

**Foreman Homes Ltd**

Land to the South of Romsey Avenue, Fareham  
Updated Environmental Statement Volume 2: Main Text  
Chapter 11: Effect Interactions

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**TEMPLE**

# CHAPTER 11: EFFECT INTERACTIONS

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## 11.0 EFFECT INTERACTIONS

### 11.1 Introduction

- 11.1.1 This chapter provides an assessment of the likely cumulative effects of the Proposed Development as required by the EIA Regulations.
- 11.1.2 There are two types of cumulative effects: Type 1, intra-project effects which are the combined effects of individual topic impacts on a particular sensitive receptor, and Type 2, inter-project effects which are the combined effects of several development schemes (in conjunction with the Proposed Development) which may, on an individual basis be insignificant but, cumulatively, have a significant effect.
- 11.1.3 Type 2 Cumulative Effects; Inter-project effects have been considered for committed developments located within 3.5 km radius from the boundary of the Site, the full list is provided in **Chapter 3: EIA Methodology, Table 3.9** of this ES. These effects have been assessed in each technical chapter of this ES and are summarised in **Table 11.1**.

### 11.2 Intra-Project Effects

- 11.2.1 There is potential during both construction and operation of the Proposed Development for a combination of environmental effects to arise at the same time, affecting the same receptor or location.
- 11.2.2 There is no established EIA methodology for assessing effect interactions on a particular receptor, although the European Commission<sup>1</sup> (EC) has produced guidelines to assist EIA practitioners in developing an approach which is appropriate to a project. This approach has been modified and applied to determine the potential for effect interactions.
- 11.2.3 **Table 11.1** and **Table 11.2** identify the potential residual effects on relevant groups of sensitive receptors, as a result of the Proposed Development, as previously identified through the individual topic assessments. These tables define these effects across both construction and operation and then further identifies the anticipated effect interactions (cumulative effects) during each of these phases. Residual effects that are beneficial or adverse in nature and that are minor, moderate or major in scale have been considered.
- 11.2.4 Further details on the assumptions made around the delivery and construction phasing of the Proposed Development are provided within **Chapter 5: The Proposed Development and Construction Overview** of this ES.

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<sup>1</sup> European Community (1999); Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions.

**Table 11.1: Summary of Intra-Project Effects Construction Phase**

Receptor	Residual Effect	Potential for Intra-Project Effects
Residential (neighbouring and local properties).	<p><b>Transport and Access</b>                      Pedestrian severance along Beaulieu and Romsey Avenue (<b>Minor adverse</b>).</p> <p>Pedestrian amenity / delay / fear and intimidation and along Beaulieu and Romsey Avenue Driver and pedestrian safety (<b>Negligible – Minor Adverse</b>)</p> <p><b>Noise and Vibration</b>                      Construction noise on existing residential receptors within 10 m of the Site; Construction traffic impact on existing residential receptors along the construction traffic route on Romsey and Beaulieu Avenue (<b>Minor adverse</b>).</p>	Potential for interaction between construction noise and traffic.
Commercial (neighbouring local commercial properties and businesses)	<p><b>Agriculture</b>                      Loss of Agricultural land resource; Loss of Farm businesses (<b>Minor adverse</b>).</p>	No potential for interactive effects.
Ecological Assets	None.	No potential for interactive effects.
Water Resources (shallow and deep groundwater)	None.	No potential for interactive effects.
Landscape and views (character areas and local and long distant views)	<p>The Site and its landscape features (<b>Moderate / minor adverse</b>).</p> <p>The character and form of the Open Coastal Plain Farmland: Fringe Character LCT and the Cams / Wicor Coastal Fringe LCA (<b>Minor adverse</b>).</p> <p>Visual impact upon residential viewpoints 2,3,4 (<b>Moderate adverse</b>)</p> <p>Visual impact upon PRow users viewpoints 4,5,6,7,8,9,10 (<b>Moderate / minor adverse</b>)</p>	No potential for interactive effects.

**Potential for Intra Project Effects during Construction**

- 11.2.5 Individual impacts that have the potential to interact during this period are largely related to increased noise and vibration and traffic as a result of construction activities.
- 11.2.6 When these impacts are combined, they have the potential to create a combined nuisance effect on the closest sensitive receptors. Residential receptors on Romsey Avenue and those residential receptors on the construction traffic route (Romsey and Beaulieu Avenue) could be subject to an interactive effect from construction noise and traffic; however, this would be temporary.
- 11.2.1 Impacts during the noisiest periods would be addressed in the form of “Best Practicable Means” and controlled and managed through the Section 61 process of the Control of Pollution Act 1974. This combined with the implementation of the Construction Traffic Management Plan (CTMP), which will manage construction traffic, routes and delivery periods, would reduce the potential interactive effect.

- 11.2.2 As works progress across the Site, the magnitude of the resultant impact will vary. The different stages of the construction works will generate different impact magnitudes.
- 11.2.3 Whilst there is the potential for combined adverse (i.e. nuisance) impacts throughout the construction stage of the Proposed Development, the magnitude of the impacts will vary depending on the type and location of works. These impacts are, therefore, temporary and transient in nature.

**Table 11.2: Summary of Intra-Project Effects Operational Phase**

Receptor	Residual Effect	Potential for Intra-Project Effects
Residential (neighbouring and local properties).	<p><b><u>Transport and Access</u></b></p> <p>Pedestrian severance, amenity / delay, along Romsey Avenue, Beaulieu Avenue and fear and intimidation along Hatherley Crescent (<b>Minor adverse</b>).</p> <p>Pedestrian fear and Intimidation and driver and pedestrian safety along Romsey and Beaulieu Avenue and pedestrian and amenity delay on Hatherley Crescent (<b>Negligible - Minor adverse</b>).</p> <p><b><u>Noise and Vibration</u></b></p> <p>Operational traffic noise and existing residential receptors on Romsey Avenue and Beaulieu Avenue (Moderate Adverse – short term, <b>Minor adverse-long term</b>).</p>	No potential for interactive effects.
Commercial (neighbouring local commercial properties and businesses)	None.	No potential for interactive effects.
Ecological Assets	<p><b><u>Ecology and Biodiversity</u></b></p> <p>Effect of operational management and maintenance on all habitats and species (<b>Minor adverse</b>).</p>	No potential for interactive effects.
Water Resources (shallow and deep groundwater)	None.	No potential for interactive effects.
Landscape and views (character areas and local and long distant views)	<p>The Site and its landscape features (<b>Minor adverse</b>).</p> <p>The character and form of the Open Coastal Plain Farmland: Fringe Character LCT and the Cams / Wicor Coastal Fringe LCA (<b>Minor adverse</b>).</p> <p>Visual impact upon residential viewpoints 2,3,4 (<b>Moderate adverse</b>).</p> <p>Visual impact upon PRoW users viewpoints 4,5,6,7,8,9,10 (<b>Moderate / minor adverse</b>).</p>	No potential for interactive effects.

***Potential for Intra Project Effects during Operation***

- 11.2.4 No interactive effects are anticipated during the operational phase of the Proposed Development.

## 11.3 Inter-Project Effects

11.3.1 Cumulative effects resulting from the in-combination impacts from other projects alongside the Proposed Development have been considered by each discipline in their respective chapters (**Chapter 6 to 10 and ES Volume 3: Landscape and Visual Impact Assessment**). Where these effects differ from the effects of the Proposed Development in isolation, these effects are summarised in **Table 11.3**. The list of committed developments assessed is included in **Chapter 3: EIA Methodology, Table 3.9** of this Updated ES.

**Table 11.3: Summary of Inter-Project Effects**

Discipline	Description
Transport and Access	No additional cumulative effects were anticipated as a result of the Proposed Development in combination with the committed developments during construction and operation.
Noise and Vibration	No additional cumulative effects were anticipated as a result of the Proposed Development in combination with the committed developments during construction and operation.
Agriculture and Soils	Loss of Best and Most Versatile agricultural land ( <b>Moderate adverse</b> ).
Water Resource, Drainage and Flood Risk	No additional cumulative effects were anticipated as a result of the Proposed Development in combination with the committed developments during construction and operation.
Ecology	No additional cumulative effects were anticipated as a result of the Proposed Development in combination with the committed developments during construction and operation.
Landscape and Visual Impact Assessment	No additional cumulative effects were anticipated as a result of the Proposed Development in combination with the committed developments during construction and operation.

11.3.2 The only changes to the significance of residual effects of the Proposed Development arising from the consideration of other committed development schemes would be:

- The loss of over 20 ha but less than 50 ha of BMV agricultural land. This cumulative effect is considered disproportionate as a consequence of other development schemes and planning policy to provide housing, necessitating the use of agricultural land and the high-quality land in the area, rather than as a result of the Proposed Development.
- A short-term notable and substantial increase in GHG emissions increasing to a moderate to major adverse effect.

11.3.1 All other significant residual effects would remain the same as for the Proposed Development.