

## 12. Residual Effects & Effect Interactions

### Introduction

- 12.1. This chapter provides a summary of the residual effects assessed in the preceding technical chapters (**Chapter 6 to Chapter 11** and **Volume 3**). These comprise those effects likely to occur as a result of the continued operation of the Development, taking into account all proposed mitigation measures. A summary of proposed mitigation is provided separately in **Chapter 13: The Next Steps**.
- 12.2. The identified residual effects are then used to undertake an assessment of the potential for effect interactions. Effect interactions arise when two or more individual effects arising from the Development have the potential to affect a single receptor or group of receptors, resulting in the potential for a cumulative effect to arise.

### Residual Effects

- 12.3. A summary of those residual effects identified as being minor adverse / beneficial or above within the preceding technical chapters is provided below. No further consideration is given to those residual effects identified as negligible, as negligible effects are not considered likely to affect identified receptors, either in isolation or in combination with other residual effects.

### Continued Operational Development Residual Effects

- 12.4. No residual effects associated with the continued operation of the Development were identified in relation to the following topics:
- **ES Chapter 8: Air Quality**
- 12.5. **Table 12.1** outlines the adverse residual effects that were identified in the preceding technical chapters (**Chapter 6 to Chapter 11** and **Volume 3**) for the continued operation of the Development.

Table 12.1: Continued Operation of the Development - Adverse Residual Effects

Topic	Nature of Effect	Receptor(s)	Residual Effect	Significance
Traffic and Transport	Increased HGV movements	Local highway network comprising the A2070 (Link 6)	Long-term moderate adverse effect.	Significant
	Increased traffic flows	Local highway network (Driver Delay) at M20 J10a	Long-term minor adverse effect	Not Significant
Noise and Vibration	Standby Generators	R5 Sunnybank - residential property opposite staff car park entrance Church Road	Night-time: local, permanent, intermittent, direct, minor adverse effect	Not significant
	HGV movements, electric hook ups and Shed 5 operations.	R10 Bridge Cottage – residential property off Church Road to the southwest of the Application Site.	local, permanent, intermittent, direct minor adverse effect	Not significant
	Road Traffic Noise	R1 Lagonda Lodge residential property to the	Negligible to local, permanent, direct	Not

Topic	Nature of Effect	Receptor(s)	Residual Effect	Significance
		northeast of the Application Site where Highfield Lane becomes Kingsford Street.	minor adverse effect.	significant
Cultural Heritage	Urbanising effect due to hard standing, buildings and lighting	Church of St Mary	Local, permanent, long-term, indirect, moderate adverse effect.	Significant
Landscape	Change to Landscape Character Area	Brabourne Lees Mixed Farmlands	Long-term, local, moderate adverse effect	Significant
Visual	Viewpoint 2 looking southeast towards the Application Site from PRow users and Visitors of St. Mary's Church (Grade I Listed).	2a Users of PRow and Visitors of St. Mary's Church (Day)	Long-term, local, minor adverse effect	Not significant
		2a Users of PRow and Visitors of St. Mary's Church (Night)	Long-term, local, moderate adverse effect	Significant
	Viewpoint 3 from the front of residential properties along Church Road. View looking east and towards the Application Site	3b Residents on Church Road (Day)	Long-term, local, moderate adverse effect	Significant
		3b Residents on Church Road (Night)	Long-term, local, moderate adverse effect	Significant
	Viewpoint 9 from PRow and residents of Blind Lane, looking west and towards the Application Site	9b Residents of the farm of Blind Lane	Long-term, local, moderate adverse effect	Significant
	Viewpoint 11 looking south towards the Application Site from PRow along the rear of properties and off Hythe Road.	11a Users of PRow	Long-term, local, minor adverse effect	Not significant
		11b Residents on Hythe Road	Long-term, local, moderate adverse effect	Significant
	Viewpoint 12 from North Downs Way within Kent Downs National Landscape, looking southwest and towards the Application Site.	12a Recreational users of North Downs Way	Long-term, local, moderate adverse effect	Significant

- 12.6. **Table 12.2** outlines the beneficial residual effects that were identified in the preceding technical chapters (**Chapter 6 to Chapter 11** and **Volume 3**) for the continued operation of the Development:

Table 12.2: Continued Operation of the Development - Beneficial Residual Effects

Topic	Nature of Effect	Receptor(s)	Residual Effect	Significance
Socio-Economics	Job Creation (Direct)	Ashford Borough	Permanent, long-term, direct, moderate beneficial effect.	Significant
	Employment	Ashford Borough	Permanent, long-term,	Not Significant

Topic	Nature of Effect	Receptor(s)	Residual Effect	Significance
			direct, minor beneficial effect.	
	Economic Output	Ashford Borough	Permanent, long-term, direct, minor beneficial effect.	Not Significant
	Workforce Expenditure	Ashford Borough	Permanent, long-term, direct, minor beneficial effect.	Not Significant
Ecology and Biodiversity	GCN population monitoring from update LEMP	Amphibians	<b>Beneficial at Site level</b>	<b>Significant</b>
	Monitoring and re-siting of failed bat boxes (update LEMP)	Bats (roosting bats)	<b>Beneficial at Site level</b>	<b>Significant</b>
	Monitoring and re-siting of failed bird boxes (update LEMP)	Breeding birds	<b>Beneficial at Site level</b>	<b>Significant</b>
	On-site habitat monitoring and management practices (within the LEMP) suitable for Reptiles	Reptiles	<b>Beneficial at Site level</b>	<b>Significant</b>
	Management and maintenance (within the LEMP) of SuDs and Ponds provide habitat connectivity for Water Vole local populations.	Water Vole	<b>Beneficial at Site level</b>	<b>Significant</b>

## Effect Interactions

- 12.7. The Town and Country Planning (Environmental Impact Assessment) Regulations 2017<sup>1</sup>, as amended<sup>2</sup> require that, in assessing the effects of a particular development proposal, consideration is also given to the cumulative effects that may arise from the proposal. As set out in **Chapter 2: EIA Methodology**, there are two types of cumulative effects:
- **Inter-development effects:** combined effects of the Development with other schemes, which individually might be insignificant, but when considered together could cause a significant cumulative effect; and
  - **Intra-development effects:** combined effects of individual effects resultant from the Development upon a set of defined sensitive receptors, for example noise, dust and visual effects.
- 12.8. Other schemes which have been assessed for inter-development effects are detailed in **Chapter 2: EIA Methodology** and each technical chapter has considered the inter-development cumulative effects relating to that particular topic.

- 12.9. There is no prescribed guidance relating to the assessment of cumulative effects, however, reference has been made to the 'Guidelines for the Assessment of Indirect and Cumulative Effects as well as Impact Interactions' published in 1999 by the European Commission (EC)<sup>3</sup>. The EC Guidelines give advice on how to approach cumulative assessments during the EIA process and how to adapt the approach to different circumstances. They also suggest tools for identifying and assessing indirect and cumulative effects as well as impact interactions.
- 12.10. Intra-development effects identified in this chapter are based on the likely residual effects reported in the preceding technical chapters of this ES (**Chapters 6 to 11** and **Volume 3** inclusive) and summarised in the section above. They therefore take account of mitigation measures that would be in place. Intra-development effects have been considered for the continued operation of the Development.
- 12.11. In assessing the potential for intra-development effects to occur, consideration has been given to all residual effects of minor significance or above, including those identified within the relevant technical chapters as being 'not significant' (disregarding only those effects which have been assessed as 'negligible'). This will ensure that the potential for a combination of effects individually assessed as non-significant to result in a significant effect upon an individual receptor, or receptors, when considered collectively, is taken into account.
- 12.12. Relevant surrounding land uses and sensitive receptors are identified in **Chapter 3: Land Uses & Sensitive Receptors**. In determining those receptors which have the potential to be affected by more than one type of effect resulting from the Development, consideration has been given to the type of receptor, their proximity to the Application Site and the likely extent of exposure to effect interactions. On this basis, the receptors likely to be affected by more than one type of effect are primarily surrounding residents and users of Public Rights of Way in the vicinity of the Application Site.
- 12.13. Potential effect interactions have been identified where one or more residual effects has been identified in relation to a particular receptor or group of receptors. Consideration has then been given to whether these intra-development effects are likely to be significant, drawing upon the outcome of the relevant technical assessments. Where one or more residual effect has been assessed as significant, the intra-development effect will also be significant. Where one or more non-significant residual effects have been identified as having the potential to affect a specific receptor, professional judgement has been used to determine whether or not these could be collectively significant.
- 12.14. The outcome of the intra-development cumulative effects assessment is presented in **Table 12.3**.

### Operational Intra-Development Effects

- 12.15. The likely residual intra-development effects (both significant and non-significant) identified for sensitive receptors for the continued operation of the Development are listed in **Table 12.3**.

Table 12.3: Likely Operational Intra-Development Effects

Sensitive Receptor / Land Use	Operation	Effect Interaction and Significance
Ashford Borough (direct job creation)	Soc+	No n/a
Ashford Borough (employment, economic	Soc +	No



Sensitive Receptor / Land Use	Operation	Effect Interaction and Significance
output, and workforce expenditure)		n/a
Church of St Mary	<b>CH-, Vis-</b>	Yes <b>Significant</b>
Resident of Church Road (Sunnybank Cottage).	<b>N-, Vis-</b>	Yes <b>Significant</b>
Protected species and habitat creation	<b>E+</b>	No n/a
Road users of the A2070 (Link 6)	<b>T+</b>	No n/a
Road Users of the M20 (Junction 10a)	<b>T</b>	No n/a

Key:

T = Transport and Access

CH = Cultural Heritage

N = Noise

V = Vibration

D = Dust

Vis = Visual

L = Landscape

+/- = Beneficial or adverse effects anticipated

Any significant residual effects are identified in **bold**.

- 12.16. **Table 12.3** indicates that there is the potential for intra-development effects to take place for the continued operation of the Development. Given the nature of the residual effects (comprising a combination of heritage, noise, and visual effects), effect interactions are likely to be limited to the Church of St Mary and resident of Church Road, Sunnybank Cottage.
- 12.17. Although other residual environmental effects occur, it is not anticipated that there would be an interaction with other different topics, as such these are considered to be 'not significant'.

## References

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- <sup>1</sup> His Majesty's Stationery Office (2017) *The Town and Country Planning (Environmental Impact Assessment) Regulations 2017* [online]. Available from: <https://www.legislation.gov.uk/uksi/2017/571/contents/made> [Accessed: 07 June 2024].
- <sup>2</sup> His Majesty's Stationery Office (2018) *The Town and Country Planning and Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2018* [online]. Available from: <https://www.legislation.gov.uk/uksi/2018/695/made> [Accessed: 07 June 2024].
- <sup>3</sup> European Commission. Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions. 1999.