

ENVIRONMENTAL STATEMENT ADDENDUM – ALDERHOLT MEADOWS, ALDERHOLT, DORSET
May 2024**INFORMATIVE/PREFACE**

An outline planning application for the development of land at Alderholt was submitted to Dorset Council (DC) accompanied, amongst other documents, by an Environmental Statement (ES), prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (The Regulations).

On 7th July 2022, following consultation with both statutory bodies and the Council, the Council refused the application.

An appeal was submitted against the refusal of the application. Various further work (further information) was undertaken to address the relevant reasons for refusal, focussing on the loss of tranquillity within the Cranborne Chase and West Wiltshire Downs Area of Outstanding Natural Beauty and this was reported in a Supplementary Environmental Statement (SES) of November 2023.

To aid the appeal and for ease of reading for the Inspector, a Consolidated Environmental Statement (CES) was produced and submitted as part of the appeal documentation in November 2023. The CES represented the combining of the original ES, February 2022 and the SES of November 2023. A Consolidated Non-Technical Summary (CNTS) was similarly produced. Within the CES and CNTS those changes arising from the SES are shown in red text, and updated figures and Technical Appendices had the suffix 'a' and 'sup' respectively.

Since November 2023, further work has been ongoing to address a number of transport and highway issues raised by the County highway Authorities, amongst other environmental topic matters. The highway work in particular, has had knock-on implications for a number of other environmental topics, for example, Air Quality and the Habitats Regulation Assessment information (Technical Appendix 9.2 of the CES), although the overall impact conclusions set out in the CES do not change.

This further information to the CES is provided in the form of this **Environmental Statement Addendum (ES Addendum)**. It should be noted that the transportation chapter (chapter 7) of the CES has been replaced/superseded in its entirety - ie, the relevant transport chapter for the purposes of the CES and appeal is the one in this ES Addendum. The CES Technical Appendix 7.1 and Technical Appendix 7.2 remain relevant. CES Technical Appendix 7.3 is deleted and replaced entirely as Appendix C within the Transport Assessment Addendum (**Technical Appendix 7.1Ad**).

Any changes to the CNTS are referenced at the end of this ES Addendum.

This **ES Addendum** should therefore be read in conjunction with the following attached documents –

- **Technical Appendix 7.1Ad** – Transport Assessment Addendum (TAA)
- **Technical Appendix 8.8Ad** – Noise Technical note
- **Technical Appendix 9.2Ad** – Information for Habitats Regulations Assessment (IfHRA Addendum)
- **Technical Appendix 11.1Ad** – FRA
- **Air Quality Technical Note**

1 INTRODUCTION

1.1 The Introduction chapter 1 of the CES has not been changed.

2 METHODOLOGY

2.1 The Methodology chapter 2 in the CES has not been changed.

2.2 It should be noted that the list of sites included as part of the cumulative impact assessment (CES paragraph 2.8) remain valid. The listed sites in Fordingbridge have been considered and analysed in more detail using the specific Transport Assessment information from those applications within the further transport/highway work presented in the new Transport chapter within this ES Addendum and the associated Transport Assessment Addendum (**Technical Appendix 7.1Ad**).

3 BACKGROUND TO THE DEVELOPMENT

3.1 This chapter 3 in the CES has not been changed.

4 PLANNING POLICY

4.1 This chapter 4 of the CES has not been changed, other than to note that references are made to NPPF, September 2023, which of course has now been superceded by the December 2023 version. This does not affect the principles or findings of the CES.

5 DEVELOPMENT DESCRIPTION

5.1 This chapter 5 of the CES has not been changed – the broad principles of the proposed development described therein remain the same.

6 ALTERNATIVES

6.1 This chapter 6 of the CES has not been changed.

7 TRANSPORTATION

7.1 This chapter, which has been prepared by Paul Basham Associates, considers the likely effects of the proposals upon traffic and transportation conditions within the vicinity of the development. The assessment considers the environmental effects of traffic generated by the Proposed Development which comprises a mixed use development of up to 1700 dwellings including affordable housing and care provision; 10,000sqm of employment space in the form of a business park; village centre with associated retail, commercial, community and health facilities; open space including the provision of SANG; biodiversity enhancements; solar array; and new roads, access arrangements and associated infrastructure.

7.2 The Site is located to the south and west of the existing Alderholt Village, to the south of Ringwood Road and west of Hillbury Road.

7.3 A comprehensive Transport Assessment (TA) has been prepared (**Technical Appendix 7.1**). The TA examines in detail the transport effects of the Proposed Development on the transport system and provides the basis for this assessment.

7.4 A Travel Plan (TP) (**Technical Appendix 7.2**) and Walking Cycling Horse-Riding Assessment & Review (WCHAR) (**Appendix C in Technical Appendix 7.1Ad**) have also been prepared to support the planning application. The TP sets out a range of policies and targeted measures designed to promote sustainable travel and reduce car dependency, which forms part of the overall transport strategy and contributes towards the mitigation of the Proposed Development. The WCHAR reviews walking and cycling conditions and identifies opportunities to provide improvements to these links to help mitigate the impact of the Proposed Development.

7.5 Since the original application submission further technical work has been undertaken. This is provided within the Transport Assessment Addendum (TAA)(**Technical Appendix 7.1Ad**) which supplements the TA and is the latest position which is referred to throughout this ES Chapter as the TAA.

CONTEXT

7.6 The assessment has been carried out with reference to the national and local policy as well as the following:

- IEMA Guideline: Environmental Assessment of Traffic and Movement (2023);
- Manual for Streets, Department for Transport (2007), & Manual for Streets 2, Chartered Institution of Highways & Transportation (2010); and
- The Government's Planning Practice Guidance to the NPPF (2023).

ASSESSMENT METHODOLOGY

Predicting effects

7.7 The NPPF, published in December 2023, states that all developments that will generate significant amounts of movement should be required to provide a Travel Plan and the application should be supported by a Transport Statement or Transport Assessment so that the likely impacts of the proposal can be assessed.

7.8 The TA and TAA accompanying the planning application have been prepared in consultation with Dorset Council (DC), in its capacity as the local highway authority (LHA), Hampshire County Council (HCC), as the neighbouring LHA, and National Highways, which is responsible for operating, maintaining and improving the strategic road network in England, including the A31.

7.9 This assessment has been based upon the Institute of Environmental Management & Assessment's Guidelines for the Environmental Assessment of Traffic and Movement (the IEMA Guidelines). The IEMA Guidelines paragraph 2.16 suggest that two broad rules-of-thumb could be used as a screening process to delimit the scale and extent of the assessment. These are:

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

7.10 These rules-of-thumb form the starting point for the assessment of effects. The significance of the effects of the Proposed Development will be considered in respect of the following subject areas based on the IEMA Guidelines:

- Road Vehicle Driver and Passenger Delay,
- Non-motorised Delay and Amenity,
- Fear and Intimidation On and By Road Users,
- Severance of Communities, and
- Road User and Pedestrian Safety.

7.11 Based on the criteria set out above the following study area has been determined. The junctions and links which form part of this assessment include:

- Junctions:
 - Proposed Site Access Junction onto Hillbury Road,
 - Station Road/Ringwood Road junction,

- Pressey's Corner junction,
 - Provost Street junction,
 - West Street/Shafesbury Street junction; and
 - Verwood Road/A31 Eastbound Off-slips.
- Links:
 - Harbridge Drove,
 - Ringwood Road
 - Hillbury Road
 - Batterley Drove,
 - B3078;
 - Shafesbury Street / Station Road;
 - Provost Street; and
 - West Street.

Receptor Sensitivity

7.12 A Magnitude of Change Scale in respect of each of the IEMA guideline subject areas is defined in Table 7.1, whilst the relevant sensitivity of receptors scale is identified in Table 7.2. The thresholds have been derived with reference to the IEMA Guidelines, best practice and professional judgment.

Table 7.1: Magnitude of Impact (Based on IEMA Guidelines)

Subject	Magnitude of Impact			
	Major	Moderate	Minor	Negligible
Severance	Change in highway link traffic flow of over 90%	Change in highway link traffic flow of 60% to less than 90%	Change in highway link traffic flow of 30% to less than 60%	Change in highway link traffic flow of less than 30%
Driver Delay	Increase in driver delay by over 90 seconds	Increase in driver delay by 30-90 seconds	Increase in driver delay by 10-30 seconds	Increase in driver delay by less than 10 seconds
Non-motorised User Delay	Change in highway link traffic flow of over 60%	Change in highway link traffic flow of 30% to less than 60%	Change in highway link traffic flow of 10% to less than 30%	Change in highway link traffic flow of less than 10%
Non-motorised User Amenity	Change in highway link traffic flow of over 60%	Change in highway link traffic flow of 30% to less than 60%	Change in highway link traffic flow of 10% to less than 30%	Change in highway link traffic flow of less than 10%
Fear and Intimidation	Two-step change in level	One-step change in level, >400 vehicle 18 hr increase, or >500 HGV increase	One-step change in level, <400 vehicle 18hr increase, or <500 HGV increase	No step change

Subject	Magnitude of Impact			
	Major	Moderate	Minor	Negligible
Accidents and Safety	Change in highway link/junction traffic flow of over 30%, taking into account existing record	Change in highway link/junction traffic flow of 10% to less than 30%, taking into account existing record	Change in traffic flow through junction of 5% to less than 10%, taking into account existing record	Change in traffic flow through junction of less than 5%, taking into account existing record

Table 7.2: Value/sensitivity assessment

Receptor value / sensitivity	Receptor type
High	Sensitive groups such as children and elderly
	Accident 'hot spots'
	Schools and town centres
	Pedestrians on roads with no footways
Medium	Pedestrians on roads with footways
	Cyclists
	Highway junctions operating close or over capacity
	Parks and recreational areas
	Retail areas
Low	Roads with active frontages
	Distributor roads
Negligible	Open space (agricultural land)

7.13 The predicted level of effect is based on the consideration of magnitude of impact and sensitivity of the resource/receptor to come to a professional judgement as to how important this effect is.

Table 7.3: Level of effect

Receptor Sensitivity	Magnitude of Impact			
	Major	Moderate	Minor	Negligible
High	Major	Major	Moderate	Negligible
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Minor	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

7.14 For the purposes of this assessment the level of impact is considered significant in circumstances when the overall magnitude of effect is moderate or above. In addition to the significance of the impact, the

nature of the impact, being either beneficial, negligible, or adverse, has also been considered accordingly.

- 7.15 The above tables have been derived with reference to the IEMA Guidelines, such that locations in the study area that would experience an increase in traffic flow of 30% or more are considered in respect of Severance, and 10% or more considered in respect of non-motorised user delay and amenity. With regards to Fear and Intimidation, areas which would result in a step change in level in accordance with IEMA calculations are considered. In respect of accidents and safety, locations with a poor collision record are considered where they would experience an increase in traffic flow of 5% or more. In respect of Driver Delay, the corresponding figure is the experiencing of an increase in delay over 10 seconds. Professional judgement has been exercised in determining the degree of the effect and whether or not mitigation in the form of an improvement to the existing road layout is required and, if required, what that improvement should comprise.

BASELINE CONDITIONS

Current Baseline

- 7.16 Baseline information collected included existing highway network information, informed by a site visit, collision records obtained from a combination of CrashMap and Hampshire Constabulary and traffic surveys undertaken in 2022-2024 (2023 in respect of West Street, Bridge Street, Normandy Way and A31 junctions).

Local Highway Network

- 7.17 The Site is located north and south of Ringwood Road and west of Hillbury Road, with access taken from a new roundabout junction on Hillbury Road and a new priority junction on Ringwood Road.
- 7.18 Ringwood Road routes on a north-west – south-east alignment between Station Road to the north and Hillbury Road to the south. It currently forms the western boundary of the existing Alderholt settlement and is utilised by traffic routing between the south and western areas of Alderholt. It can be split roughly into two sections of varying characteristics.
- 7.19 Ringwood Road can be categorised into approximately two sections of varying characteristics. From Station Road to the easternmost properties on the southern side, the speed limit is 30mph and is suburban in nature, with footways and street lighting present. At its northern end, Ringwood Road meets Station Road at a priority junction. Ringwood Road splits to provide separate access/egress points for vehicles travelling to/from the west and east.
- 7.20 Further east, Ringwood Road is more rural in nature, measures c. 5-6m in width, is subject to a 40mph speed limit, is not street-lit, and does not have formalised kerbs and footways. It provides direct access to a number of residential properties, Alderholt Recreation Ground, Foxhill Farm and Warren Park Farm campsites and a consented residential development of 45 dwellings (REF: 3/16/1446/OUT). Ringwood Road then joins Hillbury Road in the form of a simple priority junction to the south-east.
- 7.21 Hillbury Road itself routes on a north-south alignment and routes between Alderholt to the north and provides connections towards Ringwood and the A31 approximately 8km to the south.
- 7.22 Hillbury Road can also be broadly categorised into two sections. From the edge of the settlement northwards, the speed limit is 40mph, reducing to 30mph just before Windsor Way. Within the settlement, Hillbury Road provides access to a number of residential side roads and direct access to residential properties. A footway is provided on the western side of the carriageway and further north, occasional street lighting is provided. At its northern end, Hillbury Road meets Station Road (B3078) at a priority junction.
- 7.23 South of the existing settlement edge, Hillbury Road is fairly rural in nature. It measures approximately 5.5m in width, is subject to the national speed limit, is not street lit and does not provide footways, instead soft verges and hedgerows abut the carriageway.
- 7.24 Station Road forms part of the B3078 which locally routes between Cranborne to the west and Fordingbridge to the east. Within Alderholt it shapes the northern settlement boundary, linking Ringwood Road with Hillbury Road serving residential properties directly as well as via residential side roads. It measures approximately 6m in width, is subject to a 30mph speed limit, is street lit, and has footways along both sides of the carriageway for the majority of its length. Travelling east, Station Road turns to

the left adjacent to the junction with Hillbury Road. Approximately 75m to the north, Station Road turns right adjacent to a junction with Sandheath Road.

- 7.25 To the east, the B3078 becomes Fordingbridge Road. Fordingbridge Road is a local distributor road which routes between Alderholt and Fordingbridge. It is subject to a 30mph speed limit changing to a 60mph limit as it exits Alderholt and is relatively rural in nature, with soft verges and no formalised kerbs. The width of the carriageway varies, particularly where it curves in either direction.
- 7.26 Within Fordingbridge, Provost Street routes north to connect with Shaftesbury Street and is currently the main route into Fordingbridge. West Street connects Provost Street with Shaftesbury Street further west.
- 7.27 To the west, between Alderholt and Cranborne, Batterley Drove meets the B3078 via a priority junction and provides an alternative route to Verwood, providing onward connections beyond towards Wimborne. Batterley Drove is of reasonable width given its rural nature. It is typically subject to a 60mph speed limit and has no footways alongside.

Traffic Conditions

- 7.28 Traffic survey data was obtained at key links and junctions as part of the highway assessment work undertaken in 2021 and 2023. This data informed the 2023 baseline traffic scenarios which are available within the TA and TAA.

Collision Data

- 7.29 Collision data within Dorset has been obtained from CrashMap for the highway network in the vicinity of the Site for the 5-year period ranging from 2017-2021 inclusive. Within Hampshire data has been obtained from Hampshire Constabulary. An analysis of the collision data is provided within the TA and TAA.
- 7.30 The analysis confirmed that there have not been any collisions within the vicinity of the two proposed points of access, and that across the network generally the majority of collisions which occurred were categorised as slight and occurred through driver error. There were some serious collisions. However, the majority appeared not to be as a result of highway design and for the most part there are no pre-existing conditions which would be worsened following the implementation of the development. An exception to this is the A31 on-slip/Verwood Road junction, where five accidents occurred in a similar manner, suggesting a potential safety issue.

Public Transport

- 7.31 The TA identifies existing public transport services that operate within the vicinity of the Site. The nearest bus stops to the Site are located along Birchwood Drive providing access to one bus service, the 97, which routes 3 times per direction on a Tuesday, Wednesday and Friday. It routes between Alderholt and Ringwood via Fordingbridge and is provided by Community Transport Services. Public Transport is therefore lacking within Alderholt within the baseline scenario.

Walking and Cycling

- 7.32 The TA and WCHAR detail the existing walking and cycling routes within the vicinity of the Site. Immediately within the vicinity of the Site, Ringwood Road and Hillbury Road do not have footways, respectively terminating to the north of the Site at the settlement boundary.
- 7.33 The nearest footway to the Site is the footway which routes through the Recreation Ground which abuts the Site and provides a connection north into Birchwood Drive. Birchwood Drive and the majority of the roads within Alderholt settlement boundary have pedestrian infrastructure in the form of footways and dropped kerbs which provide pedestrian access within the village. The condition of these footway links within Alderholt is appraised in greater detail within the WCHAR.
- 7.34 Cycling infrastructure within the vicinity of the Site is limited, with the exception of the Bridleway which routes between Alderholt and Verwood to the west of the Site, and various forestry tracks. Given the lightly trafficked nature of the residential roads within Alderholt, on-street provision is considered appropriate.

Future Baseline

- 7.35 Future baseline flows have been forecast by taking the 2021/2023 baseline flows and factoring them up to a future year of 2033 using TEMPRO growth factors, as agreed with DC during the scoping stage. These TEMPRO Growth Factors are set out within the TA/TAA.
- 7.36 Following submission of the application, consultee comments by HCC requested additional analysis of Committed Development sites within Fordingbridge within the modelling assessment, which are included in the modelling presented in the TAA.
- 7.37 It is noted that for the purposes of the TA, sensitivity assessment scenarios of 2027 Forecast (Scenario 2) and 2028 Forecast plus 500 dwellings (Scenario 3) were assessed to determine trigger points for any mitigation works. However, for the purposes of this ES Chapter and assessment, the 2033 baseline + Committed Development (hereafter referred to as 2033 Forecast) has been referred to only.
- 7.38 This 2033 forecast scenario was used for the comparison of traffic impact 'with' and 'without' development, with the detailed methodology set out within the TA and TAA. In summary the following scenarios have been considered as part of the assessment:
- Scenario 1: 2023 Baseline;
 - Scenario 4: 2033 Forecast; and
 - Scenario 5: 2033 Forecast plus Proposed Development.

IMPACT ASSESSMENT

Construction Phase

- 7.39 The Proposed Development construction period is likely to take in the region of 14 years, although this is dependent on the number of sale outlets, market conditions and types of housing being built. The employment land and market square will be built out as required subject to S106 agreements to support the development and local environment.
- 7.40 Construction working periods are expected to be 0800-1700 Monday to Friday and 0800-1300 on Saturdays with no night-time shifts. Deliveries will be made on weekdays only and the car driver mode share for staff is considered to be 70%. This mode share assumption is robust because there is likely to be much higher car occupancy with construction workers arriving in multiple occupancy vehicles.
- 7.41 During the busiest construction phase (assumed to be c. 125 dwellings per year), it is predicted that there will be some 100 vehicle arrivals (85 cars/vans and 15 HGVs) per day. It is important to highlight that as working periods begin at 0800, the majority of on-site workers are likely to travel outside the AM peak period.
- 7.42 The other associated land uses are expected to be built alongside the residential construction programme. It is estimated that the other land uses will generate on average in the region of 40 vehicle arrivals (30 cars/vans and 10 HGVs) per day during the busiest period of construction. Again, workers are likely to arrive prior to 0800, to start work at 0800 and thus would travel outside the traditional morning peak travel period when traffic volumes and flows are at their highest.
- 7.43 In combination, for the entirety of the Proposed Development, the construction of up to 125 dwellings a year and the other land uses, during the busiest periods the Site could be expected to generate 140 vehicle arrivals, 115 of which would be in cars/vans and 25 as HGVs. Such figures are substantially lower than the total anticipated traffic generation of the development once fully built and occupied. Effectively, construction traffic associated with 125 properties per annum is less traffic than generated by 125 occupied dwellings and a lesser peak period impact.
- 7.44 When comparing the likely maximum construction traffic trip generation of 280 trips per day during construction this will equate to a maximum increase of 26% on Ringwood Road. Beyond Ringwood Road, 280 trips would equate to less than 20% of total traffic flow on some links and less than 10% on others. Furthermore, were construction traffic distributed according to census data and therefore all 280 trips spread across the network, the impacts on other links would be lower still at less than 10% (based traffic flows set out in Table 7.5 below). On this basis, the impact of construction traffic on non-motorised user delay and amenity, for which a maximum 26% increase would equate to a minor impact, for a medium receptor would have a **minor adverse** impact. Furthermore, this impact is less than that associated with

the operational stage of the development, therefore no mitigation specifically in relation to these impacts has been identified in relation to construction.

- 7.45 Regarding severance, a 26% impact would equate to a negligible impact, therefore for a medium receptor would result in a **negligible** impact.
- 7.46 Regarding fear and intimidation, the additional number of vehicles would not result in a step change in level, nor would the total number of daily HGVs increase by >500, therefore the impact will be **negligible**.
- 7.47 Regarding both driver delay, accidents and road safety, the magnitude of effects thresholds is lower. Therefore, were all 280 trips distributed onto any of Ringwood Road, Sandheath Road, Batterley Drove, B3078 to Cranborne, Hillbury Road North and Shaftesbury Street the corresponding effect would potentially be moderate. However, it should be noted that 280 trips is the total construction traffic and so this will be spread across the network rather than be experienced on any one link in totality. All other links would experience a **minor adverse impact** or less due to the percentage impact at these links being less than 10%.
- 7.48 The above figures represent the highest average daily construction vehicle trips across the entire construction programme. There is likely in practice to be some variation depending on the particular construction phase and activities taking place on site.
- 7.49 Based on the above it has been identified that some mitigation is required to minimise the impacts of the traffic associated with the construction phases. These are set out in paragraphs 7.87-7.103 within the mitigation section.

Operational Phase

- 7.50 The Proposed Development includes a wide range of local facilities, employment land and amenities, which will reduce the need to travel than would otherwise be the case for a solely residential development. On this basis a detailed review of the likely vehicular trip generation was undertaken. This involved analysis of the current trip journey purposes made by Alderholt residents with regards to education, employment, and retail/recreational needs. This then led to appropriate bespoke reductions applied to these proportions of trips in the AM and PM peak periods, taking into account the mixed-use nature of the scheme.
- 7.51 Since the submission of the application the proposed education strategy has been revised and now retains the existing three-tier system rather than the implementation of a two-tier system aligned with the Burgate School in Fordingbridge. The implications of this and the resulting trip generation has been assessed and is included within Table 13 of the Education Trip Generation Technical Note (ETGTN) appended to the TAA. This follows the principles agreed at pre-app stage with DC.
- 7.52 The resulting trip generation is set out in Table 7.4.

Table 7.4: Proposed Trip Generation

	AM Peak (0800-0900)		PM Peak (1700-1800)	
	Arrivals	Departures	Arrivals	Departures
Proposed Residential	129	619	614	230
Existing to be Discounted	-31	-70	-73	-54
Net Impact	98	549	541	176
Employment	188	36	41	176
Total	286	585	582	352
	871		934	

- 7.53 The distribution of the Proposed Development traffic onto the surrounding highway network has been assigned based on 2011 Census Journey to Work data, as set out within the TA and TAA and agreed with DC.
- 7.54 The resulting distribution is that 31% of trips route to the east along B3078 Fordingbridge Road, 35% south along Harbridge Drove and 34% along B3078 Daggons Road west. Subsequent breakdowns of assignment on wider highways links and the traffic flows for scenarios 1, 4 and 5 are set out within the TA and TAA (**Technical Appendices 7.1 and 7.1Ad**).

7.55 As a result of the Proposed Development (and mitigation in the form of a proposed one-way system in Fordingbridge) the following increases in AADT are anticipated to occur along the following links:

Table 7.5: Proposed Trip Generation By Link

Link	2033 Forecast	Development Flows	Total	% Impact
B3078 South of Cranborne	3061	747	3809	24.4%
B3078 South of Verwood	8048	1116	9164	13.9%
B3078 Cranborne - Batterley Drove	1465	747	2212	51.0%
B3081 Batterley Drove	2784	2361	5146	84.8%
B3078 Batterley Drove - Alderholt	3803	3109	6912	81.7%
B3078 Station Road	4018	1676	5694	65.5%
Ringwood Road	1080	2248	3329	218.4%
Hillbury Road (North)	2068	3626	5694	180.1%
Harbridge Drove	2984	3200	6184	107.3%
A31 West	112869	1920	114789	1.7%
A31 East	115999	1280	117279	1.1%
B3078 Fordingbridge Road	6275	1735	8009	27.6%
West Street	1643	2093	3737	127.4%
Station Road (Fordingbridge)	8650	747	9397	8.6%
Shaftesbury Street	7646	1604	9250	21.0%
High Street	11153	452	11605	4.0%
B3078 Southampton Road (New Forest)	4573	18	4592	0.4%
Provost Street	4161	-227	3934	-5.5%
A338 North of Fordingbridge	15346	572	15919	3.7%
Sandleheath Road	2289	1100	3389	48.1%

7.56 Note Shaftesbury Street, West Street and Provost Street 'Development Flows' take into account the impacts of the proposed one-way system and so some redistribution of base traffic also impacts the development flow total.

7.57 As a result of the trip generation forecasts above, the following junctions and links have been considered and assessed:

- B3078 South of Cranborne,
- B3078 South of Verwood,
- B3078 Cranborne - Batterley Drove,
- B3081 Batterley Drove,
- B3078 Batterley Drove – Alderholt,
- B3078 Station Road,
- Ringwood Road,
- Hillbury Road (North),
- Harbridge Drove,
- B3078 Fordingbridge Road,

- West Street,
- Shatesbury Street, and
- Sandleheath Road.

Driver Delay

- 7.58 Chapters 8-10 of the TA detail the modelled impact of the Proposed Development on driver delay at junctions and links throughout the study area. Further assessment has been undertaken since the application submission and this is contained within the TAA. The capacity assessments review junction operation under various scenarios pre and post development and provides outputs relating to junction performance including a Ratio of Flow to Capacity (RFC) for priority junctions and roundabouts, or Degree of Saturations (DoS) for signal junctions, as well as vehicle queue lengths and delay in seconds.
- 7.59 The scope of the junction assessments was agreed with DC, HCC and National Highways as follows:
- The proposed site access with Hillbury Road,
 - Hillbury Road / Station Road,
 - Ringwood Road / Station Road (B3078),
 - High Street / Provost Street (B3078) in Fordingbridge,,
 - Normandy Way / Station Road
 - Salisbury Street / Bridge Street; and
 - Verwood Road / A31 Off-East bound off and on slips.
- 7.60 Furthermore, following the implementation of the one-way system incorporating West Street and Provost Street the junction between West Street and Shaftesbury Street was also assessed.
- 7.61 The Site access junction with Hillbury Road has been designed to accommodate future traffic and therefore the impact is negligible. The Ringwood Road/Station Road junction will experience very minor increases in driver delay with additional delay totalling less than 10 seconds, and therefore, given the junction will operate below capacity and the absence of any high sensitive receptors the impact at this junction will be negligible. Finally, the Hillbury Road/Station Road junction will experience increases in delay of between 10-33 seconds. However, the junction itself will continue to perform under capacity and the sensitivity of the receptor totals medium, therefore the impact upon driver delay at this junction is **minor adverse**.
- 7.62 Within Fordingbridge, the junction between West Street and Station Road (Fordingbridge) experiences a moderate increase in delay and queuing vehicles as a result of the revised one-way working arrangement. The maximum delay is c. 88 seconds and therefore results in a Moderate impact, assuming existing delays are negligible. Based on a 'high' town centre receptor it is considered the impact at this junction equates to **major adverse**.
- 7.63 For the High Street/Provost Street junction the impact without mitigation would also be substantial. However, as a result of the proposed one-way system the junction performance improves due to less traffic using Provost Street and it being one-way (southbound only) therefore delay at this junction is c. 12 seconds (compared to c. 152 seconds prior to mitigation in the 2033 Forecast scenario. This equates to a reduction in delay of c. 140 seconds, which equates to a major impact. Based again on the 'high' town centre receptor the impact of the one-way system is **major beneficial** and therefore offsets the impact experienced at West Street. In addition, the one-way system removes conflict over narrow bridges on both High Street and Provost Street, thereby producing a positive effect on driver delay.
- 7.64 For the A31 Eastbound off-slip junction with Verwood Road, the assessment identified that there was to be extensive queuing and delay at the junction before the development traffic was added. With the Proposed Development queues and delays would increase and begin to interact with vehicles on the mainline of the A31 with additional delay in excess of 90 seconds (major magnitude of effect) at a junction that was operating above capacity (high sensitivity receptor). Therefore, without any mitigation

it is considered that the impact of the Proposed Development on driver delay would be **major adverse**. On this basis a mitigation scheme has been designed and is considered later in this chapter.

7.65 In addition to the assessment of driver delay at junctions, the TA and TAA also assessed the impact on specific links. The links in question included the B3078 between Cranborne to the west via Alderholt to Fordingbridge to the east. In addition, Harbridge Drove to the south of Alderholt up to the A31 was also considered in detail, whilst Batterley Drove between the B3078 and Verwood to the west of the Site was also considered.

7.66 This assessment concluded that there are some areas on the road network where two large vehicles cannot and could not pass and would likely result in minor delays of less than 30 seconds whilst the two vehicles give way to another. Given the general absence of accident hot spots or capacity sensitive junctions, the impact on these links is considered to be **minor adverse**. However, mitigation is considered appropriate and is therefore proposed in the form of localised widening where necessary.

Non-Motorised User Delay and Amenity

7.67 The percentage increases in traffic flow along links in the study area are set out in Table 7.5 above. This has the potential to decrease the pedestrian amenity along them and cause greater delay as pedestrians wait to cross.

7.68 Specifically links which will experience a greater than 60% increase (and therefore the development has the potential to have a major magnitude of impact) including Ringwood Road, Hillbury Road (north of the access), Harbridge Drove, B3081 Batterley Drove, West Street (as a result of the one-way system), B3078 Batterley Drove-Alderholt and B3078 Station Road.

7.69 Links which will experience a greater than 30% increase (and therefore the development has the potential to have a medium magnitude of impact) include Sandleheath Road and B3078 between Cranborne and Batterley Drove.

7.70 Of these links, Harbridge Drove, B3081 Batterley Drove, B3078 Batterley Drove – Alderholt, B3078 Cranborne Batterley Drove – Cranborne and Sandleheath Road are all distributor roads, where minimal pedestrian and cycle infrastructure exists and demand for pedestrian/cyclist trips is low. For this reason, the level of effect on pedestrian amenity/delay is considered to be **negligible**.

7.71 Within Alderholt itself Ringwood Road can be broadly split into two sections, the northern existing section within the residential built-up area, and the southern section adjacent to the Proposed Development. The northern section will experience a 218% increase in traffic flows resulting from the Proposed Development which equates to a major magnitude of effect. Therefore, when applied to the medium receptor along this link equates to a **major adverse** impact for non-motorised user delay and amenity without any mitigation. On this basis, mitigation has been proposed later in this chapter.

7.72 To the south, Ringwood Road will be replaced by the Proposed Development spine road, and Ringwood Road repurposed to be a 'quiet lane', which will be low speed, low traffic, no through route for vehicles and therefore suitable for pedestrians and cyclists in a way it currently is not. Therefore, given this section of Ringwood Road is a high sensitivity receptor and the change in traffic level is in excess of a 60% reduction in trips the impact upon this section of Ringwood Road is considered to be **major beneficial**.

7.73 Hillbury Road north is expected to experience a 180% increase in traffic flow (a major magnitude) and will therefore experience a **major adverse** effect (based on a medium/high receptors in locations where footways are or are not present). Therefore, mitigation has been proposed and is detailed later in this chapter.

7.74 Within Alderholt along Station Road, the traffic flow along the local road network will increase by 65.5%, which constitutes a **major adverse** impact on non-motorised user delay and amenity (based on a major magnitude impact upon medium receptors). Mitigation has therefore been proposed to address this and is detailed later in this chapter.

7.75 Within Fordingbridge, West Street experiences a c. 127% increase in traffic as a result of the proposed one way system. It is noted that this will have a **major adverse** impact on non-motorised delay and amenity along West Street based on the flow criteria. The one-way system results in a flow reduction on Provost Street which would be **minor beneficial** to NMU Delay & Amenity.

Fear and Intimidation

- 7.76 As above it is noted that a number of the links which would experience the greatest increase in flow are not pedestrian friendly at present, with a number being rural distributor roads. As a result of low pedestrian and cyclist demand, the change in fear and intimidation along these links would be effectively **negligible**.
- 7.77 Upon reviewing the IEMA suggested guidelines, none of the links would experience a stepped change in either traffic flow or HGV numbers and therefore the overall impact across all assessed links is considered to be **negligible**.

Severance

- 7.78 As outlined within the methodology section above, the impact of the Proposed Development upon severance is determined with reference to the change in traffic flow. In relation to magnitude of effect a 30% increase is considered minor, 60% considered moderate and a 90% increase considered major respectively, although allowance needs to be made for the presence of crossing facilities.
- 7.79 Traffic flow percentage increases have been calculated for all links within the assessment scenario and these are shown within Table 7.5. The figures in Table 7.5 illustrate that the Ringwood Road, Hillbury Road, Harbridge Drove and West Street experience increases in more than 90% of traffic flows and therefore the Proposed Development will have a major magnitude of effect upon Severance. Batterley Drove, B3078 Batterley Drove – Alderholt and Station Road links experience increases of 60-90% and will therefore experience a moderate magnitude of effect on Severance. The B3078 between Cranborne and Batterley Drove and Sandleheath Road experience traffic flow increases of 30-60% and therefore have minor effect.
- 7.80 It is therefore recognised that Ringwood Road, Hillbury Road, and West Street, will experience **major adverse** impacts in relation to severance due to the receptor sensitivity along these links. Harbridge Drove will also experience major effects. However given the low receptor sensitivity as a distributor road, the magnitude of impact will be **moderate**. Batterley Drove and the B3078 between Batterley Drove and Alderholt are expected to experience a moderate magnitude of effect resulting from the Proposed Development due to an increase in traffic flow in excess of 60%. Both of these are low sensitivity receptors and therefore the impact would be **minor**. Station Road would experience a moderate magnitude of effect and as a medium sensitivity receptor the impact would be **moderate**. Sandleheath Road and the B3078 between Cranborne and Batterley Drove are low sensitivity receptors and the magnitude of change is minor, such that the impact is **minor**.

Accidents and Safety

- 7.81 Within the TA the collision data on the surrounding road network has been analysed with it determined that there were only a few areas which presented a road safety concern for the existing baseline scenario. One of the few areas where there was a cluster of collisions was at the A31 off-slips.
- 7.82 The assessment approach suggests that any link which experiences an increase in traffic flow of over 30% has the potential to have a major magnitude on road safety, taking into account the existing accident record. Based solely on the flow increase percentages, a number of links and junctions have the potential to experience adverse impacts as a result of the Proposed Development, reduced considering the general lack of accident history attributable to the highway layout.
- 7.83 West Street, Hillbury Road, Ringwood Road experience the greatest increases in terms of traffic flow, however there is not a pre-existing road safety issue along these links or at the junctions. Furthermore, the modelled junctions are expected to operate within capacity and not experience any substantial queues and the roads themselves are typically low speed roads with residential frontage. On this basis the receptor for these links and junctions is low and therefore the overall impact is considered to be **negligible**.
- 7.84 To the south of Alderholt, Harbridge Drove experiences a substantial increase in traffic following the implementation of the Proposed Development in excess of 30% which would therefore equate to a major magnitude of effect due to trips routing south to join the A31. At the junction between Harbridge Drove and Verwood Road there is an unfortunate collision history. However, as set out within the TA these were either unfortunate circumstances or occurred through driver error. There is not an existing highway safety issue which would be impacted through the additional increase of vehicles along this link and through this junction. Therefore, although the magnitude of effect is major, the receptor is low sensitivity and taking into account the lack of accident record therefore the overall impact is considered **minor adverse**.

- 7.85 Along Batterley Drove there is a cluster of locations in the vicinity of the 'S' bend to the middle of the link which are not considered to be as a result of carriageway alignment and design. The Proposed Development will result in increases of in excess of 30% in traffic flow, and therefore the magnitude of effect is major. However, the receptor is low given the lack of road safety issue and therefore the resulting impact is considered **moderate adverse**.
- 7.86 In addition to the links above, additional increases over 30% in flow are expected to occur between Cranborne and Alderholt, along Station Road and along Sandleheath Road. No substantial collision history has been identified along these links. Taking this into account, the impact on highway safety is considered to be **minor adverse**. Mitigation is proposed in the form of widening.

MITIGATION

Construction Phase

- 7.87 As set out above, the overall effects of construction traffic are considered to be less than those of the operational development, whilst specifically having a minor adverse impact upon severance, NMU delay, NMU amenity. In relation to driver delay and road safety Ringwood Road, Sandleheath Road, Batterley Drove, B3078 to Cranborne, and Hillbury Road North would all experience moderate adverse impacts. Therefore, in order to manage and mitigate the impacts a Construction Traffic Management Plan will be produced in due course which will look to manage the arrival of HGVs and construction staff.
- 7.88 As a result, construction vehicle traffic would travel via the Strategic Road Network (SRN), and from there travel on the local road network to reach the Site. It is likely that travel to/from the A31 would be most appropriate, to minimise inconvenience to Alderholt residents. The specific routes would be confirmed as part of the Construction Traffic Management Plan secured via condition. Once complete, construction traffic would utilise the new internal spine road to avoid routing through the existing Alderholt village where possible. On this basis, the predicted increases in flow will be managed and the Proposed Development would have **minor adverse** effects in terms of:
- Driver Delay,
 - Severance - Non-motorised User Delay,
 - Non-Motorised Amenity, and
 - Accidents and Safety.
- 7.89 The exception to this will remain Ringwood Road. However, given Ringwood Road is intertwined with the Development it will be impacted by Construction Traffic in any event and the impact will be managed and minimised as best as possible.
- 7.90 Regarding driver delay, the construction activity period would continue whilst certain sections of the Site are occupied. The residents and users of the Proposed Development once occupied would also generate some travel demand and would thus place additional traffic movements on the local highway network whilst the construction period continues. Therefore, there is the potential for a combined **minor adverse** effect, in terms of driver delay.
- 7.91 The construction of the Proposed Development is not expected to involve the transfer of hazardous loads to or from the Site.
- 7.92 The overall effect of the construction of the Proposed Development will be **minor adverse** once mitigation measures are taken into account, will be managed accordingly through construction management practices and the effects will be temporary.

Operational Phase

Driver Delay

- 7.93 The section above identified major adverse impacts at the A31 Off-slip junction and the Provost Street junction, as well as minor adverse at some links. It is considered mitigation is necessary in order to prevent unacceptable adverse impacts on driver delay.

- 7.94 With regards to the A31 Eastbound Off-slip, this mitigation involves the signalisation of the off-slip to ensure vehicles have gaps to be able to turn onto Verwood Road heading north. The details of design and operation for this mitigation are provided within the accompanying TAA. Following the implementation of the proposed mitigation scheme the resulting delay along the A31 off-slip reduces substantially from 1888 seconds (previously 457 seconds before development) to 52 seconds, whilst the associated queue no longer blocks onto the A31 mainline. This not only mitigates the impact of the Proposed Development, but also provides substantial betterment over the future baseline operation for both driver delay and safety given the link is forecast to queue onto the A31 mainline. On this basis, following implementation of the Proposed Development and mitigation the effect is considered to be **major beneficial**.
- 7.95 Mitigation at the Provost Street / High Street junction within Fordingbridge was determined necessary given the impact of the Proposed Development upon driver delay. As discussed previously, this incorporates a one-way system with West Street which dramatically improves the operation of the Provost Street junction whilst balances the flows onto West Street. This mitigation is detailed within the accompanying TAA and includes widening in the vicinity of West Street junction with Station Road (Fordingbridge) to help large vehicle movements. This one-way system utilising West Street enables the repurposing of carriageway space at Provost Street to footway and avoids the need for priority working along Provost Street and West Street over narrow bridges, thereby improving flow, and providing an overall betterment. The resulting impact is adverse at West Street junction but beneficial at Provost Street junction but overall considered beneficial given the removal of delays to give way over the bridges.
- 7.96 Further mitigation is proposed along a series of links including the B3078 and Harbridge Drove to locally widen the road to ensure two large vehicles can pass. This mitigation will help mitigate against any adverse effects experienced along these links resulting in a **negligible** residual effect on driver delay along these links.

Non-Motorised User Delay and Amenity

- 7.97 As noted above, links within Alderholt itself such as Station Road, Ringwood Road, and Hillbury Road, will experience major adverse impacts in the absence of any mitigation. In order to mitigate non-motorised user delay and amenity, pedestrians have been considered from the very outset of design in terms of the principles of the Proposed Development. The Proposed Development will incorporate a network of pedestrian routes through the Site, either as carriageway adjacent footways or footway/cycleways. In addition, external pedestrian and cycle connections between the Site and the wider Alderholt village are to be improved with new links provided and existing connections enhanced, including specifically new footways along Ringwood Road and Hillbury Road (together with crossing facilities as appropriate) and additional connections as well as new advisory cycle lanes along Station Road. These measures will combine to minimise impact on pedestrian amenity and delay. Following implementation of these proposals the effect is considered to be **negligible** such is the scale of the permeability of the proposals.
- 7.98 West Street itself will experience **major** deterioration in non-motorised user delay and amenity. The change from two to one direction of traffic flow will partially offset this, as users only have to consider one direction of flow when judging a safe gap in traffic flow to cross. Provost Street non-motorised user delay and amenity would improve to a **minor** extent because of the reduction in flow.

Fear and Intimidation

- 7.99 As per the above, the Proposed Development is expected to have a negligible impact on Fear and Intimidation and therefore no mitigation is required. Notwithstanding this, two new footways along Hillbury Road and Ringwood Road are proposed which will ensure pedestrians have dedicated space. In addition, traffic free pedestrian routes are proposed through to Birchwood Drive towards the primary school which is a far less heavily trafficked route and therefore provides a more pleasant and less intimidating route for pedestrians to utilise within Alderholt itself.

Severance

- 7.100 Ringwood Road/Hillbury Road are considered to experience major adverse impacts in relation to Severance due to the increase in traffic volume along these links. Mitigation has therefore been provided in terms of the downgrading of Ringwood Road, details to be confirmed, footways provided and speed limit reduced to 30mph and extended to include the development. Further mitigation along Hillbury Road to facilitate a crossing is proposed. Further wider mitigation in terms of severance has been undertaken through the design of the Proposed Development to ensure permeability through the development to

existing local residential roads within Alderholt ensuring the increase in traffic only results in **minor adverse** effects on severance.

- 7.101 West Street also experiences **major adverse** impacts in relation to Severance owing to the increase in traffic along West Street. This impact is offset somewhat by this traffic now being one-directional, and therefore less severing than two-way traffic. It also enables reduced flows along Provost Street, which experiences minor beneficial impact.

Accidents and Safety

- 7.102 As noted above, although there is not a collision history along Ringwood Road and Hillbury Road, both are expected to experience a moderate adverse impact in relation to road safety. Therefore, speed limit reductions are proposed to ensure the entirety of Alderholt and the development are 30mph. Furthermore, the link along Batterley Drove has a small recorded collision history in the vicinity of the 'S' bend to the middle of the link. Therefore, given the increase in traffic volume mitigation has been provided in the form of additional advisory signage which will mitigate against any potential impact which may arise from the Proposed Development and resulting increase in traffic. As a result of this mitigation and improvements to the link, the effect of the Proposed Development is expected to be **negligible** due to the proposed improvements which will improve the safety of this link, but traffic volume will increase.
- 7.103 Link widening between Cranborne and Alderholt and along Harbridge Drove is proposed which would help to improve the ability for vehicles to pass along the links, improving road safety such that the overall residual effect would be negligible.
- 7.104 Finally, the proposed junction improvement scheme at the A31 off/on-slips will also seek to address the small collision history where right turners currently have to turn in gaps in traffic. As a result of the Proposed Development, traffic will have dedicated right turn green time, therefore reducing conflicts and adding to the **moderate beneficial** effects experienced on this junction.

RESIDUAL EFFECTS

Construction Phase

- 7.105 During the construction phase of Proposed Development, the effects of construction traffic will typically be minor adverse, and the impacts will be temporary. Management control mitigation measures will be implemented during construction in the form of controls imposed by planning conditions, health and safety legislative requirements and good construction site practices. One such example of these mitigation control measures includes a Construction Traffic Management Plan which will be secured through a planning condition and will provide mitigation as appropriate to ensure the impacts of construction traffic are considered and managed in a way to minimise adverse impacts as far as possible.

Operational Phase

- 7.106 The Proposed Development in its operational phase will give rise to additional transport demand across all main modes of transport. To accommodate this additional demand, appropriate mitigation measures have been identified and proposed.
- 7.107 It is concluded that with the implementation of the mitigation measures outlined within this chapter, the additional demand will be safely and satisfactorily accommodated on the local highway network. The overall residual effect of the Proposed Development relative to transport and traffic is likely to be **moderate/minor adverse**, or **beneficial** where mitigation measures have a wider net benefit.

IMPLICATIONS OF CLIMATE CHANGE

- 7.108 There will not be any significant implications of climate change upon the Proposed Development and its associated impacts. It is feasible that climate change could result in social attitudes towards private car use altering and may result in fewer vehicular trips being undertaken. This would therefore reduce driver delay at the assessed junctions, or through the introduction of electric vehicles the pedestrian amenity and fear and intimidation associated with the increase in construction and operational traffic will be reduced due to an increase in quieter, less polluting vehicles. This migration towards electric car ownership has been future proofed through the provision of electric car charging points which are to be provided in accordance with the Travel Plan measures for the Site. However, the impacts of these are not known and therefore cannot be quantified within an appropriate assessment format.

CUMULATIVE EFFECTS

- 7.109 Cumulative sites which have been considered in combination with the Proposed Development include:

- Whitsbury Road, Station Road and Burgate, Fordingbridge,
- Edmundsham Road, Verwood,
- North of Ringwood Road, Alderholt, and
- Daggons Road, Alderholt.

7.110 As agreed with HCC since the application was determined, the above strategic allocation sites within Fordingbridge have been further considered (using the information in the associated Transport Assessments where these sites have planning permission) and specifically allowed for within the modelling assessment to ensure cumulative effects are considered.

7.111 Furthermore, TEMPRO growth factors have been applied to allow for general background traffic growth and to take account for smaller less strategic developments which may come forward, as agreed with DC at the pre-application stage.

7.112 For North of Ringwood Road, Alderholt, directly to the north of the Proposed Development, the traffic impact is fairly minimal given its relative size (45 dwellings). However, in designing the access/road alignment arrangements for the Proposed Development, the potential impact of the North of Ringwood Road, Alderholt site has been reviewed and considered accordingly.

SUMMARY

7.113 This chapter has considered the impact of the Proposed Development and associated traffic during the construction and operational phase. The impacts have been assessed for the following:

- Driver Delay,
- Non-Motorised User Delay and Amenity,
- Fear and Intimidation,
- Severance, and
- Accidents and Safety.

7.114 Baseline data has been obtained to inform the assessment which includes traffic data gathered through surveys undertaken in 2021 and 2023.

7.115 The Proposed Development has been developed in accordance with a range of local, regional and national policy. The Proposed Development has been demonstrated to be accessible via sustainable modes and the principles of sustainable travel have been adopted throughout the Proposed Development as applicable.

7.116 The proposed vehicular trip generation for both the construction and operational phases of the Proposed Development has been estimated and set out within this ES chapter and the TA/TAA accompanying the planning application submission.

7.117 The resulting development is expected to result in a range of effects from major adverse to minor beneficial. Therefore, a series of mitigation measures have been set out within this ES Chapter and the accompanying TA/TAA to minimise and mitigate these effects.

7.118 These mitigation measures include junction improvements at the A31 off-slips junction, West Street and the Provost Street/High street junction in Fordingbridge as well as widening along a series of links surrounding Alderholt as appropriate. Furthermore, a series of new footways and pedestrian connections will be opened up within Alderholt to enhance pedestrian permeability and therefore mitigate against pedestrian delay, amenity, fear and intimidation, and severance. Finally, Ringwood Road will be downgraded following the implementation of the Proposed Development to create a quiet lane which is useable for pedestrian and cyclists and further enhance the new pedestrian and cycle connections proposed as part of the scheme. As a result of the mitigation set out the residual impact will range from moderate adverse to major beneficial depending upon the type and nature of the receptor.

NB - Table 7.6: Summary of Effects - is provided as a separate document.

8 LANDSCAPE AND VISUAL

8.1 This chapter 8 of the CS has not been changed.

8.2 As a result of the changes to the traffic modelling reported in chapter 7 above, the ADDT flows for the noise modelling (CES Technical Appendix 8.8) used in the AONB tranquillity assessment element of this CES chapter have altered. These are reported in the **Noise Technical Note (Technical Appendix 8.8Ad)** attached to this **ES Addendum**.

8.3 There are no changes arising to the conclusions of the CES in relation to AONB tranquillity.

9 ECOLOGY

9.1 This chapter 9 of the CES has not been changed. However, Natural England raised a number of issues in relation to the Information for Habitats Regulations Assessment (CES Technical Appendix 9.2). Consequently, further assessment and information has been provided in respect of River Avon water quality, New Forest and Dorset air quality, and New Forest and Dorset recreational pressures in an addendum to Technical Appendix 9.2 and referenced as **Technical Appendix 9.2Ad** and attached to this **ES Addendum**.

9.2 There are no resulting changes to the impact conclusions of the CES chapter 9.

10 SOCIETY, POPULATION AND ECONOMY

10.1 This chapter 10 of the CES has not been changed.

11 DRAINAGE AND FLOOD RISK

11.1 This chapter 11 of the CES has not been changed. However, further discussion with the appropriate authorities during the determination of the application resulted in some clarification and minor amendments being made to the Flood Risk Assessment (FRA) (Technical Appendix 11.1). These were captured in a letter dated 22 June 2023, which is referenced as **Technical Appendix 11.1Ad** attached to this **ES Addendum** for completeness.

11.2 The impact conclusions of the CES chapter 11 have not changed.

12 ARCHAEOLOGY/HERITAGE

12.1 This chapter 12 of the CES has not been changed.

13 CLIMATE CHANGE

13.1 The original Energy Strategy has been refined slightly. The principles of the energy strategy reported in the CES chapter 13 paragraph 13.92 are based on the use of solar pv electricity and ground source heat pumps for space heating and domestic hot water. The revised Energy Strategy notes that heat pump technologies (which could include both ground and air) will be leveraged into the development to provide heating solutions that are both cost-effective and energy-efficient. Complementing this will be the solar pv arrays providing electricity round the development in a series of micro-grids.

13.2 The overall impact conclusions of the CES chapter 13 do not change.

14 AIR QUALITY

14.1 As a result of changes to the traffic modelling reported in Chapter 7 above and the TAA, the ADDT flows for the air quality impact modelling have also changed. These are reported in the **Air Quality Technical Note** attached to this **ES Addendum**.

14.2 Resulting minor revisions to the CES chapter 14 are therefore as follows (red text/figures for ease of understanding) –

Table 14.13 : NO2 Results of the ADMS modelling at sensitive receptors

ID	Receptor	NO2 Annual Mean (ug/m3)			
		2019 Baseline	2041 Without Development	2041 with Development	2041 Change
1	Ashley Cottages	27.3	13.3	13.6	0.4
2	Horton Road	26.4	13.1	12.9	-0.2
3	30 Ringwood Road	25.9	13.9	13.7	-0.2
4	Salisbury Road	26.9	13.4	13.2	-0.2
5	43 Eastfield Lane	34.2	16.2	15.9	-0/3
6	Belt Cottage	15.9	11.8	12.9	0.3
7	Drove End Farm	16.9	11.9	12.9	1.0
8	Station Road	18.1	12.3	13.0	0.7
9	56 Ringwood Road	15.6	11.6	11.9	0.3
10	38 Station Road	16.9	12.0	12.4	0.4
11	Kingwood Day Nursery	16.5	11.8	12.2	0.4
12	Corner House	16.7	11.9	12.3	0.4
13	5 Edmondsham Road	16.4	11.5	11.8	0.3
14	Cardon Place	16.4	11.7	12.0	0.3
15	Verwood House	17.4	12.4	12.7	0.3
16	2 Cold Harbour	17.2	12.1	12.2	0.1
17	Avenue Lodge	16.1	11.7	11.8	0.1
18	2 Castle Street	18.5	12.1	12.8	0.7
19	Crane View	16.0	11.7	11.9	0.2
20	Mooracre Cottage	18.1	12.3	12.8	0.5
21	2 Hillbury Road	18.2	12.4	13.2	0.8
22	Sandleheath Road	17.0	12.1	12.3	0.3
23	15 Bowerwood Road	17.7	12.0	12.2	0.2
24	4 Provost Street	19.9	12.8	13.2	0.4
25	2 Bridge Street	19.8	12.8	13.2	0.4
26	Won Lodge	18.0	12.0	11.9	-0.1
27	Foxill Farm	16.0	11.6	11.6	0.0
28	Proposed: North-west of Site	-	-	11.9	-
29	Proposed: West of Site	-	-	13.0	-

ID	Receptor	NO2 Annual Mean (ug/m3)			
		2019 Baseline	2041 Without Development	2041 with Development	2041 Change
30	Proposed: East of Site	-	-	13.2	-

CES paragraph [14.109](#) therefore reads –

The results in Table 14.13 indicate the 2019 annual mean NO2 concentrations are predicted to meet the annual mean NO2 objective at all existing sensitive receptors modelled. The highest concentration of **34.2µg/m3** is predicted at Receptor **5 (43 Eastfield Lane)**.

Table 14.4 : Pm10 and PM2.5 Results of the ADMS modelling at sensitive receptors

ID	PM10 Annual Mean (µg/m3)				PM10 - Number of Days >50µg/m3				PM2.5 Annual Mean (µg/m3)			
	2019 Baseline	2041 Without Development	2041 with Development	2041 Change	2019 Baseline	2041 Without Development	2041 with Development	2041 Change	2019 Baseline	2041 Without Development	2041 with Development	2041 Change
1	15.0	14.9	15.1	0.2	0	0	0	0	11.3	9.6	9.8	0.2
2	15.1	15.0	15.1	0.1	0	0	0	0	11.3	9.7	9.7	0.0
3	13.7	13.7	13.7	0.0	0	0	0	0	10.6	9.1	9.1	0.0
4	15.3	15.3	15.3	0.0	0	0	0	0	11.6	9.9	9.9	0.0
5	16.2	16.7	16.7	0.0	0	0	0	0	13.0	10.9	10.9	0.0
6	12.4	11.2	11.3	0.1	0	0	0	0	8.5	7.4	7.4	0.0
7	12.5	11.5	11.9	0.4	0	0	0	0	8.3	7.3	7.6	0.3
8	12.3	11.4	11.6	0.2	0	1	1	0	8.6	7.5	7.6	0.1
9	12.1	11.1	11.3	0.2	1	2	1	0	8.2	7.4	7.4	0.0
10	12.3	11.4	11.5	0.1	0	1	1	0	8.5	7.5	7.6	0.1
11	11.9	10.9	11.0	0.1	1	2	2	0	8.1	7.1	7.2	0.1
12	12.5	11.5	11.6	0.1	0	1	1	0	8.1	7.2	7.3	0.1
13	12.2	11.4	11.5	0.1	0	1	1	0	8.5	7.6	7.7	0.1
14	12.1	11.3	11.5	0.2	1	1	1	0	8.3	7.5	7.6	0.1
15	12.3	11.5	11.6	0.1	0	1	1	0	8.1	7.2	7.3	0.1
16	13.1	12.2	12.2	0.0	0	1	1	0	8.3	7.4	7.4	0.0
17	13.0	12.0	12.0	0.0	0	1	1	0	8.2	7.3	7.3	0.0
18	13.0	12.0	12.1	0.1	0	1	1	0	8.6	7.5	7.5	0.0
19	12.0	11.0	11.0	0.0	1	2	2	0	8.0	7.1	7.1	0.0
20	12.2	11.3	11.5	0.2	0	1	1	0	8.4	7.4	7.5	0.1
21	12.3	11.4	11.7	0.3	0	1	1	0	8.4	7.4	7.6	0.2

22	12.2	11.2	11.3	0.1	1	1	1	0	8.3	7.3	7.4	0.1
23	12.7	11.8	11.9	0.1	0	1	1	0	8.7	7.6	7.7	0.1
24	13.0	12.1	12.3	0.2	0	1	0	0	9.4	8.3	8.4	0.1
25	13.0	13.2	12.3	0.1	0	1	0	0	9.5	8.3	8.4	0.0
26	12.8	12.0	12.0	0.0	0	1	1	0	8.7	7.8	7.8	0.0
27	12.4	11.4	11.4	0.0	0	1	1	0	8.2	7.3	7.3	0.0
28	-	-	11.2	-	-	-	1	-	-	-	7.4	-
29	-	-	12.2	-	-	-	1	-	-	-	7.7	-
30	-	-	11.9	-	-	-	1	-	-	-	7.8	-

CES paragraph 14.113 therefore reads -

As shown in Table 14.14, the annual mean PM10 concentrations are predicted to be below the objective of 40µg/m3 in 2019 and in 2041 both 'without' and 'with' the Proposed Development at all receptor locations considered. The maximum predicted concentration in all scenarios assessed is 16.2µg/m3 at Receptor 5 (43 Eastfield Lane) in 2019.

14.3 The overall impact conclusions of CES chapter 14 do not change.

15 CUMULATIVE EFFECTS

15.1 There are no changes to CES chapter 15 and no changes to the overall conclusions.

16 OVERVIEW AND CONCLUSIONS

16.1 As a result of the revisions to the traffic modelling in chapter 7 and the TAA, CES table 16.1a Summary of Effects is revised as follows (red text for ease of understanding) -

Table 16.1a: Summary of Effects

TOPIC	IMPACT	SIGNIFICANCE – (Year 1)	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE (Year 15)
CONSTRUCTION					
Economy, Population and Society	Demographics: population count and demographic structure	Nil	N/A	N/A	Nil
	Economy and Employment	Slight Beneficial	N/A	N/A	Slight Beneficial
	Wealth and Deprivation	Negligible	N/A	N/A	Negligible
	Housing (house prices, tenure, composition)	Nil	N/A	N/A	Nil
	Education and Training	Negligible	N/A	N/A	Negligible
	Health, Community and Leisure/Recreation	Nil	N/A	N/A	Nil

TOPIC	IMPACT	SIGNIFICANCE – (Year 1)	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE (Year 15)
	Shopping	Slight Beneficial	N/A	N/A	Slight Beneficial
Water Resources	Fluvial Flood Risk Off-site	Negligible		N/A	N/A
	Water Quality – surface water	Negligible/Slight	CEMP (embedded)	N/A	N/A
	Waste water drainage /Foul drainage	Negligible			
	Changes to surface water flood risk	Negligible	CEMP (embedded)	N/A	N/A
	Changes to Fluvial flood risk	Negligible	CEMP (embedded)	N/A	N/A
	Ground Water Quality	Negligible to Moderate	CEMP and NMP (embedded)	N/A	N/A
	Climate Change	Increased GHG emissions	Moderate	None required	N/A
Transport	Potential impacts upon Non-Motorised User Delay and Amenity; Fear and Intimidation; and Severance across the network due to increase in HGV numbers	Minor//Negligible	CTMP to manage traffic	Residual effects confined to Ringwood Road and links to the south rather than wider network	Minor
	Potential impacts upon Driver Delay and Road Safety across the network due to increase in HGV numbers	Moderate	As above	As above	Minor
Ecology	Designated sites – vegetation effected by dust	Slight	Implement an approved CEMP - Dust control measures	None	Nil
	Habitats onsite – vegetation affected by dust	Slight	As above	As above	Nil
	Trees - damage	Slight	Implement an approved Tree Protection Plan	As above	Nil
	Retained habitats - damage	Moderate	Implement an approved CEMP – fencing	As above	Nil
	Bats – loss/harm to roosts	Significant	Implement an EPSML – supervised works	Loss of roosts requires compensation	Significant

TOPIC	IMPACT	SIGNIFICANCE – (Year 1)	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE (Year 15)
	Bats - disturbance	Slight	Implement an approved CEMP – regulate timing of works	None required	Nil
	Amphibians - harm	Slight	Implement an approved CEMP and/or EPSML – time supervised clearance to Apr-Sep when active	As above	Nil
	Reptiles -harm	Moderate	Implement an approved CEMP – time supervised clearance to Apr-Sep when active	As above	Nil
	Breeding Birds - nesting	Slight	Implement an approved CEMP – Avoid clearance when nesting Mar-Aug OR Check by ecologist and leave buffer	As above	Nil
	Badgers – disturbance of setts	Slight	Implement an approved CEMP – update survey	As above	Nil
Landscape/Visual	Impacts during construction would be short term and temporary – therefore not assessed	Short term and temporary			
Air Quality	Dust	Short-term, local effects of major adverse significance at receptors within 20m from the Proposed Development;	Refer to IAQM for high-risk sites. A CEMP would be implemented. Mitigation measures are routinely and successfully applied to construction projects throughout the UK and are proven to significantly reduce the potential for adverse nuisance dust effects associated with the various stages of the construction work.	N/A	Not significant

TOPIC	IMPACT	SIGNIFICANCE – (Year 1)	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE (Year 15)	
		Short-term, local effects of moderate adverse significance at receptors between 20m and 100m of the Proposed Development;	As above		Not significant	
		Short-term, local effects of minor adverse significance at receptors between 100m and 350m of the Proposed Development;	As above	N/A	Not significant	
		Negligible effects at receptors over 350m from the Proposed Development.	As above	N/A	Not significant	
		Construction Vehicle emissions	Not significant	Construction traffic logistics would be agreed with DC. Where practicable - avoidance, or limited use of roads during peak hours.	N/A	Not significant
		Construction plant emissions	Not significant	None required	N/A	Not significant
		Archaeology and Heritage	Known and as yet unknown archaeological remains associated with medieval agricultural and land management activity	Negligible (not significant)	Programme of archaeological investigation prior to or during construction	Residual effect reduced through preservation by record
	Known and as yet unknown archaeological remains associated with post-medieval agricultural and extraction activity	Negligible (not significant)	As above	As above	Negligible (not significant)	
	As yet unknown Palaeolithic and geoarchaeological remains	Negligible (not significant)	As above	As above	Negligible (Not significant)	
OPERATION						

TOPIC	IMPACT	SIGNIFICANCE – (Year 1)	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE (Year 15)
Society, Population and Society	Demographics: population count and demographic structure	Slight beneficial	N/A	N/A	Slight beneficial
	Economy and Employment	Moderate Beneficial	N/A	N/A	Moderate Beneficial
	Wealth and Deprivation	Nil	N/A	N/A	Nil
	Housing (house prices, tenure, composition)	Moderate Beneficial	N/A	N/A	Moderate Beneficial
	Education and Training	Negligible/Slight Adverse	Onsite primary, secondary financial contribution	N/A	N/A
	Health/Community Facilities	Negligible	Financial contribution	N/A	Negligible
	Shopping - Alderholt/Leisure/Recreation Facilities	Slight Beneficial	N/A	N/A	Slight/Moderate Beneficial
	Shopping – Verwood/Fordingbridge	Slight adverse (F) – slight/moderate beneficial (V)			Major beneficial
Water Resources	Fluvial Flood Risk Off-Site	Negligible (not significant)	N/A	N/A	N/A
	Surface water Quality	Slight	CEMP	N/A	N/A
	Waste water drainage /Foul drainage	Negligible (not significant)	N/A	N/A	N/A
	Changes to surface water flood risk	Negligible (not significant)			
	Changes to Fluvial flood risk	Negligible (not significant)	N/A	N/A	N/A
	Groundwater Quality	Negligible	N/A	N/A	N/A
Climate Change	Increase in GHG Emissions	Moderate	Compliance with Part L of Building Regulations	Increase in renewable energy	Slight
	Declining species and natural habitats	Moderate	Various mitigation see Chapter 8	Increase in biodiversity	Negligible
	Impact on existing ground conditions	Slight	None required	N/A	Slight
	Summertime overheating of buildings	Moderate	Overheating assessment to be carried out at RM stage	Reducing risk of overheating homes	Slight

TOPIC	IMPACT	SIGNIFICANCE – (Year 1)	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE (Year 15)
Transportation	Potential impact at the Provost Street/ High Street junction in Fordingbridge due to increases in Driver Delay	Major	Junction improvements including widening and potential one-way system	Delay experienced prior to mitigation no longer occurs	Negligible
	Impact of one-way system implementation on West Street & Provost Street in terms of non-motorised user delay, amenity and severance.	Varied – West Street – major adverse; Provost Street – minor beneficial	West Street will experience an increase in traffic which will result in a major adverse impact on severance and non-motorised user amenity. This will be offset by overall improvement to Provost Street through a reduction in traffic and therefore improvements to non-motorised user amenity and severance along Provost Street. Reduction from two to one way traffic flow of benefit	Overall the impact is considered minor adverse on NMU delay, amenity and severance.	Minor
	Impact of one-way system implementation on West Street & Provost Street in terms of Driver Delay	Varied – West Street junction – adverse; Provost Street junction – beneficial; Provost and West Street links – beneficial	One way system increases delay, at West Street junction, and reduces delay at Provost Street junction, compared to existing arrangement.	Collectively, one way system reduces delay at junctions and on the links	Moderate
	Potential impact at the A31/B3081 eastbound on/off-slips with substantial delay and queuing onto the mainline and well as existing collisions at the opposite on-slip	Major	Junction improvements to include signalising reducing delay and conflict for right turners onto on-slip and improving NMU amenity	Delay experienced substantially reduced compared to without development situation and safety issues resolved.	Major

TOPIC	IMPACT	SIGNIFICANCE – (Year 1)	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE (Year 15)
	Potential impact upon driver delay , accidents and safety along the B3078 and Harbridge Drove due to potential pinch points	Minor	Potential widening of links as determined necessary	Pinch points reduced and so reduced delay experienced	Negligible
	Potential impact at Hillbury Road for Driver Delay	Minor			
	Potential impact on Road Safety along Batterley Drove	Moderate	Advisory signage on approach to 'S' bend in the middle of link	Greater safety through the centre of this link	Negligible
	Potential impact on NMU Delay and Amenity, within Alderholt along Station Road, Ringwood Road and Hillbury Road due to increase in traffic volume.	Major	Wide range of new and/or improved footway/cycle connections between development and existing Alderholt settlement. Also scheme has been designed in a way to promote permeability, whilst Ringwood Road itself will be stopped up and turned into a active travel friendly route connecting the centre of Alderholt. Further measures are covered within TA.	Improved means of access within Alderholt (both existing and new development)	Negligible overall but Mahor beneficial for former Ringwood Road alignment
	Potential Impact on Severance on Ringwood Road and Hillbury Road	Major	Repurposing old Ringwood Road alignment, provision of footway/cycleway alongside spine road, reduction in speed limit on Hillbury Road and crossing of Hillbury Road. Improved permeability and additional pedestrian links through alternative routes.	Improved connections, linkages and reduced speeds reduce the effects of traffic increases on severance.	Minor
Ecology	Dorset Heathlands SAC/SPA/RMASAR - recreational pressures	Significant	No development within 400m, provision and management in perpetuity of alternative recreation resources (SANG, GI, walking routes).	None	Nil

TOPIC	IMPACT	SIGNIFICANCE – (Year 1)	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE (Year 15)
			(In accordance with Dorset Heathlands SPD).		
	Air pollution of habitats at designated sites	Not significant	None required	As above	Nil
	River Avon SAC/Avon Valley SPA/Ramsar – Nutrient (Phosphate) pollution	Significant	Bespoke nutrient mitigation strategy	As above	Nil
	New Forest SAC/SPA/RAMSR, Cranborne Common SSSI, Other SSSIs in ZOI – recreational pressure	Significant	Provision and management in perpetuity of alternative recreation resources (SANG, GI, walking routes) AND/OR Contribution to strategic mitigation scheme for New Forest.	As above	Nil
	Sleepbrook Farm SNCI, Ringwood Forest SINC and other LWS in ZOI – recreational pressure	Significant	Provision of alternative recreation resources (SANG, GI, walking routes)	As above	Nil
	Habitats creation and management	Significant	None required assuming implementation of approved SANG/EMES Management Plans.	Biodiversity benefits	Significant
	Bats – loss and gain of Foraging Habitat	Moderate	As above	As above	Moderate
	Bats – disturbance by operational lighting	Moderate	Implementation of lighting strategy	None	Nil
	Reptiles – loss and gain of breeding/foraging habitat	Moderate	None required assuming implementation of approved SANG/EMES Management Plans.	Biodiversity benefits	Moderate

TOPIC	IMPACT	SIGNIFICANCE – (Year 1)	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE (Year 15)
	Badgers – net loss of breeding/foraging habitat	Slight	As above	Biodiversity benefits	Slight
	Birds (Nightjar) – disturbance by operational lighting	Moderate	Implementation of lighting strategy	None	Nil
	Breeding Birds, Barn Owl, Nightjar – loss/gain in breeding/foraging habitat nesting habitat	Moderate	None required assuming implementation of approved SANG/EMES Management Plans.	Biodiversity benefits	Moderate
	Invertebrates – loss/gain of habitat	Moderate	As above	As above	Moderate
	Amphibians – loss/gain of breeding/foraging habitat	Moderate	As above	As above	Moderate
	Landscape/Visual	View 1	Minor/moderate	Landscape/planting strategy maturing	N/A
View 2		Minor/moderate		N/A	Minor
View 3		Minor/moderate		N/A	Minor
View 4		Minor		N/A	Minor
View 5		Minor		N/A	Neutral/minor
View 6		Minor/moderate		N/A	Neutral/minor
View 7		Moderate		N/A	Minor/moderate
View 8		Negligible/minor		N/A	Minor
View 9		Negligible/minor	As above	N N/A	Negligible
View 10		Negligible	As above	N/A	Negligible

TOPIC	IMPACT	SIGNIFICANCE – (Year 1)	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE (Year 15)
	View 11	Negligible/minor	As above	N/A	Moderate
	View 12	Minor/moderate	As above	N/A	Neutral/minor
	View 13	Minor	As above	N/A	Neutral/minor
	View 14	Minor/ Moderate	As above	N/A	Minor
	View 15	Minor/moderate	As above	N/A	Minor
	Residential receptors (RR) 38-58 Ringwood Road	Major	As above	N/A	Moderate
	RR 24-26 Pine Road	Moderate	As above	N/A	Minor
	RR 37-49 Ringwood Road	Moderate	As above	N/A	Minor
	RR Ringwood Road from Sleepbrook Farm Lane to Alderholt recreation ground	Neutral/minor	As above	N/A	Neutral
	RR Ringwood Road west of Foxhill Farm	Moderate	As above	N/A	Moderate
	RR Foxhill Farm	Neutral	As above	N/A	Neutral
	RR Hazel Close	Minor	As above	N/A	Neutral/minor
	RR Saxon Way	Minor	As above	N/A	Neutral/minor
	RR Hilbury Park	Moderate	As above	N/A	Minor
	RR Hilbury	Minor	As above	N/A	Neutral/minor
	RR Warren Park Farm	Negligible	As above	N/A	Negligible

TOPIC	IMPACT	SIGNIFICANCE – (Year 1)	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE (Year 15)
Tranquillity within the AONB	TR1 to TR8	Slight	None	N/A	Slight
Air Quality	Nitrogen Dioxide	Not significant	None required	N/A	Not significant
	Particulate Matter (PM10, PM2.5)	Not significant	As above	N/A	Not significant
Archaeology and Heritage	N/A	N/A	N/A	N/A	N/A

NB- the operational Transport Residual effects include cumulative traffic

16.2 The CES overall conclusions remain unchanged.

ES NON-TECHNICAL SUMMARY

The CNTS remains unchanged other than Table NTS1a: Summary of Effects. The updates to this table are the same as those provided above in Table 16.1a and so are not repeated here.

