

CHAPTER 8: TRAFFIC AND TRANSPORT

8.1 INTRODUCTION

8.1.1 This chapter of the ES Addendum Statement has been produced by Paul Basham Associates to review and, where necessary, update the original assessment and findings of the Traffic and Transport assessment and the conclusions presented in the original Traffic and Transport ES chapter. This original ES was produced in 2020 and is referred to within this chapter as the ES.

8.2 CONFIRMATION OF AND UPDATES TO BASELINE ENVIRONMENT

Legislative context

8.2.1 Since the ES Chapter was produced there have been some updates to national policy, namely the NPPF and IEMA guidance. There have also been updates to local policy including the adoption of the new Eastleigh Local Plan and Hampshire County Council's Local Transport Plan (LTP) 4.

National Planning Policy Framework (NPPF)

8.2.2 The NPPF has been revised several times, most recently in December 2023. In transport terms the changes to the NPPF are not fundamental and the same principles apply surrounding the promotion of sustainable development. In transport terms the changes centre predominantly on new paragraph numbers with the paragraph numbers now relevant to transport being 109-117.

8.2.3 For completeness the new paragraph references have been made in the following paragraphs. Specifically, the NPPF (December 2023) states:

“108: Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

a) the potential impacts of development on transport networks can be addressed;

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

c) opportunities to promote walking, cycling and public transport use are identified and pursued;

d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and

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

“109: The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas,”

8.2.4 Paragraph 114 now sets out the transport tests which need to be addressed when considering sites that may be allocated for development. It should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

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

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

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

8.2.5 Paragraph 115 states that *“development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”*

8.2.6 Paragraph 117 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.*

8.2.7 These paragraph changes have no impact upon the validity of the previous ES Chapter, save the reference of new paragraph numbers.

Institute of Environmental Management and Assessment (IEMA) Guidelines

- 8.2.8 In addition to the NPPF updates, the IEMA guidance has also been updated since the ES Chapter was produced. In July 2023 new guidelines were published on the 'Environmental Assessment of Traffic and Movement'. This closely aligns previous guidelines and the principles of assessment remain largely unchanged, however references have been updated accordingly.
- 8.2.9 The main area of difference since the ES Chapter was produced and the new guidelines is the assessment of fear and intimidation. Previously the assessment of fear and intimidation was captured within the cumulation of other effects, however following the publishing of the new IEMA guidelines fear and intimidation is assessed under its own cover.
- 8.2.10 Within the new IEMA guidance the extent of fear and intimidation is dependent on the total volume of traffic, the heavy vehicle composition, vehicle speeds and the proximity of traffic to people. Fear and intimidation is not limited to cars, lorries, motorcycles and buses, but also includes horses, cycles, mobility scooters, e-scooters and e-cycles. Whilst there are no commonly agreed thresholds, the July 2023 IEMA guidelines outlines traffic flow and speed values to generate a degree of hazard score and total hazard score to outline the level of fear and intimidation between small, moderate, great and extreme.
- 8.2.11 The impacts of this revised IEMA guidelines are considered later in this Chapter.

Eastleigh Local Plan

- 8.2.12 Within the ES Chapter the previous Eastleigh Local Plan (2001-2011) was referenced, with the (at the time) emerging Local Plan also reviewed. The previously emerging Eastleigh Local Plan 2016-2035 was adopted in April 2022 and represents an evolution of the previous Local Plan and was referenced as part of the ES Chapter submission. Therefore, the assessment was undertaken in light of the emerging plan and so its adoption does not result in any fundamental changes.
- 8.2.13 For clarity the Wider OPA Site is referenced within the adopted Local Plan as site HH1 whilst several of the accompanying infrastructure provisions are also assigned specific policy references. These were identified within the ES Chapter and so have not been reproduced here.

HCC Local Transport Plan 4

- 8.2.14 At time of writing the ES Chapter HCC's LTP 3 was the adopted document, but LTP 4 had been drafted and was well advanced in its consultation process. Therefore, the ES Chapter, Transport

Assessment and accompanying mitigation designs have been considered in collaboration with HCC and within the context of the emerging LTP4.

8.2.15 Furthermore, LTP4 primarily seeks to prioritise active travel and sustainable travel modes above previous approaches of improving highway capacity and this is an approach which aligns with the overall strategy of the Proposed Development.

Baseline Conditions

Committed Development

8.2.16 Upon review of the committed development lists provided it does not appear there is any new or evolving committed Development sites which would need to be re-considered or which may impact the assessment undertaken thus far.

Traffic Data

8.2.17 In terms of baseline conditions, it is noted that the ES Chapter relied on traffic data from 2018. It is noted however that there have not been any significant developments in the area which may have had a particular impact on the baseline traffic flows, noting that TEMPRO growth factors and committed developments were applied as part of the assessment.

8.2.18 It is noted that the Bubb Lane relief road which forms a part of the Proposed Development has now been delivered and open to general use. This represents the implementation of an early phase of infrastructure and so does not affect the assessment's baseline situation and as such the baseline data is still considered appropriate.

Facilities

8.2.19 Since the ES Chapter was produced there has been minimal change to the overall baseline position in terms of local facilities and amenities available within the locality beyond typical evolution of the branding of those facilities subsequently the baseline position still remains current.

8.2.20 In terms of public transport options within the locality, due to the nature of the public transport industry, some contracts have expired and been renewed in slightly different guises with evolving routes since the ES Chapter set out the baseline. The overall provision of public transport availability as part of the baseline conditions has not materially changed, with regular bus services still provided. However, due to the evolution of these services an up to date table setting out the exact bus services in the locality is provided in **Table 8.1** below. Note this table

provides an updated list of regular services in the locality, any irregular/infrequent/adhoc services which take place occasionally have not been identified within this list.

Table 8.1: Updated Bus Timetables

Service	Bus Stop Location	Operator	Route	Approximate Frequency		
				M-F	Sat	Sun
2 Bluestar	Botley Road	Bluestar	Southampton-Eastleigh-Fair Oak	Every 20mins	Every 20 mins	Every 20 mins
3 Bluestar	Botley Road	Bluestar	Southampton-Hedge End-Eastleigh	Hourly	Hourly	Hourly

8.2.21 The bus service provision has evolved slightly, but the key services remain in similar guise to those provided at the time of the ES Chapter and therefore the overall provision is considered to remain relatively unchanged. The development proposals still incorporate enhancement to public transport provision through the development site.

8.2.22 In terms of pedestrian infrastructure, with the exception of the walking and cycling provision provided alongside the Bubb Lane Relief Road which has already been discussed is the earlier implementation of development infrastructure, there has been no material changes from the baseline assessed as part of the ES Chapter.

8.2.23 The overall baseline position as set out in the ES Chapter remains fundamentally unchanged and so no further updates are required.

8.3 REVIEW OF PREVIOUS ASSESSMENTS AND CONCLUSIONS

Trip Generation

8.3.1 The Proposed Development has not materially changed since the production of the ES Chapter in 2020. Therefore, the overall trip generation as set out in the ES Chapter and accompanying Transport Assessment will also not have changed.

8.3.2 It is noted that since 2020 further sites may have become available within on the TRICS database which may reflect the evolving travel patterns post Covid-19. These effects can be broadly described as there being fewer trips in the typical highway peaks due to greater prevalence of home working. However, this slight reduction in peak hour trips is typically offset by peak spreading of trips or by trips made during the duration of the day. To confirm whether there is an impact arising from this change in behaviour on Transport effects a revised TRICS assessment has been undertaken. This revised TRICS assessment has been undertaken to

match the previous assessment criteria, utilising residential developments of greater than 500 dwellings in comparable locations. This is shown in **Table 8.2** below.

Table 8.2: Trip Rate Comparison

Trip Rate	AM Peak			PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
ES	0.149	0.392	0.541	0.377	0.224	0.601
Revised Trip Rate	0.140	0.380	0.520	0.345	0.156	0.501

8.3.3 As can be seen from Table 8.2 above, the previously agreed trip rates are higher than a most recent assessment undertaken and therefore demonstrates that the trip rates and subsequent trip generation remains representative and robust.

Trip Distribution

8.3.4 It is noted that the distribution of traffic was undertaken using Journey to Work data derived from the 2011 Census data. Since the assessment was undertaken, 2021 Census data is now available. However, using the 2021 Census Data is flawed in the use of deriving traffic distributions due to it being undertaken during Covid-19 and therefore is heavily biased in favour of remote working. It has therefore remained standard practice to utilise 2011 Census data as the core data source for distribution. On this basis the original distribution work undertaken for the ES is still valid and the resulting findings from the Transport Assessment and ES are still valid.

Fear and Intimidation

8.3.5 As noted in the sections above, following the updated IEMA guidelines Fear and Intimidation is very specifically quantified relevant to the increases in flow, speed limit changes and daily totals. However due to the methodology it would require a change in flow between the various categories (<1200; 1200-1800; and >1800 AAWT per hour), combined with speed limits on order to have a major adverse impact. It is therefore considered that the impact on Fear and Intimidation will not have any more considerable impact than any of the other effects, such as Driver Delay, or Severance.

8.3.6 To further demonstrate this point, a worked example of the fear and intimidation scale has been produced for a specific link which experiences a high increase in traffic volume. Tolbar Way is subject to a 40mph speed limit and is forecast to experience a rise in c. 4400 AADT following the implementation of the Proposed Development. It serves as a primary distributor road south

towards Hedge End and the M27 and therefore 18.6% of the residential development and 36.4% of the commercial development traffic is expected to distribute along it. This increase of c. 4400 AADT equates to a percentage increase of 18.7% against the 2036 + Committed Development scenario.

- 8.3.7 Based on the above, the future scenario equates to c. 1309 AAWT pro rata'd per hour and following the implementation of the Proposed Development this will rise to 1554. Therefore, there will be no step change in traffic volume. The speed limits are expected to remain as current. The development itself it not expected to give rise to significant HGV numbers, with the numbers primarily associated with deliveries and servicing to the residential uses and small amounts of HGV movements to the commercial and supporting uses. It is therefore expected there will be no significant change equating to over 1,000 HGVs daily from the development. On this basis Fear and Intimidation scores would equate to no stepped change in score and as such the resulting impact would be negligible in this regard. To this end greater impacts are experienced as part of other effects such as Driver Delay or Severance to which mitigation has already been proposed as part of the ES Chapter and accompanying TA. To this end no further work has been undertaken on Fear and Intimidation.

Cumulative Effects

- 8.3.8 The changes to the Schedule of Committed Developments were reviewed to inform this Addendum. These do not result in any changes to the assessment of cumulative effects presented in Chapter 8 of the 2020 ES.

Impact of Climate Change

- 8.3.9 The impact of Climate Change would remain unchanged from that identified in Chapter 8 of the 2020 ES.

8.4 ASSESSMENT SUMMARY

- 8.4.1 Upon review of the ES Chapter the current baseline and the Proposed Development, it is clear that the assessment undertaken as part of the ES Chapter remains representative of current and future conditions and that the assessment is valid and acceptable.

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Table 8.3: Traffic and Transport Assessment Summary (Wider OPA)

Environmental Effect	Sensitivity of Receptor	Nature of Impact	Significance/Impact Magnitude	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect
Construction Effects						
Severance	High	Temporary	Negligible	Construction Environmental Management Plan	Negligible	Temporary
Driver Delay	Very High	Temporary	Slight Adverse	Construction Environmental Management Plan	Negligible	Temporary
Pedestrian Delay	High	Temporary	Negligible	Construction Environmental Management Plan	Negligible	Temporary
Pedestrian Amenity	High	Temporary	Negligible	Construction Environmental Management Plan	Negligible	Temporary
Accidents and Safety	Medium	Temporary	Negligible	Construction Environmental Management Plan	Negligible	Temporary
Fear and Intimidation	Medium	Temporary	Negligible	Construction Environmental Management Plan	Negligible	Temporary
Hazardous Loads	Low	Temporary	Negligible	Construction Environmental Management Plan	Negligible	
Operation Effects						
Severance	High	Permanent	Negligible or Slight Adverse	Sustainable Transport Strategy, Off-site highway works and contributions	Negligible or slight adverse	Permanent
Driver Delay	Very High	Permanent	Slight to Moderate Adverse	Sustainable Transport Strategy, Off-site highway works and contributions	Slight adverse	Permanent
Pedestrian Delay	High	Permanent	Negligible or Slight Adverse	Sustainable Transport Strategy, Off-site highway works and contributions	Negligible or Slight Adverse	Permanent
Pedestrian Amenity	High	Permanent	Negligible	Sustainable Transport Strategy, Off-site highway works and contributions	Slight beneficial	Permanent
Accidents and Safety	Medium	Permanent	Slight to Moderate Adverse	Sustainable Transport Strategy, Off-site highway works and contributions	Slight adverse	Permanent
Fear and Intimidation	Medium	Permanent	Negligible or Slight Adverse	Sustainable Transport Strategy, Off-site highway works and contributions	Negligible or slight adverse	Permanent
Hazardous Loads	Low	Permanent	Negligible	Not Required	Negligible	

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Cumulative Effects			
Effect	Description	Mitigation	Significance
N/A	N/A	N/A	N/A
Impact of Climate Change			
Effect	Description	Mitigation	Significance
N/A	N/A	N/A	N/A

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Table 8.4: Mitigation Implementation (Wider OPA)

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
Bubb Lane to Burnetts Lane link road and associated junctions	Developer	S278/S38	N/A	Completed
Burnetts Lane to Allington Lane link road	Developer	S278/S38	N/A	December 2024
Improvement to eastern end of Fir Tree Lane	Developer	S278/S38	N/A	TBC
Pedestrian/cycle route along eastern end of WEF3 (Chalcroft Farm Access Road)	Developer	S278/S38	N/A	TBC
Traffic calming along Burnetts Lane	Developer	S278	N/A	TBC
Improvements to local footpath route which runs to the south of the railway (route to secondary school)	Developer or HCC	S278/S106	N/A	TBC
Upgrades to FOHHF7 to accommodate pedestrians and cyclists	Developer or HCC	S278/S106	N/A	TBC
Financial contributions towards surfacing improvements at local PROW routes	HCC	S106	N/A	TBC
Infrastructure at Bubb Lane/Link Road roundabout including extended footway and pedestrian crossing	Developer	S278/S106	N/A	TBC
Masterplan provision of pedestrian and cycle routes	Developer	S278/S38	N/A	TBC
Downgrading of central section of Fir Tree Lane to become footway/cycleway	Developer	S278/S38	N/A	TBC
Provision of bus serving the development and associated infrastructure	Developer or HCC	S106	N/A	TBC
Off-site highway contributions (EBC as developer has already paid £2,880,776.74)	HCC	S106	N/A	TBC
Provision of Travel Plan	Developer	S106	N/A	3 months prior to 1 st occupation