverse	Negligible	Minor Adverse	Minor Adverse	Negligible	Negligible Adverse
B6	Link Road, South Access	**Moderate Adverse**	**Moderate Adverse**	**Moderate Adverse**	**Moderate Adverse**	**Moderate Adverse**	Negligible-Minor Adverse	Negligible Adverse
A286	Primary link North of link road	**Moderate Adverse**	**Moderate Adverse**	**Moderate Adverse**	Minor Adverse	Minor Adverse	Negligible-Minor Adverse	Negligible Adverse
CR107	Rusper Road	Minor Beneficial	Minor Beneficial	Negligible-Minor	Negligible-Minor Beneficial	Negligible-Minor Beneficial	Negligible-Minor Beneficial	Negligible Beneficial
2	Ifield Avenue, S of Link Road	Negligible-Minor Beneficial	Negligible-Minor Beneficial	Negligible Adverse	Negligible-Minor Beneficial	Negligible-Minor Beneficial	Negligible-Minor Beneficial	Negligible-Minor Beneficial
4	Charlwood Road, N of Link Road	Negligible-Minor Beneficial	Negligible-Minor Beneficial	Minor Beneficial	Negligible-Minor Beneficial	Negligible-Minor Beneficial	Negligible-Minor Beneficial	Negligible Beneficial
B2	Rusper Road, South of Parham Road	Minor Beneficial	Minor Beneficial	**Moderate Adverse**	Negligible-Minor Beneficial	Negligible-Minor Beneficial	Negligible-Minor Beneficial	Negligible Beneficial
B3	Ifield Green	Minor Beneficial	Minor Beneficial	**Moderate Adverse**	Negligible-Minor Beneficial	Negligible-Minor Beneficial	Negligible-Minor Beneficial	Negligible Beneficial

Public Transport Impact

15.10.54 Detailed analysis of the public transport impact assessment is included in Chapter 11 of the TA (WOI-HPA-DOC-TA-01) and is summarised below, which is based on Scenario 5, replicating the full build out and occupation of the Proposed Development.

15.10.55 The trip generation assessment set out in the TA (WOI-HPA-DOC-TA-01) submitted as part of this application, sets out that a total of 712 additional external passengers during the morning peak hour and 948 passengers during the evening peak hour are forecast to travel by public transport (bus and rail).

Bus

15.10.56 As described previously, the Site is accessible by bus with three bus routes (2, 21, 200) stopping at the nearby bus stops on Ifield Green, Ifield Drive and Hyde Drive. These bus stops are accessible within 1.4km walking distance of the Site. While outside of a typically accepted distance of 400m to a bus stop, these services offer a frequent service to a number of key destinations, including rail station, town centre, Gatwick Airport and Manor Royal. It is generally accepted that people are willing to walk longer distances for high quality frequent services, and as such some residents are likely to walk this distance to a stop.

15.10.57 The Proposed Development will add a further two bus services (route A and B) that will route through the development site, using the CWMMC, as detailed in Section 5 of the TA. These will have a combined frequency of 5-6 minutes. Although the existing bus services do provide greater flexibility, for the majority of journeys the additional services and higher frequency would provide new routes choices that would provide an exemplar level of service with high quality interchange possibilities within Crawley Bus Station or further north at Gatwick Airport, to East Surrey Hospital for example. These services will provide additional benefit to not only new residents but also existing local residents who will be able to use these new bus services.

15.10.58 Overall taking into account and existing and proposed bus provision within proximity of the Site, there is a combined frequency of 16 buses per hour at the nearby bus stops in both the morning and evening peak hours. The existing and proposed bus routes will be able to accommodate the additional 573 external bus passengers in the morning peak hour and 765 external bus passengers in the evening peak hour.

15.10.59 In the context of magnitude of Impact (Sustainable Transport) set out in Table 15.7, the sensitivity of the local bus stops are considered to be low and the magnitude of impact is assessed to be moderate. Therefore, there is likely to be a direct permanent, long-term residual effect of Negligible-Minor Adverse (not significant). However, the Proposed Development is committed to providing additional bus services and routes (secured through a Section 106 legal agreement) which will reduce the adverse impact on the existing bus services.

Rail

15.10.60 Ifield Rail Station is located approximately 1.2km from the Site. Ifield Rail Station currently has a regular service at all times of day. During the morning peak, two trains per hour are provided towards London, Crawley, Three Bridges and Gatwick Airport, with five trains per hour towards Horsham. During the evening peak, five trains run from London to Ifield and two trains per hour run from Horsham to Ifield. During off-peak periods, two trains per hour typically serve Ifield in each direction.

15.10.61 The scheme is likely to generate an additional 139 external rail passengers in the morning peak hour and 184 external rail passengers in the evening peak hour. These will be accommodated at the Ifield Rail Station, which will be improved as part of the proposals.

These improvements will be secured through the Section 106 agreement. This information has been obtained from the trip generation assessment set out in the TA submitted as part of the planning application.

15.10.62 In the context of Magnitude of Impact (Sustainable Transport) set out in Table 15.7, the sensitivity of Ifield Station is considered to be low, and the magnitude of impact is assessed to be moderate. Therefore, there is likely to be a direct permanent, long-term residual effect of Negligible-Minor Adverse (not significant).

Ifield Station Improvements

15.10.63 The Applicant has been discussing with Network Rail and Govia Thameslink the potential for making improvements to Ifield Station to accommodate the increased in rail passenger demand and promote modal change, alongside creating a greater sense of arrival and prominence of the station, increase the cycle parking provision and improve the waiting area for London bound passengers in particular. A feasibility study funded by Homes England has identified a package of improvements, that they will contribute towards, which would be delivered by the Train Operator / Network Rail. This contribution will be secured through the Section 106 legal agreement.

Walking and Cycling Impact

15.10.64 The Proposed Development is expected to generate an additional 392 external walk and cycle trips in the morning peak hour and 561 external walk and cycle trips in the evening peak hour. This information has been obtained from the trip generation assessment set out in the TA submitted as part of the planning application. In addition to the wide network of pedestrian and cycle routes within the Site, routes to the neighbouring communities will be maintained and enhanced through contribution to the LCWIP programme, secured through the Section 106 legal agreement.

15.10.65 The sensitivity of the pedestrian link receptors 1, 2, 3, 6, 7 and 8 are assessed to be low and the magnitude of impact is assessed to be medium. Therefore, there is likely to be a direct permanent, long-term residual effect of Negligible-Minor Adverse (not significant).

15.10.66 It should be noted that for pedestrian link receptors 6, 7 and 8 that pedestrian infrastructure is being provided to limit the adverse impacts of the increased pedestrian flows. Passive provision of pedestrian crossings associated with the CWMMC (within the site) is being provided on pedestrian link receptors 6 and 7, and signalised crossing facilities associated with the CWMMC (within the site) are being provided on pedestrian link receptor 8 as part of the Proposed Development. The improvements highlighted at pedestrian link receptors 6, 7 and 8 (which will be secured through the Section 106 legal agreement) will reduce the magnitude of impact to low. Therefore, there is likely to be a direct permanent, long-term residual effect of Negligible Adverse (not significant.

15.10.67 The sensitivity of the pedestrian link receptors 4 and 5 are assessed to be medium and the magnitude of impact is assessed to be moderate. Therefore, there is likely to be a direct permanent, long-term residual effect of Minor Adverse (not significant).

15.10.68 The sensitivity of the cycle link receptors 1, 2, 5, 6 and 7 are assessed to be low and the magnitude of impact is assessed to be moderate. Therefore, there is likely to be a direct permanent, long-term residual effect of Negligible-Minor Adverse (not significant).

15.11 Assessment of Residual Effects

Additional Mitigation

Demolition and Construction Stage

15.11.1 The preparation of a detailed Construction Logistic Plan (CLP) and Detailed CEMP will be secured as part of the s106 and via a planning condition respectively. An Outline CEMP has been submitted for the Phase 1 (detailed) element of the planning application (10051123-ARC-XXX-ZZ-TR-CM-00001). An additional Outline CEMP has been submitted for the outline elements as part of the ES (ES Volume 2 Technical Appendix 5.1). The measures included within each document will be of an appropriate level to mitigate the temporary impact of the demolition and construction of the Proposed Development. The measures will reduce vehicular impact on peak hour traffic and reduce the number of deliveries. The CLP document will outline appropriate routing of construction vehicles, hours of operation and any driver training requirements.

15.11.2 To mitigate the impact of the construction phase, an Outline CEMP has been prepared as part of this application. The purpose of the Outline CEMP is to:

- Demonstrate that construction materials can be delivered, and construction waste can be removed in a safe, efficient and sustainable manner;
- Identify the routing strategy for HGVs for inbound and outbound movements;
- Identify deliveries to the Site that may be re-timed, reduced or consolidated, particularly during peak periods;
- Help decrease congestion on the local highway network, by; encouraging construction workers to travel to the Site by car sharing or non-car modes; and
- Improve the reliability of deliveries and waste collection.

Completed Development Stage

15.11.3 The Travel Plan (WOI-HPA-DOC-FTP-01) includes traffic surveys on Ifield Avenue (which is one of the highest impacted roads nearby the Proposed Development) in line with Travel Plan monitoring. If car driver mode share targets are not met, then additional measures will be sought and implemented to support reducing the percentage of car driver mode share.

15.11.4 This further supports the need to move away from a 'predict and provide' approach, where future infrastructure is based on extrapolating past travel trends. It is therefore proposed that contributions secured S106 agreement towards targeted highway and junction improvements, are on a 'decide and provide' approach to align with the DfT Transport Decarbonisation Plan (2021)[30] to highway capacity rather than 'predict and provide', to ensure that investment is targeted at improving conditions for all users. This will avoid the provision of highway capacity improvement schemes which have typically been implemented at the expense of public transport, walking, and cycling.

15.11.5 The need to ensure that traffic mitigation is only put in place when absolutely required with funds prioritised to support more non-car modes is increasingly important.

15.11.6 Table 15.33 sets out the proposed measures for the Proposed Development and whether they are essential or reviewable, i.e. the situation will be monitored and schemes only implemented if necessary – this is in line with the decide & provide approach being taken. The decide and provide approach is based on deciding the desired outcomes and then providing the transport systems and infrastructure to achieve those goals. The need for junction signalisation will be monitored through annual traffic surveys and if deemed necessary the funds secured through S106 could be drawn down.

[30] DfT Transport Decarbonisation Plan (2021)

Table 15.33: Proposed Embedded Mitigation Measures

Measure	Priority	Trigger	How Will it be Implemented / Secured?	Benefits
CWMMC	Essential	Prior to occupation of any building other than the Secondary school	Secured via S106 agreement	Significant transport benefits and inviting experience for those who use the CWMMC. Cycle lane and footway will be provided, and signalised crossing available.
Contribution to bus services (route A and later route B)	Essential	Staged. The Applicant will provide a capped / specified financial contribution to be phased as revenue support to WSCC to secure the necessary bus services to establish the public transport strategy and achieve targeted mode share. This will be aligned with the revenue model and assumptions discussed with Metrobus and provided to WSCC	Secured via S106 agreement	Improve bus journey times of proposed development site users to key locations
Contribution towards Ifield Station Interchange Improvements	High	Prior to the occupation of 550 homes.	Secured via S106 agreement	Enhance the station experience, including the potential for additional cycle parking, lighting, enhanced station entrance and enhanced waiting areas to facilitate modal change.
LCWIP Route L improvements	Essential	Subject to more detailed trigger point regarding Traffic Regulation Order (TRO)	Secured via S106 agreement	Improve pedestrian and cycle infrastructure across LCWIP Route L
LCWIP Route M improvements between CWMMC junction and Langley Drive	Essential	Trigger point to be agreed with WSCC / LPA	Secured via S106 agreement	Improve pedestrian and cycle infrastructure across LCWIP Route M between CWMMC junction and Langley Drive
LCWIP Route P improvements between Ifield Avenue and A23	Essential	Trigger point to be agreed with WSCC / LPA	Secured via S106 agreement	Improve pedestrian and cycle infrastructure across LCWIP Route M between Ifield Avenue and A23

Table 15.33: Proposed Embedded Mitigation Measures

Measure	Priority	Trigger	How Will it be Implemented / Secured?	Benefits
Signalising Ifield Avenue / Warren Drive junction	Reviewable (D&P)	If annual monitoring data collected as part of Travel Plan Monitoring and Decide & Provide Monitoring and Mitigation Plan suggests this is required	Secured via S106 agreement	Improves the capacity of the junction and reduces queuing (compared to existing junction arrangement)
Signalising Ifield Avenue / Stagelands junction	Reviewable (D&P)	If annual monitoring data collected as part of Travel Plan Monitoring and Decide & Provide Monitoring and Mitigation Plan suggests this is required	Secured via S106 agreement	Improves the capacity of the junction and reduces queuing (compared to existing junction arrangement)

15.11.7 It is proposed that these are secured through the S106 and then reviewed as part of the Travel Plan monitoring.

Demolition and Construction Residual Effects

15.11.8 Demolition and construction traffic will likely generate transport effects on the surrounding highway network, and as such it is appropriate to ensure that some controls are in place on traffic movements through the provision of a CLP. The construction traffic accessing the Site will be controlled by the use of a construction vehicle routeing agreement so that a clear route, agreed by the highway authority, is adhered to which will minimise the effect of construction traffic on inappropriate areas. The routeing agreement secured through the CLP could include restrictions on delivery times if considered necessary by the highway authority.

Completed Development Residual Effects

15.11.9 This chapter has assessed the traffic flows for the highway network in the vicinity of the Site for the Future Year of 2041. These flows take into account both the future committed development schemes, as well as the Gatwick Airport DCO application development flows and are assessed together as cumulative schemes for robustness. This has focussed on the AADT and AAWT traffic flows in the principal assessment year of 2041 (Scenario 4 and 5), which includes committed development, cumulative development and the Proposed Development.

15.11.10 Overall, two highway receptors have been assessed to have a significant adverse residual effect on the environmental impact of Changes in Traffic Flows, two highway receptors have been assessed to have a significant adverse residual effect on the environmental impact of Severance, five highway receptors have been assessed to have a significant adverse residual effect on the environmental impact of Driver Delay, one highway receptor has been assessed to have a significant adverse effect on the environmental impact of Pedestrian Delay, and one highway receptor has been assessed to have a significant adverse effect on the environmental impact of Pedestrian Amenity. For all these, highway receptor mitigation packages have been outlined to reduce the adverse significant residual effects, unless no mitigation is determined necessary. It is not expected that any adverse effects will remain after this implementation.

15.11.11 Two cycling receptors were identified to have minor (not significant) impacts, but these have both been identified to have improvements as part of the Local Walking and Cycling Improvement Plan and funds will be secured by S106 to achieve this. The remainder of highway, public transport, walk and cycle receptors assessed against the environmental impacts were deemed to not have a significant residual effect.

15.11.12 A comprehensive mitigation package accompanies the application. This includes adhering to the Local Authorities approach of promoting sustainable transport, aimed at encouraging modal shift rather than providing additional physical capacity improvements at junctions. As such, while the transport analysis has identified some junctions which may operate over capacity (refer to Chapter 9 of submitted TA) along with a physical intervention to address capacity at Ifield Avenue / Warren Drive and Ifield Avenue / Stagelands junctions, the Local Authority may wish to implement alternative mitigation schemes which would have a similar outcome i.e. rather than signalising a junction to address queuing and delay, similar network operation improvements may be attainable through modal shift.

15.11.13 An integral part of the proposals for Proposed Development is a Site wide umbrella Travel Plan (WOI-HPA-DOC-FTP-01) which is included as separate documents as part of the planning application.

15.11.14 In addition to the substantial measures set out in the Travel Plan to support the uptake of non-car modes such as a high level of cycle parking within the Site, managed car parking provision, mobility hubs and travel plan incentives for sustainable travel, the mitigation set

out in Table 15.33 is proposed to ensure that the Proposed Development is sustainable and the impact on the surrounding neighbourhoods is minimised. This includes off Site mitigation such as:

- Walking & Cycling
  - Provision of funding, secured by S106, for LCWIP route L, part of routes M and P, which includes routes between Charlwood Road / CWMMC junction to Langley Walk (route M) along route P (from Ifield Avenue to A23 London Road) and route L between Rusper Road and the town centre, via Ifield Station.
  - Additional cycle parking at Ifield Station
- Public Transport
  - Provision of two Fastway bus services across the Site, with the first operational prior to the first residential property being occupied. Secured via the S106 agreement.
  - Funding of improvements at Ifield Station to improve interchange, including additional cycle parking (exact improvements set out in the feasibility study commissioned by Homes England). Secured via the S106 agreement.
- Junction improvements (proposed that two junctions will be signalised, or that WSCC will implement alternative schemes which deliver similar outcomes):
  - Ifield Avenue / Warren Drive
  - Ifield Avenue / Stagelands

15.12 Summary of Residual Effects

15.12.1 Table 15.34 presents a summary of Transport Assessment outcomes for the Proposed Development. It includes only those receptors experiencing impacts of minor significance or greater- whether adverse or beneficial- during the operational phase of the completed development. An exception is made for public transport receptors, where impacts of negligible to minor adverse significance are also reported. Additionally all Highway Links assessed during the demolition and construction phases have been included.

Table 15.34: Summary of Residual Effects

Receptor	Description of Residual Effect	Additional Mitigation	Scale and Significance of Residual Effect **	Nature of Residual Effect				
				+ -	D I	P T	R IR	St Mt Lt
Demolition and Construction Stage – Highway Links								
A183 Ifield Avenue, Ifield Drive to Crawley Avenue	Changes in Traffic Flows	Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR79 A2011 Crawley Avenue, w of M23 J10 (St Hildas Close)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR48 London Road, s of Lowfield Heath Roundabout		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
B4 Crawley Avenue		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR101 A2220 Horsham Road		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR102 A23 Brighton Road, Pease Pottage Hill		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR88 Crawley Avenue (Filbert Crescent)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
A183 Ifield Avenue, Ifield Drive to Crawley Avenue	Severance	Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR79 A2011 Crawley Avenue, w of M23 J10 (St Hildas Close)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR48 London Road, s of Lowfield Heath Roundabout		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
B4 Crawley Avenue		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR101 A2220 Horsham Road		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST

Table 15.34: Summary of Residual Effects

Receptor	Description of Residual Effect	Additional Mitigation	Scale and Significance of Residual Effect **	Nature of Residual Effect				
				+ -	D I	P T	R IR	St Mt Lt
CR102 A23 Brighton Road, Pease Pottage Hill		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR88 Crawley Avenue (Filbert Crescent)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
A183 Ifield Avenue, Ifield Drive to Crawley Avenue	Driver Delay	Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR79 A2011 Crawley Avenue, w of M23 J10 (St Hildas Close)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR48 London Road, s of Lowfield Heath Roundabout		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
B4 Crawley Avenue		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR101 A2220 Horsham Road		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR102 A23 Brighton Road, Pease Pottage Hill		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR88 Crawley Avenue (Filbert Crescent)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
A183 Ifield Avenue, Ifield Drive to Crawley Avenue	Pedestrian and Cycle Delay	Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR79 A2011 Crawley Avenue, w of M23 J10 (St Hildas Close)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR48 London Road, s of Lowfield Heath Roundabout		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
B4 Crawley Avenue		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST

Table 15.34: Summary of Residual Effects

Receptor	Description of Residual Effect	Additional Mitigation	Scale and Significance of Residual Effect **	Nature of Residual Effect				
				+ -	D I	P T	R IR	St Mt Lt
CR101 A2220 Horsham Road		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR102 A23 Brighton Road, Pease Pottage Hill		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR88 Crawley Avenue (Filbert Crescent)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
A183 Ifield Avenue, Ifield Drive to Crawley Avenue	Pedestrian Amenity	Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR79 A2011 Crawley Avenue, w of M23 J10 (St Hildas Close)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR48 London Road, s of Lowfield Heath Roundabout		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
B4 Crawley Avenue		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR101 A2220 Horsham Road		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR102 A23 Brighton Road, Pease Pottage Hill		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR88 Crawley Avenue (Filbert Crescent)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
A183 Ifield Avenue, Ifield Drive to Crawley Avenue	Accidents and Safety	Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR79 A2011 Crawley Avenue, w of M23 J10 (St Hildas Close)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR48 London Road, s of Lowfield Heath Roundabout		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST

Table 15.34: Summary of Residual Effects

Receptor	Description of Residual Effect	Additional Mitigation	Scale and Significance of Residual Effect **	Nature of Residual Effect				
				+ -	D I	P T	R IR	St Mt Lt
B4 Crawley Avenue		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR101 A2220 Horsham Road		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR102 A23 Brighton Road, Pease Pottage Hill		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR88 Crawley Avenue (Filbert Crescent)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
A183 Ifield Avenue, Ifield Drive to Crawley Avenue	Fear and Intimidation	Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR79 A2011 Crawley Avenue, w of M23 J10 (St Hildas Close)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR48 London Road, s of Lowfield Heath Roundabout		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
B4 Crawley Avenue		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR101 A2220 Horsham Road		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR102 A23 Brighton Road, Pease Pottage Hill		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
CR88 Crawley Avenue (Filbert Crescent)		Mitigation measures to address impact from demolition and construction vehicles will be set out in the submitted CLP and Detailed CEMP reports.	Negligible Adverse	-	D	T	R	ST
Completed Development – Highway Links								
A68 A217, entrance to Tesco	Changes in Traffic Flows	No physical mitigation necessary. Impacts are addressed via modal change resulting from improved active travel infrastructure.	Minor Adverse (not significant)	-	D	P	IR	LT

Table 15.34: Summary of Residual Effects

Receptor	Description of Residual Effect	Additional Mitigation	Scale and Significance of Residual Effect **	Nature of Residual Effect				
				+ -	D I	P T	R IR	St Mt Lt
A260 Stagelands, North of Ifield Avenue		Ifield Avenue / Stagelands junction is proposed to be signalised, with the aim to regulate vehicle flow, reduce queueing, and limit adverse impact on pedestrians and cyclists.	Minor Adverse (not significant)	-	D	P	IR	LT
A186 Ifield Avenue, Warren Drive to Ifield Green		Ifield Avenue / Warren Drive junction is proposed to be signalised, with the aim to regulate vehicle flow, reduce queueing, and limit adverse impact on pedestrians and cyclists.	Minor Adverse (not significant)	-	D	P	IR	LT
B5 Link Road, South of Charlwood Road		Traffic flows within typical capacity parameters – high percentage change is due to low baseline flows before full development comes online.	Minor Adverse (not significant)	-	D	P	IR	LT
B6 Link Road South Access		Traffic flows within typical capacity parameters – high percentage change is due to low baseline flows before full development comes online	**Moderate Adverse (significant)**	-	D	P	IR	LT
A286 Primary Link, North of Link Road		Traffic flows within typical capacity parameters – high percentage change is due to low baseline flows before full development comes online	**Moderate Adverse (significant)*** **	-	D	P	IR	LT
CR107 Rusper Road		Net decrease in vehicle trips and therefore no physical mitigation necessary.	Minor Beneficial (not significant)	+	D	P	IR	LT
B2 Rusper Road, South of Parham Road		Net decrease in vehicle trips and therefore no physical mitigation necessary.	Minor Beneficial (not significant)	+	D	P	IR	LT
B3 Ifield Green		Net decrease in vehicle trips and therefore no physical mitigation necessary.	Minor Beneficial (not significant)	+	D	P	IR	LT
A68 A217, entrance to Tesco	Severance	No physical mitigation necessary. Impacts are addressed via modal change resulting from improved active travel infrastructure.	Minor Adverse (not significant)	-	D	P	IR	LT
A178 Ifield Avenue, Stagelands to Warren Drive		Ifield Avenue / Stagelands junction is proposed to be signalised, with the aim to regulate vehicle flow, reduce queueing, and limit adverse impact on pedestrians	Minor Adverse (not significant)	-	D	P	IR	LT

Table 15.34: Summary of Residual Effects

Receptor	Description of Residual Effect	Additional Mitigation	Scale and Significance of Residual Effect **	Nature of Residual Effect				
				+ -	D I	P T	R IR	St Mt Lt
A260 Stagelands, North of Ifield Avenue		Ifield Avenue / Stagelands junction is proposed to be signalised, with the aim to regulate vehicle flow, reduce queueing, and limit adverse impact on pedestrians	Minor Adverse (not significant)	-	D	P	IR	LT
A186 Ifield Avenue, Warren Drive to Ifield Green		Ifield Avenue / Warren Drive junction is proposed to be signalised, with the aim to regulate vehicle flow, reduce queueing, and limit adverse impact on pedestrians	Minor Adverse (not significant)	-	D	P	IR	LT
B5 Link Road, South of Charlwood Road		Traffic flows within typical capacity parameters – high percentage change is due to low baseline flows before full development comes online.	Minor Adverse (not significant)	-	D	P	IR	LT
B6 Link Road South Access		Traffic flows within typical capacity parameters – high percentage change is due to low baseline flows before full development comes online	**Moderate Adverse (significant)**	-	D	P	IR	LT
A286 Primary Link, North of Link Road		Traffic flows within typical capacity parameters – high percentage change is due to low baseline flows before full development comes online	**Moderate Adverse (significant)**	-	D	P	IR	LT
CR107 Rusper Road		Net decrease in vehicle trips and therefore no physical mitigation necessary.	Minor Beneficial (not significant)	+	D	P	IR	LT
B2 Rusper Road, South of Parham Road		Net decrease in vehicle trips and therefore no physical mitigation necessary.	Minor Beneficial (not significant)	+	D	P	IR	LT
B3 Ifield Green		Net decrease in vehicle trips and therefore no physical mitigation necessary.	Minor Beneficial (not significant)	+	D	P	IR	LT
A178 Ifield Avenue, Stagelands to Warren Drive	Driver Delay	Both the Ifield Avenue / Warren Drive and Ifield Avenue / Stagelands junctions are proposed to be signalised, with the aim to regulate vehicle flow, reduce queuing and driver delay.	**Major Adverse (significant)**	-	D	P	IR	LT
A189 Ifield Wood		No physical mitigation necessary. Impacts are addressed via modal change resulting from improved active travel infrastructure.	**Moderate Adverse (significant)**	-	D	P	IR	LT

Table 15.34: Summary of Residual Effects

Receptor	Description of Residual Effect	Additional Mitigation	Scale and Significance of Residual Effect **	Nature of Residual Effect				
				+ -	D I	P T	R IR	St Mt Lt
A260 Stagelands, North of Ifield Avenue		Ifield Avenue / Stagelands junction is proposed to be signalised, with the aim to regulate vehicle flow and reduce queuing and driver delay.	**Major Adverse (significant)**	-	D	P	IR	LT
B6 Link Road South Access		Traffic flows within typical capacity parameters – change in driver delay is due to low baseline flows before full development comes online	**Moderate Adverse (significant)**	-	D	P	IR	LT
A286 Primary Link, North of Link Road		Traffic flows within typical capacity parameters – change in driver delay is due to low baseline flows before full development comes online	**Moderate Adverse (significant)**	-	D	P	IR	LT
4 Charlwood Road, North of Link Road		Net decrease in driver delay and therefore no physical mitigation necessary.	Minor Beneficial (not significant)	+	D	P	IR	LT
B2 Rusper Road, South of Parham Road		Traffic flows within typical capacity parameters – change in driver delay is due to low baseline flows before full development comes online	**Moderate Adverse (significant)**	-	D	P	IR	LT
B3 Ifield Green		Traffic flows within typical capacity parameters – whilst the change in driver delay is high, this is due to low baseline flows before full development comes online and delay is typical of an urban junction. Delay relates only to the peak hour periods and not across the remaining hours of a typical day. Traffic signal timing will be continually reviewed to minimise delay.	**Moderate Adverse (significant)**	-	D	P	IR	LT
Ifield Avenue, Stagelands to Warren Drive (Link ID 178)	Pedestrian Delay	Ifield Avenue / Stagelands junction is proposed to be signalised, which will include signalised pedestrian crossing facilities.	Minor Adverse (not significant)	-	D	P	IR	LT
A260 Stagelands, North of Ifield Avenue		Ifield Avenue / Stagelands junction is proposed to be signalised, which will include signalised pedestrian crossing facilities.	Minor Adverse (not significant)	-	D	P	IR	LT
B5 Link Road, South of Charlwood Road		Traffic flows within typical capacity parameters – change in pedestrian delay is due to low baseline flows before full development comes online	Minor Adverse (not significant)	-	D	P	IR	LT

Table 15.34: Summary of Residual Effects

Receptor	Description of Residual Effect	Additional Mitigation	Scale and Significance of Residual Effect **	Nature of Residual Effect				
				+ -	D I	P T	R IR	St Mt Lt
B6 Link Road South Access		Traffic flows within typical capacity parameters – change in pedestrian delay is due to low baseline flows before full development comes online	**Moderate Adverse (significant)**	-	D	P	IR	LT
A286 Primary Link, North of Link Road		Traffic flows within typical capacity parameters – change in pedestrian delay is due to low baseline flows before full development comes online	Minor Adverse (not significant)	-	D	P	IR	LT
Ifield Avenue, Stagelands to Warren Drive (Link ID 178)	Pedestrian Amenity	Ifield Avenue / Stagelands junction is proposed to be signalised, which will include signalised pedestrian crossing facilities.	Minor (not significant)	-	D	P	IR	LT
A260 Stagelands, North of Ifield Avenue		Ifield Avenue / Stagelands junction is proposed to be signalised, which will include signalised pedestrian crossing facilities.	Minor Adverse (not significant)	-	D	P	IR	LT
B5 Link Road, South of Charlwood Road		Imbedded mitigation within CWMMC.	Minor Adverse (not significant)	-	D	P	IR	LT
B6 Link Road South Access		Imbedded mitigation within CWMMC.	**Moderate Adverse (significant)**	-	D	P	IR	LT
A286 Primary Link, North of Link Road		Imbedded mitigation within CWMMC.	Minor Adverse (not significant)	-	D	P	IR	LT
Ifield Avenue, Stagelands to Warren Drive (Link ID 178)	Accidents and Safety	Ifield Avenue / Stagelands junction is proposed to be signalised, which will include signalised pedestrian crossing facilities.	Minor Adverse (not significant)	-	D	P	IR	LT
A260 Stagelands, North of Ifield Avenue		Ifield Avenue / Stagelands junction is proposed to be signalised, which will include signalised pedestrian crossing facilities.	Minor Adverse (not significant)	-	D	P	IR	LT
Ifield Avenue, Stagelands to Warren Drive (Link ID 178)	Fear and Intimidation	Ifield Avenue / Stagelands junction is proposed to be signalised, which will include signalised pedestrian crossing facilities	Minor Adverse (not significant)	-	D	P	IR	LT
A260 Stagelands, North of Ifield Avenue		Ifield Avenue / Stagelands junction is proposed to be signalised, which will include signalised pedestrian crossing facilities	Minor Adverse (not significant)	-	D	P	IR	LT
Completed Development – Pedestrian Links								

Table 15.34: Summary of Residual Effects

Receptor	Description of Residual Effect	Additional Mitigation	Scale and Significance of Residual Effect **	Nature of Residual Effect				
				+ -	D I	P T	R IR	St Mt Lt
Ifield Drive Tangmere Road to Ifield Station (Pedestrian Link Receptor 4)	Increase in pedestrian flows	Provision of funding, secured by S106, for LCWIP route L	Minor (not significant)	-	D	P	IR	LT
Underpass under A23 Crawley Avenue (Pedestrian Link Receptor 5)		N/A	Minor (not significant)	-	D	P	IR	LT
Completed Development – Cycle Links								
Ifield Drive (Cycle Link Receptor 3)	Increase in cycle flows	Provision of funding, secured by S106, for LCWIP route L	Minor (not significant)	-	D	P	IR	LT
Underpass (Cycle Link Receptor 4)		N/A	Minor (not significant)	-	D	P	IR	LT
Completed Development – Public Transport								
Local Bus Stops	Increase in bus passengers	Provision of two Fastway bus services across the site, with the first operational prior to the first residential property being occupied	Negligible-Minor (not significant)	-	D	P	IR	LT
Ifield Station	Increase in rail passengers	Funding of improvements at Ifield Station to improve interchange, including additional cycle parking (exact improvements subject to GBR feasibility study).	Negligible-Minor (not significant)	-	D	P	IR	LT

Notes:
* - = Adverse/ + = Beneficial/ +/- Neutral; D = Direct/ I = Indirect; P = Permanent/ T = Temporary; R=Reversible/ IR= Irreversible; St- Short term/ Mt –Medium term/ Lt –Long term.
**Negligible/Minor/Moderate/Major
***Calculation identifies as being significant impact. In reality this is not a significant adverse residual effect as the CWMMC does not exist in the Do Minimum scenario (Scenario 4).

15.13 Cumulative Effects

15.13.1 Traffic modelling has included Proposed Development and committed development impacts and therefore no further impact assessment is required as part of this Chapter.

15.14 Summary of Assessment

Background

15.14.1 This chapter outlines the potential Transport impacts associated with both the construction and completed development stages of the Proposed Development. The assessment has been carried out in accordance with relevant national and local guidance, policies and regulations to ensure a comprehensive and compliant evaluation.

Demolition and Construction Effects

15.14.2 Construction effects are considered to be temporary and concentrated during the construction phase of the Proposed Development only. After the construction of the first development phase for occupation, future construction periods will run concurrently with operational phases already complete and occupied. Peak construction will occur early in the project, when operational flows are low. The peak cumulative demolition, construction and operation flows, in any one year, do not exceed the traffic associated with the full build out. As intervening years have not been assessed, due to the modelling periods available operational flows have not been included in the demolition and construction assessment of effects.

15.14.3 The construction vehicle trip generation assessment indicates that the peak construction year will occur in 2033-2035, with a total of 648 one-way and 1,295 two-way (AADT) construction vehicles anticipated to be associated with the construction of the development. Of these 95 are two-way HGV trips. Demolition and constriction stage of effects have been calculated for two scenarios.

15.14.4 The scenarios have been used as the basis to compare and contrast the effects of the Proposed Development in relation to the following environmental impacts:

- Changes in traffic flows;
- Severance;
- Driver delay;
- Pedestrian delay;
- Pedestrian amenity;
- Accidents and safety; and
- Fear and intimidation.

15.14.5 Overall, none of the seven Highway Links reviewed have been assessed as experiencing a significant adverse residual effect on the environmental impact criteria considered.

Completed Development Effects

15.14.6 This chapter has assessed projected traffic flows on the highway network surrounding the Site for the future assessment year of 2041. These projections incorporate both committed development schemes and the traffic associated with the Gatwick Airport DCO application, assessed cumulatively to ensure a robust analysis. The focus has been on AADT and AAWT traffic flows under Scenarios 4 and 5, which reflect the combined impacts of committed development, cumulative development and the Proposed Development.

15.14.7 The scenarios have served as the basis for evaluating and comparing the environmental effects of the Proposed Development across a range of key impact areas including:

- Changes in traffic flows;
- Severance;
- Driver delay;
- Pedestrian delay;
- Pedestrian amenity;
- Accidents and safety; and
- Fear and intimidation.

15.14.8 Overall, two highway receptors have been assessed to have a significant adverse residual effect on the environmental impact of Changes in Traffic Flows, two highway receptors have been assessed to have a significant adverse residual effect on the environmental impact of Severance, seven highway receptors have been assessed to have a significant adverse residual effect on the environmental impact of Driver Delay, one highway receptor has been assessed to have a significant adverse effect on the environmental impact of Pedestrian Delay, and one highway receptor has been assessed to have a significant adverse effect on the environmental impact of Pedestrian Amenity. No receptors have a significant adverse residual effects for the environmental impact of Fear and Intimidation. For all these, highway receptor mitigation packages have been outlined(which will be secured through the Section 106 Legal Agreement) to reduce the adverse significant residual effects, unless no mitigation is determined necessary.

15.14.9 Two cycling receptors were identified to have minor (not significant) impacts, but these have both been identified to have improvements as part of the Local Walking and Cycling Improvement Plan and funds will be secured by S106 to achieve this. The remainder of highway, public transport, walk and cycle receptors assessed against the environmental impacts were deemed to not have a significant residual effect.

15.14.10 A summary of the highway receptors with significant adverse effects on Changes in Traffic Flows, Severance, Driver Delay, Pedestrian Delay and Pedestrian Amenity is described below.

Changes in Traffic Flows

15.14.11 For the environmental impact Changes in Traffic Flows, the sensitivity of highway link B6 and A286 has been assessed to be medium and the magnitude of impact has been assessed to be high. Therefore, there is likely to be a direct permanent, long-term residual effect of Moderate Adverse (significant). The traffic flows for both road links are determined to be within typical capacity parameters, and the high percentage change is due to the low baseline traffic flows before the full Proposed Development comes online.

Severance

15.14.12 For the environmental impact Changes in Traffic Flows, the sensitivity of highway link B6 and A286 has been assessed to be medium and the magnitude of impact has been assessed to be high. Therefore, there is likely to be a direct permanent, long-term residual effect of Moderate Adverse (significant). The traffic flows for both road links are determined to be within typical capacity parameters, and the high percentage change is due to the low baseline traffic flows before the full Proposed Development comes online.

Driver Delay

15.14.13 For the environmental impact Driver Delay, the sensitivity of highway link A178 has been assessed to be high and the magnitude of impact has been assessed to be medium in the AM peak hour and high in the PM peak hour. Therefore, there is likely to be a direct permanent, long-term residual effect of Moderate and Major Adverse (significant) in the AM

and PM peak hours respectively. Both the Ifield Avenue / Warren Drive and Ifield Avenue / Stagelands junctions are proposed to be signalised, with the aim to regulate vehicle flow, reduce queuing and driver delay.

15.14.14 The sensitivity of highway link A189 has been assessed to be medium and the magnitude of impact has been assessed to be high in the PM peak hour. Therefore, there is likely to be a direct permanent, long-term residual effect of Moderate Adverse (significant) in the PM peak hour. No physical mitigation is considered necessary and the impacts of the development will be addressed via a modal change resulting from improved active travel infrastructure, as a result of interventions by WSCC / CBC and those secured as part of the overall transport package associated with the development which will be secured via the Section 106 legal agreement.

15.14.15 The sensitivity of highway link A260 has been assessed to be high and the magnitude of impact has been assessed to be high in the AM peak hour. Therefore, there is likely to be a direct permanent, long-term residual effect of Major Adverse (significant) in the AM peak hour. The Ifield Avenue / Stagelands junction is proposed to be signalised, with the aim to regulate vehicle flow, reduce queuing and driver delay.

15.14.16 The sensitivity of highway link B6 has been assessed to be medium and the magnitude of impact has been assessed to be high in the AM peak hour. Therefore, there is likely to be a direct permanent, long-term residual effect of Moderate Adverse (significant) in the AM peak hour. The traffic flows for both road links are determined to be within typical capacity parameters, and the change in driver delay is due to the low baseline traffic flows before the full Proposed Development comes online.

15.14.17 The sensitivity of highway link A286 has been assessed to be medium and the magnitude of impact has been assessed to be high in the PM peak hour. Therefore, there is likely to be a direct permanent, long-term residual effect of Moderate Adverse (significant) in the PM peak hour. The traffic flows for both road links are determined to be within typical capacity parameters, and the change in driver delay is due to the low baseline traffic flows before the full Proposed Development comes online.

15.14.18 The sensitivity of highway link B2 has been assessed to be medium and the magnitude of impact has been assessed to be high in both the AM and PM peak hours. Therefore, there is likely to be a direct permanent, long-term residual effect of Moderate Adverse (significant) in both the AM and PM peak hours. The traffic flows for the road link is determined to be within typical capacity parameters, and the change in driver delay is due to the low baseline traffic flows before the full Proposed Development comes online.

15.14.19 The sensitivity of highway link B3 has been assessed to be medium and the magnitude of impact has been assessed to be high in both the AM and PM peak hours. Therefore, there is likely to be a direct permanent, long-term residual effect of Moderate Adverse (significant) in both the AM and PM peak hours. The traffic flows for the road link is determined to be within typical capacity parameters, and the change in driver delay is due to the low baseline flows before full development comes online and delay is typical of an urban junction. Delay relates only to the peak hour periods and not across the remaining hours of a typical day. Traffic signal timing will be continually reviewed to minimise delay.

Pedestrian Delay

15.14.20 For the environmental impact Pedestrian Delay, the sensitivity of highway link B6 has been assessed to be medium and the magnitude of impact has been assessed to be medium. Therefore, there is likely to be a direct permanent, long-term residual effect of Moderate Adverse (significant). The traffic flows for both road links are determined to be within typical

capacity parameters, and the change in pedestrian delay is due to the low baseline traffic flows before the full Proposed Development comes online.

Pedestrian Amenity

15.14.21 For the environmental impact Pedestrian Amenity, the sensitivity of highway link B6 has been assessed to be medium and the magnitude of impact has been assessed to be high. Therefore, there is likely to be a direct permanent, long-term residual effect of Moderate Adverse (significant). Embedded mitigation will be included within the CWMMC, secured through the application, as well as the parameter plans, while the overall transport package will bring forward pedestrian improvements which will be secured via the Section 106 legal agreement .

Assessment of Severability

15.14.22 The hybrid planning application is for a phased development intended to be capable of coming forward in distinct and separable phases and/or plots in a severable way. In terms of severability, the identified demolition and construction transport and movement effects are limited to the level of construction in any one year as different phases are built and brought on line. The cumulative impacts of construction and operation would not exceed the effects identified in this assessment, and as such severability is not considered to be an issue in respect to demolition and construction given the direct relationship between construction and trip generation and the incremental nature of operational traffic. Providing the transport mitigation package set out in this chapter was implemented (as secured by appropriate planning condition(s) attached to the outline permission or as detailed within future reserved matters applications), or replicated in an alternative application, including provision of suitable PRoW diversions during the demolition and construction phase, then development of a given phase would not alter the identified demolition and construction transport and movement effects.

15.14.23 In terms of severability, associated with the completed development some transport and movement effects would be different depending on the phasing of facilities, infrastructure and land uses on site, however in total they would not exceed the effects identified in this assessment. This applies to beneficial effects of internalisation and promotion of sustainable transport, which may limit off site transport movements, albeit the absence of on-site land uses, also equates to no additional trips being generated. For these specific effects the monitor and manage approach to decide and provide transport planning alongside the provision of the mitigation proposed in this chapter, implemented (as secured by appropriate planning condition(s) attached to the outline permission or as detailed within future reserved matters applications), or replicated in an alternative application, means that a given phase would not exceed the identified completed development transport and movement effects outlined in the assessment.

Cumulative Effects

15.14.24 Traffic modelling has tested Proposed Development, committed development impact and the cumulative Gatwick Airport DCO scheme within the core scenario and therefore no further impact assessment is required as part of this Chapter.