8. Assessment of Cumulative Effects

Introduction

8.1 This Chapter reports the assessment of cumulative effects arising from the Proposed Scheme, in line with Schedule 4, Paragraph 5(e) of the EIA Regulations, which states the need to consider the following:

'the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources'.

8.2 To accord with the EIA Regulations, in terms of providing an assessment of cumulative effects, this assessment has considered the following types of cumulative effects:

- **Effect interactions**: the interaction of environmental effects of the Proposed Scheme affecting the same receptor either within the Site or in the local area; and
- **In-combination interactions**: the combination of environmental effects of the Proposed Scheme with existing or approved projects affecting the same receptor.

Legislative Framework and Guidance

8.3 Planning Practice Guidance[1] (PPG) refers to the need for cumulative effects to be assessed as part of an ES, but at present, there is no widely accepted current methodology or best practice for the assessment of cumulative effects. As such, the methodology has been based on previous experience and knowledge at Turley, the types of receptors being assessed and the nature of the Proposed Scheme.

Assessment Methodology

8.4 The assessment of cumulative effects, for both effect interactions and in-combination effects for those topics scoped into the ES, is largely qualitative in nature. The assessment of effect interactions is based on information contained within the ES, whilst the assessment of in-combination effects is also based on publicly available information (i.e. the planning applications submitted for the projects considered for in-combination effects). The approach to the assessment of both effect and in-combination interactions is set out in the following sections.

Effect Interactions

8.5 Following the completion of **Technical Chapters 6 and 7**, the residual effects have been collated into a matrix so that effect interactions on common receptors[a] can be identified. Where a residual effect is concluded in **Technical Chapters 6 and 7** to be neither adverse nor beneficial, i.e. negligible, then this was excluded from the matrix

[a] The common sensitive receptors considered within this assessment are those which are assessed within two or more of the technical assessments within the ES.

(**Table 8.2** and **8.3**). This is on the basis that a negligible residual effect is unlikely to cause a noticeable change at a receptor or the receptor is not considered sensitive to a change.

8.6 Where residual effects have been considered to be 'minor' or greater, receptors have been categorised into receptor categories, defined by the 'factors' categories outlined in Schedule 4, Paragraph 4 of the EIA Regulations. The threshold has been set at 'minor' as this is considered to address the potential for a number of 'not significant' effects to a receptor becoming significant when they are considered together.

8.7 Where the level of effect has been expressed using a range across receptors assessed, the worst case level of effect was included in **Tables 8.2** and **8.3**, i.e. the 'least beneficial' or 'most adverse'. If no residual effects for a receptor group were identified, these were not included in **Tables 8.2** and **8.3**.

8.8 Where effect interactions have been identified, a qualitative appraisal has been undertaken for the relevant receptor categories. The qualitative evaluation at the receptor level considered the following:

- Magnitude of change for each residual effects;
- Sensitivity/value/importance of the receptor/receiving environment to change; or/and
- Duration and reversibility of effect.

8.9 This process has been documented within the Assessment of Effect Interactions section of this Chapter.

In-Combination Effects

8.10 The assessment of potential in-combination effects has followed a two-step approach, as detailed below.

Step 1: Identification and Evaluation of Projects for Further Consideration

8.11 A review of planning applications submitted to CDC was undertaken as part of consultation undertaken in October 2022 as part of the EIA Scoping Report (**Appendix 2.1**) to identify an initial list of projects that could give risk to in-combination effects with the Proposed Scheme. The review considered projects that have submitted applications, rather than any projects that are foreseeable or allocated sites. This is due to it being unlikely that there will be sufficient information to inform a robust in-combination assessment for schemes where no application is yet submitted.

8.12 As part of their EIA Scoping Opinion (**Appendix 2.2**), CDC provided a list of three additional current planning applications for which they requested consideration in the assessment. Applicable projects for consideration of in-combination effects were determined using the following criteria:

- Permitted application(s) either under construction or not yet implemented;

- Submitted application(s) not yet determined but have the potential to be determined prior to the submission of the Proposed Scheme;

- All refusals subject to appeal procedures not yet determined but have the potential to be determined prior to the submission of the Proposed Scheme;

- Located in a common geographical area, taken to be within 1km of the Site (with consideration of projects on the periphery of this); and

- The project being of a relevant scale, the minimum threshold for this has been projects that have been or would be considered Schedule 2 developments within the EIA Regulations, at which there is a potential for 'likely significant effects'. This threshold was be applied with caution, indeed none of the projects identified were accompanied by an EIA.

8.13 All three additional applications provided by CDC were considered relevant, and have been included as Approved Projects 3 – 5. The final list of Approved Projects is set out in **Table 8.1** and shown on **Figure 8.1**.

Step 2: Assessment of In-Combination Effects

8.14 A review of available information for each project on the short list was undertaken using CDC's online planning portal. Relevant ESs or other relevant environmental reports were downloaded for consideration by the project team. Where no environmental reporting was available, professional judgement was used in order to determine any potential in-combination effect.

8.15 Where available, consideration was also given to whether there is likely to be a concurrent construction or operational stage with the Proposed Scheme.

8.16 The sensitive receptors identified for the Proposed Scheme were then cross checked against the receptors identified within the Approved Projects. In order for there to be a potential in-combination effect, there needs to be a potential effect on the same receptor for a similar duration within the overall programme for the Proposed Scheme.

8.17 The qualitative evaluation at the receptor level considered the following:

- Combined magnitude of change of all Approved Projects;

- Sensitivity/value/importance of the receptor/receiving environment to change; or/and

- Duration and reversibility of effect.

8.18 Through a combination of the qualitative evaluation and mitigation presented in the ES, conclusions have been drawn as to the likelihood for significant in-combination environmental effects to arise.

Table 8.1: List of Approved Projects for In-Combination Assessment

Turley ID	Reference and address	Description	Distance and direction	Status	EIA?
1	18/01882/OUT Drayton Lodge	Outline: Residential development, comprising the erection of up to 320 dwellings including affordable housing, together with a local centre of 0.5ha (providing retail and community facilities), landscaping, public open space, playing fields, allotments, access and associated infrastructure.	70m west	Under construction	No
2	21/03426/OUT Land Opposite Hanwell Fields Recreation	Outline planning application of up to 78 dwellings and associated space with all matters reserved other than access.	600m south-east	Under construction	No
3	22/03064/OUT Hanwell Fields Phase 2 Land Opposite Hanwell Fields Recreation Adj To Dukes Meadow Drive Banbury	Outline planning application for up to 176 dwellings and associated open space with all matters reserved other than access	780m south-east	Under consultation	No
4	21/02467/F OS Parcel 0005 And Part OS Parcel 1300 0878 And 7566 Banbury	Erection of mixed-use development including a 240-bed hotel, 4-storey office building and roadside services including 2 no hot food restaurant drive-throughs, a coffee shop drive-through and a petrol filling station with ancillary retail store	3.4km south-east	Under consultation	No
5	22/01488/OUT OS Parcel 5616 South West Of Huscote Farm And East Of Daventry Road Banbury	Construction of up to 140,000 sq m of employment floorspace (use class B8 with ancillary offices and facilities) and servicing and infrastructure including new site accesses, internal roads and footpaths, landscaping including earthworks to create development platforms and bunds, drainage features and other associated works including demolition of the existing farmhouse	3.4km east	Under consultation	Yes

Assessment of Effect Interactions

8.19 **Table 8.2** and **8.3** detail those receptor categories where residual effects were identified within **Technical Chapters 6 and 7** for the construction and operational stages of the Proposed Scheme, respectively. **Technical Chapters 6 and 7** have each identified specific sensitive receptors within their assessments, and these have been grouped into common categories in **Table 8.2** and **8.3** for further consideration.

8.20 Where effects are reported as significant in **Technical Chapters 6 and 7**, these are shown in **Table 8.2** and **8.3** as **bold** and shaded grey.

Table 8.2: Matrix of Effect Interactions (Construction Stage)

Effect	Population and Human Health	Landscape
Chapter 6: Built Heritage and Archaeology		
N/A		
Chapter 7: Landscape and Visual		
Changes to landscape character		**Moderate to Major, to Major adverse**
Changes to the visual amenity of visual receptors within 1km of the Site	**Major adverse**[b]	
Effect Interactions	**No**	**No**

[b] In relation to users of PRoW 191/6/30 only. Broader adverse (and significant) effects are concluded within **Chapter 7: Landscape and Visual**, however a Major adverse effect has been included within the assessment of effect interactions to represent a worst case scenario.

8.21 As shown in **Table 8.2**, there are no residual effects above negligible reported during the construction stage for **Chapter 6: Built Heritage and Archaeology**.

8.22 Residual effects are reported for the population and human health and landscape factors, however as only one residual effect is reported for each factor, there are no anticipated effect interactions.

Table 8.3: Matrix of Effect Interactions (Operational Stage)

Effect	Population and Human Health	Cultural Heritage	Landscape
Chapter 6: Built Heritage and Archaeology			
Potential impact on setting of designated heritage assets		Minor adverse	
Chapter 7: Landscape and Visual			
Changes to landscape character			**Moderate, to Moderate to Major adverse**[c]
Changes to the visual amenity of visual receptors within 1km of the Site	**Major adverse**[d]		
Effect Interactions	**No**	**No**	**No**

[c] In Year 1 only.

[d] In relation to properties at the western extent of Hanwell in Year 1 only. Broader adverse (and significant) effects are concluded within **Chapter 7: Landscape and Visual**, however a Major adverse effect has been included within the assessment of effect interactions to represent a worst case scenario.

8.23 As shown in **Table 8.3**, residual effects are reported for the population and human health, cultural heritage and landscape factors. However, as only one residual effect is reported for each factor, there are no anticipated effect interactions.

Assessment of In-Combination Effects

8.24 Approved Projects identified for the assessment of in-combination effects are detailed **Table 8.1** and shown on **Figure 8.1**. The assessment of in-combination effects is set out below.

Built Heritage and Archaeology

8.25 All Approved Projects have been deemed sufficiently detached (geographically) from the Site (including its archaeological resource) and the HCA so as not to result in effects greater than those reported for the Proposed Scheme in isolation (negligible effect to archaeological remains and the setting of the HCA during construction and a minor adverse effect to the setting of the HCA during operation).

8.26 Therefore, no in-combination effects to built heritage or archaeological assets are anticipated.

Landscape and Visual

8.27 For landscape and visual, the receptors considered include the landscape character of the Site, the landscape character of the local context, including the relationship between Banbury and Hanwell, local properties and users of PRoWs, Gullicote Lane, Warwick Road (B4100) and Main Street.

Landscape Character

8.28 No in-combination effects are predicted in relation to changes to the character of the Site itself, as only the Proposed Scheme would be responsible for changes to on-Site features. As a result, only changes to the landscape character of the Site context, including the relationship between Banbury and Hanwell, are considered further.

8.29 Should the Proposed Scheme and Approved Projects 1 – 3 be constructed concurrently, changes would generally be experienced at the respective site-levels and their associated immediate context. During construction, neither the Proposed Scheme nor Approved Project 1 will directly affect the wider landscape context, as the physical effects of construction (i.e. changes to fabric and character) will be contained within their respective Site boundaries. Given Approved Project 1's separation from the landscape which guides the relationship between Banbury and Hanwell by the course of Warwick Road (B4100), and Approved Project 2's/3's surrounding landform/tree cover, the movement and machinery associated with these Approved Projects' site operations will introduce additional but localised activity. As a result, Approved Projects 1 – 3 would each incur little to no greater change to the landscape character of the local context, including the relationship between Banbury and Hanwell, to that reported during construction for the Proposed Scheme in isolation (Moderate to Major, to Major adverse (and significant)) (**Chapter 7: Landscape and Visual**).

8.30 No mutual landscape receptors have been identified between the Proposed Scheme and Approved Projects 4 and 5, meaning that there are no in-combination effects during construction or operation.

8.31 During operation, the extent to which Approved Project 1 contributes to the relationship between Banbury and Hanwell is limited, divided from this intervening landscape by Warwick Road (B4100) and associated mature vegetation. While also extending the settlement edge of Banbury north, the northern extent of Approved Project 1 extends no further north than that of Hanwell Fields at present. It is, therefore, anticipated that the presence of the operational Proposed Scheme with Approved Project 1 will not give rise to in-combination effects greater than that determined for the Proposed Scheme in isolation (Moderate to Major, to Major adverse (and significant) in Year 1 and Minor to Moderate, to Moderate adverse (and significant) in Year 15) (**Chapter 7: Landscape and Visual**).

8.32 Similarly to the construction stage, the containment provided to Approved Projects 2 and 3 by intervening vegetation (substantial tree belts and mature woodland blocks) and gently undulating topography will ensure that effects to the landscape character of the Site context will not exceed those reported for the Proposed Scheme in isolation (Moderate to Major, to Major adverse (and significant) in Year 1 and Minor to Moderate, to Moderate adverse (and significant) in Year 15) (**Chapter 7: Landscape and Visual**).

Visual Amenity

8.33 An assessment of the in-combination visual effects of the Proposed Scheme and Approved Projects is provided within **Table 8.5** below. This assessment only takes into consideration the potential in-combination effects upon receptors which have been identified within both **Chapter 7: Landscape and Visual** and the respective landscape assessments produced in relation to the Approved Projects – therefore making them the only common receptors.

Table 8.4: Visual In-Combination Assessment

Approved Project	In-Combination Assessment
1	Construction Stage *Road Users travelling along Warwick Road (B4100)* Road users travelling south along Warwick Road (B4100) towards Banbury would experience the movement of tall machinery such as cranes (due to the presence of intervening foreground vegetation) within both sites, either side of the Warwick Road (B4100) corridor. This machinery would be particularly noticeable to road users when alongside the Site's western boundary. This is anticipated to incur a slight elevation in perceived change during the construction stage when compared to that of the Proposed Scheme alone, but will not change the very high magnitude of change and level of effect reported in **Chapter 7: Landscape and Visual** for the Proposed Scheme in isolation (Moderate to Major adverse (and significant)). *Properties at the western extent of Hanwell* If the Proposed Scheme and Approved Project 1 were to be constructed concurrently, residential receptors at the western extent of Hanwell will likely be predominantly focused upon those construction activities being undertaken within the foreground Proposed Scheme, with construction activity within Approved Project 1 (notably high vehicles such as cranes) being seen to blend into this foreground activity. As a result, it is anticipated that the construction of both schemes in-combination will not give rise to in-combination effects greater than those determined within **Chapter 7: Landscape and Visual** for the Proposed Scheme in isolation (Moderate to Major adverse (and significant)). Operational Stage *Road Users travelling along Warwick Road (B4100)* The Landscape and Visual Appraisal (March 2019) produced by Hankinson Duckett Associates for Approved Project 1 identified a low adverse magnitude of change and minor adverse residual effect upon receptors travelling along Warwick Road (B4100), noting that while proposed dwellings will be noticeable from Viewpoint 5 (Photoviewpoint EDP 8 (**Appendix 7.3**) for the Proposed Scheme) this will be a transient and isolated view through a gap in roadside vegetation.

Approved Project	In-Combination Assessment
	As noted within the assessment at **Chapter 7: Landscape and Visual**, receptors travelling along Warwick Road (B4100) will experience clear views of the Proposed Scheme to the east, extending further north along the route's extent than Approved Project 1. Combined views for the two schemes will be limited in availability, however due to roadside vegetation, as identified above, when stood at or passing the location of Photoviewpoint EDP 5 (at the Site's north-western corner). From here, close ranging foreground views of the Proposed Scheme will be available to the east and Approved Project 1 will be seen in the mid-distance through a gap in roadside vegetation. Together, these two schemes will be seen to extend the wider urban edge of Banbury northwards rather than just in small sections (albeit with Approved Project 1 extending no further north than the existing development of Hanwell Fields). Overall, the Proposed Scheme and Approved Project 1 being seen along Warwick Road (B4100) will incur a slight increase in perceived magnitude of change upon receptors when compared to that predicted for the Proposed Scheme in isolation (**Chapter 7: Landscape and Visual**), albeit this change will continue to be high within 600m of the Site, and very low upon the overall route, especially once the proposed boundary planting of both schemes has reached maturity (Year 15). Locally (for the 600m stretch passing adjacent to the Site's boundary), the residual in-combination effect will continue to be Moderate adverse and significant in Year 15. Beyond this 600m stretch, views of the two schemes in-combination will not be available, and the residual in-combination effect will continue to be Negligible to Minor adverse (and not significant) in Year 15 (**Chapter 7: Landscape and Visual**). *Residents at the western extent of Hanwell* Given the location of the Site at the foreground of views from these residential receptors, and the screening effect that the existing and proposed planting on-Site will have upon views of Approved Project 1, it is anticipated that the presence of both schemes in-combination will not give rise to in-combination effects greater than those determined for the Proposed Scheme in isolation (Major adverse (and significant) in Year 1 and Moderate to Major adverse (and significant) in Year 15) (**Chapter 7: Landscape and Visual**).
2	<u>Construction Stage</u> *Users of PRoW 239/8/20* If constructed concurrently, there is potential for some glimpsed in-combination views of taller elements of construction activity within Approved Project 2 to be viewed by users of PRoW 239/8/20 when looking to the southeast, in succession with construction activities of the Proposed Scheme (predominantly low-level works within Parcel B and crane movements within Parcel A) when looking southwest. The in-combination effect of these schemes would incur a slight elevation in perceived change but would still be

Approved Project	In-Combination Assessment
	considered to incur a high magnitude of change and a continued Moderate to Major adverse (and significant) level of effect, as reported for the Proposed Scheme in isolation (**Chapter 7: Landscape and Visua**l). *Users of PRoW 239/9/10* If constructed concurrently, there is potential for some glimpsed in-combination views of taller elements of construction activity within Approved Project 2 to be viewed by users of PRoW 239/9/10 when looking to the southeast, in succession with construction activities of the Proposed Scheme (predominantly low-level works within Parcel B and crane movements within Parcel A) when looking west. The in-combination effect of these schemes would incur a slight elevation in perceived change but would still be considered to incur no more than a medium magnitude of change and a continued Moderate adverse (and significant) level of effect, as reported for the Proposed Scheme in isolation (**Chapter 7: Landscape and Visua**l). <u>Operational Stage</u> *Users of PRoW 239/8/20* The Landscape and Visual Technical Note (August 2021)[2] produced by Aspect Landscape Planning for Approved Project 2 noted that due to containment provided by intervening vegetation (substantial tree belts and mature woodland blocks) and gently undulating topography, '*it is considered that the proposals would not be visible from this setting*'. During operation, there are likely to be few locations along this PRoW where views of the Proposed Scheme will be seen in-combination with Approved Project 2. With this in mind, at no location along this PRoW will the consideration of both the Proposed Scheme and Approved Project 2 together give rise to levels of effect greater than those reported for the Proposed Scheme in isolation (Moderate adverse (and significant) in Year 1 and Minor to Moderate adverse (and not significant) in Year 15) (**Chapter 7: Landscape and Visual**). *Users of PRoW 239/9/10* The Landscape and Visual Technical Note (August 2021) produced by Aspect Landscape Planning for Approved Project 2 noted that from this PRoW, '[Approved Project 2] *would not be visible from within the valley setting and would not result in any harm to its sense of perceived remoteness or tranquillity*', due to visual containment provided by the intervening valley topography and extensive treelines and woodland blocks.

Approved Project	In-Combination Assessment
	At no location along this PRoW will both the Proposed Scheme and Approved Project 2 be clearly seen in succession or give rise to in-combination effects greater than those identified for the Proposed Scheme in isolation (Minor to Moderate adverse (and not significant) during both Years 1 and 15), as reported in **Chapter 7: Landscape and Visual**.
3	<u>Construction Stage</u> *Users of PRoW 239/8/20* If constructed concurrently, there is the potential for some glimpsed in-combination views of taller elements of construction activity within Approved Project 3 to be viewed by users of PRoW 239/8/20 when looking to the southeast, in succession with construction activities of the Proposed Scheme (predominantly low-level works within Parcel B and crane movements within Parcel A) when looking southwest. The in-combination effect of these schemes would incur a slight elevation in perceived change but would still be considered to incur a high magnitude of change and a continued Moderate to Major adverse (and significant) level of effect, as reported for the Proposed Scheme in isolation (**Chapter 7: Landscape and Visual**). *Users of PRoW 239/9/10* If constructed concurrently, there is the potential for some glimpsed in-combination views of taller elements of construction activity (notably cranes) to be viewed by users of PRoW 239/9/10 when looking to the southeast, in succession with construction activities of the Proposed Scheme (predominantly low-level works within Parcel B and crane movements within Parcel A) when looking west. The in-combination effect of these schemes would incur a slight elevation in perceived change but would still be considered to incur a medium magnitude of change and a continued Moderate adverse (and significant) level of effect, as reported for the Proposed Scheme in isolation (**Chapter 7: Landscape and Visual**). <u>Operational Stage</u> *Users of PRoW 239/8/20* The Landscape and Visual Impact Assessment (September 2022)[3] produced by Aspect Landscape Planning for Approved Project 3 noted that due to containment provided by intervening vegetation (significant tree belts and a mature woodland blocks), '*the built edge of Hanwell Fields is not perceived….however, the large scale industrial sheds around Noral Way and the Bellway development…are visible, ensuring that the presence of Banbury is perceived. The site is not visible from these locations*.' During

Approved Project	In-Combination Assessment
	operation there are likely to be few locations along this PRoW where views of the Proposed Scheme will be seen in-combination with Approved Project 3. With this in mind, at no location along PRoW 239/8/20 will the consideration of both the Proposed Scheme and Approved Project 3 give rise to in-combination effects greater than those reported in **Chapter 7: Landscape and Visual** for the Proposed Scheme in isolation (Moderate adverse (and significant) in Year 1 and Minor to Moderate adverse (and not significant) in Year 15). *Users of PRoW 239/9/10* The Landscape and Visual Impact Assessment (September 2022) produced by Aspect Landscape Planning for Approved Project 3 noted that from this route '*Views from within the lower lying valley setting to the north are well contained, due to the intervening valley topography and extensive treelines and woodland blocks. The intervening fieldscape displays an established a compartmentalised character within the sloping valley face and it is considered that the proposed roofscape would be partially visible from within the valley setting but would not result in any harm to its sense of perceived remoteness or tranquillity*.' The assessment identifies a '*minor significance of effect*'. At no location along PRoW 239/9/10 will both the Proposed Scheme and Approved Project 3 be clearly seen in succession or give rise to in-combination effects greater than those identified for the Proposed Scheme in isolation (Minor to Moderate adverse (and not significant) during both Years 1 and 15), as reported in **Chapter 7: Landscape and Visual**.
4	<u>Construction Stage</u> *Users of PRoWs 239/8/20 and 239/9/10* If constructed concurrently, there is the potential for some long-distance, glimpsed in-combination views of taller elements of construction activity within Approved Project 4 to be viewed by users of PRoWs 239/8/20 and 239/9/10 when looking to the southeast, in succession with construction activities of the Proposed Scheme (predominantly low-level works within Parcel B and crane movements within Parcel A) when looking west. The in-combination effect of these schemes would incur a slight elevation in perceived change but would still be considered to incur no more than a high magnitude of change and continued, as reported for the Proposed Scheme in isolation (Moderate to Major adverse (and significant) for PRoW 239/8/20 and Moderate adverse (and significant) for PRoW 239/9/10) (**Chapter 7: Landscape and Visual**).

Approved Project	In-Combination Assessment
	Operational Stage *Users of PRoWs 239/8/20 and 239/9/10* When looking southeast from these PRoWs, receptors are already influenced by the presence of existing commercial/industrial units around Noral Way and Windmere Road. Approved Project 4 is located to the east beyond both of these existing industrial areas, with any new development likely to only be glimpsed, and where seen, not out of character with the baseline condition. With this in mind, at no location along these PRoWs will both the Proposed Scheme and Approved Project 4 together give rise to in-combination effects greater than those determined for the Proposed Scheme in isolation (Moderate adverse (and significant) in Year 1/Minor to Moderate adverse (and not significant) in Year 15 regarding PRoW 239/8/20, and Minor to Moderate adverse (and not significant) during both Years 1 and 15 of operation regarding PRoW 239/9/10) (**Chapter 7: Landscape and Visual**).
5	No mutual visual receptors have been identified between the Proposed Scheme and Approved Project 5, meaning that here are no in-combination effects during construction or operation.
All Approved Projects	The relevant Approved Projects identified above have the potential to generate in-combination effects in respect to changes in visual amenity. Given the location of the Approved Project sites in relation to the Proposed Scheme, there are no viewpoints where all Approved Schemes can be viewed in-combination with the Proposed Scheme. For some visual receptors using PRoWs 239/8/20 and 239/9/10, however, multiple Approved Projects are likely to be viewed in-combination with the Proposed Scheme. From no other visual receptor locations will multiple Approved Projects be seen in succession with the Proposed Scheme. Construction Stage *PRoWs 239/8/20 and 239/9/10* If constructed concurrently, there is the potential for some glimpsed views of taller construction activity associated with Approved Projects 2 – 4 to be viewed from PRoWs 239/8/20 and 239/9/10 when looking to the southeast, in-combination with construction activities of the Proposed Scheme (predominantly low-level works within Parcel B and crane movements within Parcel A) when looking southwest from PRoW 239/8/20 and west from PRoW 239/9/10.

Approved Project	In-Combination Assessment
	The in-combination effect of these schemes would incur a slight elevation in perceived change but would still be considered to incur no more than a high and medium magnitude of change caused by the Proposed Scheme in isolation to PRoWs 239/8/20 and 239/9/10 respectively. As a result, the in-combination effects of Approved Projects 2 – 4 and the Proposed Scheme on the visual amenity of users of PRoWs 239/8/20 and 239/9/10 will be no greater than those identified from the Proposed Scheme in isolation (Moderate to Major adverse (and significant) for PRoW 239/8/20 and Moderate adverse (and significant) for PRoW 239/9/10) (**Chapter 7: Landscape and Visual**). <u>Operational Stage</u> *PRoWs 239/8/20 and 239/9/10* Whilst visible during construction, a combination of intervening vegetation (substantial tree belts and mature woodland blocks), gently undulating topography and the presence of existing industrial buildings will block successive views of the Proposed Scheme and all Approved Projects from users of PRoWs 239/8/20 and 239/9/10 once operational. As a result, the in-combination effects will be no greater than those concluded for the Proposed Scheme in isolation, being Moderate adverse (and significant) in Year 1 and Minor to Moderate adverse (and not significant) in Year 15 for PRoW 239/8/20 and Minor to Moderate adverse (and not significant) during both Years 1 and 15 of operation for PRoW 239/9/10 (**Chapter 7: Landscape and Visual**).

Summary

8.34 The assessment of cumulative effects considered effect interactions (where more than one effect is experienced by a single receptor) and in-combination effects (where effects on a receptor may combine with those of other projects in the locale).

Effect Interactions

8.35 During construction, residual effects are reported for the population and human health and landscape factors, however as only one residual effect is reported for each factor, there are no anticipated effect interactions.

8.36 Similarly, during operation, residual effects are reported for the population and human health, cultural heritage and landscape factors. However, as only one residual effect is reported for each factor, there are no anticipated effect interactions.

In-Combination Effects

Built Heritage and Archaeology

8.37 Regarding built heritage and archaeology, all Approved Projects have been deemed sufficiently detached (geographically) from the Site (including its archaeological resource) and the HCA so as not to result in effects greater than those reported for the Proposed Scheme in isolation (negligible effect to archaeological remains and the setting of the HCA during construction and a minor adverse effect to the setting of the HCA during operation) (**Chapter 6: Built Heritage and Archaeology**).

8.38 Therefore, no in-combination effects to built heritage or archaeological assets are anticipated.

Landscape and Visual

8.39 With respect to landscape and visual, no in-combination effects are predicted in relation to changes to the character of the Site itself, as only the Proposed Scheme would be responsible for changes to on-Site features.

8.40 Changes to the landscape character of the Site context, including relationship between Banbury and Hanwell, have only been considered likely with Approved Projects 1 – 3, as Approved Projects 4 and 5 are considered too distant from the Site (being separated by the A423 corridor) to cause any in-combination effects. Given the enclosure of the Site and Approved Projects 1 – 3 afforded by boundary vegetation and undulating topography, the in-combination effects of the Proposed Scheme and the Approved Projects combined would not result in the exceedance of the levels of effect determined for the Proposed Scheme in isolation, either during construction or operation (**Chapter 7: Landscape and Visual**)[e].

8.41 Regarding changes to visual amenity, only Approved Projects 1 – 4 were considered to share common visual receptors with the Proposed Scheme. It was determined that all in-combination effects (both separately for each Approved Project and for all Approved

[e] Moderate to Major, to Major adverse (and significant) during construction, Moderate to Major, to Major adverse (and significant) in Year 1 of operation and Minor to Moderate, to Moderate adverse (and significant) in Year 15 of operation.

Projects and the Proposed Scheme together) would not be greater than those identified for the Proposed Scheme in isolation (**Chapter 7: Landscape and Visual**)[f].

[f] During construction, effects range from Minor to Moderate adverse (and not significant) to Moderate to Major adverse (and significant), depending on the receptor considered. During operation, effects range from Negligible to Minor adverse (and not significant) to Major adverse (and significant) in Year 1, and Negligible to Minor adverse (and not significant) to Moderate to Major adverse (and significant) in Year 15, also depending on the receptor considered.

References

[1] Ministry of Housing, Communities and Local Government (2020). Planning Practice Guidance – Environmental Impact Assessment. Available at: https://www.gov.uk/guidance/environmental-impact-assessment [Accessed: 25/11/2022].

[2] Aspect Landscape Planning (2021) Manor Oak Homes – Land at Dukes Drive – Hanwell Landscape & Visual Technical Note. Available at: https://planningregister.cherwell.gov.uk/Planning/Display/21/03426/OUT#undefined [Date Accessed: 22 November 2022].

[3] Aspect Landscape Planning (2022) Proposed Residential Development, Hanwell, Duke's Meadow Drive Phase 2, Banbury. Landscape & Visual Impact Assessment. Available at: https://planningregister.cherwell.gov.uk/Planning/Display/22/03064/OUT#undefined [Date Accessed: 03 January 2023].