



Land North of Camer Road, Meopham Environmental Statement

Chapter 5: Transport and Access

ttc on behalf of The McManus
Family

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5. TRANSPORT AND ACCESS

Introduction

- 5.1 This chapter of the ES has been prepared by ttc and presents an assessment of the likely significant effects of the Proposed Development with respect to Transport. Mitigation measures are identified, where appropriate, to avoid, reduce or offset any significant adverse effects identified and/or enhance likely beneficial effects. Taking into account the mitigation measures, the nature and significance of the likely residual effects are reported.
- 5.2 This chapter is supported by the following technical appendices:

- **Appendix 5.1: Transport Assessment.**

Legislation and Policy Context

Legislation Context

- 5.3 The following legislation is relevant to the Proposed Development:
- Environmental Impact Assessment Regulations 2017.

National Planning Policy

- 5.4 The following national planning policy is relevant to the Proposed Development:
- National Planning Policy Framework (2024)¹.

Regional Planning Policy

- 5.5 The following regional planning policies are relevant to the Proposed Development:
- Kent Local Transport Plan 5;
 - Kent Transport Assessment and Travel Plan Guidance 2025;
 - Kent Design Guide; and
 - Kent County Council (KCC) Parking Standards 2025.

Local Planning Policy

- 5.6 The following local planning policies are relevant to the Proposed Development:
- Gravesham Local Plan Core Strategy (September 2017); and
 - SPG4 KCC Parking Standards (July 2006).

Guidance

- 5.7 The following guidance is relevant to the Proposed Development:
- Institute of Sustainability and Environmental Professionals (ISEP) Guidelines: Environmental Assessment of Traffic and Movement (2023)¹.

Assessment Methodology and Significance Criteria

- 5.8 This section presents the methodology used to assess the potential effects of the Proposed Development in relation to Transport and Access.

Consultation

- 5.9 A request for an EIA Scoping Opinion (**Appendix 1.4**) was submitted to Gravesham Borough Council (GBC) on the 8th September 2025 which included a detailed chapter on Transport and Access setting out the proposed scope of the corresponding ES chapter.
- 5.10 **Table 5.1** below presents a summary of comment raised in discussions with relevant consultees.

Table 5.1: Summary of Comments

Consultee	Comment	Response
KCC Highways and Transportation	The applicant should provide a Transport Assessment in support of any future planning application.	A Transport Assessment has been prepared and is submitted in support of the planning application.

- 5.11 Given the feedback above, it has been considered that the proposed scope set out within the Scoping Report (**Appendix 1.3**) was acceptable.

Study Area and Scope

Study Area

Geographical Extent

- 5.12 The scope of the highway capacity assessments for the Proposed Development has been agreed with KCC and are included within the Transport Assessment (**Appendix 5.1**). The study area for this assessment has been based upon the ISEP Guidelines: Environmental Assessment of Traffic and Movement (2023) as below:

- Rule 1: Include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%); and
- Rule 2: Include highway links of high sensitivity where traffic flows have increased by 10% of more.

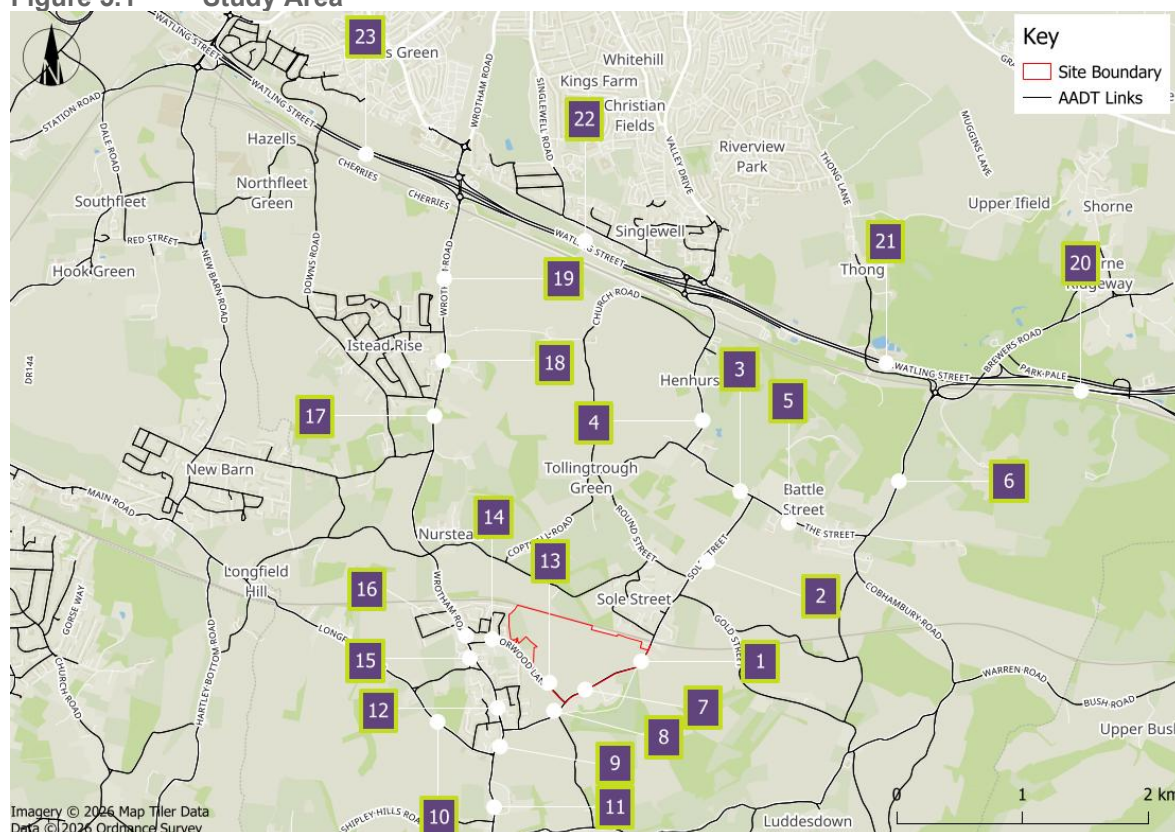
- 5.13 The geographical extent of the study area is as follows:

- Link 1: Camer Road (north of access);
- Link 2: Sole Street;
- Link 3: Jeskyns Road;
- Link 4: Henhurst Road;
- Link 5: The Street
- Link 6: Halfpence Lane;

- Link 7: Camer Road (south of access);
- Link 8: Green Lane;
- Link 9: Wrotham Road (north of Longfield Road);
- Link 10: Longfield Road;
- Link 11: Wrotham Road (south of Longfield Road);
- Link 12: Wrotham Road (north of Green Lane);
- Link 13: Norwood Lane (southern section);
- Link 14: Norwood Lane (northern section);
- Link 15: Wrotham Road (south of Norwood Lane);
- Link 16: Wrotham Road (north of Norwood Lane);
- Link 17: Wrotham Road (south of Lewis Road);
- Link 18: Wrotham Road (Istead Rise to Lewis Road);
- Link 19: Wrotham Road (north of Istead Rise);
- Link 20: A2 (east of Halfpence Lane);
- Link 21: A2 (east of Henhurst Road);
- Link 22: A2 (east of Wrotham Road); and
- Link 23: A2 (west of Wrotham Road).

5.14 The location of each of the links is set out in **Figure 5.1**.

Figure 5.1 Study Area



Temporal Extent

5.15 The temporal extent of the study area was defined by the assessment years as included in the Kent strategic Transport Model (KTM) (a strategic software model) with additional forecast years derived to allow for the alignment of the current baseline and the consideration of construction effects. These are as follows:

- 2024 Baseline.
- 2031 Future Baseline.
- 2031 Future Baseline plus Peak Construction.
- 2042 Future Baseline.
- 2042 Future Baseline plus Proposed Development.
- 2042 Future Baseline plus Proposed Development plus Local Plan.

Scope

5.16 The scope of the Transport Assessment (**Appendix 5.1**) covers all phases of the Proposed Development including the enabling works and construction activity (medium-term), completed development (long-term) effects, and cumulative effects.

5.17 For each element, the assessment covers the peak transport activity associated with each phase of work, for example, peak construction phases with regard to vehicle and people movements and a fully occupied and operational development for the completed effects and cumulative effects.

5.18 The following topics will be assessed for the construction and completed phases of the Proposed Development in line with ISEP Guidelines (2023):

- Severance;
- Driver Delay;
- Pedestrian Delay;
- Non-Motorised User Amenity;
- Fear and Intimidation;
- Road Safety; and
- Hazardous Loads / Large Loads.

Assessment Methodology

Impact Areas

- 5.19 To forecast the potential for effects resulting from the Proposed Development, the KTM was utilised to forecast traffic impacts across the highway network in the vicinity of the Site.
- 5.20 The outputs from the KTM comprised two-way Average Annual Daily Traffic (AADT) traffic flows for the Proposed Development scenarios presented within this chapter.

Significance Criteria

- 5.21 The scale attributed to each effect has been determined based on the sensitivity of the receptor and magnitude of impact arising as a result of the Proposed Development. Professional judgement and experience have been drawn upon to assess the scale and significance.

Receptors and Receptor Sensitivity

- 5.22 The sensitivity of each receptor was evaluated as being high, medium, low or negligible based on a review of the baseline position of each receptor and its performance against benchmark areas. The receptors and the definition of sensitivity of a receptor (high, medium, low) is based on a scale set out in **Table 5.1** below.

Table 5.1 Receptor Sensitivity Description

Value (Sensitivity)	Description
High	Receptors of greatest sensitivity to traffic flow: schools, colleges, playgrounds, collision clusters, retirement homes, roads without footways that are used by pedestrians
Medium	Traffic flow sensitive receptors: congested junctions, doctors' surgeries, hospital, shopping areas with roadside frontage, roads with narrow footways, recreation facilities

Value (Sensitivity)	Description
Low	Receptors with some sensitivity to traffic flow: place of worship, public open space, tourist attractions and residential areas with adequate footway provision
Very Low	Receptors with low sensitivity to traffic flows and those sufficiently distant from affected roads and junctions: links where no pedestrian activity occurs and where there is no provision for pedestrians. For example, strategic roads such as motorways and trunk roads or rural roads where there are no pedestrian-generating land uses within the vicinity

Magnitude of Impact

- 5.23 The magnitude of impact to a receptor has been determined by considering the estimated deviation from baseline conditions both before, and, if required, after mitigation. The scale used for determining the magnitude of an impact has been based on **Table 5.2** below.

Table 5.2 Magnitude of Impact Description

Impact	Magnitude of Impact			
	High	Medium	Low	Very Low
Severance	Change in total traffic or Heavy Duty Vehicles (HDV) flows over 90%	Change in total traffic or HDV flows of 60-90%	Change in total traffic or HDV flows of 30-60%	Change in total traffic or HDV flows of less than 30%
Driver Delay	A judgement based on the journey time assessment within the traffic model and the results of junction capacity assessment			
Pedestrian Delay	A judgement based on the road links with two-way traffic flow exceeding 1,400 vehicles per hour in context of the individual characteristics			Two-way traffic flow <1,400 vehicles per hour
Non-motorised User Amenity	A judgement based on the routes with >100% change in context of their individual characteristics			Change in total traffic or HDV flows of less than 100%

Impact	Magnitude of Impact			
	High	Medium	Low	Very Low
Fear and Intimidation*	Two step changes in level	One step change in level, but with • >400 veh increase in average 18hr AV - two-way all vehicle flow; and/or • >500 HDV increase in total 18hr HDV flow	One step change in level, with • <400 veh increase in average 18hr AV - two-way all vehicle flow; and/or • <500 HDV increase in total 18hr HDV flow	No change in step changes
Road Safety	A judgement based on quantitative analysis set out in Appendix 6.1: Transport Assessment and summarised in this ES chapter			
Hazardous Loads / Large Loads	A judgement based on the forecast types of hazardous loads or large loads to be transported in relation to the development proposals			

*The Fear and Intimidation assessment adopts a total hazard scoring system to inform the step change which accounts for total traffic volumes, HDV flow and average speeds. These are included within the forecasts for this chapter (ISEP 'Guidelines for the Environmental Assessment for Road Traffic' (2023) Table 3.1/3.2)

Assessing Significance

5.24 **Table 5.3** below provides a matrix for determining the significance of an effect based on the sensitivity of the receptor and the magnitude of impact.

Table 5.3 Significance of Effect Matrix

Receptor Sensitivity	Classification of Effect			
	High	Medium	Low	Very Low
High	Major Beneficial / Adverse	Major Beneficial / Adverse	Moderate Beneficial / Adverse	Minor Beneficial / Adverse
Medium	Major Beneficial / Adverse	Moderate Beneficial / Adverse	Minor Beneficial / Adverse	Negligible
Low	Moderate Beneficial / Adverse	Minor Beneficial / Adverse	Negligible	Negligible
Very Low	Minor Beneficial / Adverse	Negligible	Negligible	Negligible

- 5.25 Effects classified as major or moderate are considered 'significant'. Effects classified as minor or negligible in scale are considered 'not significant'.

Limitations and Assumptions

- 5.26 The KTM utilises a baseline year of 2019 which does not align with the baseline years required for the Air Quality or Noise assessments (**Chapter 6** and **7**) included within this ES. Therefore, a growth factor was applied to the extracted 2019 traffic data to provide a baseline year of 2024.

- 5.27 This growth factor was extracted from the TEMPro database using the National Transport Model for the middle super outputs area of Gravesham (012) and is set out below.

- 2019-2024 = 1.0219

- 5.28 The future year assessment within the KTM represents 2042 which is beyond the anticipated peak activity associated with the construction phase of the Proposed Development. It has therefore been necessary to derive an additional forecast year to allow for the assessment of construction effects during their peak.

- 5.29 To derive a future year of 2031 the total growth forecast within the KTM from 2019 to 2042 has been calculated by averaging growth for each link over this 23-year period. The initial results forecast an average negative growth figure, and it is observed that the A2 corridor shows significant reductions in trips during this period. As it is not considered negative growth on local roads is likely, the A2 growth has been excluded. This approach also ensures locally committed developments are included proportionally between 2019 and 2042.

- 5.30 The forecast growth over the 2019-2042 period has then been divided by 23 to provide an annual figure and multiplied by 12 to generate a figure for 2031 from the baseline year of 2019. This set out below.

- 2019-2031 = 1.0024

- 5.31 In April 2023 a section of the A226 Galley Hill Road in Northfleet collapsed. This road served as a primary link between Dartford and Gravesend as an alternative to the A2 further south. Since this collapse this section of the A226 Galley Hill Road has been closed, causing traffic to reroute.

- 5.32 Whilst this is some 8km north of the Proposed Development, the effects are pronounced and could lead to cumulative impacts on the transport network in north Kent. Therefore, during scoping discussions with KCC with regard to the Transport Assessment (**Appendix 5.1**) it was agreed that all modelling scenarios excluded this link as there is currently no committed resolution in place to restore this section of the A226 Galley Hill Road. This approach has been adopted for this EIA also.

Baseline Conditions

Establishing Baseline Conditions

- 5.33 Baseline traffic conditions were extracted directly from the KTM to provide two-way AADT flows across the highway network in the vicinity of the Site.

Baseline Conditions

- 5.34 This section will include a description of the environment as it currently stands. The baseline position will be taken as the current conditions on the Site, taking account of the planning designations and assuming that all existing land uses in the surrounding area beyond the Site remain.

Active Travel

- 5.35 With regard to the existing footway provision, a footway is provided along the eastern side of Camer Road from the Royal Hounds Dog Park north towards Sole Street Station. On Norwood Lane, a footway is provided on the northern side of the road which terminates approximately 100m east of Nursery Road. Continuing west on this footway, pedestrians are able to route to Meopham Station.
- 5.36 There is an extensive public right of way (PRoW) network near the Site including:
- Footpath NS192 which bisects the Site and, in its entirety, runs from Wrotham Road (A227) to the south to Sole Street in the north;
 - Footpath NS250 which runs from the Camer Road / Norwood Lane junction north-west across open land to connect to Tradescent Drive;
 - Footpath NS191 which runs from Camer Road east to Gold Street;
 - Footpath NS308 which runs from Norwood Lane to Tradescent Drive; and
 - Bridleway NS242 which runs from the Royal Hounds Dog Park to Henley Street.

Public Transport

Bus

- 5.37 The nearest bus stops to the Site are located on Camer Road in proximity to Sole Street Station. These stops are served by the 311, 416 and 695 to destinations including Rochester and Gravesend. Additional stops are provided on Wrotham Road (A227) approximately 1km west of the Site served by the 34, 223, 306, 308, 416, 418, 418W, 695, M1 and VIGO1 to destinations including Vigo Village, Sevenoaks and Gravesend.

Rail

- 5.38 Sole Street Station is located to the north-east of the Site and provides hourly services to both London Victoria and Gillingham. Further rail services are available at Meopham Station approximately 1km to the north-west of the Site accessible via Norwood Lane and Wrotham Road. More frequent services are provided to Dover Priory, London Victoria and Gillingham.

Highway Network

Camer Road

- 5.39 Camer Road bounds the Site to the south-east and comprises a two-way single carriageway subject to the national speed limit, though this reduces to 30mph on the approach to Sole Street Station. The road is approximately 6m in width with limited footway provision.

Norwood Lane

- 5.40 Norwood Lane bounds the Site to the south-west and comprises a two-way single carriageway operating at the national speed limit to the south and 30mph to the north in the vicinity of the existing residential dwellings. The road varies in width from approximately 4m south of the Site to 5m adjacent to the residential dwellings.

Wrotham Road (A227)

- 5.41 Wrotham Road runs to the west of the Site on a north-south alignment between Gravesend and Meopham. In proximity to the Site, the road comprises a two-way single carriageway operating with a 30mph speed limit. Footways are provided on both sides of the carriageway providing connections to local facilities.

Baseline Traffic Flows (2024)

- 5.42 A list of the baseline traffic flows in 24 hours AADT and HDV is included in **Table 5.4** overleaf.

Table 5.4 2024 Baseline Traffic Flows

Link	Location	24hr AADT	24hr HDV	HDV %
1	Camer Road (north of access)	7614	248	3%
2	Sole Street	9107	270	3%
3	Jeskyns Road	4005	47	1%
4	Henhurst Road	4013	47	1%
5	The Street	5102	224	4%
6	Halfpence Lane	6028	250	4%
7	Camer Road (south of access)	7614	248	3%
8	Green Lane	5639	229	4%
9	Wrotham Road (north of Longfield Road)	15212	554	4%
10	Longfield Road	4074	32	1%
11	Wrotham Road (south of Longfield Road)	17532	584	3%
12	Wrotham Road (north of Green Lane)	11250	369	3%
13	Norwood Lane (southern section)	780	13	2%
14	Norwood Lane (northern section)	2526	21	1%

Link	Location	24hr AADT	24hr HDV	HDV %
15	Wrotham Road (south of Norwood Lane)	12621	362	3%
16	Wrotham Road (north of Norwood Lane)	12676	373	3%
17	Wrotham Road (south of Lewis Road)	14005	398	3%
18	Wrotham Road (Istead Rise to Lewis Road)	14978	424	3%
19	Wrotham Road (north of Istead Rise)	18675	459	2%
20	A2 (east of Halfpence Lane)	166846	18762	11%
21	A2 (east of Henhurst Road)	161028	18663	12%
22	A2 (east of Wrotham Road)	169385	18277	11%
23	A2 (west of Wrotham Road)	176954	18403	10%

Highway Safety

- 5.43 There have been no collisions in the most recent five-year period on Camer Road and only one slight collision on Norwood Lane. There have been five slight collisions and two serious collisions on Wrotham Road (A227) with two slight collisions on Green Lane. Whilst there have been two collisions at the Wrotham Road/Norwood Lane junction in the five-year period, this is significantly below the rate of one collision per annum, so there is deemed to be no inherent safety issues with the local highway network. It is noted that, whilst DfT data is suitable for scoping purposes, the Transport Assessment (**Appendix 5.1**) will utilise the most recent available data to be obtained from KCC, which will be inclusive of the reasons for collisions.

Receptors

- 5.44 A list of existing and future receptors is included in **Table 5.5** below.

Table 5.5 Existing and Future Sensitive Receptors

Receptor	Sensitivity
Existing Receptors	
Existing residents	High
Existing business employees	Medium
Highway network	Low

Receptor	Sensitivity
Pedestrians and cyclists	High
Future Receptors	
Future residents	High
Future primary school pupils	High
Highway network	Low
Pedestrians and cyclists	High

Future Baseline 2031 / 2042

- 5.45 A list of the Future Baseline traffic flows in AADT and HDV as well as percentage HDV for the Future Baseline of 2031 and 2042 is included in **Table 5.6**.

Table 5.6 2031 Future Baseline Traffic Flows

Link	Location	24hr AADT	24hr HDV	HDV %
1	Camer Road (north of access)	7633	249	4%
2	Sole Street	9129	271	4%
3	Jeskyns Road	4015	47	3%
4	Henhurst Road	4023	47	3%
5	The Street	5115	225	6%
6	Halfpence Lane	6043	250	5%
7	Camer Road (south of access)	7633	249	4%
8	Green Lane	5653	229	6%
9	Wrotham Road (north of Longfield Road)	15249	555	4%
10	Longfield Road	4084	32	1%
11	Wrotham Road (south of Longfield Road)	17574	585	4%
12	Wrotham Road (north of Green Lane)	11277	370	3%
13	Norwood Lane (southern section)	782	13	2%
14	Norwood Lane (northern section)	2532	22	1%

Link	Location	24hr AADT	24hr HDV	HDV %
15	Wrotham Road (south of Norwood Lane)	12652	363	2%
16	Wrotham Road (north of Norwood Lane)	12707	374	3%
17	Wrotham Road (south of Lewis Road)	14039	399	2%
18	Wrotham Road (Istead Rise to Lewis Road)	15014	425	2%
19	Wrotham Road (north of Istead Rise)	18721	461	2%
20	A2 (east of Halfpence Lane)	167252	18807	12%
21	A2 (east of Henhurst Road)	161420	18709	12%
22	A2 (east of Wrotham Road)	169798	18321	5%
23	A2 (west of Wrotham Road)	177385	18448	4%

- 5.46 A list of the Future Baseline traffic flows in AADT and HDV as well as percentage HDV for the Future Baseline of 2042 is included in **Table 5.7**.

Table 5.7 2042 Future Baseline Traffic Flows

Link	Location	24hr AADT	24hr HDV	HDV %
1	Camer Road (north of access)	7851	350	4%
2	Sole Street	9233	387	4%
3	Jeskyns Road	6488	212	3%
4	Henhurst Road	6677	213	3%
5	The Street	2746	175	6%
6	Halfpence Lane	3895	190	5%
7	Camer Road (south of access)	7851	350	4%
8	Green Lane	5861	325	6%
9	Wrotham Road (north of Longfield Road)	16493	649	4%
10	Longfield Road	4401	38	1%
11	Wrotham Road (south of Longfield Road)	19363	687	4%

Link	Location	24hr AADT	24hr HDV	HDV %
12	Wrotham Road (north of Green Lane)	12497	371	3%
13	Norwood Lane (southern section)	645	10	2%
14	Norwood Lane (northern section)	2614	20	1%
15	Wrotham Road (south of Norwood Lane)	13903	344	2%
16	Wrotham Road (north of Norwood Lane)	14019	353	3%
17	Wrotham Road (south of Lewis Road)	15672	383	2%
18	Wrotham Road (Istead Rise to Lewis Road)	16712	411	2%
19	Wrotham Road (north of Istead Rise)	20547	449	2%
20	A2 (east of Halfpence Lane)	178741	21634	12%
21	A2 (east of Henhurst Road)	182145	22076	12%
22	A2 (east of Wrotham Road)	148993	7049	5%
23	A2 (west of Wrotham Road)	163404	7091	4%

Assessment of Effects

- 5.47 The scoping exercise completed for this chapter of the ES includes the construction phase as well as focussing on the future impacts resulting from the completed Proposed Development.

2031 Future Baseline plus Peak Construction

- 5.48 To assess the potential effects associated with the construction of the Proposed Development a review has been completed of the anticipated construction programme and the vehicles and HDV associated with completing this. Construction activities are programmed to take place over a five-year period between 2027 and 2032, with peak construction activity occurring during 2031 when both dwellings and the proposed school will be under construction. The forecast construction programme is provided in **Table 5.8**

Table 5.8 Forecast Construction Programme

Phase / sub-phase	Construction Start Date (Indicative)	Construction end date (Indicative)	Initial Occupation date (Indicative)
Phase 1 – 223 homes	Q4 2027	Q1 2030	Q3 2029

Phase / sub-phase	Construction Start Date (Indicative)	Construction end date (Indicative)	Initial Occupation date (Indicative)
Phase 2a – 226 homes	Q2 2029	Q3 2031	Q4 2030
Phase 2b School (dependant on KCC)	Target Q3 2029	Target Q1 2032	Target Q3 2032
Phase 3 – 276 homes	Q4 2030	2033	2033

- 5.49 Based upon this programme the peak construction activity is anticipated to occur in 2031. To forecast the number of construction vehicles associated with this stage of the construction programme, a first principles approach has been taken based upon professional experience.
- 5.50 During 2031 Phase 2a, 2b and 3 will be in progress, these phases in total deliver a total of 602 dwellings and a primary school between 2029 and 2032. To provide a reasonable and robust assessment it has been assumed that a third of these dwellings (167 dwellings) are constructed simultaneously in 2031 along with the entire school. This does not assume this level of development is constant throughout 2031 but that this represents the peak day of activity.
- 5.51 To forecast the residential construction traffic a trip generation exercise has been completed for car and HDVs separately. A daily car trip generation rate of 1.5 two-way trips per dwelling has been used along with an HDV trip generation rate of 0.1 two-way trips per dwelling. This results in a daily trip generation of 251 cars and 17 HDVs.
- 5.52 For the school, a peak of 50 construction staff has been assumed with a vehicle occupancy of 1.2 results in a car trip generation of 84 two-way trips. A two-way HDV trip generation has been assumed of 10HDV (likely during the structural development of the school).
- 5.53 Based upon the forecasts set out above the total two-way construction traffic associated with the Proposed Development during the peak construction period of 2031 comprises 335 cars and 27 HDVs.
- 5.54 To assess the potential effects of the construction of the Proposed Development the forecast trips have been distributed onto the highway network along three distinct routes. These are as follows:
- Route 1: 50% of all traffic to and from the site to the M20;
 - Route 2: 25% of all traffic to and from the site via the A2 east; and
 - Route 3: 25% of all traffic to and from the site via the A2 west.
- 5.55 The resulting forecast traffic flows associated with the peak construction phase during 2031 is set out in **Table 5.9**.

Table 5.9 2031 Future Baseline plus Peak Construction

Link	Location	AADT	+/-	%	HDV	+/-	%
1	Camer Road (north of access)	7994	361	4.5%	276	27	9.7%
2	Sole Street	9129	0	0.0%	271	0	0.0%
3	Jeskyns Road	4015	0	0.0%	47	0	0.0%
4	Henhurst Road	4023	0	0.0%	47	0	0.0%
5	The Street	5115	0	0.0%	225	0	0.0%
6	Halfpence Lane	6043	0	0.0%	250	0	0.0%
7	Camer Road (south of access)	7994	361	4.5%	276	27	9.7%
8	Green Lane	6014	361	6.0%	256	27	10.4%
9	Wrotham Road (north of Longfield Road)	15430	181	1.2%	568	13	2.4%
10	Longfield Road	4084	0	0.0%	32	0	0.0%
11	Wrotham Road (south of Longfield Road)	17755	181	1.0%	599	13	2.2%
12	Wrotham Road (north of Green Lane)	11458	181	1.6%	383	13	3.5%
13	Norwood Lane (southern section)	782	0	0.0%	13	0	0.0%
14	Norwood Lane (northern section)	2532	0	0.0%	22	0	0.0%
15	Wrotham Road (south of Norwood Lane)	12833	181	1.4%	376	13	3.6%
16	Wrotham Road (north of Norwood Lane)	12887	181	1.4%	387	13	3.5%
17	Wrotham Road (south of Lewis Road)	14220	181	1.3%	412	13	3.2%
18	Wrotham Road (Istead Rise to Lewis Road)	15195	181	1.2%	438	13	3.0%
19	Wrotham Road (north of Istead Rise)	18901	181	1.0%	474	13	2.8%
20	A2 (east of Halfpence Lane)	167252	0	0.0%	18807	0	0.0%

Link	Location	AADT	+/-	%	HDV	+/-	%
21	A2 (east of Henhurst Road)	161420	0	0.0%	18709	0	0.0%
22	A2 (east of Wrotham Road)	169888	90	0.1%	18328	7	0.0%
23	A2 (west of Wrotham Road)	177475	90	0.1%	18455	7	0.0%

Severance

- 5.56 There are no links forecast to experience an increase in total traffic of HDV flow of over 30% which suggests a **Minor Adverse (Not Significant)** effect.

Driver Delay

- 5.57 The greatest effect observed occurs on Camer Road (Links 1 and 7) and Green Lane (Link 8) where an additional 361 two-way movements are forecast. Whilst this scenario was not specifically included within Table 7.2 of the Transport Assessment (**Appendix 5.1**) it is possible to qualitatively assess Driver Delay based on the results of the other scenarios and the forecast traffic flows.
- 5.58 There is only one link forecast to experience a change in driver delay between the 2042 Baseline and 2042 Baseline plus Proposed Development scenario (which has a greater impact in trip numbers on all affected links in this construction scenario) and that is Link 19 Wrotham Road (north of Istead Rise). It is therefore reasonable to assert that this link is most likely to experience additional delay.
- 5.59 In this scenario the impact forecast on Link 19 represents only a 1.0% uplift which isn't considered a material change and suggests a **Negligible (Not Significant)** effect.

Pedestrian Delay

- 5.60 To assess the likely effects on pedestrian delay consideration has been given to links where the two-way traffic flow could excess 1,400 vehicles per hour. As the outputs are presented as AADT, this has been divided by 24 in the first instance to give an annual average hour traffic figure. Consideration has also been given to the nature of 'peak' hour periods which typically experience between 7% and 10% of the total daily traffic in a single hour.
- 5.61 Using the magnitude of change of 1,400 two-way vehicles per hour, a link with an AADT value of 14,000 ($1,400 \times (100/10)$) could be considered to meet this magnitude of flow.
- 5.62 Link 9 Wrotham Road (north of Longfield Road) experiences an AADT flow of 15,430, an increase of just 1.2% which is unlikely to be perceptible to pedestrians. As such the effects are considered **Minor Adverse (Not Significant)**.
- 5.63 Link 11 Wrotham Road (south of Longfield Road) experiences an AADT flow of 17,775 which represents a 1.0% increase which is not considered perceptible to pedestrians. Furthermore, a staggered pedestrian crossing with guard railing is in place at the junction between Wrotham Road

and Longfield Road which would minimise any perceived increase in traffic as pedestrians cross a single lane at once. This suggests a **Minor Adverse (Not Significant)** effect.

- 5.64 Link 17 Wrotham Road (south of Lewis Road) is forecast to experience an AADT flow of 14,220 an increase of 1.3% which is unlikely to be perceptible to pedestrians. As such the effects are considered **Minor Adverse (Not Significant)**.
- 5.65 Link 18 Wrotham Road (Istead Rise to Lewis Road) is forecast to experience an AADT flow of 15,195 an increase of 1.2% over the 2031 Baseline which is unlikely to be perceptible to pedestrians. As such the effects are considered **Minor Adverse (Not Significant)**.
- 5.66 Link 19 Wrotham Road (North of Istead Rise) is forecast to experience an AADT flow of 18,901 an increase of 1.0% over the 2031 Baseline which is unlikely to be perceptible to pedestrians. As such the effects are considered **Minor Adverse (Not Significant)**.
- 5.67 Links 20, 21, 22 and 23 all comprise sections of the A2 where the impacts is less than 0.2% and as no pedestrians are anticipated or permitted on these links there are no effects to consider.

Non-motorised User Amenity

- 5.68 There are no links anticipated to experience an increase in traffic flow of over 100% as a result of the construction activities in comparison to the 2031 Baseline. The greatest increase forecast is a 6.0% increase on Green Lane.
- 5.69 These forecasts suggest a **Minor Adverse (Not Significant)** effect.

Fear and Intimidation

- 5.70 Fear and Intimidation is set out in **Table 5.2** and is a judgement based on the volume of traffic, HDV composition, proximity to people and the level of protection. Links with an increase of over 400 vehicles are identified for assessment with consideration given to the nature of the link, the HDV flow and provisions for pedestrians.
- 5.71 As there are no links with this level of increase forecast the resulting effect is **Minor Adverse (Not Significant)**.

Road Safety

- 5.72 Section 2.10 of the Transport Assessment (**Appendix 5.1**) shows that, over the five-year period, a total of six slight collisions occurred and five serious collisions; no fatal collisions have occurred. Whilst it is noted that four collisions occurred in 2020, including three serious collisions, across the study area, an average of only two collisions occurred per annum which does not indicate a recurring pattern.
- 5.73 As a result of the anticipated increases in vehicular traffic, the effects are considered **Minor Adverse (Not Significant)**.

Hazardous Loads / Large Loads

- 5.74 A Construction Environmental Management Plan (CEMP) will be produced ahead of the start of construction to ensure the safe and effective operation of construction related activity to and from the Site. In the event that any hazardous loads are required for transportation then all packaging and containment will be provided in line with the Vehicle Certification Agencies Dangerous Goods Office procedures and requirements for UK roads. Vehicles will be loaded on-Site with the responsibility for the safe transit of the good that of the haulier or client under the European Agreement concerning International Carriage of Dangerous Goods by Road.
- 5.75 On this basis, procedures will be in place for loading hazardous loads within the Site and transporting them on the local and strategic road network to ensure any risks are minimised. As a result, the effect of the Proposed Development will be **Minor Adverse (Not Significant)**.

Environmental Design and Management

- 5.76 As part of the design of the Proposed Development a number of embedded mitigation features will be delivered. These mitigation features will significantly enhance the walking, cycling and driving experience across the Site and local highway networks. A list of the embedded mitigation is set out below with full details set out within the Transport Assessment (**Appendix 5.1**).
- Delivery of a new Site access roundabout on Camer Road;
 - Realignment and widening of Camer Road;
 - Reduction in speed limit on Camer Road;
 - Widening of the junction between Norwood Lane and Camer Road;
 - Pedestrianisation of southern extent of Norwood Lane;
 - Introduction of new pedestrian and cycle access into the Site from Norwood Lane;
 - Delivery of two new pedestrian crossing points on Camer Road; and
 - Realignment of the eastbound bus stop on Camer Road.

Effects Once the Proposed Development is Operational

- 5.77 A list of the forecast traffic flows associated with the Proposed Development in AADT and HDV is included in **Table 5.10**.

Table 5.10 Proposed Development Traffic Flows

Link	Location	24hr AADT	24hr HDV
1	Camer Road (north of access)	2009	-47
2	Sole Street	2289	-58
3	Jeskyns Road	1939	-55
4	Henhurst Road	2079	-44
5	The Street	349	-3
6	Halfpence Lane	422	-2
7	Camer Road (south of access)	1432	-47
8	Green Lane	2034	-45
9	Wrotham Road (north of Longfield Road)	-342	-48
10	Longfield Road	963	-3
11	Wrotham Road (south of Longfield Road)	613	-50
12	Wrotham Road (north of Green Lane)	1046	-6
13	Norwood Lane (southern section)	-645	-10
14	Norwood Lane (northern section)	362	9
15	Wrotham Road (south of Norwood Lane)	1179	-4
16	Wrotham Road (north of Norwood Lane)	1208	0
17	Wrotham Road (south of Lewis Road)	1241	-5
18	Wrotham Road (Istead Rise to Lewis Road)	1306	-5
19	Wrotham Road (north of Istead Rise)	1811	-6
20	A2 (east of Halfpence Lane)	712	-3
21	A2 (east of Henhurst Road)	449	-10
22	A2 (east of Wrotham Road)	437	14
23	A2 (west of Wrotham Road)	706	4

5.78 The Proposed Development traffic flows set out in **Table 5.7** have been added to the 2042 Future Baseline to present the Future Baseline plus Proposed Development assessment scenario. These flows are included in **Table 5.11**.

Table 5.11 2042 Future Baseline plus Proposed Development Traffic Flows

Link	Location	AADT	+/-	%	HDV	+/-	%
1	Camer Road (north of access)	9860	2009	20.4%	303	-47	-15.5%
2	Sole Street	11522	2289	19.9%	329	-58	-17.6%
3	Jeskyns Road	8427	1939	23.0%	157	-55	-35.0%
4	Henhurst Road	8756	2079	23.7%	169	-44	-26.0%
5	The Street	3095	349	11.3%	172	-3	-1.7%
6	Halfpence Lane	4317	422	9.8%	188	-2	-1.1%
7	Camer Road (south of access)	9283	1432	15.4%	303	-47	-15.5%
8	Green Lane	7895	2034	25.8%	280	-45	-16.1%
9	Wrotham Road (north of Longfield Road)	16151	-342	-2.1%	601	-48	-8.0%
10	Longfield Road	5364	963	18.0%	35	-3	-8.6%
11	Wrotham Road (south of Longfield Road)	19976	613	3.1%	637	-50	-7.8%
12	Wrotham Road (north of Green Lane)	13543	1046	7.7%	365	-6	-1.6%
13	Norwood Lane (southern section)	0	-645	-	0	-10	-
14	Norwood Lane (northern section)	2976	362	12.2%	29	9	31.0%
15	Wrotham Road (south of Norwood Lane)	15082	1179	7.8%	340	-4	-1.2%
16	Wrotham Road (north of Norwood Lane)	15227	1208	7.9%	353	0	0.0%

Link	Location	AADT	+/-	%	HDV	+/-	%
17	Wrotham Road (south of Lewis Road)	16913	1241	7.3%	378	-5	-1.3%
18	Wrotham Road (Istead Rise to Lewis Road)	18018	1306	7.2%	406	-5	-1.2%
19	Wrotham Road (north of Istead Rise)	22358	1811	8.1%	443	-6	-1.4%
20	A2 (east of Halfpence Lane)	179453	712	0.4%	21631	-3	0.0%
21	A2 (east of Henhurst Road)	182594	449	0.2%	22066	-10	0.0%
22	A2 (east of Wrotham Road)	149430	437	0.3%	7063	14	0.2%
23	A2 (west of Wrotham Road)	164110	706	0.4%	7095	4	0.1%

Severance

- 5.79 Only one link is forecast to experience an increase in total traffic of HDV flow of over 30% which occurs on link 14 Norwood Lane, north of the newly pedestrianised section. This route will be a no-through route and so the forecast increase of HDVs is unlikely to be a result of development traffic, but instead rerouted traffic or traffic associated with committed developments.
- 5.80 In numerical terms, the increase comprises nine HDVs across an average day which equates to fewer than one HDV per hour. This impact is not considered to present any severance impacts making the magnitude of impact very low across receptors suggesting a **Minor Adverse (Not Significant)** effect in terms of severance.

Driver Delay

- 5.81 Tabel 7.2 of the Transport Assessment (**Appendix 5.1**) sets out the forecast impact of the Proposed Development on driver delay across the transport network included within the KTM. This table demonstrates that there is no single link, with the exception of the link 19 Wrotham Road (north of Istead Rise) forecast to experience an increase in delay in excess of 30 seconds during the 2042 Baseline plus Proposed Development scenario.
- 5.82 Link 19 is forecast to have delay of between 30 seconds and one minute. A review of the traffic flow in this location identifies a forecast increase in traffic of 8.1% across a day. This therefore suggests a **Negligible (Not Significant)** effect on driver delay.

Pedestrian Delay

- 5.83 To assess the likely effects on pedestrian delay the methodology set out for the assessment of the 2031 Baseline plus Peak Construction has been maintained.
- 5.84 Link 9 Wrotham Road (north of Longfield Road) experiences an AADT flow of 16,151, though this is a decrease from the 2042 Baseline and as such the effects are **Minor Adverse (Not Significant)**.

- 5.85 Link 11 Wrotham Road (south of Longfield Road) experiences an AADT flow of 19,976 which represents a 3.1% increase. Whilst pedestrian movement is considered prevalent in this area, a staggered pedestrian crossing with guard railing is in place at the junction between Wrotham Road and Longfield Road which would minimise any perceived increase in traffic as pedestrians cross a single lane at once. This suggests a **Minor Adverse (Not Significant)** effect.
- 5.86 Link 12 Wrotham Road (north of Green Lane) has an AADT of 13,543 which represents an increase of 7.7% over the 2042 Baseline. Wrotham Road in this location is likely to serve pedestrian movements to and from Meopham Rail Station and local facilities and services but also provides two dedicated, staggered crossing points to minimise delay for pedestrians. The uplift in traffic is considered minor and suggests a **Minor Adverse (Not Significant)** effect.
- 5.87 Link 15 Wrotham Road (south of Norwood Lane) is forecast to experience an AADT flow of 15,082 an increase of 7.8% over the 2042 Baseline. There are limited opportunities for pedestrian to cross Wrotham Road in this location but given the low level of increase in flows (below 10%) and the provisions to cross further south and north on Wrotham Road, this suggests a **Minor Adverse (Not Significant)** effect.
- 5.88 Link 16 Wrotham Road (north of Norwood Lane) is forecast to experience an AADT flow of 15,227 an increase of 7.9% over the 2042 Baseline. There are multiple opportunities for pedestrian to cross Wrotham Road in this location and given the low level of increase in flows (below 10%) and the additional provisions to cross further south and north on Wrotham Road, this suggests a **Minor Adverse (Not Significant)** effect.
- 5.89 Link 17 Wrotham Road (south of Lewis Road) is forecast to experience an AADT flow of 16,913 an increase of 7.3% over the 2042 Baseline. There is no footway located in this location and as such this suggests a **Negligible (Not Significant)** effect.
- 5.90 Link 18 Wrotham Road (Istead Rise to Lewis Road) is forecast to experience an AADT flow of 18,018 an increase of 7.2% over the 2042 Baseline. There is only a footway located on the western side of the carriageway in this location and pedestrian trips would be primarily focussed on travelling in and around Istead Rise as there are no continuous footways north or south of this area. This therefore suggests a **Minor Adverse (Not Significant)** effect.
- 5.91 Link 19 Wrotham Road (North of Istead Rise) is forecast to experience an AADT flow of 22,358 an increase of 8.1% over the 2042 Baseline. There is no footway located in this location and as such this suggests a **Negligible (Not Significant)** effect.
- 5.92 Links 20, 21, 22 and 23 all comprise sections of the A2 and as no pedestrians are anticipated or permitted on these links there are no effects to consider.

Non-motorised User Amenity

- 5.93 There are no links anticipated to experience an increase in traffic flow of over 100% as a result of the Proposed Development in comparison to the 2042 Baseline. The greatest increase forecast is a 25.8% increase on Green Lane.

- 5.94 These forecasts suggest a **Minor Adverse (Not Significant)** effect.

Fear and Intimidation

- 5.95 Fear and Intimidation is set out in **Table 5.2** and is a judgement based on the volume of traffic, HDV composition, proximity to people and the level of protection. Links with an increase of over 400 vehicles have been assessed with consideration given to the nature of the link, the HDV flow and provisions for pedestrians.
- 5.96 Link 1 Camer Road (north of access) is forecast to experience an increase in AADT flow of 2,009 vehicles which is considered a perceptible increase and above 400 vehicles. The HDV impact however represents a reduction of 47 vehicles. Dedicated footway provisions are made on the southern side of Camer Road and although the increase in traffic volume is perceptible, the decrease in HDV numbers will minimise fear and intimidation. There are also significant embedded mitigation measures in place on Camer Road to further enhance pedestrian facilities and minimise the impacts felt of the Proposed Development. Critically, there is no step change from the baseline anticipated and it is therefore considered that this suggests a **Minor Adverse (Not Significant)** effect.
- 5.97 Link 2 Sole Street is forecast to experience an increase in AADT flow of 2,289 vehicles which is considered a perceptible increase and above 400 vehicles. The HDV impact however represents a reduction of 58 vehicles and there is no step change in hazard from the baseline. It is therefore considered that this suggests a **Minor Adverse (Not Significant)** effect.
- 5.98 Link 3 Jeskyns Road is forecast to experience an increase in AADT flow of 1,939 vehicles which is considered a perceptible increase and above 400 vehicles. The HDV impact represents a reduction of 55 vehicles and there is no step change in hazard from the baseline. It is therefore considered that this suggests a **Minor Adverse (Not Significant)** effect.
- 5.99 Link 4 Henhurst Road is forecast to experience an increase in AADT flow of 2,079 vehicles which is considered a perceptible increase and above 400 vehicles. The HDV impact represents a reduction of 44 vehicles and there is no step change in hazard from the baseline. It is therefore considered that this suggests a **Minor Adverse (Not Significant)** effect.
- 5.100 Link 7 Camer Road (south of access) is forecast to experience an increase in AADT flow of 1,432 vehicles which is considered a perceptible increase and above 400 vehicles. The HDV impact represents a reduction of 47 vehicles. Dedicated footway provisions within the Proposed Development will afford pedestrian movement adjacent to Camer Road and although the increase in traffic volume is perceptible, the decrease in HDV numbers will minimise fear and intimidation. There are also significant embedded mitigation measures in place on Camer Road to further enhance pedestrian facilities and minimise the impacts felt of the Proposed Development. As no step change in hazard is forecast from the baseline, it is therefore considered that this suggests a **Minor Adverse (Not Significant)** effect.
- 5.101 Link 8 Green Lane is forecast to experience an increase in AADT flow of 2,034 vehicles which is considered a perceptible increase and above 400 vehicles. The HDV impact represents a reduction of 45 vehicles however and with dedicated footway provisions on the northern side of Green Lane

and an extended 30 mph speed limit it is considered there would be no step change in hazard from the baseline and that the impact on fear and intimidation would comprise a **Minor Adverse (Not Significant)** effect.

- 5.102 Links 12, 15, 16, 17, 18 and 19 all comprise Wrotham Road and are all forecast to experience an increase in AADT flow of over 400 vehicles though no step change in hazard is forecast. For all links, the HDV impacts reduce however in comparison to the Baseline with the exception of Link 16 which has no change at all. Wrotham Road provides a mix of segregate footways on both sides of the carriageway and services a significant volume of traffic as identified by the 2042 Baseline data. The reduction, for the most part, in HDV traffic and moderate uplift in vehicle numbers is not considered to present a perceptible impact on fear and intimidation on links 12, 15, 16, 17, 18 and 19. This would suggest a **Minor Adverse (Not Significant)** effect.
- 5.103 Links 20-23 comprise the A2 corridor where no pedestrians are present and no step change is forecast and so these have therefore been excluded.

Road Safety

- 5.104 Section 2.10 of the Transport Assessment (**Appendix 5.1**) shows that, over the five-year period, a total of six slight collisions have occurred and five serious collisions; no fatal collisions have occurred. Whilst it is noted that four collisions occurred in 2020, including three serious collisions, across the study area, an average of only two collisions occurred per annum which does not indicate a recurring pattern.
- 5.105 As a result, the effects are considered **Minor Adverse (Not Significant)**.

Hazardous Loads / Large Loads

- 5.106 There are no operational hazardous or large loads anticipated with the Proposed Development. In the event that any hazardous loads are required for transportation then all packaging and containment will be provided in line with the Vehicle Certification Agencies Dangerous Goods Office procedures and requirements for UK roads. Vehicles will be loaded on Site with the responsibility for the safe transit of the good that of the haulier or client under the European Agreement concerning International Carriage of Dangerous Goods by Road. On this basis, procedures will be in place for loading hazardous loads within the Site and transporting them on the local and strategic road network to ensure any risks are minimised. As a result, the effect of the Proposed Development will be **Minor Adverse (Not Significant)**.

Cumulative Effects Once the Proposed Development is Operational

- 5.107 A list of the forecast traffic flows associated with the Operational phase and committed developments included within the Local Plan in 24 hours AADT and HDV is included in **Table 5.12**.

Table 5.12 2042 Future Baseline plus Proposed Development plus Local Plan Traffic Flows

Link	Location	AADT	+/-	%	HDV	+/-	%
1	Camer Road (north of access)	11861	4010	34%	248	-102	-41%
2	Sole Street	12871	3638	28%	271	-116	-43%
3	Jeskyns Road	9106	2618	29%	145	-67	-46%
4	Henhurst Road	9828	3151	32%	172	-41	-24%
5	The Street	3765	1019	27%	126	-49	-39%
6	Halfpence Lane	5342	1447	27%	143	-47	-33%
7	Camer Road (south of access)	11044	3193	29%	248	-102	-41%
8	Green Lane	9407	3546	38%	225	-100	-44%
9	Wrotham Road (north of Longfield Road)	18756	2263	12%	514	-135	-26%
10	Longfield Road	6237	1836	29%	55	17	31%
11	Wrotham Road (south of Longfield Road)	21394	2031	9%	569	-118	-21%
12	Wrotham Road (north of Green Lane)	15166	2669	18%	336	-35	-10%
13	Norwood Lane (southern section)	0	-645	N/A	0	-10	N/A
14	Norwood Lane (northern section)	3794	1180	31%	30	10	33%
15	Wrotham Road (south of Norwood Lane)	16973	3070	18%	327	-17	-5%
16	Wrotham Road (north of Norwood Lane)	17102	3083	18%	340	-13	-4%
17	Wrotham Road (south of Lewis Road)	18914	3242	17%	355	-28	-8%
18	Wrotham Road (Istead Rise to Lewis Road)	20319	3607	18%	377	-34	-9%
19	Wrotham Road (north of Istead Rise)	24546	3999	16%	415	-34	-8%
20	A2 (east of Halfpence Lane)	186674	7933	4%	21346	-288	-1%
21	A2 (east of Henhurst Road)	189139	6994	4%	21824	-252	-1%

Link	Location	AADT	+/-	%	HDV	+/-	%
22	A2 (east of Wrotham Road)	148863	-130	0%	6792	-257	-4%
23	A2 (west of Wrotham Road)	166378	2974	2%	6915	-176	-3%

Severance

- 5.108 Only one link is forecast to experience an increase in total traffic of HDV flow of over 30% which occurs on link 14 Norwood Lane, north of the newly pedestrianised section. This route will be a no-through route and so the forecast increase of HDVs is unlikely to be a result of development traffic, but instead rerouted traffic or traffic associated with committed developments.
- 5.109 In numerical terms, the increase comprises 10 HDVs across an average day which equates to fewer than one HDV per hour. This impact is not considered to present any severance impacts making the magnitude of impact very low across receptors suggesting a **Minor Adverse (Not Significant)** effect in terms of severance.

Driver Delay

- 5.110 Table 7.2 of the Transport Assessment (**Appendix 5.1**) sets out the forecast impact of the Proposed Development on driver delay across the transport network included within the KTM. This table demonstrates that there are increases in delay forecast on link 4 Henhurst Road and link 19 Wrotham Road (north of Istead Rose). In both instances the forecast impacts during the 2042 Baseline plus Proposed Development plus Local Plan are for increases to delay of 30 seconds.
- 5.111 The KTM results (Appendix J of the Transport Assessment (**Appendix 5.1**)) shows the volume over capacity for link 4 to be below 75% and for link 19 to be between 75% and 85%. Giving consideration to these metrics, it is suggested that the Proposed Development will have a **Minor Adverse (Not Significant)** effect on driver delay.

Pedestrian Delay

- 5.112 To assess the likely effects on pedestrian delay the methodology set out for the assessment of the 2031 Baseline plus Peak Construction has been maintained.
- 5.113 Link 9 Wrotham Road (north of Longfield Road) experiences an AADT flow of 18,756, which represents an increase of 12.1% in this location. Whilst pedestrian movement is considered prevalent in this area, a staggered pedestrian crossing with guard railing is in place at the junction between Wrotham Road and Longfield Road which would minimise any perceived increase in traffic as pedestrians cross a single lane at once. This suggests a **Minor Adverse (Not Significant)** effect.
- 5.114 Link 11 Wrotham Road (south of Longfield Road) experiences an AADT flow of 21,394 which represents a 9.5% increase. As with link 9, whilst pedestrian movement is considered prevalent in this area, a staggered pedestrian crossing with guard railing is in place at the junction between Wrotham Road and Longfield Road which would minimise any perceived increase in traffic as pedestrians cross a single lane at once. This suggests a **Minor Adverse (Not Significant)** effect.

- 5.115 Link 12 Wrotham Road (north of Green Lane) has an AADT of 15,166 which represents an increase of 17.6% over the 2042 Baseline. Wrotham Road in this location is likely to serve pedestrian movements to and from Meopham Rail Station and local facilities and services but also provides two dedicated, staggered crossing points to minimise delay for pedestrians. The uplift in traffic is considered minor and suggests a **Minor Adverse (Not Significant)** effect.
- 5.116 Link 15 Wrotham Road (south of Norwood Lane) is forecast to experience an AADT flow of 16,973 an increase of 18.1% over the 2042 Baseline though the HDV numbers fall by 17. There are limited opportunities for pedestrian to cross Wrotham Road in this location though there are provisions to cross further south and north on Wrotham Road. this suggests a **Minor Adverse (Not Significant)** effect.
- 5.117 Link 16 Wrotham Road (north of Norwood Lane) is forecast to experience an AADT flow of 17,102 an increase of 18.0% over the 2042 Baseline. There are multiple opportunities for pedestrian to cross Wrotham Road in this location and given the reduction in HDV movements (-13) and the additional provisions to cross further south and north on Wrotham Road, this suggests a **Minor Adverse (Not Significant)** effect
- 5.118 Link 17 Wrotham Road (south of Lewis Road) is forecast to experience an AADT flow of 18,914 an increase of 17.1% over the 2042 Baseline but with a decrease in HDVs of 28. There is no footway located in this location and as such this suggests a **Negligible (Not Significant)** effect.
- 5.119 Link 18 Wrotham Road (Istead Rise to Lewis Road) is forecast to experience an AADT flow of 20,319 an increase of 17.8% over the 2042 Baseline with a reduction in HDV traffic of 34 vehicles. There is only a footway located on the western side of the carriageway in this location and pedestrian trips would be primarily focussed on travelling in and around Istead Rise as there are no continuous footways north or south of this area. This therefore suggests a **Minor Adverse (Not Significant)** effect
- 5.120 Link 19 Wrotham Road (North of Istead Rise) is forecast to experience an AADT flow of 24,546 an increase of 16.3% over the 2042 Baseline. There is no footway located in this location and as such this suggests a **Negligible (Not Significant)** effect
- 5.121 Links 20, 21, 22 and 23 all comprise sections of the A2 and as no pedestrians are anticipated or permitted on these links there are no effects to consider.

Non-motorised User Amenity

- 5.122 There are no links anticipated to experience an increase in traffic flow of over 100% as a result of the Proposed Development in comparison to the 2042 Baseline. The greatest increase forecast is a 37.7% increase on Green Lane.
- 5.123 These forecasts suggest a **Minor Adverse (Not Significant)** effect.

Fear and Intimidation

- 5.124 Fear and Intimidation is set out in **Table 5.2** and is a judgement based on the volume of traffic, HDV composition, proximity to people and the level of protection. Links with an increase of over 400

vehicles have been assessed with consideration given to the nature of the link, the HDV flow and provisions for pedestrians.

- 5.125 Link 1 Camer Road (north of access) is forecast to experience an increase in AADT flow of 4,010 vehicles which is considered a perceptible increase and above 400 vehicles. The HDV impact however represents a reduction of 102 vehicles. Dedicated footway provisions are made on the southern side of Camer Road and although the increase in traffic volume is perceptible, the decrease in HDV numbers will minimise fear and intimidation. There are also significant embedded mitigation measures in place on Camer Road to further enhance pedestrian facilities and minimise the impacts felt of the Proposed Development. No step change in hazard is forecast and it is therefore considered that this suggests a **Minor Adverse (Not Significant)** effect.
- 5.126 Link 2 Sole Street is forecast to experience an increase in AADT flow of 3,638 vehicles which is considered a perceptible increase and above 400 vehicles. The HDV impact however represents a reduction of 116 vehicles and there are no step changes in hazard forecast. It is therefore considered that this suggests a **Minor Adverse (Not Significant)** effect.
- 5.127 Link 3 Jeskyns Road is forecast to experience an increase in AADT flow of 2,618 vehicles which is considered a perceptible increase and above 400 vehicles. The HDV impact represents a reduction of 67 vehicles and there are no step changes in hazard forecast. It is therefore considered that this suggests a **Minor Adverse (Not Significant)** effect.
- 5.128 Link 4 Henhurst Road is forecast to experience an increase in AADT flow of 3,151 vehicles which is considered a perceptible increase and above 400 vehicles. The HDV impact represents a reduction of 41 vehicles and there are no step changes in hazard forecast. It is therefore considered that this suggests a **Minor Adverse (Not Significant)** effect.
- 5.129 Link 7 Camer Road (south of access) is forecast to experience an increase in AADT flow of 3,193 vehicles which is considered a perceptible increase and above 400 vehicles. The HDV impact represents a reduction of 102 vehicles. Dedicated footway provisions within the Proposed Development will afford pedestrian movement adjacent to Camer Road and although the increase in traffic volume is perceptible, the decrease in HDV numbers will minimise fear and intimidation. There are also significant embedded mitigation measures in place on Camer Road to further enhance pedestrian facilities and minimise the impacts felt of the Proposed Development. As no step change in hazard is forecast it is therefore considered that this suggests a **Minor Adverse (Not Significant)** effect.
- 5.130 Link 8 Green Lane is forecast to experience an increase in AADT flow of 3,546 vehicles which is considered a perceptible increase and above 400 vehicles. The HDV impact represents a reduction of 100 vehicles however and with no step change in hazard forecast, dedicated footway provisions on the northern side of Green Lane and an extended 30 mph speed limit it is considered that the impact on fear and intimidation would comprise a **Minor Adverse (Not Significant)** effect.
- 5.131 Links 12, 15, 16, 17, 18 and 19 all comprise Wrotham Road and are all forecast to experience an increase in AADT flow of over 400 vehicles. For all links, the HDV impacts reduce however in

comparison to the Baseline. Wrotham Road provides a mix of segregate footways on both sides of the carriageway and services a significant volume of traffic as identified by the 2042 Baseline data. The reduction, for the most part, in HDV traffic and moderate uplift in vehicle numbers is not considered to present a perceptible impact on fear and intimidation on links 12, 15, 16, 17, 18 and 19. With no step change in hazard forecast on these links, this would suggest a **Minor Adverse (Not Significant)** effect.

- 5.132 Links 20-23 comprise the A2 corridor where no step change in hazard is forecast and no pedestrians are present and have therefore been excluded.

Road Safety

- 5.133 Section 2.10 of the Transport Assessment (**Appendix 5.1**) shows that, over the five-year period, a total of six slight collisions have occurred and five serious collisions; no fatal collisions have occurred. Whilst it is noted that four collisions occurred in 2020, including three serious collisions, across the study area, an average of only two collisions occurred per annum which does not indicate a recurring pattern.
- 5.134 As a result, the effects are considered **Minor Adverse (Not Significant)**.

Hazardous Loads / Large Loads

- 5.135 There are no operational hazardous or large loads anticipated with the Proposed Development. In the event that any hazardous loads are required for transportation then all packaging and containment will be provided in line with the Vehicle Certification Agencies Dangerous Goods Office procedures and requirements for UK roads. Vehicles will be loaded on Site with the responsibility for the safe transit of the good that of the haulier or client under the European Agreement concerning International Carriage of Dangerous Goods by Road. On this basis, procedures will be in place for loading hazardous loads within the Site and transporting them on the local and strategic road network to ensure any risks are minimised. As a result, the effect of the Proposed Development will be **Minor Adverse (Not Significant)**.

Measures

- 5.136 No measures are proposed to manage the forecast effects of the Proposed Development.

Mitigation Once the Proposed Development is Operational

- 5.137 No additional operational mitigation is proposed over and above the embedded mitigation set out in this chapter.

Residual Effects and Monitoring

- 5.138 The residual effects arising from the Proposed Development are summarised in **Table 5.13** overleaf.

Table 5.13 Summary of Residual Effects

Effect	Receptor (Sensitivity)	Nature of Effect and Geographic Scale	Magnitude of Impact*	Classification of Effect	Mitigation and Monitoring	Residual Effect
2031 Future Baseline plus Peak Construction						
Severance	Pedestrians (High)	Local and strategic	Very Low	Minor Adverse	Embedded mitigation	Minor Adverse (Not Significant)
Driver Delay	Vehicle drivers (Low)	Local	Low	Negligible	Embedded mitigation	Negligible (Not Significant)
Pedestrian Delay	Pedestrians, cyclists, equestrians (High)	Local	Very Low	Minor Adverse	Embedded mitigation	Minor Adverse (Not Significant)
Non-motorised user Amenity	Pedestrians, cyclists, equestrians (High)	Local and strategic	Very Low	Minor Adverse	N/A	Minor Adverse (Not Significant)
Fear and Intimidation	Pedestrians, cyclists, equestrians, vehicle drivers (High)	Local and strategic	Very Low	Minor Adverse	N/A	Minor Adverse (Not Significant)
Road Safety	Pedestrians, cyclists, equestrians, vehicle drivers (High)	Local and strategic	Very Low	Minor Adverse	Adherence to UK requirements	Minor Adverse (Not Significant)

Effect	Receptor (Sensitivity)	Nature of Effect and Geographic Scale	Magnitude of Impact*	Classification of Effect	Mitigation and Monitoring	Residual Effect
Hazardous Loads / Large Loads	Pedestrians, cyclists, equestrians, vehicle drivers (High)	Local and strategic	Very Low	Minor Adverse	N/A	Minor Adverse (Not Significant)
2042 Future Baseline plus Proposed Development						
Severance	Pedestrians (High)	Local and strategic	Very Low	Minor Adverse	Embedded mitigation	Minor Adverse (Not Significant)
Driver Delay	Vehicle drivers (Low)	Local and strategic	Low	Negligible	N/A	Negligible (Not Significant)
Pedestrian Delay	Pedestrians (High)	Local	Very Low	Minor Adverse	Embedded mitigation	Minor Adverse (Not Significant)
Non-motorised user Amenity	Pedestrians, cyclists, equestrians (High)	Local	Very Low	Minor Adverse	Embedded mitigation	Minor Adverse (Not Significant)
Fear and Intimidation	Pedestrians, cyclists, equestrians (High)	Local and strategic	Very Low	Minor Adverse	N/A	Minor Adverse (Not Significant)
Road Safety	Pedestrians, cyclists, equestrians, vehicle drivers (High)	Local and strategic	Very Low	Minor Adverse	N/A	Minor Adverse (Not Significant)

Effect	Receptor (Sensitivity)	Nature of Effect and Geographic Scale	Magnitude of Impact*	Classification of Effect	Mitigation and Monitoring	Residual Effect
Hazardous Loads / Large Loads	Pedestrians, cyclists, equestrians, vehicle drivers (High)	Local and strategic	Very Low	Minor Adverse	Adherence to UK requirements	Minor Adverse (Not Significant)
2042 Future Baseline plus Proposed Development plus Local Plan						
Severance	Pedestrians (High)	Local	Very Low	Minor Adverse	Embedded mitigation	Minor Adverse (Not Significant)
Driver Delay	Vehicle drivers (Low)	Local and strategic	Medium	Minor Adverse	N/A	Minor Adverse (Not Significant)
Pedestrian Delay	Pedestrians (High)	Local	Very Low	Minor Adverse	Embedded mitigation	Minor Adverse (Not Significant)
Non-motorised user Amenity	Pedestrians, cyclists, equestrians (High)	Local	Very Low	Minor Adverse	Embedded mitigation	Minor Adverse (Not Significant)
Fear and Intimidation	Pedestrians, cyclists, equestrians (High)	Local and strategic	Very Low	Minor Adverse	N/A	Minor Adverse (Not Significant)
Road Safety	Pedestrians, cyclists, equestrians, vehicle drivers (High)	Local and strategic	Very Low	Minor Adverse	N/A	Minor Adverse (Not Significant)

Effect	Receptor (Sensitivity)	Nature of Effect and Geographic Scale	Magnitude of Impact*	Classification of Effect	Mitigation and Monitoring	Residual Effect
Hazardous Loads / Large Loads	Pedestrians, cyclists, equestrians, vehicle drivers (High)	Local and strategic	Very Low	Minor Adverse	Adherence to UK requirements	Minor Adverse (Not Significant)

Notes: * incorporating environmental design and management, ** incorporating mitigation and monitoring measures

Likely Significant Environmental Effects

- 5.139 There are no significant effects forecast to result from the Proposed Development.

Summary and Conclusions

- 5.140 The forecast transport effects resulting from the construction and final operation of the Proposed Development have been assessed based on industry best practice guidance from the ISEP. This assessment has demonstrated that the Proposed Development will not result in any significant effects on local receptors. Whilst some minor effects are anticipated, the embedded mitigation and management of the Site will ensure that no significant effects occur within the surrounding area.

Effect Interactions and Cumulative Effects

Cumulative Effects of the Proposed Development with Other Development Schemes

Cumulative Effects Once the Proposed Development is Operational

- 5.141 The cumulative impacts remain as forecast for the 2042 Baseline plus Proposed Development with no significant adverse effects forecast as a result of the cumulative impacts.

References

¹ Institute of Sustainability and Environmental Professionals (ISEP) Guidelines: Environmental Assessment of Traffic and Movement (2023)'. Available at: <https://www.iema.net/media/5mrmquib/iema-report-environmental-assessment-of-traffic-and-movement-rev07-july-2023.pdf>