Preliminary Environmental Information Report
Chapter 8: Landscape, Townscape and Visual Resources

September 2021

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8 Landscape, Townscape and Visual Resources

8.1. Introduction

8.1.1 This chapter of the Preliminary Environmental Information Report (PEIR) presents the findings of the Environmental Impact Assessment (EIA) work undertaken to date concerning the potential effects of the proposal to make best use of Gatwick's existing runways (referred to within this report as 'the Project') on landscape, townscape and visual resources.

8.1.2 This chapter assesses the likely significant landscape, townscape and visual effects resulting from the Project. This includes identification of the character and features of the landscape and townscape (landscape within built up areas) and consideration of the changes that would result as a consequence of the Project. In addition, it considers the potential visual effects arising as a result of the Project. The chapter reports on studies, including a combination of field surveys and desktop research, to describe, classify and evaluate the existing resource. The principal objectives of the assessment are:

- to describe, classify and evaluate the existing landscape and townscape likely to be affected by the Project during its construction and operational phases;
- to identify visual receptors with views of the Project; and
- to identify the likely significant effects on landscape, townscape and views, considering measures proposed to reduce or avoid any effects identified.

8.1.3 In particular, this PEIR chapter:

- sets out the existing and future environmental baseline conditions, established from desk studies, surveys and consultation to date;
- presents the potential environmental effects on landscape, townscape and visual resources arising from the Project, based on the information gathered and the analysis and assessments undertaken to date;
- identifies any assumptions and limitations encountered in compiling the environmental information; and
- highlights any necessary monitoring and/or mitigation measures that could prevent, minimise, reduce or offset the possible environmental effects identified in the EIA process.

8.1.4 This chapter is accompanied by a number of appendices and figures listed below:

- Appendix 8.2.1: Summary of Local Planning Policy;
- Appendix 8.3.1: Summary of Stakeholder Scoping Responses;
- Appendix 8.4.1: Landscape, Townscape and Visual Impact Assessment Methodology;
- Appendix 8.6.1: County Landscape Character Assessments;
- Appendix 8.6.2: CPRE Tranquillity Mapping;
- Appendix 8.9.1: Summary of Effects at Representative Viewpoints;
- Figure 8.4.1: Existing and Proposed Zones of Theoretical Visibility (ZTV) within 5 km Radius Study Area;
- Figure 8.4.2: National Landscape Character Areas and Landscape Designations;
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- Figure 8.4.21: Aerial Photography and Visual Receptor Locations;
- Figure 8.6.1: Topography;
- Figure 8.6.2: District Landscape and Townscape Character Areas within 5 km Radius;
- Figure 8.6.3: 2018 Baseline Gatwick Overflights;
- Figure 8.6.4: All 2018 Baseline Overflights within 35 mile Radius;
- Figure 8.6.5: Increase in Gatwick Overflights;
- Figure 8.6.6: Increase in Gatwick Overflights Compared with All Overflights; and
- Figure 8.9.1 to 8.9.36: Photomontages.

8.1.5 The PEIR will inform pre-application consultation. Following consultation, comments on the PEIR will be reviewed and taken into account, where appropriate, in preparation of the Environmental Statement (ES) that will accompany the application to the Planning Inspectorate for development consent.

8.2. Legislation and Policy

Legislation

8.2.1 The following legislation is relevant to this assessment:

- European Landscape Convention, 2000;
- Countryside and Rights of Way Act, 2000; and
- National Parks and Access to the Countryside Act, 1949.

8.2.2 The European Landscape Convention (Council of Europe, 2000) acknowledges that the quality and diversity of European landscapes constitute a common resource. The convention defines the meaning of ‘landscape’, and the importance of its characterisation through assessment, its protection, management and planning and its contribution to the quality of life for people everywhere.

8.2.3 The Countryside and Rights of Way Act, 2000, sets out the rights of the public in relation to access land and public rights of way and the designation of Areas of Outstanding Natural Beauty (AONB) for the purpose of conserving and enhancing natural beauty.

8.2.4 The National Parks and Access to the Countryside Act 1949 provides the original framework for the creation of National Parks and AONBs for the purpose of conserving and enhancing natural beauty and also addresses rights of way and access to open land.

Planning Policy Context

National Policy Statements

8.2.5 The Airports National Policy Statement (NPS) (Department for Transport, 2018), although primarily provided in relation to a new runway at Heathrow Airport, remains a relevant consideration for other applications for airport infrastructure in London and the south east of England.

8.2.6 The NPS for National Networks (Department for Transport, 2015) sets out the need for development of road, rail and strategic rail freight interchange projects on the national networks and the policy against which decisions on nationally significant road and rail projects will be

made[1]. This has been taken into account in relation to the highways improvements proposed as part of the Project.

8.2.7 Table 8.2.1 provides a summary of the relevant requirements of these NPSs and how these are addressed within the PEIR.

Table 8.2.1: Summary of NPS Information Relevant to this Chapter

Summary of NPS requirement	How and Where Considered in the PEIR
Airports NPS	
Paragraph 5.213 states *'For airport development, landscape and visual effects also include tranquility effects, which would affect people's enjoyment of the natural environment and recreational facilities. In this context, references to landscape should be taken as covering local landscape, waterscape and townscape character and quality, where appropriate'*.	Landscape and townscape character, condition and quality are described in Section 8.6 of this chapter. Effects on landscape, townscape, visual resources and tranquillity are described in Section 8.9 of this chapter. Cumulative effects on landscape, townscape, visual resources and tranquillity are described in Section 8.11 of this PEIR chapter.
Paragraph 5.214 states *'The landscape and visual assessment should reference any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the preferred scheme. In addition, the applicant's assessment should take account of any relevant policies based on these assessments in local development documents'*.	Relevant policy is included in Section 8.2 of this chapter. Landscape and townscape character, condition and quality are described in Section 8.6 of this chapter. Effects on landscape, townscape and visual resources and tranquillity are described in Section 8.9 of this chapter. Cumulative effects on landscape, townscape, visual resources and tranquillity are described in Section 8.11 of this PEIR chapter.
Paragraph 5.215 states that the assessment should include *'surface access proposals', 'aviation activity' and 'landscape character, including historic characterisation'*.	The effects of the surface access proposals (highways improvements) are considered within a 5 km radius study area in Sections 8.9 and 8.11 of this chapter. The effects of aviation activity are considered within a 5 km radius study area in Sections 8.9 and 8.11 of this PEIR chapter and effects on tranquillity within nationally designated landscapes within a wider study area for overflying aircraft < 7,000 feet. The effects on the historic landscape are included in Chapter 7 Historic Environment.

[1] It is noted that the Transport Decarbonisation Plan published by Department for Transport (DfT) on 14 July 2021 announced DfT's intention to review the NPS for National Networks in due course once demand patterns post-pandemic become clearer. It is understood DfT intends to commence the review by the end of 2021 and complete it by Spring 2023. In the interim and whilst the review is undertaken, DfT has confirmed the NPS for National Networks remains relevant government policy and has full force and effect for the purposes of the Planning Act 2008.

Summary of NPS requirement	How and Where Considered in the PEIR
Paragraph 5.216 states that *'noise and light pollution effects, including on local amenity, tranquility and nature conservation'* should be included.	The effects of noise in terms of tranquillity and the effects of light generally on night time character and visual amenity have been assessed in Sections 8.9 and 8.11 of this PEIR chapter. The effects on nature conservation are included in Chapter 9 Ecology.
NPS for National Networks	
Paragraph 5.146 states, in relation to the assessment of effects on views and visual amenity that it *'should include any noise and light pollution effects, including on local amenity, tranquility and nature conservation'*.	The effects of noise in terms of tranquillity and the effects of light generally on night time visual amenity have been assessed in Sections 8.9 and 8.11 of this PEIR chapter. The effects on nature conservation are considered in Chapter 9 Ecology and Nature Conservation.

National Planning Policy Framework

8.2.8 The National Planning Policy Framework (NPPF) (Ministry of Housing, Community and Local Government, 2021) sets out the planning policies for England. The document sets out broad aims to achieve sustainable development in Section 2, including an environmental objective *'to protect and enhance our natural, built and historic environment'* at paragraph 8.

8.2.9 Strategic policies regarding Plan-making at Section 3 include, at paragraph 20, a requirement for sufficient provision for *'conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure and planning measures to address climate change mitigation and adaption'*.

8.2.10 Section 6: 'Building a strong, competitive economy' recognises that sites may have to be found adjacent to or beyond existing settlements or urban areas. In these circumstances, development *'is sensitive to its surroundings'*, which will be important for parts of the Project beyond the existing Gatwick Airport boundary.

8.2.11 Section 8: 'Promoting healthy and safe communities' states at paragraph 92 that development should *'enable and support healthy lifestyles,[…..] for example through the provision of safe and accessible green infrastructure… and layouts that encourage walking and cycling'*. Paragraph 99 states that *'Existing open space [….] Should not be built on unless […] the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quality and quantity in a suitable location'*. Paragraph 100 states that *'planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users'*. Public open space at Riverside Garden Park and the public rights of way within the Project site form an important element of the EIA process and design development.

8.2.12 Section 9: 'Promoting sustainable transport' requires at paragraph 104 that *'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'. Paragraph 112 states that development should *'respond to local character and design standards'.*

8.2.13 Section 11: 'Making effective use of land' recognises the need to safeguard and improve the environment when meeting the needs for development. Paragraph 120 promotes new habitat creation or the improvement of public access to the countryside. Paragraph 124 recognises the *'desirability of maintaining an area's prevailing character and setting (including residential gardens), or of promoting regeneration and change'* and *'the importance of securing well-designed, attractive and healthy places'*. Provision of appropriately designed landscape infrastructure forms an important part of the mitigation strategy for the Project and will continue to be developed throughout the EIA process.

8.2.14 Section 12: 'Achieving well-designed places' includes general policies about achieving high quality and inclusive design for all development (paragraph 130). This is to ensure that developments will function well and add to the overall quality of the area, establish a strong sense of place and create an attractive and comfortable place to live, work and visit. Proposals should optimise the potential of the site to accommodate development. Developments should respond to the local character and history and reflect the identity of the surrounding built environment and landscape setting whilst not discouraging appropriate innovative design. New development should create safe and accessible environments that are visually attractive with appropriate and effective landscaping. Landscape proposals will be appropriately designed to provide functional and attractive infrastructure within the airport and complement the surrounding landscapes and townscapes.

8.2.15 Section 15: 'Conserving and Enhancing the Natural Environment' (paragraph 174) states that *'Planning policies and decisions should contribute to and enhance the natural and local environment by; protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)'* and by *'recognising the intrinsic character and beauty of the countryside'* including the benefits of trees and woodland. Paragraph 175 requires that Plans should *'[…] take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries'*. Paragraph 176 states that '*Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues'.* Paragraph 185 requires that new development is appropriate to its location and should *'identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason'*, and that the impact on local amenity of light pollution from artificial light is limited within intrinsically dark landscapes. The Project will be designed to avoid or minimise adverse effects on the setting of nationally designated landscapes and the tranquillity enjoyed within them.

National Planning Practice Guidance

8.2.16 The National Planning Practice Guidance (NPPG) (Ministry of Housing, Communities and Local Government, 2019) supports the NPPF and provides guidance across a range of topic areas.

8.2.17 The NPPG refers to nationally designated landscapes including National Parks and AONBs and recommends that *'Land within the setting of these areas often makes an important contribution to maintaining their natural beauty, and when poorly located or designed development can do*

significant harm. This is especially the case where long views from or to the designated landscape are identified as important, or where the landscape character of land within and adjoining the designated area is complementary. Development within the settings of these areas will therefore need sensitive handling that takes these potential impacts into account'. Para: 042 Ref. ID:8-042-20190721. The Project will be designed to avoid or minimise adverse effects on the setting of nationally designated landscapes and the tranquillity enjoyed within them.

Other Relevant National Planning Policy

Airspace Design: CAP 1616 (Civil Aviation Authority (CAA), March 2021)

8.2.18 The CAA document requires that any changes to routes and/or traffic patterns of overflying aircraft at height profiles up to 7,000 feet above ground level should be identified to assess effects on landscape tranquillity and visual receptors. The assessment in this chapter of the PEIR has been defined using guidance within Appendix B 'Environmental metrics and assessment requirements' within CAP1616. Whilst the Project does not propose airspace design change, paragraph B76 contains useful guidance with regard to tranquillity assessment and states *'For the purpose of airspace change proposals, impact upon tranquillity need only be considered with specific reference to Areas of Outstanding Natural Beauty (AONB) and National Parks unless other areas for consideration are identified through community engagement'.* The Project will be designed to avoid or minimise adverse effects on the setting of nationally designated landscapes and the tranquillity enjoyed within them.

Local Planning Policy

8.2.19 Gatwick Airport lies within the administrative area of Crawley Borough Council and adjacent to the boundaries of Mole Valley District Council to the north west, Reigate and Banstead Borough Council to the north east and Horsham District Council to the south west. The administrative area of Tandridge District Council is located approximately 1.9 km to the east of Gatwick Airport, while Mid Sussex District Council lies approximately 2 km to the south east. Gatwick Airport is located in the county of West Sussex and immediately adjacent to the bordering county of Surrey.

8.2.20 The relevant local planning policies applicable to landscape, townscape and visual resources based on the extent of the study area for this assessment are summarised in Table 8.2.2 and explained further in Appendix 8.2.1.

Table 8.2.2: Local Planning Policy

Administrative Area	Plan	Policy
Adopted Policy		
Crawley	Crawley 2030: Crawley Borough Local Plan 2015-2030	Policy CH2: Principles of Good Urban Design
		Policy CH3: Normal Requirements of All New Development
		Policy CH8: Important Views
		Policy CH9: Development Outside the Built-Up Area
		Policy CH10: High Weald Area of Outstanding Natural Beauty
		Policy ENV1: Green Infrastructure
		Policy CS2: Valued Landscapes and the Natural Environment

Administrative Area	Plan	Policy
Reigate and Banstead	Reigate and Banstead Local Plan: Adopted Core Strategy 2014	Policy CS3: Green Belt
		Policy CS12: Infrastructure Delivery
	Reigate and Banstead Borough Development Management Plan 2018-2027 (Adopted 2019)	Policy NHE1: Landscape Protection
		Policy NHE3: Protecting Trees, Woodland Areas and Natural Habitats
		Policy NHE4: Green/blue Infrastructure
Mole Valley	Mole Valley Core Strategy 2009	Policy CS13: Landscape Character
		Policy CS 14: Townscape, Urban Design and the Historic Environment
	Mole Valley Local Plan 2000 (saved policies)	Policy ENV4 Landscape Character
		Policy ENV22 General Development Control Criteria
		Policy ENV23 Respect for Setting
		Policy ENV25 Landscape Design of New Developments
Tandridge	Tandridge District Core Strategy 2008	Policy CSP 18 Character and Design
		Policy CSP 21 Landscape and Countryside
	Tandridge Local Plan Part 2: Detailed Policies 2014 - 2029	Policy DP7: General Policy for New Development
		Policy DP10: Green Belt
Mid Sussex	Mid Sussex District Plan 2014-2031	Policy DP16: High Weald Area of Outstanding Natural Beauty
	Mid Sussex District Local Plan 2004 (saved policies)	Policy CP1: Countryside
High Weald Joint Advisory Committee	High Weald Area of Outstanding Natural Beauty Management Plan 2019 - 2024	Objective OQ3: *'To develop and manage access to maximise opportunities for everyone to enjoy, appreciate and understand the character of the AONB while conserving its natural beauty'*. Objective OQ4: *'To protect and promote the perceptual qualities that people value – aircraft noise – dark skies – scenic impact of intrusive development on valued views'*.

Administrative Area	Plan	Policy
Surrey Hills AONB Board	Surrey Hills Area of Outstanding Natural Beauty Management Plan 2020 to 2025	Policy RT3: *'Significant viewpoints and vistas will be identified, conserved and enhanced'*. Policy P2: *'Development will respect the special landscape character of the locality, giving particular attention to potential impacts on ridgelines, public views and tranquility'.* Policy P6: *'Development that would spoil the setting of the AONB, by harming public views into or from the AONB, will be resisted'*.
Kent Downs AONB Unit	Kent Downs Area of Outstanding Natural Beauty Management Plan 2014 - 2019	*Sustainable Development Policy SD6: 'Activities to increase understanding of the importance and extent of tranquility, remoteness and 'dark night skies' within the Kent Downs and the factors that affect them, will be supported and pursued'*. *Sustainable Development Policy SD8: 'Proposals which negatively impact on the distinctive landform, landscape character, special characteristics and qualities, the setting and views to and from the AONB will be opposed unless they can be satisfactorily mitigated'*.
South Downs National Park Authority	South Downs Local Plan 2014 to 2033	Objective 1: '*To conserve and enhance the landscapes of the National Park'.* Strategic Policy SD6: Safeguarding Views Strategic Policy SD7: Relative Tranquility Strategic Policy SD8: Dark Night Skies Strategic Policy SD23: Sustainable Tourism
Emerging Policy		
Crawley	Draft Crawley Borough Local Plan 2021-2037	Policy SD1: Presumption in Favour of Sustainable Development
		Policy CL2: Making Successful Places: Principles of Good Urban Design
		Policy CL3: Movement Patterns, Layout and Sustainable Urban Design
		Policy CL5: Development Briefs and Masterplanning
		Policy CL6: Structural Landscaping
		Policy CL7: Important and Valued Views
		Policy CL8: Development Outside the Built-Up Area
		Policy CL9: High Weald Area of Outstanding Natural Beauty
		Policy DD1: Normal Requirements of All Design
		Policy DD2: Inclusive Design
		Policy DD4: Tree Replacement Standards
		Policy DD5 Aerodrome Safeguarding
		Policy OS1: Open Space, Sport and Recreation
		Policy OS3: Rights of Way and Access to Countryside
		Policy GI1: Green Infrastructure
Tandridge		Policy TLP03: Green Belt
		Policy TLP32: Landscape Character

Administrative Area	Plan	Policy
	Our Local Plan 2033 Tandridge District Council	Policy TLP33: Surrey Hills and High Weald Areas of Outstanding Natural Beauty
Mole Valley	Future Mole Valley 2018 to 2033 Consultation Draft Local Plan	Policy EN1: Development in the Green Belt Policy EN4: Design and Character Policy EN8: Landscape Character
Kent Downs AONB Unit	Kent Downs Area of Outstanding Natural Beauty Draft for Consultation Management Plan 2020 - 2025	*Sustainable Development Policy SD6: 'Activities to increase understanding of the importance and extent of tranquility, remoteness and 'dark night skies' within the Kent Downs will be pursued'*. *Sustainable Development Policy SD8: 'Ensure proposals, projects and programmes do not negatively impact on the distinctive landform, landscape character, special characteristics and qualities, the setting and views to and from the AONB'*.

8.3. Consultation and Engagement

8.3.1 In September 2019, GAL submitted a Scoping Report to the Planning Inspectorate, which described the scope and methodology for the technical studies being undertaken to provide an assessment of any likely significant effects and, where necessary, to determine suitable mitigation measures for the construction and operational phases of the Project. It also described those topics or sub-topics which are proposed to be scoped out of the EIA process and provided justification as to why the Project would not have the potential to give rise to significant environmental effects in these areas.

8.3.2 Following consultation with the statutory bodies, the Planning Inspectorate (on behalf of the Secretary of State) provided a Scoping Opinion on 11 October 2019.

8.3.3 Key issues raised during the scoping process specific to landscape, townscape and visual resources are listed in Table 8.3.1, together with details of how these issues have been addressed within the PEIR.

Table 8.3.1: Summary of Scoping Responses

Details	How/where addressed in PEIR
Extent of study area: Review 5 km radius study area when description of development is fixed and include 50 metre high stack at the Central Airfield Maintenance and Recycling (CARE) facility. (PINS ID 4.2.1) Agree study area with relevant consultees. Visual effects of overflying aircraft on heritage assets.	The preliminary 5 km radius study area is sufficient to inform the PEIR. The Project description continues to be refined and, therefore, this will be reviewed for the final ES. A preliminary location for the CARE facility 50 metre high stack has been included in the ZTV, together with maximum parameters, as a worst case scenario to ensure the study area is sufficient to ensure all impacts that could give rise to potential significant effects on landscape, townscape and visual resources are assessed. Effects of overflying aircraft on heritage assets are addressed in Chapter 7: Historic Environment of the PEIR.
Extent of tranquility study area: Defined according to CAP1616. The assessment should take account of land elevation, which could result in aircraft over 7,000 feet above mean sea level being less than 7,000 feet. (PINS ID 4.2.2)	The extent of the tranquility study area has been determined through an appropriate methodology (to accommodate specific criteria in CAP1616 Appendix B (para B30), which defines overflights up to 7,000 ft above ground level)
Refers to guidance documents. An Approach to Landscape Character Assessment (Natural England, October 2014) and Technical Guidance Note 06/19: Visual Representation of Development Proposals (Landscape Institute) (PINS ID 4.2.4)	Documents included in methodology in Section 8.4 of this chapter.
Zone of Theoretical Visibility: Relate to maximum parameters including flue stack and agreed with consultees. (PINS ID 4.2.5)	A preliminary location for the CARE facility 50 metre high stack has been included in the ZTV, together with maximum parameters, as a worst case scenario to ensure the study area is sufficient to ensure all impacts that could give rise to potential significant effects on landscape, townscape and visual resources are assessed. GAL will seek to obtain agreement with consultees regarding the parameters of the ZTV.
Methodology: To include Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3) (Landscape Institute and Institute of Environmental Management and Assessment, 2013) (PINS ID 4.2.6)	Methodology set out in Section 8.4 refers to GLVIA3 and clearly defines all criteria including sensitivity, magnitude and significance of effect.
Baseline studies: Describe surveys and studies undertaken, timing and if professional judgement applied. (PINS ID 4.2.7) Agree with consultees.	Baseline information has been gathered through a combination of desk studies, consultation and field surveys. Baseline photography includes summer/winter and day/night. See methodology in Section 8.4 of this chapter of the PEIR.

Details	How/where addressed in PEIR
	GAL will seek to obtain agreement with consultees regarding the baseline surveys/studies.
Representative viewpoints and visualisations: To include views from High Weald AONB, Kent Downs and Surrey Hills AONBs and Important Viewpoints identified in Crawley Borough Local Plan. (PINS ID 4.2.8)	Viewpoints include High Weald AONB and Tilgate Hill 'Important Viewpoint'. See Visual Resources in Section 8.6 of this chapter of the PEIR. Target Hill 'Important Viewpoint' was scoped out of assessment as there is no intervisibility with Gatwick. Viewpoint photography within Kent Downs and Surrey Hills AONBs is not relevant to assessment of landscape, townscape and visual effects, due to the distance from Gatwick and lack of/limited intervisibility. Appropriate preliminary visualisations have been undertaken in accordance with Technical Guidance Note 06/19: Visual Representation of Development Proposals (Landscape Institute, 2019).
Tranquility study area: Should be mapped on nationally designated landscapes and orientation and frequency of aircraft movements. An assessment of effects should include users of public rights of way and residents, during the day and night and within the South Downs National Park International Dark Skies Reserve, visitors to heritage assets and historic parks and gardens. (PINS ID 4.2.9)	The extent of the tranquility study area has been determined through an appropriate methodology (to accommodate specific criteria in CAP1616 Appendix B para B30) and incorporated into baseline data for nationally designated landscapes and character areas. See Figure 8.4.2. This informs the assessment including night-time effects and the South Downs National Park International Dark Skies Reserve in Section 8.9 of this chapter of the PEIR. Effects of overflying aircraft on heritage assets are addressed in Chapter 7 of the PEIR.
Visible plumes and Residential Visual Amenity Assessment (RVAA): If a visible plume is produced it should be assessed and if a RVAA is undertaken it should be included in the LVIA. (PINS ID 4.2.10)	Due to the limited intervisibility of visual receptors within the study area and the very limited number of likely significant effects, there is no requirement for an RVAA. The potential for a visible plume at the CARE facility will be considered during the EIA process and reported, if required, in the ES.
Assessment years and mitigation. Mitigation planting and its implementation should be defined and included in assessment of effects throughout assessment years, and any visualisations. (PINS ID 4.2.11)	Timing of proposed planting is defined, and the level of mitigation achieved throughout the assessment years is set out in Sections 8.8 and 8.9 of this chapter of the PEIR.
Lighting: Assessment should reference The Guidance Notes for the Reduction of Obtrusive Light (Institution of Lighting Professionals, 2011) (PINS ID 4.2.12)	A lighting strategy is being developed, which will take into account relevant guidance. The final ES will consider effects arising from lighting, taking into account the lighting strategy.

8.3.4 Key issues raised during consultation and engagement with interested parties specific to landscape, townscape and visual resources are listed in Table 8.3.2, together with details of how these issues have been addressed within this chapter of the PEIR.

Table 8.3.2: Summary of Consultation

Consultee	Date	Details	How/where addressed in PEIR
Crawley Borough Council, Reigate and Banstead Borough Council, Mole Valley Borough Council, Tandridge Borough Council, Mid Sussex District Council, Surrey County Council and West Sussex County Council	20.8.2019	Presentation at Gatwick Airport of key aspects of Landscape, Townscape and Visual Resources within Scoping Report. No specific issues were raised in relation to this topic.	NA
Crawley Borough Council, Reigate and Banstead Borough Council, Mole Valley Borough Council, Tandridge Borough Council, Mid Sussex District Council, Surrey County Council and West Sussex County Council	3.2.2020	Presentation at Gatwick Airport of key aspects of Landscape, Townscape and Visual Resources baseline and assessment findings within PEIR. No specific issues were raised in relation to this topic.	NA
Natural England	25.6.2021	MS Teams Meeting. Presentation of landscape tranquility methodology based on CAA CAP 1616 Airspace Change document, and air quality HRA. Natural England recommended consultation with High Weald AONB.	NA
High Weald AONB Joint Advisory Committee	29.6.2021	Email to Landscape Officer seeking consultation on methodology including landscape tranquility.	NA
High Weald AONB Joint Advisory Committee	1.7.2021	Email from High Weald AONB stating overall duty and purpose and specifically AONB Management Plan Objectives OQ4 and G3. Response referred back to two HWAONB consultation responses in 2019 regarding airspace modernization programme and Gatwick masterplan.	NA
Crawley Borough Council, Surrey County Council, Reigate and Banstead Borough Council, Mole Valley Borough Council, Tandridge Borough Council, Horsham Borough Council and Mid Sussex District Council	29.7.2021	Presentation via MS Teams summarizing Landscape, Townscape and Visual Resources progress before Project pause due to Covid, current situation, any changes to assessment in PEIR and ongoing work.	NA

8.4. Assessment Methodology

Relevant Guidance

8.4.1 As a matter of best practice, this assessment has been undertaken based on the relevant guidance on landscape and visual assessment. This includes:

- Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3) (Landscape Institute and Institute of Environmental Management and Assessment, 2013);
- An Approach to Landscape Character Assessment (Natural England, 2014);
- Landscape Character Assessment – Guidance for England and Scotland (The Countryside Agency and Scottish Natural Heritage, 2002);
- Airspace Design: CAP 1616 (Civil Aviation Authority, 2021);
- Tranquillity – An Overview, Technical Information Note 1/17 (Landscape Institute, 2017); and
- Technical Guidance Note 06/19: Visual Representation of Development Proposals (Landscape Institute, 2019)

Scope of the Assessment

8.4.2 The scope of this PEIR has been developed in consultation with relevant statutory and non-statutory consultees as detailed in Table 8.3.1 and Table 8.3.2. This PEIR chapter includes an appraisal of the landscape, townscape and visual baseline conditions within the study area and their value and sensitivity to change as a result of the Project. The relevant aspects of the Project are described and the effects on landscape, townscape and visual resources assessed. Design development and mitigation measures are described which would minimise adverse effects. This chapter includes a summary of the methodology, with an extended version of the methodology contained within Appendix 8.4.1.

8.4.3 Taking into account the scoping and consultation process, Table 8.4.1 summarises the issues considered as part of this assessment.

Table 8.4.1: Issues Considered within the Assessment

Activity	Potential Effects
Construction Phase (including Demolition): Landscape/Townscape Characters	
Construction and demolition activities (generally)	Change in character (to landscape designations/types/areas) as a result of construction activity (including lighting).
Construction of updated highways junctions	Change in character (to landscape designations/types/areas, specifically Riverside Garden Park) as a result of construction of upgraded highway junctions (including lighting).
Use of construction compounds and creation of mitigation areas	Change in character (to landscape designations/types/areas) as a result of use of construction compounds and creation of mitigation/enhancement areas (including lighting) beyond the existing airport boundary. Specifically, effects of new attenuation ponds excavation/River Mole floodplain.

Activity	Potential Effects
Construction Phase (including Demolition): Visual Effects	
Construction and demolition activities	Effects on views as a result of demolition and construction activity (including lighting). Likely scope of assessment to focus on the following elements of the Project that have some potential to result in significant effects on visual resources: construction of upgraded highway junctions, decked parking at Pentagon Field, attenuation ponds and use of construction compounds.
Operational Phase: Landscape/Townscape Character	
Use of airport, including upgraded highway junctions	Change in character as a result of operational activity (including tranquillity). Likely scope of assessment to focus on the following elements of the Project that have some potential to result in significant effects on landscape/townscape: extension to North and South Terminals, new hotels, new office blocks, multi-storey and decked car parks, surface access improvements, attenuation ponds/River Mole floodplain and lighting.
Operational Phase: Visual Effects	
Use of airport, including upgraded highway junctions	Effects on views as a result of airport and operational activities and moving and stationary aircraft (including effects on tranquillity). To include consideration of day time and night time effects. Likely scope of assessment to focus on the following elements of the Project that have some potential to result in significant effects on visual resources: extension to North and South Terminals, new hotels, new office blocks, multi-storey and decked car parks, surface access improvements, attenuation ponds/River Mole floodplain, and lighting.

8.4.4 Effects which are not considered likely to be significant have been scoped out of the assessment. A summary of the effects scoped out are presented in Table 8.4.2.

Table 8.4.2: Issues Scoped Out of the Assessment

Issue	Justification
Effects on seascape character	The West Sussex coastline is approximately 35 km from Gatwick Airport and lies outside the study areas, including the study area for overflying aircraft below 7,000 feet, which informs the assessment of effects on tranquillity. Therefore, there would be no change or impact on receptors within this area. This approach was agreed by the Planning Inspectorate in the Scoping Opinion of October 2019, at ID ref. 4.2.3 of the Aspect Based Scoping Tables.
Effects which may arise as a result of reconfiguration of internal spaces within existing buildings/structure, eg amendments to the cargo hall and redevelopment of internal spaces within North and South Terminals.	No external works or changes to the building appearance. Therefore, no pathway for impacts on landscape, townscape or visual amenity.

Study Area

8.4.5 The existing and proposed ZTVs have informed the extent of the study area to ensure that all landscape, townscape and visual receptors that may experience significant effects are captured (see Figure 8.4.1).

8.4.6 An area of search based on a 5 km radius from the Project site boundary has been identified, as the ZTV indicates that the vast majority of land that may be potentially intervisible with development at Gatwick Airport lies within this area. This has defined an appropriate study area to capture the relevant landscape, townscape and visual receptors that are likely to be affected by the Project and to ensure that all likely significant effects have been identified.

8.4.7 A separate wider study area has been established to coincide with overflying aircraft at height profiles up to 7,000 feet above ground level to address effects on landscape tranquillity and visual receptors. This study area is considered appropriate to capture receptors in the wider rural landscape, including the High Weald AONB, Surrey Hills AONB, Kent Downs AONB and South Downs National Park (see Figure 8.4.2).

Methodology for Baseline Studies

8.4.8 The baseline assessment includes an appraisal of the landscape and townscape within the study area. The studies identify the landscape/townscape resources and character, including individual features, key characteristics and the wider landscape/townscape character.

8.4.9 Baseline information on the landscape/townscape has been gathered through a combination of desk studies, consultation and field surveys.

Desk Study

8.4.10 The scope of work has included the following core activities:

- a review of relevant planning policy related to landscape/townscape and visual issues; and
- a desk study and web search of relevant background documents and maps, including reviews of aerial photography, web searches, county and local planning authority publications, National Park and AONB publications and relevant landscape character assessments for the Project site and study areas.

8.4.11 Documents used to inform the assessment include aerial photographs, Ordnance Survey maps and published landscape character assessments.

8.4.12 Relevant national, county and district landscape character assessments have been reviewed. Particular attention has been paid to the key landscape characteristics of the relevant landscape types/character areas and special qualities of the High Weald AONB, Surrey Hills AONB, Kent Downs AONB and South Downs National Park. Valued landscape resources have been identified at national and local levels.

Site-Specific Surveys

8.4.13 The scope of work has included the following field assessments and photographic surveys of the character and fabric of the Project site and its surroundings, and of the views available to and from the Project site. Field surveys allow a better understanding of the landscape, to determine its character, condition (quality), value and intrinsic sensitivity and identify visual receptors and visual

barriers. The surveys have established the landscape and townscape resources that combine to give the landscape and townscape a distinct sense of place.

8.4.14 A series of representative daytime summer and winter views and winter night time views have been identified and these are shown on Figures 8.4.1 and 8.4.3 with panoramic photography at Figures 8.4.4 to 8.4.20. The representative viewpoints have been used to assess the potential visual impacts of the Project on the different range of views within or towards the Project site. The selected viewpoints include views within the Project site or from close quarters through to distant views in which the Project site is part of a wider landscape. Further viewpoints will be identified and added to the assessment process, as required in consultation with local authorities and Natural England.

8.4.15 The landscape, townscape and visual assessment process has identified the existing 'baseline' and projected 'future baseline' condition, value and character of the landscape/townscape and its visual relationship with its surroundings, building on the initial appraisal of existing baseline conditions. The future baseline within the identified assessment years (see PEIR Chapter 6) as a result of committed or consented developments has also been described.

Tranquillity

8.4.16 This section reviews commentary and guidance on tranquillity assessment from key sources including the Landscape Institute, Natural England (and its predecessor the Countryside Agency) and the Campaign to Protect Rural England (CPRE) to define tranquillity for the purposes of this chapter of the PEIR.

8.4.17 The assessment of effects on tranquillity has been informed by guidance contained within 'Tranquillity – An Overview, Technical Information Note 1/17'. (Landscape Institute, 2017). The Technical Information Note states that:

'Tranquillity is defined as a consideration in planning, particularly in England's NPPF and is a recognised factor in the landscape characterisation process. However, how it is actually considered in practice is not clear and there is limited documented evidence to demonstrate how tranquillity assessment is carried out'.

8.4.18 Professional judgement will be used to interpret the public perception of tranquillity, based on the following key aspects identified within the Countryside Agency's 'Research Paper CRN 92' (Countryside Agency, 2005) following a public perception study:

- perceived links to nature and natural features (seeing, hearing and experiencing);
- natural landscapes, open views and night skies;
- the importance of wildlife; and
- peace, quiet and calm - the absence of people and a feeling of 'getting away from it all'.

8.4.19 The perceptual aspects that the public considered not to be tranquil included the following:

- large concentrations of people;
- traffic including noise;
- industrial and commercial development;
- lighting; and
- low flying aircraft.

8.4.20 CPRE undertook tranquillity mapping between 1991 and 1995 to create the first map of tranquil areas. CPRE's definition of tranquillity includes:

'places that are sufficiently far away from the visual or noise intrusion of development or traffic to be considered unspoilt by urban influences'.

8.4.21 Subsequent mapping projects on behalf of CPRE included subjective factors to define relative levels of tranquillity as follows:

'remoteness from people, habitat type, presence and visibility of rivers and woodlands, presence and visibility of unnatural features and detractors, openness of the landscape, overhead skyglow and identification of noise sources'.

Assessment Criteria and Assignment of Significance

8.4.22 The significance of an effect is determined based on the sensitivity of a receptor and the magnitude of an impact. This section describes the criteria applied in this chapter to characterise the sensitivity of receptors and magnitude of potential impacts. The terms used to define magnitude and sensitivity are based on and have been adapted from those used in the Design Manual for Roads and Bridges (DMRB) methodology (Highways England *et al*., 2020), which is described in further detail in Chapter 6: Approach to Environmental Assessment.

Receptor Sensitivity/Value

8.4.23 The sensitivity or susceptibility of a landscape or townscape to change varies according to the nature of the existing resource and the nature of the proposed change. Considerations of value, integrity and capacity are all relevant when assessing sensitivity. For the purpose of this assessment, these terms are defined as follows.

- Value: the relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a variety of reasons. Landscapes can be recognised through national, regional or local designation. Views tend not to be designated, but value can be recognised through a named location shown on a map, or through the creation of a parking lay-by or location of a bench to appreciate a view.
- Integrity: the degree to which the value has been retained, the condition and integrity of the landscape or the view.
- Capacity: the ability of a landscape, townscape or view to accommodate the proposed change while retaining the essential characteristics which define it.

8.4.24 Sensitivity, or susceptibility, is not readily graded in bands. However, in order to provide both consistency and transparency to the assessment process, Tables 8.4.3 and 8.4.4 below define the criteria which have guided the judgement as to the sensitivity of the receptor and the susceptibility to change.

8.4.25 The sensitivity of the landscape and townscape character areas to the type of change associated with the Project has been considered, based on guidance contained within GLVIA3. Table 8.4.3 below summarises criteria used to assess the sensitivity of the landscape to change.

Table 8.4.3: Landscape/Townscape Sensitivity Criteria

Sensitivity	Definition
Very High	Landscape/townscape value recognised by international or national designation. The landscape/townscape resource has very little ability to absorb change of the type proposed without fundamentally altering its present character and is of very high importance, rarity and value. Sense of tranquillity or remoteness specifically noted in landscape character assessment. High sensitivity to disturbance specifically noted in landscape character assessment. The qualities for which the landscape/townscape is valued are in good condition, with a clearly apparent distinctive character and absence of detractors. Very limited potential for substitution.
High	Landscape/townscape value recognised by national designation. The landscape/townscape resource has little ability to absorb change of the type proposed without fundamentally altering its present character and/or is of high importance, rarity or value. Sense of tranquillity or remoteness specifically noted in landscape character assessment. High sensitivity to disturbance specifically noted in landscape character assessment. The qualities for which the landscape/townscape is valued are in good condition, with a clearly apparent distinctive character and absence of detractors. Limited potential for substitution.
Medium	Landscape/townscape value is recognised or designated locally. The landscape/townscape resource has moderate capacity to absorb change of the type proposed without significantly altering its present character and/or is of medium importance, rarity or value. The landscape/townscape is relatively intact, with a distinctive character and some detractors; and is reasonably tolerant of change. Limited potential for substitution.
Low	The landscape/townscape resource is tolerant of change of the type proposed without detriment to its character and/or is of low importance, rarity or value. Landscape/townscape integrity is low, with a poor condition with the presence of detractors; and the landscape/townscape has the capacity to potentially accommodate high levels of change.
Negligible	The landscape/townscape resource is tolerant of change of the type proposed without detriment to its character and/or is of low importance, rarity or value. Landscape/townscape integrity is low, with a poor condition and a degraded character with the presence of detractors such as dereliction; and the landscape/townscape has the capacity to potentially accommodate considerable change.

8.4.26 The sensitivity of visual receptors has been assessed, based on guidance contained within GLVIA3. Sensitivity is dependent upon several factors including the location and context of the viewpoint, whether views are continuous, fragmented, or intermittent (ie the dynamic nature of a view gained while travelling through an area), the importance of views and the occupation and activity of the visual receptor. Influences such as the number of receptors affected, popularity of views and the significance of the views in relation to valued landscapes or features also determine the importance of views.

Table 8.4.4: Visual Sensitivity Criteria

Sensitivity	Definition
Very High	Large number of viewers whose attention is very likely to be focused on the landscape within nationally designated landscapes of high tranquillity. Eg users of strategic recreational footpaths and cycleways; people experiencing views from important landscape features of physical, cultural or historic interest, beauty spots and picnic areas.
High	Large number of viewers whose attention is likely to be focused on the landscape. Eg residents experiencing views from dwellings; users of strategic recreational footpaths and cycleways; people experiencing views from important landscape features of physical, cultural or historic interest, beauty spots and picnic areas. Occupiers of vehicles in highly scenic areas or on recognised tourist routes.
Medium	Viewers' attention may be focused on landscape, such as users of pavements, footways and secondary footpaths in urban areas, and people engaged in outdoor sport or recreation eg horse riding or golf. Occupiers of vehicles in rural areas.
Low	People at their place of work, or engaged in similar activities, whose attention may be focused on their work or activity and who may therefore be potentially less susceptible to changes in view. Occupiers of vehicles whose attention may be focused on the road.
Negligible	People at their place of work, or engaged in similar activities, whose attention may be focused on their work or activity and who may therefore be potentially less susceptible to changes in view. Occupiers of vehicles in urban areas.

Magnitude of Impact

8.4.27 The next stage of the assessment process has identified the potential magnitude of change to landscape or townscape character and views arising from the Project. The assessment distinguishes between landscape or townscape impacts and impacts upon views, based on guidance contained within GLVIA3. The former considers the impact upon landscape or townscape character taking account of impacts upon the physical resource (landform, vegetation, pattern, etc.) and any impacts arising from the Project, which would be sufficient to impact on the inherent character of a landscape or townscape area. The latter considers the impact on views perceived by people from publicly accessible locations. Potential impacts are also considered in terms of their duration ie whether they are permanent or temporary.

8.4.28 The magnitude or scale of change brought about by the Project upon both the existing landscape or townscape resource and upon views, both beneficial and adverse, has been assessed as set out in Table 8.4.5 below.

Table 8.4.5: Impact Magnitude Criteria

Magnitude of Impact	Definition
High	The proposed change forms a dominant or immediately apparent feature that would significantly alter and change view. Where there are substantial changes affecting the character of the landscape/townscape, or important elements through loss of or severe damage to key existing characteristics, features or elements. Proposed development within affected landscape/townscape. Scale, mass and form of development out of character with existing elements. Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements (adverse).
	Large scale or major improvement of landscape/townscape character or view; extensive restoration or enhancement of quality (beneficial).
Medium	The proposed change forms a prominent new element that would affect and change the view. The proposed development forms a visible and recognisable feature in the landscape/townscape. Proposed development is within or adjacent to affected landscape/townscape. Scale of development fits with existing features. Partial loss of/damage to key characteristics, features or elements, but not adversely affecting the integrity of landscape/townscape (adverse).
	Moderate scale improvement of landscape/townscape character or view; partial restoration or enhancement of quality (beneficial).
Low	The proposed change constitutes only a minor component of view, which is recognisable, although might be missed by the casual observer. Awareness of the proposed change would not change the overall nature and character of the view. Receptor may be located at distance from the Project. Minor loss of, or alteration to, one (maybe more) key characteristics, features or elements (adverse).
	Minor benefit to, or addition of, one (maybe more) key landscape/townscape characteristics, features or elements or improvement in quality of view due to partial restoration or enhancement (beneficial).
Negligible	Only a very small part of the proposed change would be discernible, and/or it is at such a distance that it would be scarcely appreciated. Consequently, it would have very little effect on view. The effect of change on the perception of the landscape/townscape, the physical characteristics, features or elements is barely discernible (adverse).
	Very minor benefit to or positive addition of one or more landscape/townscape characteristics, features or elements (beneficial).
No Change	No loss of or alteration to landscape/townscape characteristics, features or elements; no observable adverse or beneficial impact.

Significance of Effect

8.4.29 The significance of the effect upon landscape, townscape or visual resources has been determined by taking into account the sensitivity of the receptor and the magnitude of the impact. The method employed for this assessment has taken into account the matrix presented in Table 8.4.6. The assessment matrix provides a framework for the assignment of levels of effect for each impact identified, together with professional judgement. Where a range of significance levels are presented, the final assessment for each effect is based upon professional judgement.

8.4.30 In all cases, the evaluation of receptor sensitivity, impact magnitude and significance of effect has been informed by professional judgement and is underpinned by narrative to explain the conclusions reached.

8.4.31 For the purpose of this assessment, any effects with a significance level of moderate or less are not considered to be significant.

Table 8.4.6: Assessment Matrix

Sensitivity	Magnitude of Impact				
	No Change	Negligible	Low	Medium	High
Negligible	No change	Negligible	Negligible or Minor	Negligible or Minor	Minor
Low	No change	Negligible or Minor	Negligible or Minor	Minor	Minor or Moderate
Medium	No change	Negligible or Minor	Minor	Moderate	Moderate or Major
High	No change	Minor	Minor or Moderate	Moderate or Major	Major or Substantial
Very High	No change	Minor	Moderate or Major	Major or Substantial	Substantial

8.4.32 A description of the levels of effect is provided in the bullets below:

- Substantial: Where the proposed changes cannot be mitigated; would be completely uncharacteristic and would substantially damage the integrity of a valued and important landscape or townscape. Where the proposed changes would form the dominant feature or would be completely uncharacteristic and substantially change the scene in highly valued views. Only adverse effects are normally assigned this level of significance. They represent key factors in the decision-making process.
- Major: Where the proposed changes cannot be fully mitigated; would be uncharacteristic and would damage a valued aspect of the landscape or townscape. Where the proposed changes would form a major part of the view, or would be uncharacteristic, and would alter valued views. These beneficial or adverse effects are considered to be very important considerations and are likely to be material in the decision-making process.
- Moderate: Where some elements of the proposed changes would be out of scale or uncharacteristic of an area. Where the proposed changes to views would be prominent, out of scale or uncharacteristic with the existing view. These beneficial or adverse effects may be important but are not likely to be key decision-making factors. The cumulative effects of

such factors may influence decision-making if they lead to an increase in the overall adverse effect on a particular resource or receptor.

- Minor: Where the proposed changes would be at slight variance with the character of an area. Where the proposed changes to views would be recognisable or at slight variance with the existing view. These beneficial or adverse effects may be raised as local factors. They are unlikely to be critical in the decision-making process but are important in enhancing the subsequent design of the Project.
- Negligible: Where the proposed changes would be barely discernible within the landscape/townscape or have a barely discernible influence over a landscape/townscape. Where the proposed changes would be barely discernible within the existing view.

8.4.33 In the assessment those levels of effect indicated as being 'substantial' or 'major' may be regarded as significant effects for EIA purposes. An accumulation of individual 'moderate' effects, for instance experienced by a visual receptor during a journey, may also be regarded as a significant sequential effect. Where negligible adverse and beneficial effects occur within the same view or same landscape/townscape, the effect may be described as neutral on balance.

8.4.34 Long term, day time operational effects form the primary focus of this assessment as these are most likely to result in significant effects. All assessment conclusions are supported by reasoned justification.

8.5. Assumptions and Limitations of the Assessment

8.5.1 Assumptions associated with the assessment of landscape and visual effects are based on either:

- the ability to retain existing vegetation to protect landscape or townscape character and screen views of the Project and/or existing development at Gatwick Airport;
- the need to completely remove existing vegetation to provide suitable access for construction activities and/or to accommodate the Project; and/or
- the provision of mitigation planting to replace removed planting and, in the long term, restore or enhance character and screen views of the Project and/or existing development at Gatwick Airport.

8.5.2 The assessment scenarios that have been assumed for specific elements of the Project are described below and the approach to mitigation and enhancement measures is defined in Section 8.8 of this chapter.

8.5.3 Partial retention of existing vegetation:

- A23/M23 spur surface access improvements corridor (North Terminal, South Terminal and Longbridge Roundabouts);
- South Terminal hotel/car park H and office blocks;
- Pentagon Field decked car park;
- Replacement Purple Parking at Crawter's Field;
- Gatwick Museum flood compensation area; and
- Gatwick Stream flood storage area.

8.5.4 Complete vegetation removal:

- construction compounds;
- CARE facility (Option 2 location);
- noise mitigation feature; and
- River Mole diversion.

8.5.5 Mitigation planting proposals:

- Pentagon Field decked car parking;
- North and South Terminal roundabout and Longbridge roundabout improvements;
- noise mitigation feature;
- relocation of Pond A;
- flood compensation at Museum Field and east of Museum Field;
- replacement parking at Crawter's Field (Purple Parking);
- South Terminal and North Terminal extensions and forecourts;
- CARE facility;
- new hangar;
- Gatwick Stream flood compensation;
- River Mole diversion works; and
- North Terminal Long Stay decked car parking.

8.5.6 No assumptions and limitations have been identified in the preparation of this chapter with regard to landscape, townscape and visual resources that would prevent a preliminary assessment of the potential effects being made for the purposes of this PEIR.

8.6. Baseline Environment

Current Baseline Conditions

Topography

8.6.1 Landform elevation (height) throughout the study area is shown on Figure 8.6.1. The Low Weald landscape extends over much of the study area. The landform is smooth and gently undulating with occasional rounded low hills interrupting an otherwise low-lying landscape. Gatwick Airport lies within this landscape, occupying a relatively level area at about 60 metres above ordnance datum (AOD). Occasional higher hills, such as the Low Weald hills to the west of Gatwick Airport rise to about 120 metres AOD. The large settlement of Crawley lies immediately to the south of Gatwick rising to about 70 metres AOD. Further south east the landform rises again to the High Weald AONB to between 140-160 metres AOD. The landscape of the AONB is visible from the Weald as an escarpment.

8.6.2 The most notable watercourse within the study area is the River Mole which rises to the south west of the airport near Rusper before flowing north to the River Thames. The watercourse is culverted beneath the runway and emerges to flow through a naturalised linear green space on the north western side of Gatwick Airport. Crawter's Brook flows through the southern edge of Gatwick Airport around the fringes of Lowfield Heath before joining the River Mole culvert. Gatwick Stream rises in the Worth Forest in the High Weald AONB and flows through the eastern part of Gatwick Airport, east of the railway via South Terminal to Riverside Garden Park and its confluence with the River Mole. Man's Brook follows the eastern edge of Brockley Wood, linking to the River Mole.

Land Use

8.6.3 Due to the scale and nature of development at Gatwick, the airport forms its own distinctive and well-defined urban townscape (see Figure 1.3.1). Gatwick Airport extends over an area of 850 hectares and occupies the majority of land within the Project site boundary. The remainder of the land within the Project site boundary is formed of smaller areas of farmland and open space beyond the current airport boundary. The majority of the land within the Project site is flat and open, occupied by runways, taxiways, stands, surface car parking and mown grassland. The main built form is located at the North Terminal and South Terminal clusters. Architectural treatments and materials vary throughout the Project site, forming a varied built form typical of an international airport which has evolved and expanded over time. Several large aircraft hangars, a cargo hall, hotels, multi-storey car parks and control towers form other large scale or prominent buildings within the airport. The M23 spur forms the main road transport route into the airport from the east, linking the M23 to the South Terminal and the A23 to the North Terminal and surrounding settlements. The London to Brighton railway passes through the Project site on a north-south alignment, linking to the Gatwick Airport Station. There are earthen bunds in various locations along the western airport perimeter which provide acoustic and visual screening of the airport. They are visible only locally and contrast with the natural landform.

8.6.4 Gatwick Airport, in the vicinity of the terminals and car parks, is a well-lit environment for the practical and safe function of the airport. Lighting columns are located along the A23 surface access roads, internal circulatory roads and within car parks. Light sources are also located within all terminal buildings, hotels, multi-storey car parks, hangars and ancillary buildings and are visible at night through windows and doors. Lighting on aircraft and cars forms moving sources of light within and around the airport.

8.6.5 Due to the large number and scale of passenger aircraft at stands and piers across the airport, aircraft form a significant and distinctive element of the character of Gatwick Airport.

8.6.6 The main areas of green infrastructure are associated with the River Mole to the north west and the land to the east of the railway and south of South Terminal. The broad, naturalised riparian corridor through which the River Mole flows includes the sinuous watercourse, wet meadow terraces and marginal habitats and belts of native tree and shrub planting. A small block of mature, ancient woodland at Brockley Wood lies east of the River Mole. A larger area of green infrastructure lies to the east of the railway. Blocks of mature woodland, some of which is designated as ancient, lie at Horleyland Wood and Upper Pickett's Wood. These are linked by woodland belts, hedgerows and copses to form an extensive network of native trees and shrubs which merge with neighbouring gardens of residential properties. Open areas of grassland are located at the surface water attenuation feature south of the Crawley Sewage Treatment Works and grazing land at Pentagon Field. Mature hedgerows define many of the perimeters of car parks and form remnants of the agricultural landscape. Mature tree, shrub and amenity planting is associated with the North and South Terminals and the A23 surface access network. The green infrastructure throughout the Project site combines to form an attractive and diverse element of the airport.

8.6.7 Land within the Project site boundary that lies outside of Gatwick Airport includes the Riverside Garden Park. This is a public open space which separates Gatwick Airport and the residential edge of Horley. The space comprises informal mature woodland, trees, amenity planting, grassland and lakes. A small area of public open space and grazing land surrounded by mature

hedgerows and trees lies north of the Longbridge roundabout on the A23. Several fields of grazing land surrounded by hedgerows and trees lie to the west between the River Mole and Gatwick Aviation Museum. Two separate areas comprising several fields of grazing land surrounded by hedgerows and trees lie to the north of the A23 and to the south of the M23.

8.6.8 Apart from the woodlands and parts of the River Mole corridor, the character of the Project site is intensely urban, particularly within and around the development clusters at the terminals.

Public Rights of Way

8.6.9 Several public rights of way are located within the Project site (see Figure 8.4.3). Public footpath 346 forms the longest route linking the North and South Terminals via Perimeter Road and continuing along the A23 to the River Mole crossing. The route continues south along the river and joins the Horley Road at the Bear and Bunny Nursery. A small section of footpath 347 links footpath 346 to Horley Road via woodland planting. Footpath 355 lies parallel to the eastern side of the railway line south of the A23. This footpath links with footpaths 360, 361 and 359 which lie adjacent to hedgerows and trees surrounding car parks and passes through Upper Picketts Wood and between residential properties to connect to Radford Road. Other footpaths associated with this area of green infrastructure east of the railway line, including 360 and 358, pass through woodlands and between attenuation ponds. Footpath 359 extends north to follow the western and northern edge of grazed land at Pentagon Field. Footpath 367 passes through the proposed construction compound site south of the M23 linking Balcombe Road and Fernhill Road. Footpath 574 passes between the cemetery and Longbridge roundabout west of Horley.

8.6.10 The Sussex Border Path long distance route coincides with many of these definitive rights of way to form a continuous route linking Charlwood in the west to the M23 in the east via the airport.

8.6.11 National Cycle Route 21 passes through Horley and the Riverside Garden Park, beneath the A23 and the Inter-Terminal Transit System (ITTS) and continues south between the A23 and railway to Crawley.

Landscape Designations

8.6.12 Gatwick Airport is located outside of any designated AONB or National Park. There are three AONBs and a National Park within the wider study area (see Figure 8.4.2) comprising:

- High Weald AONB;
- Surrey Hills AONB;
- Kent Downs AONB; and
- South Downs National Park.

8.6.13 The landscapes within these designated areas are relevant to the assessment of the influence of overflying aircraft on the perception of tranquillity.

8.6.14 The primary purpose of the AONB designation is to conserve and enhance natural beauty, maintain a thriving community life and promote understanding of the area's special qualities.

High Weald Area of Outstanding Natural Beauty Management Plan 2019 to 2024

8.6.15 The High Weald AONB extends over a broad swathe of south east England from Horsham in the west to Rye in the east. The AONB is located approximately 3 km to the south east of the Project

site, separated from the airport by the town of Crawley. The designation extends over a large part of the study area between approximately 5 km and 15 km to the south and east of the airport.

8.6.16 The High Weald Joint Advisory Committee make the following commitments within the High Weald Area of Outstanding Natural Beauty Management Plan 2019 – 2024 (High Weald Joint Advisory Committee, 2019):

- *'Use the plan to assess whether activities in the 'setting' of the High Weald affect land in the AONB'.*
- *'Use the plan to identify effects of proposed development on the AONB helping ensure development is 'landscape-led' and contributes to conserving and enhancing natural beauty'*.

8.6.17 The Management Plans Statement of Significance identifies the five defining components of the High Weald which comprise its special qualities, which are as follows.

- *'Geology, landform and water systems: a deeply incised, ridged and faulted landform of clays and sandstone with numerous gill streams.*
- *Settlement: dispersed historic settlements including high densities of isolated farmsteads and late medieval villages founded on trade and non-agricultural rural industries.*
- *Routeways: a dense network of historic routeways (now roads, tracks and paths).*
- *Woodland: abundance of ancient woodland, highly connected and in small holdings.*
- *Field and Heath: small, irregular and productive fields, bounded by hedgerows and woods, and typically used for livestock grazing; with distinctive zones of lowland heaths, and inned river valleys'*.

8.6.18 The Management Plan also defines 'Other Qualities' as follows:

'These include locally distinctive features which enrich the character components such as historic parks and gardens, orchards, hop gardens, veteran trees along with the rich and varied biodiversity and a wide range of appealing and locally distinctive historic buildings including oast houses, farm buildings, Wealden Hall houses and their associated features such as clay-tile cat slide roofs. People value the wonderful views and scenic beauty of the High Weald with its relative tranquillity. They appreciate the area's ancientness and sense of history, its intrinsically dark landscape with the opportunity to see our galaxy – the Milky Way – and the ability to get close to nature through the myriad public rights of way'.

8.6.19 A key issue defined for 'Other Qualities' which is relevant to the assessment is as follows:

- *'Development including traffic, noise and light pollution, degrading the AONB's tranquil and dark qualities'*.

8.6.20 The Objective identified is OQ4:

- *'To protect and promote the perceptual qualities that people value'*.

8.6.21 The rationale is;

- *'To ensure that the special qualities people value, such as tranquillity, dark skies, sense of naturalness and clean air, are recognised and taken account of in AONB management'*.

8.6.22 Areas of landscape within the High Weald AONB that lie closer to Gatwick Airport and the large settlement of Crawley are influenced by a combination of the expanse of development, the concentration of people, the movement of traffic and overflying aircraft, the light generated by these and the noise from aircraft. A combination of these elements influences the level of perceived tranquillity. This area of landscape coincides, to a limited extent, with the ZTV for the Project within a 5 km radius and forms part of the wider study area for overflying aircraft less than 7,000 feet above ground level.

Surrey Hills Area of Outstanding Natural Beauty Management 2020 to 2025

8.6.23 The Surrey Hills AONB extends over an area of upland landscape which links to the South Downs National Park to the west and the Kent Downs AONB to the east. Parts of the AONB at Dorking, Reigate and Redhill are located within the wider study area for overflying aircraft.

8.6.24 The Surrey Hills Area of Outstanding Natural Beauty Management Plan 2020 to 2025 (Surrey Hills AONB Board, 2020) includes a section 'Defining the natural beauty of the Surrey Hills AONB'. The key characteristics are as follows:

'Although the Surrey Hills is now one of the most wooded of the nationally protected areas in the country, it is still an intriguingly diverse landscape characterised by hills and valleys, traditional mixed farming, a patchwork of chalk grassland and heathland, sunken lanes, picturesque villages and market towns. It has associations with many of the country's great artists, writers, musicians and designers. It is often regarded as the first real countryside south of London and is a rural retreat for many thousands of daily commuters'.

'The Hills stretch across the chalk North Downs that run from Farnham in the west, above Guildford, Dorking and Reigate, to Oxted in the east. They contain a mosaic of woodland, scrub and open downland with combes, spring lines, chalk pits, quarries and striking cliffs. To the south are the Greensand Hills that include Black Down, the Devil's Punch Bowl and Leith Hill, with ancient sunken lanes and geometric fields that have been enclosed from heaths and wooded commons. In between are the valleys of the Wey, Tillingbourne and Mole rivers, and heaths of Frensham, Thursley and Blackheath. The Low Weald forms the southern fringe of the Area of Outstanding Beauty, with its extensive woodlands and small irregular fields, hedgerows and wooded shaws'.

'Although geology, soils and climate have created the bones of the landscape, the appearance of the Surrey Hills has been shaped for centuries by the changing patterns of land use and settlement. Over much of the Surrey Hills the historic settlement pattern remains largely intact: small picturesque villages of Saxon and medieval origin in the valleys; isolated farmsteads on chalk slopes, valley bottoms and in clearings won from the woodland; large country houses with designed landscapes including parklands; market towns; and remnants of seventeenth and eighteenth century industry'.

8.6.25 The 11 features, listed in order, that define the special character of the Surrey Hills, based on consultation feedback during the preparation of the Management Plan are as follows:

- views;
- woodland;
- heathland;
- tranquillity;

- commons;
- downland;
- country lanes;
- farmland;
- dark skies
- historic buildings; and
- parkland.

Kent Downs Area of Outstanding Natural Beauty Management Plan 2014 to 2019

8.6.26 The Kent Downs AONB extends over a band of landscape associated with the M25 and M20 around Sevenoaks and east to Rochester.

8.6.27 Special qualities are defined in the Kent Downs Area of Outstanding Natural Beauty Management Plan 2014 – 2019 (Kent Downs AONB Unit, 2014) and the emerging Kent Downs Area of Outstanding Natural Beauty Management Plan 2020 – 2025 as follows.

- Dramatic landform and views – Impressive south facing steep scarp slopes of chalk, hidden dry valleys, open plateaux, river valleys and iconic chalk cliffs. 'Breathtaking', long-distance panoramas.
- Biodiversity rich habitats – Rich mosaic of semi-natural chalk grassland, ancient semi-natural woodland, traditional orchards, chalk cliffs and sea platform, chalk rivers, wet pasture, spring lines, heath and acid grassland.
- Farmed landscape – Mixed farming including pasture, orchards, hop gardens, arable crops and horticulture.
- Woodland and trees – Deciduous and mixed woodland on the upper scarp slopes, dry valleys and plateaux tops. Over half the woodland is ancient and includes extensive coppiced sweet chestnut.
- A rich legacy of historic and cultural heritage – Distinctive architecture of villages, farmsteads, oasthouses, barns, churches and country houses using a range of materials including flint, chalk, Ragstone, timber and tile. Ancient network of fields, hedges, droveways and sunken lanes.
- Geology and natural resources – Imposing landform of the Kent Downs. Soils and geology are important for agriculture, biodiversity and water resources. Fresh air experienced throughout the AONB.
- Tranquillity and remoteness – Surprisingly tranquil and remote countryside offering dark night skies and peace.

8.6.28 A recurrent theme in the Kent Downs AONB is that of tranquillity and remoteness. The Management Plan states that:

'The perception of being away from the noise, sights and smells of modern life is a much valued feature of many parts of the AONB where people can refresh body and soul. National tranquillity mapping carried out by the CPRE has confirmed that the Kent Downs offers important areas of relative tranquillity'. The Management Plan also identifies that *'Several main flight paths from London to mainland Europe pass over the Kent Downs, and the western part of the landscape is passed by aircraft descending to London Gatwick. The impact of overflying airplanes on landscape tranquillity can be significant'.*

South Downs National Park

8.6.29 The South Downs National Park Authority adopted the South Downs Local Plan 2014 to 2033 in July 2019.

8.6.30 The National Parks' statutory purposes and duty is *'To conserve and enhance the natural beauty, wildlife and cultural heritage of the area'* and *'To promote opportunities for the understanding and enjoyment of the special qualities of the National Park by the public'*.

8.6.31 The Local Plan defines seven special qualities as follows:

- diverse, inspirational landscapes and breathtaking views;
- distinctive towns and villages, and communities with real pride in their area;
- well-conserved historical features and a rich cultural heritage;
- great opportunities for recreational activities and learning experiences;
- tranquil and unspoilt places;
- a rich variety of wildlife and habitats including rare and internationally important species; and
- an environment shaped by centuries of farming and embracing new enterprise.

8.6.32 The study area for the assessment of effects on tranquillity within the National Park coincides predominantly with the Western Weald character area and also smaller parts of the Greensand Hills, Sandy Arable Farmland and Major River Floodplains (River Arun) character areas which collectively lie within the Low Weald landscape character type (LCT). The Western Weald is described as *'made up of wooded hills, deep valleys and open heaths linked by sandy sunken lanes. It includes Black Down, which is the highest point in the National Park'*. Whilst the Local Plan includes strategic policies regarding safeguarding views, relative tranquillity and dark night skies (the entire National Park is defined as an International Dark Sky Reserve) these are concerned with development within the National Park and do not refer to the existing or proposed effects of overflying aircraft.

South Downs National Park Authority Tranquillity Study 2017

8.6.33 This study (South Downs National Park Authority, 2017) was undertaken to provide an evidence base to inform local planning policy and help the South Downs National Park Authority to protect and enhance areas of high tranquillity within the National Park.

8.6.34 Within this report, tranquillity is defined as:

'Tranquillity is considered to be a state of calm, quietude and is associated with a feeling of peace. It relates to quality of life, and there are good scientific evidence that it also helps to promote health and well-being. It is a perceptual quality of the landscape, and is influenced by things that people can both see and hear in the landscape around them'.

8.6.35 The tranquillity mapping exercise undertaken for the study identified the relative tranquillity of the landscape of the South Downs National Park and does not form a comparison with other areas of the country. The study identifies both visible and audible factors and both positive and negative factors and divides the National Park into three categories:

- *'Areas of highest tranquillity – should demonstrate that they conserve and enhance factors that contribute to relative tranquillity.*

- *Areas of intermediate tranquillity – are often those areas most vulnerable to change, should avoid further harm and take every opportunity to enhance it.*
- *Areas of lowest tranquillity – are often within or on the edge of urban areas, may have limited scope for enhancing tranquillity but opportunities for enhancement should be taken wherever possible'*.

8.6.36 Appendix 2 of the study includes tranquillity factors assessed within the South Downs National Park. These include negative factors defined within the study as '*seeing*', relating to overflying aircraft, as follows:

- *'low flying aircraft – aircraft are visible flying at low altitudes (estimated up to 7,000 feet)*;
- *high altitude aircraft – aircraft are visible at altitudes (estimated 7,000 feet or more)*;
- *low flying aircraft – clear audible noise from low flying aircraft can be heard'*; and
- *'high altitude aircraft – noise from high altitude aircraft can be heard at all'* (locations).

8.6.37 The tranquillity scores formed the output from the study, including a combination of the desktop Campaign to Protect Rural England data and the field based South Downs National Park Authority data. Areas of the National Park which are overflown by aircraft at up to 7,000 feet above ground level include land defined by the South Downs National Park Authority as low, intermediate and high tranquillity. Low tranquillity areas are associated with development within and around settlements and transport corridors. High tranquillity areas are rural and located away from settlements and transport corridors. Areas of intermediate tranquillity are located outside of settlements and transport corridors but are not in completely rural areas. The author considers that the data within the South Downs National Park Authority Tranquillity Study 2017 indicate that the presence of overflying aircraft does not have a defining effect on the levels of tranquillity experienced within the National Park.

Landscape Character

National Character Areas

8.6.38 Gatwick Airport and its immediate landscape context are located within the Low Weald National Character Area 121, as defined in Natural England's National Character Area (NCA) profiles which divide England into 159 Joint Character Areas (see Figure 8.4.2). Other character areas within the wider study area include High Weald NCA 122, Wealden Greensand NCA 120 and North Downs NCA 119. The national character areas provide a broad character context for the analysis of the baseline conditions and help to provide a common link between the baselines of the large scale of the wider study area for the assessment of tranquillity and the much smaller 5 km radius study area for the assessment of effects at the airport. The key characteristics of these areas are described below.

Low Weald

8.6.39 The Low Weald forms a broad arc of landscape south of London which wraps around the High Weald and extends to the coastline at the Pevensey Levels. Key characteristics include the following.

- Broad, low-lying, gently undulating clay vales with outcrops of limestone or sandstone providing local variation.

- The underlying geology has provided materials for industries including iron working, brick and glass making, leaving pits, lime kilns and quarries. Many of the resulting exposures are critical to our understanding of the Wealden environment.
- A generally pastoral landscape with arable farming associated with lighter soils on higher ground. Land use is predominantly agricultural but with urban influences, particularly around Gatwick, Horley and Crawley.
- Field boundaries of hedgerows and shaws (remnant strips of cleared woodland) enclosing small, irregular fields and linking into small and scattered linear settlements along roadsides or centred on greens or commons. Rural lanes and tracks with wide grass verges and ditches.
- Small towns and villages are scattered among areas of woodland, permanent grassland and hedgerows on the heavy clay soils where larger 20th-century villages have grown around major transport routes.
- Frequent north–south routeways and lanes, many originating as drove roads, along which livestock were moved to downland grazing or to forests to feed on acorns.
- Small areas of heathland particularly associated with commons. Also, significant historic houses often in parkland or other designed landscapes.
- The Low Weald boasts an intricate mix of woodlands, much of it ancient, including extensive broadleaved oak over hazel and hornbeam coppice, shaws, small field copses and tree groups, and lines of riparian trees along watercourses. Veteran trees are a feature of hedgerows and in fields.
- Many small rivers, streams and watercourses with associated watermeadows and wet woodland.
- Abundance of ponds.
- Traditional rural vernacular of local brick, weatherboard and tile-hung buildings plus local use of distinctive Horsham slabs as a roofing material. Weatherboard barns are a feature.

High Weald

8.6.40 The High Weald NCA 122 coincides predominantly with the upland areas of the High Weald AONB which is described in detail at paragraphs 8.6.15 to 8.6.19 and is therefore not repeated here.

Wealden Greensand

8.6.41 The Wealden Greensand NCA 120 is a linear landscape that forms a transition between the Low Weald to the south and the North Downs to the north. Key characteristics include the following.

- A long narrow, undulating landform of scarp and dip slopes including Leith Hill, one of the highest points in south east England.
- Extensive areas of ancient mixed woodland.
- Remnants of lowland heathland, unimproved acid grasslands and pasture.
- Small to medium sized irregular fields bounded by hedgerows and shaw woodland.
- Agricultural land is mixed and includes orchards in Kent.
- Settlement pattern includes dispersed farmsteads, hamlets and nucleated villages. Large houses set in parkland occur throughout the area.
- The local built vernacular includes stone, timber framing and weatherboarding.
- Historic landscape features include sunken lanes cut into the sandstone and older deer parks.
- Many streams and rivers cut through the area.

North Downs

8.6.42 The North Downs NCA 119 is a linear upland landscape north of the Wealden Greensand extending from Surrey in the west to the White Cliffs of Dover in the east. Key characteristics include the following.

- A distinctive chalk downland ridge with a steep scarp slope to the south bisected by dry valleys, deep river valleys, ridges and plateaux.
- A series of dry coombes cut into the scarp slope create an undulating topography.
- The footslope of the escarpment supports arable farmland and horticulture on richer loamy soils.
- Woodland is located on steep slopes and valley sides. Hedgerows and shaws surround fields creating a wooded character.
- Chalk grassland and heaths have rich biodiversity.
- Historic landscape features include sunken lanes cut into the dip slope, defensive installations and houses set in parkland estates.
- Settlement pattern includes scattered farmsteads and nucleated villages and oast barns. Flint, chalk and Wealden brick form vernacular materials.
- The highly developed outskirts of London fringe and influence the northern boundary of the area.

8.6.43 The National Character Area profile also defines an aspiration to *'protect the tranquillity of the landscape'….'an often remote and tranquil atmosphere offering dark night skies in places'*.

County Level Landscape Character Assessment

8.6.44 County wide landscape character assessments have been prepared by West Sussex and Surrey County Councils, which coincide with the 5 km radius study area. However, as more detailed landscape and townscape character assessments have been prepared by the six district authorities within the 5 km radius study area and as many of the character areas are duplicated at county and district level, to avoid repetition only the district assessments have formed the basis for the assessment. For completeness and to provide further context to the assessment in this chapter, relevant extracts from the West Sussex County Council Landscape Character Assessment (2007) and the Surrey County Council Landscape Character Assessment (2015) can be found in Appendix 8.6.1.

District Level Landscape and Townscape Character Assessments

8.6.45 This section refers to assessments published by local authorities and includes key features, elements and characteristics, intrinsic sensitivity, value and condition. Landscape and townscape value within the study area is expanded upon in paragraphs 8.6.77 to 8.6.95.

Crawley District

8.6.46 The landscape between Crawley and Gatwick Airport is identified in the Crawley Borough Council Draft Landscape Character Assessment (Crawley Borough Council, 2012) as being within 'Area 1- Upper Mole Farmlands' (see Figure 8.6.2).

Crawley: Upper Mole Farmlands

8.6.47 Its key characteristics are described as follows.

- Rural landscape strongly influenced by proximity of Crawley to south and Gatwick Airport to north.
- Variable field pattern and land use divided by hedgerows with small farm ponds.
- Mixed land use ranging from industrial units and hotels/motels along the A2219, pastoral and arable across the wider area with a concentration of playing fields to the south and a caravan park to the north.
- Flat to very gently undulating landscape, crossed by the upper tributaries of the River Mole.
- Generally confined views with the exception of localised high point at Rowley Farm.
- Small blocks of woodlands and copses.
- Noise and visual intrusion due to proximity to Gatwick Airport.

8.6.48 The study states that, overall, the area has a moderate sensitivity to change. Thick hedgerows, hedgerow trees and occasional woodlands to some extent reduce its visual sensitivity. Despite some noise intrusion from Gatwick much of the area is tranquil. The study considers that the landscape condition is declining due to increasing visual/noise intrusion in some parts.

8.6.49 A key issue is defined as *'the potential for the expansion of Gatwick Airport'*.

8.6.50 An objective within the study is that *'This area plays an important role in separating Crawley from Gatwick allowing greater access to the countryside for residents who live in the neighbourhoods at the north of the borough.'*

8.6.51 The area to the east of the London to Brighton railway line is shown within Area 6 North East Crawley High Woodland Fringes (see Figure 8.6.2).

North East Crawley High Woodland Fringes

8.6.52 Its key characteristics are described as follows.

- Flat to gently undulating narrow clay vale, with floodplain and upper tributaries of the River Mole in the north east.
- Pattern of small, medium and large fields with a variable density of hedgerows.
- Predominantly pasture farmland.
- Scattered tree cover, isolated woodlands and copses.
- Distinctive field trees and farm ponds.
- Major road and rail corridors and pylon lines.
- Strong suburban and urban fringe influences of Crawley and Gatwick Airport.

8.6.53 The study states that in terms of landscape character/visual sensitivity the area has a moderate sensitivity to change. Thick hedgerows, hedgerow trees and occasional woodlands to some extent reduce its visual sensitivity. The study states that the landscape condition *'is considered to be declining due to increasing visual/noise intrusion in some parts'*.

8.6.54 Key issues are defined as *'Visual and noise impact of Gatwick Airport and M23'* and *'Localised visual impact of urban fringe uses, including development of airport car parks'*.

8.6.55 An objective within the study is that *'This area is of high landscape value which should be retained for public access benefits and maintaining the separate identities of Gatwick Airport, Crawley and Horley'*.

Mole Valley District

8.6.56 The landscape north west of Gatwick Airport is identified in the Mole Valley Landscape Supplementary Planning Document (SPD) (2013a) as being within the 'Open Weald' character area.

Mole Valley: Open Weald

8.6.57 Its key characteristics are described as follows.

- Moderately open, small scale, undulating landscape.
- Small, irregularly shaped fields are divided by strong pattern of square cut hedges with regularly spaced hedgerow oaks.
- Narrow winding lanes are enclosed by low hedges or are sunken with hedge banks.
- River/streams are sunken below the surrounding land and only apparent as a result of occasional riparian alder and willow.
- Small scattered development occurs on higher ground, larger scale modern development lies on the flat plain around Gatwick.
- Church towers and farm buildings provide important focal points in short distance views.
- On-going threat of airport-related development encroaching into the rural landscape.

8.6.58 The SPD recommends the following action;

'Conservation through appropriate management of characteristic hedges, shaws, hedgerow trees and field trees.'

Reigate and Banstead District

8.6.59 The landscape north east of Gatwick Airport is identified in the Reigate and Banstead Borough Wide Landscape and Townscape Character Assessment (June 2008) as being within the 'Low Weald' character sub-area C1.

Low Weald

8.6.60 Its key characteristics are described as follows.

- The landscape has a gently changing topography forming low, raised areas and very shallow valleys. Expansive views are possible.
- A unified landscape which exhibits similar characteristics across its extents, with some variety of character where it meets urban areas.
- There are localised small blocks of woodland, some of which are designated as ancient woodland.
- The area to the east of Horley is the only part of the Borough's countryside not designated as Green Belt.
- South of Horley the landscape is interrupted and severed by human activities, transport infrastructure and development mainly due to the proximity to Gatwick Airport, rail lines and major roads. There are associated noise and visual impacts on open spaces which result in a low sensitivity to change. Green areas are frequently associated with 'horsiculture'.

8.6.61 The assessment considers the overall landscape sensitivity to be medium-high. However, the areas in close proximity to Gatwick Airport are considered to be of low sensitivity.

Townscape Character

8.6.62 The local settlements of Crawley, Horley, Charlwood and Hookwood have been identified as townscape character areas in this assessment.

Crawley District

8.6.63 A baseline character assessment of Crawley was completed in May 2009 on behalf of Crawley Borough Council (2009). The Crawley Borough Council (2009) Crawley Baseline Character Assessment identified, *'eight strategic character areas based on urban and landscape character, predominant land use and development age'.* Each of these character types also contain a number of character areas and sub-character areas (see Figure 8.6.2).

8.6.64 Crawley was designated as the site for a New Town in 1947 in order to take the overspill population from London after the second world war. Originally the town was laid out with nine neighbourhoods ringing an expanded town centre. The area of Crawley that is most relevant within this assessment due to some degree of intervisibility with Gatwick Airport is Northgate/Manor Royal which lies on the northern fringe of the town adjacent to the Upper Mole Farmlands and High Woodland Fringes referred to above.

Manor Royal (Northgate)

8.6.65 The large commercial/business area of Manor Royal lies to the west of the A23 and is within the 'Employment Areas' strategic character area. It is not covered in detail within the study albeit the following description is provided:

'The main roads (Fleming Way and Manor Royal) through the area are wide with large grassed verges and street trees and serve large development plots which have been developed on a plot-by-plot basis. Building typologies are either single or double height, brick, steel or glass with large floor plates, shallow pitched or flat roofs and a variety of sizes and styles. There are a number of office blocks / reception areas of three –six storey constructed of red or buff brick or clad'.

8.6.66 The Crawley Borough Council assessment defines the townscape quality of Manor Royal as ordinary. The urban townscape is typical and commonplace. The area has been progressively developed/redeveloped in a piecemeal way and lacks a distinct identity. The Crawley Borough Council assessment defines the townscape value as low.

8.6.67 With respect to views from the northern edge of Crawley to the West Sussex county landscape character area known as Northern Vales (LW8), the study states the following:

'Within the northern urban area views are generally restricted to local and short distance, due to the contained nature of the built form, screening provided by belts of trees, hedgerow vegetation and the generally low-lying flat topography. Along the northern fringes to the north and north-west (Ifield, Langley Green and Lowland Heath) views are limited to short distances over the rural fringe landscape. The contained nature of the urban area breaks up, allowing views over the intimate rural landscape with fields of pasture delineated by mature hedgerows and trees. In some places these views are filtered due to the break up in density of the hedgerows and tree cover; in others slightly more extensive views are possible due to larger field layouts, created by the intensification of modern farming. The presence of Gatwick Airport is also clearly evident in these fringe areas. Although the airport is not directly visible from the edge of the built-up area, aircraft continually puncture the skyline as they take-off. This land use also impacts on the rural

character of the northern pastoral plain as the large units and warehouses (many associated with airport services) in Manor Royal and Lowfield Heath provide an industrial character to the landscape'.

Horley

8.6.68 The townscape of Horley is described in the 'Borough Wide Landscape and Townscape Character Assessment', undertaken by Atkins on behalf of Reigate and Banstead Borough Council (2008) as follows:

'Mostly 1930's-1950's suburbia, arranged on straight, uniform road layout; A Victorian-Edwardian core to the town centre, including a conservation area, and localised surviving pre-Victorian development; and more recent suburban development around the edge of town, ranging from 1960's to recent development.'

8.6.69 That part of the settlement nearest to the airport is suburban in character and also includes the Riverside Garden Park beside the A23. This area once formed part of Horley Common; an area of semi-natural woodland and open grassland. The public open space at Riverside Garden Park forms a relatively attractive and well-used community asset within the townscape character area.

8.6.70 The Reigate and Banstead Borough Council assessment defines the range of townscape quality of Horley from good to ordinary. The settlement is mainly suburban in character with a Victorian/Edwardian town centre and two conservation areas. The Reigate and Banstead assessment defines the overall townscape value as medium.

Charlwood

8.6.71 The character of Charlwood is described in the Mole Valley Local Development Framework-Larger Rural Villages Character Appraisal Supplementary Planning Document (SPD) (Mole Valley District Council, 2013b). This identifies three separate areas of character within the settlement; the 'Village Core', 'Rectory Lane' and 'East Charlwood'. That part of the 'Village Core' which extends east along Horley Road is the nearest to Gatwick Airport. The main characteristics of the settlement of relevance to this study include the following:

'The village as a whole has a loose knit, sinuous form, spreading out from its core near the Parish Church and the junction of Ifield Road and The Street. Pockets of built development are interspersed with expanses of open space, notably the Recreation Ground and The Millennium Field, which bring fingers of countryside right into the heart of the settlement. These open spaces are an integral part of the character of the village.'

8.6.72 The study also notes that whilst Charlwood is near to the Crawley urban area and closer to Gatwick Airport, it still retains the '*feel of a small rural settlement'*. It also notes the importance of the fields between the settlement and the airport as '*preventing the village coalescing with the airport'* and the value of the existing noise attenuation bunds along this boundary of the airport which it states '*protect the village both visually and acoustically'*. It continues, '*although there are some clear views of the airport from high points outside the village (eg Norwood Hill), the landscaping ensures that it is hardly seen from closer quarters*.'

8.6.73 The SPD defines the townscape quality of Charlwood as high. This is an attractive townscape with a strong, intact rural village character. The SPD defines the townscape value as high.

Hookwood

8.6.74 Hookwood is described in the same SPD as Charlwood above. Two character areas are defined, 'East Hookwood' (essentially commercial) and 'West and South Hookwood' (essentially residential). The key characteristics of the latter area include the following:

'Buildings chiefly strung out along two main roads, with a small amount of backland development, mainly within the centre of the village; Concentration of original Edwardian cottages on east side of Reigate Road indicating the original heart of the village, now rather dominated by the larger scale urban areas to the south and east. Lack of clear identity to the village centre; Sporadic green landscaping, including some generous hedge and tree cover in individual properties'.

8.6.75 The SPD defines the townscape quality of Hookwood as ordinary. This is a typical and commonplace townscape with some features worthy of conservation, including Edwardian cottages on the east side of Reigate Road within the original heart of the village. The SPD defines the townscape value as medium.

Gatwick Airport Urban Character Area

8.6.76 Following review of the landscape and townscape character assessments prepared by Crawley Borough Council, within which the airport lies, it was considered the distinct character of Gatwick Airport had not been adequately described. The airport extends over an area of 850 hectares within the Low Weald of Crawley district and West Sussex county. Therefore, a further urban character area has been identified and forms the basis for the assessment of effects within the Project. The character description and baseline for the purposes of this assessment have been based on the description of the airport in paragraphs 8.6.1 to 8.6.11 of this chapter. The airport is considered to have an ordinary condition and generally a low sensitivity to change as a result of the Project.

Landscape and Townscape Value

8.6.77 As part of the baseline description of the study area the value of the landscape or townscape that would be affected has been established. The NPPF at paragraph 170 states that *'Planning policies and decisions should contribute to and enhance the natural and local environment by: protecting and enhancing valued landscapes…. (in a manner commensurate with their statutory status or identified quality in the development plan).*

8.6.78 GLVIA3 defines value as *'the relative value that is attached to different landscapes by society, bearing in mind that a landscape may be valued by different stakeholders for a whole variety of reasons. A review of existing landscape designations is usually the starting point to understanding landscape value, but the value attached to undesignated landscapes also needs to be carefully considered and individual elements of the landscape and individual elements of the landscape may also have value'*.

8.6.79 GLVIA3 includes a list of eight factors within Box 5.1 that have been used to identify landscape/townscape value. These have been used as factors in the following sections of this chapter to establish value within the study area:

- landscape quality;
- scenic quality;
- rarity;

- representativeness;
- conservation interest;
- recreation value;
- perceptual aspects; and
- associations.

Landscape Quality

8.6.80 Landscape quality, or condition, measures the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.

8.6.81 The condition of the landscape and townscape character areas, as defined in the various district character assessments which are relevant to this assessment, is described in the section above. The Gatwick Airport Urban character area generally has an ordinary quality and condition due to the large-scale commercial buildings and infrastructure, extensive areas of hardstanding and regular aircraft movements. The airport has some areas of poor condition where there are detracting features of industrial infrastructure and disused land and some areas of good condition including woodlands and watercourses. The combination of dense urban elements and remnants of rural landscape result in a low landscape/townscape quality value. The wider rural landscapes of the Upper Mole Farmlands, High Woodland Fringes and Open Weald in Mole Valley District have an overall medium value, which reduces to low value in some parts of the study area adjacent to the airport, and the Low Weald in Reigate and Banstead District has a low value within the study area. The townscapes of Crawley and Horley have a poor or ordinary condition and a low to medium value within the study area.

Scenic Quality

8.6.82 This measures the degree to which the landscape appeals to the visual senses. The visual baseline is analysed in more detail above.

8.6.83 The green infrastructure throughout the Project site combines to form an attractive and diverse element within the airport. However, the extent and dominance of large-scale built development and infrastructure within the Gatwick Airport Urban character area results in a poor scenic quality and low value overall. The juxtaposition of the airport and the rural landscape of the Low Weald create contrasting backdrops to the Project site and provide a transition in the local context to landscapes with a medium value. The airport merges almost seamlessly with the adjoining urban townscapes of Crawley and Horley which also have a low value in terms of landscape scenic quality. The rural fringes of the High Weald within the AONB, distant from the Project site, are highly valued.

Rarity

8.6.84 This is concerned with the presence of rare features and elements in the landscape or the presence of a rare character type.

8.6.85 The buildings, infrastructure and activities at Gatwick are typical of an international airport and have a low rarity value. Remnants of woodland, including ancient woodland, are present within the airport and are more typical of the wider study area of the Low Weald and have a medium/high landscape value. The surrounding landscapes of the Upper Mole Farmlands, High

Woodland Fringes and Open Weald are more typical of the rural Low Weald and are of relatively higher value, as rural landscapes in the context of the predominantly urban airport.

Representativeness

8.6.86 This analyses the features or elements within the Project site which are considered particularly important examples, which are worthy of retention.

8.6.87 The linear green space and habitats associated with the River Mole, small blocks of mature woodland at Brockley Wood, Horleyland Wood and Upper Pickett's Wood and woodland belts, hedgerows and copses form an extensive network of natural features around the fringes of the airport. These features are important within the airport, require retention and add positively to the character of the Project site and surrounding landscape and townscapes within the study area.

Conservation Interests

8.6.88 This considers the presence of features of wildlife, earth science or archaeological or historical and cultural interest can add value to a landscape.

8.6.89 There are four areas of ancient woodland within the Project site of which one, at Horleyland Wood, is also a Local Wildlife Site. Several further areas of ancient woodland are located south east of the airport within the High Woodland Fringes character area. Land east of the railway and the north-west zone is managed for long term benefits of biodiversity as part of the Gatwick Greenspace Partnership. A Grade II* listed building at Charlwood Farmhouse is located on the north western side of the airport and two Grade II listed buildings at the Courtyard Marriot Hotel are located on the eastern side of the airport. Due to the close proximity of car parks and airport infrastructure to these buildings, their context is relatively poor. The conservation area located around St Bartholomew's Church in Horley lies on the northern edge of the Project site. Other conservation assets within the surrounding landscapes and townscapes have a limited relationship with Gatwick Airport and the Project site due to their location within urban areas or lack of intervisibility with the airport. Overall, the land within the Project site has a low conservation value.

Recreation Value

8.6.90 Several public rights of way including the Sussex Border Path are located within the airport, mainly associated with the River Mole corridor to the north west and the woodlands east of the railway. The National Cycle Route 21 follows the railway line, passing beneath the A23 and through Riverside Garden Park at Horley. This network of routes is well used by the local community and members of staff at Gatwick Airport. The recreational value of the footpaths that cross the Project site and link with the surrounding landscape and townscape is medium. The public open space at Riverside Garden Park lies within Horley Townscape character area. This forms a relatively attractive and well-used community asset with a medium/high recreational value.

Perceptual Aspects

8.6.91 A landscape may be valued for its perceptual qualities, notably wildness and/or tranquillity.

8.6.92 The range and extent of development and activities at Gatwick Airport including the frequent take-off and landing of aircraft define the urban character of the Project site. Consequently, the Gatwick Airport Urban character area cannot be defined as wild and largely precludes a sense of

tranquillity, even in the areas of mature woodland, resulting in a low value. The surrounding farmed landscape and large settlements of the Low Weald also cannot be defined as wild. The large-scale commercial buildings and infrastructure, extensive hardstanding, carparks, aircraft, lighting and aircraft noise and movements associated with the airport together with the large settlements of Crawley and Horley have an adverse influence over the landscape of the Low Weald and influence the tranquillity of the landscape. The concentration of light sources at the airport create a sky glow effect, which is repeated at Crawley, particularly on the northern edge at Manor Royal, which lies adjacent to Gatwick. This character is in contrast to the dark skies and relative night time tranquillity associated with the High Weald AONB to the south. The visual and noise impacts of Gatwick Airport and its potential expansion and the urban centre of Crawley are referenced within district landscape character assessments as an adverse influence over the surrounding landscape. Much of the Upper Mole Farmlands south of Gatwick are described as tranquil within these assessments however, this should be interpreted as relative tranquillity compared to the large scale developments associated with Gatwick Airport and Crawley rather than absolute tranquillity. In close proximity to Gatwick Airport the rural landscapes of the Low Weald in Reigate and Banstead District, the Open Weald in Mole Valley District, and the Upper Mole Farmlands and High Woodland Fringes in Crawley District have a low value in terms of perceptual aspects. The townscape character areas of Crawley and Horley all have low value due to their urban nature.

Associations

8.6.93 Farmland at Gatwick was cleared to create an aerodrome in the late 1920s and has been used for commercial flights since 1933. The first terminal known as ‘The Beehive’ (Grade II* listed) was built in 1935 as a circular building with surrounding taxiways. The building has been redeveloped and currently stands outside the operational airport within the City Place Gatwick office complex. Historically the Gatwick Racecourse occupied the north east side of the current airport from 1891 to 1940. The locations’ operation as a commercial airport forms the main cultural or historic association with the area. The St Michael and All Angels Church at Lowfield Heath is Grade II* listed and lies just outside the Project site boundary. The building has associations with the Gothic Revival architect William Burgess and is the only remaining building in the former village following the development of Gatwick Airport.

Summary of Landscape Value

8.6.94 The overall value of the Gatwick Airport Urban character area is considered to be low. The extensive built development and infrastructure at Gatwick are typical of an international airport. They are largely dictated by the function of the airport and are not highly valued with regard to any of the eight criteria above. The green infrastructure associated with the River Mole, blocks and belts of mature woodland, hedgerows and trees have a greater value and will be protected and enhanced, where possible, within the Project. This green infrastructure links into the surrounding Low Weald, providing a transition from the urban character of the airport and the largely agricultural character of the landscape and makes a positive contribution to the wider area. One of the most valued aspects of the Project site and surrounding landscapes and townscapes is the recreational opportunity that the public rights of way network and open spaces offer the local community. Therefore, whilst relatively minor elements of the Project site have some attractive or scenic qualities and has some wildlife interest and links to public open space at Riverside Garden Park, these are not considered sufficient to elevate the land within the Project site to a landscape that is highly valued.

8.6.95 The NPPF requires landscapes or townscapes that are not statutorily designated to have attributes of a sufficiently high quality to qualify as 'valued landscapes', to ensure their protection and enhancement. The mosaic of land uses within the Project site do not combine to create highly valued special qualities. The airport's relationship, both physical and visual, with the landscapes and townscapes of the study area in which it is located would be largely retained.

Visual Resources

8.6.96 Site surveys have identified a range of visual receptors within the 5 km radius study area. Receptors can be categorised in the following main groups:

- walkers and equestrians using public rights of way;
- cyclists;
- occupiers of residential properties;
- occupiers of commercial properties;
- occupiers of vehicles and trains;
- visitors to Gatwick Airport; and
- members of staff working at Gatwick Airport.

8.6.97 All main receptor groups with potential views of the Project have been described within this chapter. Seventeen viewpoint locations which are representative of key visual receptor groups have been identified and photography undertaken in summer, winter and at night (winter) to provide a more detailed understanding of publicly available views and potential effects on visual amenity (see Figures 8.4.4 to 8.4.20). The level of perceived tranquillity is also defined for each receptor group and viewpoint location. The viewpoints are described below.

Existing Views

Viewpoint 1: Perimeter Road North and public right of way 346/2Sy, Sussex Border Path

8.6.98 This is an enclosed view looking west towards the North Terminal from public right of way 346/2Sy which follows the roadside pavement on Perimeter Road North within Gatwick Airport. Racecourse Road lies behind the security fencing to the left of the view. The distinctive serpentine form of the concrete acoustic wall frames the left side of the view, visible through an avenue of mature lime trees. The Sofitel Arora Hotel and Premier Inn at the North Terminal form large-scale built forms. A decked car park lies in front of the Sofitel, obscuring the base of the building. Jubilee House and Pier Four form lower level buildings, partly visible through the security fence and trees. The raised deck of the tramway shuttle is visible to the right of the view. Earth shaping and mature tree and shrub planting flow between the complex infrastructure, providing visual integration of the built form. In the summer, when trees are in leaf, the buildings and infrastructure are more heavily filtered and screened and become less visually prominent.

8.6.99 At night, lighting columns provide a well-lit road corridor and light sources within the hotels, Pier Four and decked car park define the size and scale of the built form. Lighting at the North Terminal and in airside locations provides a backdrop of skyglow.

8.6.100 Pedestrians using a pavement beside a busy road within the airport, surrounded by buildings, infrastructure and lighting are influenced by traffic and aircraft noise and perceive a low level of tranquillity.

Viewpoint 2: Short Stay Multi-Storey Car Park 3

8.6.101 This is an open view looking north from the open upper deck of the multi-storey car park at South Terminal. The parallel structures of the tramway shuttle station and line, mainline railway, raised road deck and ground level Coach Road combine to form a wide transport corridor below the level of the viewer. The hotels at North Terminal are visible on the left side of the view. The A23 Airport Way bridge over the railway, and the traffic moving on it, are visible within a gap in the mature roadside vegetation. The toll booths at the short stay car park are visible through trees to the right of the view. The majority of the middle distance of the view comprises dense woodland vegetation associated with the A23 corridor, Gatwick green infrastructure or Riverside Garden Park, which screens Horley. The tops of lighting columns are visible rising above this. The distant horizon is formed by the ridge of higher land within the Surrey Hills AONB. In the summer, when trees are in leaf, the buildings and infrastructure at Gatwick Airport are more heavily filtered and screened and become less visually prominent.

8.6.102 At night, lighting columns illuminate the transport corridors. Light sources within trains, the shuttle, the station and hotels are prominent. The distant rural backdrop is largely dark.

8.6.103 Visitors to the airport using the upper deck of a multi-storey car park surrounded by buildings, infrastructure and lighting and influenced by traffic, train and aircraft noise also gain distant views of a rural landscape; however, overall receptors perceive a low level of tranquillity.

Viewpoint 3: Car Rental South Terminal, public right of way 360/Sy

8.6.104 This is a framed view looking north from the public right of way as it crosses an access road at the car rental site of the cluster of buildings and structures at South Terminal. Hedgerows and trees surround the car park in front of the low-rise car rental buildings beyond. A row of hornbeam trees east of the car park partially screens and softens the raised deck of the Upper Forecourt road. The large blocks of the Blue and Red short stay multi-storey car parks rise up behind. Moving traffic at different levels adds to the dynamic character of the view.

8.6.105 At night, lighting columns illuminate the car park, transport corridors and multi-storey car park. Light sources from cars and buses and within buildings are prominent.

8.6.106 Walkers using the public right of way are surrounded by large buildings, car parks, railway line, moving traffic and lighting. Walkers are influenced by traffic and aircraft noise and perceive a low level of tranquillity.

Viewpoint 4: River Mole public right of way 346, Sussex Border Path

8.6.107 This is a channelled view looking north east from the public right of way 346/1Sy beside the narrow channel of the River Mole at Povey Cross. Woodland frames the view to the left and a woodland strip on an earth mound screens views into the airport to the right. The upper parts of the Travelodge Hotel on the A23 are visible rising up above a narrow belt of mixed deciduous and coniferous woodland. In the summer when vegetation is in leaf, built development is almost completely screened.

8.6.108 At night, the light sources at the hotel are prominent in the relatively dark context. Skyglow created by lighting within the airport is visible through the trees to the right.

8.6.109 Walkers using the public right of way experience a narrow green corridor close to development at the airport and Povey Cross and associated noise sources and therefore perceive a low level of tranquillity.

Viewpoint 5: River Mole public right of way 346, Sussex Border Path

8.6.110 This is a channelled view looking south west from public right of way 346/1Sy beside the River Mole, south of houses at Povey Cross Road. Narrow belts of woodland planting on higher land to the right and a steep earth bund to the left frame the view. Scrubby Goat Willow and patches of reed follow the river channel. In summer the foliage provides a dense screen around the viewer.

8.6.111 At night, lighting columns on Perimeter Road North are partly visible through trees in winter and some skyglow is visible generated by Gatwick Airport.

8.6.112 Walkers using the public right of way experience a narrow green corridor close to development at the airport and Povey Cross and associated noise sources and therefore perceive a low level of tranquillity.

Viewpoint 6: Riverside Garden Park, National Cycle Route 21

8.6.113 This is an enclosed view looking south west towards the A23 from the main footpath and National Cycle Route 21 through the park. The large pond forms an open foreground to the view, surrounded by predominantly native trees and shrub planting. A double row of hedgerow and tree planting either side of a public right of way beside the A23 forms a backdrop to the view. The tops of lighting columns, road signs and traffic are visible rising above the vegetation. The route through the public open space is well used. In summer, the vegetation screens most views of the A23 corridor, creating a more secluded space, although traffic noise is still apparent.

8.6.114 At night lighting columns within the park and along the A23 create a partly lit environment. Skyglow created by light sources at Gatwick Airport illuminates the backdrop.

8.6.115 Cyclists using the cycleway experience a green space in close proximity to views of the A23 corridor and noise from traffic and aircraft. Within the context of Horley and the airport the space has a medium perception of tranquillity; however, in terms of absolute tranquillity a receptor's perception is of low levels.

Viewpoint 7: Horley Riverside

8.6.116 This is a restricted view looking south west from the residential edge of Horley beside Riverside Garden Park. An area of disused hardstanding and low grass bund define the foreground. Mature native planting beside the Gatwick Stream and within the park create many layers of vegetation around open grassy areas. Glimpses of moving traffic on the A23 are barely discernible. In summer the foliage creates a dense screen, obscuring views beyond.

8.6.117 At night, lighting columns within the park and along the A23 is visible, filtered through vegetation, in winter only.

8.6.118 Receptors within properties on the edge of the settlement look from an urban environment into an urban green space with a main transport corridor beyond and overhead aircraft noise. Receptors perceive a low level of tranquillity.

Viewpoint 8: Public right of way 362a north of the A23 and South Terminal

8.6.119 This is an open view (approximately 48 metres to Project site boundary) looking south across a grazed horse paddock from public right of way 362a which links residential areas of Horley. The A23 crosses the view on embankment in the middle distance. Woodland planting on the slopes partly screen views of the moving traffic and buildings and infrastructure at Gatwick Airport beyond. Large buildings at the South Terminal are prominent beyond the railway overbridge to the right of the view. The South Terminal Welcome Arch is visible to the left of the view. Lighting columns and road signs are partly visible rising above highways planting. In summer when vegetation is in leaf, most infrastructure is screened, except the top of the South Terminal buildings and the entrance sign and a brief glimpse of the road traffic as it crosses the bridge over the railway.

8.6.120 At night, the concentration of lighting associated with the South Terminal buildings and the Gatwick Airport entrance gantry sign at the Airport Way roundabout are conspicuous beyond a dark foreground. The row of lighting columns along the A23 and the traffic travelling along it are also visible. General lighting within the airport creates a skyglow effect on the right side of the view.

8.6.121 Walkers passing through this urban fringe landscape gain views of development at the airport and the traffic on the A23. Noise from the road, railway and overflying aircraft and the well-lit context combine to create a low level of tranquillity.

Viewpoint 9: Balcombe Road at Pentagon Field

8.6.122 This is an open view looking north west across the cattle grazed Pentagon Field from a field entrance gate on Balcombe Road on the edge of the Project site boundary. Scrubby vegetation around a substation frames the view to the left and roadside hedgerows frame the view to the right. Hedgerows and mature trees around the field boundary filter views to Gatwick Airport's long stay surface car parks, decked car park and the green clad Courtyard by Marriott Hotel beyond. In summer the foliage screens all but a narrow glimpse of the upper levels of the hotel.

8.6.123 At night lighting columns associated with surface parking and light sources at the hotel are visible through the trees. Other light sources within the airport are less visible and more widely spaced across the remainder of the view. Skyglow is visible on the left side of the view towards the main airport area.

8.6.124 Receptors traveling along the road gain an urban fringe experience of fields, hedgerows and airport infrastructure glimpsed through trees. Traffic noise and the dominant influence of overflying aircraft immediately overhead create a low level of perceived tranquillity.

Viewpoint 10: Public right of way 359/Sy at Pentagon Field

8.6.125 This is an open view looking south across the cattle grazed Pentagon Field from a field entrance gate. Walkers using the public footpath 359/Sy, which follows a private access track from Balcombe Road, gain a brief view into the field framed by hedgerows and trees. The low managed field boundary hedgerow on Balcombe Road is visible to the left with the taller vegetation on the opposite side of the road beyond. Mature woodland at Pickett's Wood to the south of Pentagon Field and mature trees along the hedgerows to the west form a dense band of vegetation extending across the view from the right, obscuring views of the airport and the landscape beyond. Two mature oak trees lie within the field as focal points.

8.6.126 At night, lighting columns associated with surface parking and light sources at decked car parks are visible through the trees, more so in the winter when vegetation is not in leaf. Some skyglow is visible to the right of the view towards the main airport area.

8.6.127 Walkers using the path gain a rural fringe experience of fields, hedgerows and airport infrastructure glimpsed through gaps in vegetation. Traffic noise and the dominant influence of overflying aircraft immediately overhead create a low level of perceived tranquillity.

Viewpoint 11: Public right of way 360/1Sy at Tinsley Green

8.6.128 This is an open view looking west where the public right of way crosses the access road to the Crawley Sewage Treatment Works. Hardstanding, piles of materials and storage containers form discordant elements in the foreground. Hedgerows and mature oak trees form attractive historic field boundaries crossing the Project site and subdividing the parcels of grassland. Framed views into neighbouring fields are possible. Glimpses of large industrial buildings at the sewage treatment works can be gained to the right of the view. Views of the adjacent water drainage feature are obscured in the summer.

8.6.129 At night there are limited light sources within the view. Lighting at the sewage works may be visible and the general skyglow from the edge of Crawley and the airport.

8.6.130 The footpath beside woodland and open land with glimpses of infrastructure at the sewage works and background noise of traffic and overflying aircraft create a perception of a low level of tranquillity.

Viewpoint 12: Bridleway public right of way 352/Sy at Rowley Farm

8.6.131 This is an open view (approximately 340 metres to Project site boundary) looking north from public right of way 352Sy that crosses elevated land at Rowley Farm. Pasture fields divided by unmanaged hedgerows and trees extend across the foreground and slope down towards the airport. This vegetation combines visually with the woodland strip planted north of the A23 London Road to form a buffer to commercial development at Lowfield Heath and the buildings and infrastructure of Gatwick. The view is orientated towards the airport runways where aircraft taking off or landing diminish the perception of tranquillity within the urban fringe landscape of the Low Weald. The spire of the St Michaels and All Angels Church at Lowfield Heath forms a local landmark to the left of the view within the same angle of view as the large pale block of the Boeing hangar. The cluster of tall buildings at South Terminal rise up above the trees to the right of the view. Ridges of high land at Norwood Hill and the Surrey Hills AONB are visible on the horizon beyond. In summer the hedgerows and trees when in leaf screen many views of airport infrastructure and development at Lowfield Heath; however, the tops of the tallest buildings remain visible.

8.6.132 At night, lighting within airport buildings and car parks is visible as clusters of light on the left and right edges of the view, contrasting with the dark foreground of the farmed fields. The different types and colours of lights and illuminated signs are particularly apparent at the South Terminal. The concentration of lighting at Gatwick creates a skyglow effect within views.

8.6.133 The bridleway crosses a small remnant of farmland between the large-scale airport infrastructure and commercial edge of Crawley. In combination with traffic on the A23 and aircraft taking off and landing, receptors experience a low level of tranquillity.

Viewpoint 13: Ifield Road

8.6.134 This is a narrow, glimpsed view (approximately 940 metres to Project site boundary) looking east through a gap in the hedgerow beside a layby on Ifield Road. The view is aligned along the airport runways, directly beneath the flightpath of aircraft taking off or landing which diminishes the perception of tranquillity within the Low Weald landscape. The foreground and middle distance are occupied by open farmland with few trees or hedgerows. The flat open expanse of runways, taxiways and grassland lie within the centre of the view. This corridor is flanked by the buildings and infrastructure at Gatwick Airport. The South Terminal, piers, Boeing hangar, control tower and parked aircraft combine to form a cluster of development to the left of the view, partly screened by the noise bund on the western edge of the airport. Commercial development at Lowfield Heath, Gatwick staff car park and the decked Purple Parking and buildings on Lowfield Heath Road are visible to the right of the view. Woodland belts and blocks on Charlwood Road and around the car parks at South Terminal form a green buffer across much of the view, screening the wider landscape. In summer vegetation in leaf provides a greater degree of screening, however the airport infrastructure remains distantly visible.

8.6.135 At night, the concentration of light sources within the airport form a prominent strip of light across the view in an otherwise largely dark, rural landscape. Rows of runway lights are visible in the centre of the view within the largely dark expanse of grassland. A noticeable, wider skyglow effect is also created by the airport lighting which influences night time tranquillity within the Low Weald landscape. Lights on overflying aircraft are also prominent as moving light sources.

8.6.136 The immediate context of the view is rural farmland. However, the nearby airport and the dominant influence of overflying aircraft immediately overhead lead to a low level of tranquillity.

Viewpoint 14: Public right of way 344, Sussex Border Path east of Charlwood

8.6.137 This is a channelled view (approximately 360 metres to Project site boundary) looking south east across pasture farmland from public right of way 344 that follows a farm track. Hedgerows are managed to eye level, limiting views into field parcels or across to the surrounding landscape. Woodland planting along Horley Road and the River Mole on the north west side of Gatwick Airport screen most views of buildings and infrastructure. The control tower is visible, framed by mature trees in the foreground. The top of the Virgin hangar is visible above woodland to the right of this. The top of the Boeing hangar is visible in the centre of the view with the buildings of the 'Aquatics To Your Door' commercial property on Horley Road visible in front. In summer, the hedgerows and trees screen all views of Gatwick Airport infrastructure and buildings.

8.6.138 At night the control tower, and hangars are visible as illuminated structures in a predominantly dark rural landscape. The concentration of lighting at Gatwick creates a skyglow effect within views which influences night time tranquillity within the Low Weald landscape.

8.6.139 Walkers experience a rural landscape of farmed fields which is influenced by large scale buildings and infrastructure at the airport, visible beyond the treeline. Lighting and the sight and sound of aircraft taking off and landing create the perception of a low level of tranquillity.

Viewpoint 15: Norwood Hill

8.6.140 This is a distant open view (approximately 2.61 km to Project site boundary) looking south east across horse paddocks and farmland from Norwood Hill Road. Small woodland copses and mature hedgerow trees combine to form a band of vegetation, beyond which the infrastructure

and buildings at Gatwick Airport are visible. Tall structures and buildings including the North and South Terminals, Travelodge and Airport Inn, control tower and Boeing hangar are visible in the centre and left side of the view. On the right side of the view, the airport infrastructure visually merges with the Manor Royal Business Park and the urban centre of Crawley, extending the narrow strip of development across the whole view. The dark, wooded hills of the High Weald AONB form a backdrop to the view. In summer the foreground trees and woodland provide additional screening when in leaf; however, the airport and Crawley form a distant focus of the view.

8.6.141 At night, the concentration of lights at Gatwick Airport and Crawley form a distinct ribbon of light forms and colours across the whole view, contrasting with the dark rural foreground and background of the High Weald AONB. The lighting creates a wider skyglow effect which influences night time tranquillity within the Low Weald landscape.

8.6.142 The immediate context of the view is rural farmland; however, the distant views of the airport and Crawley and the visible and audible overflying aircraft lead to a medium level of tranquillity.

Viewpoint 16: Turners Hill

8.6.143 This is an open view (approximately 5.78 km to Project site boundary) looking north-west from elevated land within the High Weald AONB on the northern edge of the settlement of Turners Hill. A ‘pick your own’ property lies in the foreground comprising grass parking area with huts and outbuildings. The view extends over the top of trees within woodland copses that lie on land that slopes down to Crawley. Urban development is visible as a pale band of geometric blocks at Manor Royal on the northern edge of Crawley and within Gatwick Airport. The control tower forms a very small but distinctive vertical element within the view. Aircraft are visible taking off to the left of the view. The gently undulating landscape of the Low Weald continues beyond with the higher land of the Surrey Hills AONB in the far distance. A pylon tower is visible as a vertical element in the foreground. The distant sound of aircraft is apparent on a still day, although not particularly prominent.

8.6.144 At night, the concentration of lights at Gatwick Airport and Crawley create a distinct ribbon of light forms and colours across the centre of the view, contrasting with the dark rural foreground of the High Weald AONB and dark background of the Low Weald and Surrey Hills AONB. The skyglow effect is less apparent at this distance.

8.6.145 The immediate context of the view is rural farmland; however, the distant views of the airport and Crawley and the visible and audible overflying aircraft lead to receptors perceiving a medium level of tranquillity.

Viewpoint 17: Tilgate Hill Crawley Borough Council ‘Important View’

8.6.146 This is a distant framed view (approximately 5.23 km to Project site boundary) looking north from the car park at Tilgate Park. Groups of trees in grass cover a steep slope on the northern edge of the park. Narrow view corridors between trees extend over suburban development at Tilgate. The tops of tall buildings within the centre of Crawley are visible as pale blocks above the tree line. Aircraft are visible taking off from Gatwick Airport beyond the belt of intervening trees and buildings. The far distance is concealed by mist and would include the landscapes of the Low Weald and the Surrey Hills AONB. The distant sound of aircraft at Gatwick Airport is apparent, which is emphasized when the aircraft are also visible.

8.6.147 At night, street lighting within residential areas of Crawley is visible extending into the mid-distance. A greater concentration of light sources is visible within the centre of Crawley. Lighting at Gatwick Airport is visible beyond this as a minor intensification of light sources in the view, together with a general skyglow effect. The rural landscape of the Surrey Hills forms a dark backdrop.

8.6.148 Visitors to the park experience urban green space on the edge of a large settlement. Aircraft taking off at Gatwick are audible and briefly visible. Within the context of Crawley, the park has a medium perception of tranquillity; however, in terms of absolute tranquillity a receptor's perception is of low levels.

8.6.149 Figure 8.4.21 shows the locations of visual receptors also considered within this chapter that are not represented by a viewpoint location photograph.

Gatwick Overflights and Tranquillity

8.6.150 The Project would increase the number of flights in the area around Gatwick Airport. The methodology for assessing Airspace Change (CAP1616) requires the landscape, townscape and visual resources assessment to consider effects on the perception of tranquillity due to increased overflights within nationally designated landscapes.

8.6.151 The noise team have prepared a methodology for capturing and assessing overflight data that has informed the baseline for the assessment of effects on tranquillity (see Chapter 14 of the PEIR Appendix 14.9.2). An aircraft is defined as overflying an observer if it passes within 1.8 km of the observer at a height of 7,000 feet above local ground level. The Gatwick overflight baseline data are based on 92 days in summer 2018 and presented within a grid size of 3.6 km aligned with the runway orientation. The data for an average 24 hour period are presented as a heat map with the number of overflights defined for each grid square ranging from 1 to 10, 10 to 50, 50 to 100, 100 to 200 and greater than 200 (see Figure 8.6.3).

8.6.152 The baseline data capture all air transport movements associated with Gatwick Airport for arriving and departing aircraft. Arrival and departure routings will not change as a result of the Project and hence the baseline data show where effects due to an intensification of existing noise or visual impacts are likely to occur. Receptors within the landscape outside of these routes have been scoped out of the assessment as there are no proposed changes to routing and therefore these areas would not be overflown (and no change in tranquillity as a result of the Project is likely). No impacts are anticipated beyond this wider study area and effects on designated landscapes outside these areas have therefore been scoped out of the assessment.

8.6.153 To enable a complete baseline situation to be defined, non-Gatwick flights have also been assessed. These mainly originate from Heathrow Airport and Redhill aerodrome. To capture these non-Gatwick flights within the study area, GAL provided ten days of radar data within approximately 35 miles of Gatwick Airport during June and July 2018. A second heat map has been created which combines the two sets of data to form a complete baseline situation, indicating the results (see Figure 8.6.4).

8.6.154 The four nationally designated landscapes within this study area comprising the High Weald, Surrey Hills and Kent Downs AONBs and the South Downs National Park have been incorporated into these overflight heat maps to provide a baseline for the assessment of effects on tranquillity.

8.6.155 Figure 8.6.3 illustrates that a large proportion of the High Weald AONB coincides with existing Gatwick overflights at less than 7,000 feet above ground level. The main concentration of flights extends in a corridor east and fanning out and curving round to the south and west. Over 200 flights a day pass over areas to the east of Gatwick Airport in a corridor south of Edenbridge. A broader corridor of the AONB extending east and south from Hever to Crowborough is overflown by between 100 and 200 flights a day. These areas include popular and distinctive locations such as Hever Castle and the Ashdown Forest. Hever Castle is surrounded by formal gardens and parkland that are Grade 1 listed on the English Heritage Register of Historic Parks and Gardens. Visitors to the gardens experience a relatively large number of either visible or audible overflying aircraft. Ashdown Forest comprises a series of connected commons of open heathland and woodland fringes on a high sandy ridge. This is the largest area of public access land in the south east of England. Visitors to the landscape generally experience between 50 and 100 either visible or audible overflying aircraft within open and expansive views that are not typical of the wider East Sussex landscape and therefore valued by visitors. The majority of the remaining area of the AONB overflown at less than 7,000 feet by Gatwick aircraft lies in the north western half of the designation. Areas are generally overflown by 1 to 10 flights a day with smaller areas of 10 to 50 and 50 to 100 flights a day. Wakehurst Place Royal Botanic Gardens forms a popular location within this area. There is a narrow area of land close to and south of the airport which is not generally overflown. It extends from north Horsham, across Crawley and thereafter across the north fringes of the High Weald AONB towards the eastern edge of East Grinstead.

8.6.156 Large areas of the Surrey Hills AONB are overflown by Gatwick aircraft. A broad area of the designated landscape south of Godalming to Haslemere is overflown by 1 to 10 flights a day and an area east of Godalming to Dorking is generally overflown by 1 to 10 or 10 to 50 flights a day with a small area overflown by 100 to 200 flights a day. These areas include popular and distinctive locations such as Leith Hill and Witley and Milford Commons. Leith Hill lies within a large wooded landscape on the Greensand Ridge and is one of the highest points in the south east of England. Visitors to this popular viewpoint experience relatively low numbers of either visible or audible overflying aircraft within panoramic views. Witley and Milford Commons comprise a series of connected areas of public access land of open heathland and woodland fringes, owned by the National Trust. Visitors to the landscape experience either visible or audible overflying aircraft within open and expansive views.

8.6.157 Smaller areas of the landscape along the M25 corridor on the southern edge of the Kent Downs AONB between Merstham and Westerham and south of Sevenoaks are overflown by between 1 and 10 Gatwick flights a day. In these locations, the visible or audible presence of Gatwick aircraft make a limited contribution to the level of tranquillity experienced by people using the landscape of the Kent Downs AONB.

8.6.158 Areas on the northern fringes of the South Downs National Park are also overflown at less than 7,000 feet. This includes a larger area west of Petworth to Midhurst and north to Haslemere which is generally overflown by 1 to 10 flights a day. These areas include popular and distinctive locations such as Petworth House and Park and the Temple of the Winds at Blackdown. Petworth House is surrounded by pleasure grounds and a deer park designed by Capability Brown that are Grade 1 listed on the English Heritage Register of Historic Parks and Gardens. Visitors to the park experience a relatively small number of either visible or audible overflying aircraft. The Temple of the Winds at Blackdown comprises a mosaic of open heathland and woodland on a high ridge. Visitors to the landscape experience a relatively small number of either visible or audible overflying aircraft within open views. A smaller area of the national park north of Brighton

and Lewes and south to Seaford is also overflown by 1 to 10 Gatwick flights a day. These areas include popular and distinctive locations such as Ditchling Beacon and Firle Beacon which are linked by the South Downs National Trail. These two locations lie within open, farmed downland above the Sussex coastline. Visitors to the landscape experience a relatively small number of either visible or audible overflying aircraft within panoramic open views. In these locations, the visible or audible presence of Gatwick aircraft would make a limited contribution to the level of tranquillity experienced by people using the landscape of the South Downs National Park.

8.6.159 Tranquillity mapping prepared by CPRE has also been consulted as part of the baseline data gathering exercise. The CPRE map defines tranquillity based on land uses such as settlements, transport corridors and large scale industrial/commercial uses (see Appendix 8.6.2). The map does not take into consideration the effects on tranquillity of overflying aircraft in the wider landscape. There is no corridor to the east and west of Gatwick Airport, corresponding with the greatest concentration of aircraft taking off and landing, that is defined as less tranquil than the underlying land uses. Therefore, it does not appear that the presence of any overflying aircraft has formed part of the methodology for defining tranquillity.

Future Baseline Conditions

8.6.160 Several developments at Gatwick Airport are currently under construction and are due for completion shortly/have been completed since the surveys for the PEIR were completed. These developments are sufficiently far advanced that the scale, mass and architectural treatment can be understood within the existing baseline and they appear in baseline photography:

- Boeing hangar (under construction at time of survey, now operational);
- M23 Smart Motorway Project; and
- Temporary maintenance hangar.

8.6.161 Other known developments that are proposed/consented include the following:

- extension to Pier 6;
- alterations to Taxiway Quebec;
- reconfiguration of aircraft stands;
- resurfacing of the main runway in accordance with the usual maintenance schedule;
- replacement of the Instrument Landing System (ILS) localisers.
- multi-storey car park 4 (1,500 vehicles);
- multi-storey car park 7 (2,750 vehicles);
- use of robotics technology within existing long stay parking areas to increase capacity, resulting in an additional 2,500 spaces;
- highway improvements to North Terminal and South Terminal roundabouts, signalisation and signage;
- extension to the existing BLOC hotel (approximately 200 additional bedrooms);
- reconfiguration of the existing Hilton hotel to provide 50 additional bedrooms: and
- Gatwick Station improvements.

8.6.162 Multi-storey car parks 4 and 7 are likely to result in the greatest change to the existing baseline situation. Multi-storey car park 4 will be located immediately north of the existing short stay multi-storey car park 3 at South Terminal. The development will form a logical continuation of the scale, form and architectural treatment of built development in this location. Some mature trees and shrubs will be removed to accommodate the building, reducing the extent of green infrastructure

and increasing the mass of built form at South Terminal. The development will form an extension and intensification of the established building cluster at the airport. Multi-storey car park 7 will be located immediately north of Tunnel Road at North Terminal. The development will extend the scale and form of built development in this location, although it will adopt a different architectural treatment to existing buildings, which do not include multi-storey car parks. The building will be constructed on an existing surface car park and will not require the removal of any vegetation. The development will form an intensification of the established building cluster at the airport.

8.6.163 These developments will combine to create a slightly more intensely developed airport character. Each of the future baseline developments will reinforce locally distinctive patterns of development at Gatwick Airport and will not result in an overall change in the character or composition of the airport. The developments will not exert any additional influence over the surrounding landscape and townscape character areas or visual receptors within the study area.

8.6.164 All of these future baseline developments are scheduled to be complete by 2024. The completion of multi-storey car park 4 at South Terminal will obscure views from the short stay car park 3 for visitors to the airport, represented in Viewpoint 2. Any influence over the neighbouring landscape character area of Low Weald at Horley or views from this landscape or urban fringe would be barely perceptible. Therefore, there will be no difference in the future baseline situation for the purposes of the assessment within this chapter for the years 2024 to 2029, 2030 to 2032, 2033 to 2038 or 2038.

Air Traffic Movements Future Baseline Conditions

8.6.165 The effects on the perception of tranquillity within the study area are informed by data presented within Chapter 14: Noise of the PEIR. Chapter 14 focuses on the 2032 and 2038 assessment years, as the predicted changes in air traffic movements are likely to be greater than in the opening year of 2029. In terms of noise emission levels, the 2032 future baseline has been modelled based upon air traffic forecasts which include changes in the aircraft fleet to quieter types. It is predicted that in 2032 there would be a reduction in the area of landscape and townscape affected by aircraft noise and, therefore, the number of residents affected living in the affected area. Between 2032 and 2038 the fleet would continue to change to quieter types, resulting in further reduction in baseline levels.

8.7. Key Project Parameters

8.7.1 The assessment has been based on the parameters identified within Chapter 5: Project Description.

8.7.2 Table 8.7.1 below identifies the key parameters most relevant to this assessment. Where options exist, the maximum design scenario selected is the one having the potential to result in the greatest effect on an identified receptor or receptor group. Effects of greater adverse significance are not predicted to arise should any other option identified in Chapter 5 be taken forward in the final design of the Project.

Table 8.7.1: Maximum Design Scenarios

Potential Impact	Maximum Design Scenario	Justification
Initial Construction Phase: 2024-2029		
Airport character. Visual amenity: A23 and internal roads, railway, staff car parks.	Main contractor construction compound MA1 (up to 5 hectares including infrastructure up to 30 metres high)	Maximum footprint and height of development
Airport character. Visual amenity: Gatwick staff/visitors.	Airfield satellite contractor compound (up to 6 hectares including infrastructure up to 30 metres high)	Maximum footprint and height of development
Landscape/townscape character. Visual amenity: Horley residential edge, Balcombe Road and internal roads, multi-storey car parks, ITTS, railway, McDonalds, KFC, Schlumberger House, Marriot Hotel. Riverside Garden Park, Premier Inn and Travelodge, River Mole footpath, A23 and internal roads, multi-storey car parks, surface carparks, ITTS	Surface access satellite contractor compounds, South Terminal (up to 2 hectares including infrastructure up to 15 metres high), North Terminal (up to 1.6 hectares including infrastructure up to 15 metres high)	Maximum footprint and height of development and vegetation removal
Airport/Landscape character. Visual amenity: public footpaths, Balcombe Road, car parks,	Pentagon Field decked parking: 8.8 hectares to accommodate 5,800 cars up to 8 metres high on a landform up to 4.4 metres high accommodating 250,000 m^3 of spoil.	Maximum footprint, height of development, vegetation loss and spoil volume.
Airport/Landscape character. Visual amenity: Gatwick staff/visitors.	Replacement Purple Parking at Crawter's Field (5.7 hectares and 3,000 spaces)	Maximum footprint of development
Airport/Landscape character. Visual amenity: Gatwick staff/visitors.	Relocation of substations BP, BR and A (25 m^2 and 5 metres high)	Maximum footprint and height of development
	Relocation of substation J (180 m^2 and 6 metres high)	Maximum footprint and height of development
	Substation BK (144 m^2 and 6 metres high)	Maximum footprint and height of development
Landscape/Airport character. Visual amenity: River Mole footpath, Gatwick Museum	Museum Field flood compensation area (3.5 metres deep)	Maximum footprint, depth of feature and vegetation loss.
Landscape/Airport character. Visual amenity: River Mole footpath	East of Museum Field flood compensation area (1.8 metres deep)	Maximum footprint, depth of feature and vegetation loss.

Potential Impact	Maximum Design Scenario	Justification
Airport/Landscape character. Visual amenity: Gatwick staff/visitors.	Car park X flood alleviation area (2.5 metres deep)	Maximum footprint, depth of feature and vegetation loss.
Airport character. Visual amenity: Gatwick staff/visitors.	Underground surface water storage beneath Car Park Y	Maximum footprint and depth of feature.
Airport character. Visual amenity: Gatwick staff/visitors.	CARE facility (Phase 1 and start of Phase 2) relocation option 2 (1.76 hectares, 22 metre high buildings and 50 metre high flue) construction. Motor Transport Facilities (1.56 hectares and 15 metres high) and RVP North	Maximum footprint and height of development. Closer to airport perimeter, greater opportunity for effects on landscape and visual receptors outside airport.
Airport/Landscape character. Visual amenity: Lowfield Heath Road, Roband Electronics	Noise mitigation feature (assumed to be up to 12 metres high)	Indicative height of development
Airport/Landscape character. Visual amenity River Mole footpath	Fire training ground (1.2 hectares, up to 25 metres high)	Maximum footprint and height of development
Airport character. Visual amenity: Sofitel and Premier Inn, roads, ITTS, multi-storey car parks	North Terminal International Departure Lounge (IDL) extensions and forecourt (3,120 m^2 and 32.5 metres high and 3,180 m^2 and 27 metres high) construction and completion.	Maximum footprint and height of development
	North Terminal baggage reclaim extension (650 m^2 and 7 metres high) construction and completion.	
	North Terminal baggage hall extension (6,552 m^2 and 12.5 metres high) construction commenced	
Airport character. Visual amenity: Hilton Hotel, roads, multi-storey car parks.	South Terminal IDL Extension and forecourt (3,780 m^2 and 30.5 metres high) complete.	Maximum footprint and height of development
Landscape/Airport character. Visual amenity: Horley residential edge, Balcombe Road and internal roads, surface carparks, railway, McDonalds, KFC, Schlumberger House.	Surface Access, South Terminal roundabout improvements (including flyover) (8 metres high above finished ground level) and North Terminal roundabout improvements, construction commenced	Maximum footprint and height of development
Airport character.	Hotel at building compound adjacent to car rental location (200 rooms) (16.3 metres)	Maximum footprint and height of development and vegetation loss

Potential Impact	Maximum Design Scenario	Justification
Visual amenity: Public footpath, Roads, railway, multi-storey car parks and surface car parks.		
Airport character. Visual amenity: Sofitel, Pier 4, roads, multi-storey car parks	Multi-storey car park J (900 spaces, 1 hectare and 27 metres high)	Maximum footprint and height of development
Airport character. Visual amenity: Gatwick staff/visitors.	Pond A and River Mole diversion	Maximum footprint, volume and vegetation removal
Airport character. Visual amenity: Hilton Hotel, roads, multi-storey car parks and surface car parks.	Car park H (0.5 hectare and 1,800 spaces, 27 metres high)	Maximum footprint and height of development and vegetation loss
Landscape/Airport character. Visual amenity River Mole footpath	North Terminal Long Stay decked car park (4,500 spaces and 13 hectares) (11 metres) construction commenced	Maximum footprint and height of development and vegetation loss
Airport character. Visual amenity: Gatwick staff/visitors.	Grounds Maintenance (1230 m^2 and 8 metres high) Surface Transport Facility (1440 m^2 and 15 metres high)	Maximum footprint and height of development
Airport character. Visual amenity: Gatwick staff/visitors.	ITTS improvements to North and South Terminal stations	Maximum footprint and height of development.
Tranquillity	N/A (existing 2019 air traffic movements 893 per 24 hours (766 per 16 hour day))	2019 baseline situation for assessment.
2030-2032		
Airport character. Visual amenity: Hilton Hotel, roads, multi-storey car parks and surface car parks.	Three office blocks South Terminal (3,072 m^2 and 27 metres high) and South Terminal Hotel (400 bedrooms and 27 metres high)	Maximum footprint and height of development and vegetation loss
Landscape/Townscape character. Visual amenity: Horley residential edge, A23, River Mole footpath	Surface access satellite contractor compound Longbridge Roundabout (up to 0.65 hectares including infrastructure up to 5 metres high)	Maximum footprint and height of development and vegetation loss
Airport/Townscape character. Visual amenity: Horley residential edge, A23, Balcombe Road and internal roads, multi-storey car parks, ITTS, railway, McDonalds, KFC, Schlumberger House, Marriot	Surface Access, South Terminal roundabout improvements (including flyover) completed (8 metres high above finished ground level), Balcombe Road overbridge raised 2.2 metres and North Terminal	Maximum footprint and height of development and vegetation removal. Outside of airport perimeter, greater opportunity for effects on landscape and visual receptors outside airport

Potential Impact	Maximum Design Scenario	Justification
Hotel. Riverside Garden Park, Horley residential edge, Premier Inn NT and Perimeter Road North, Sofitel, Premier Inn and Travelodge, River Mole footpath, A23 and internal roads, multi-storey car parks, surface carparks, ITTS.	roundabout improvements (including flyover 8 metres high above finished ground level) and Longbridge Roundabout improvements including new River Mole bridge construction.	
Airport character. Visual amenity: Gatwick staff/visitors.	CARE facility location option 2 (1.76 hectares, 22 metres high buildings and 50 metre high flue) and Motor Transport Facility – completion of construction	Maximum footprint and height of development. Closer to airport perimeter, greater opportunity for effects on landscape and visual receptors outside airport.
Airport/Landscape character. Visual amenity: Gatwick staff/visitors.	Hangar (12,440 m^2 and 32 metres high)	Maximum footprint and height of development
Airport character. Visual amenity: Premier Inn NT and Perimeter Road North and Travelodge, River Mole footpath, A23 and internal roads, Horley residential edge, multi-storey car parks.	North Terminal hotel (400 bedrooms) (27 metres)/ multi-storey car park Y (1.9 hectares and 3,000 spaces)	Maximum footprint and height of development and vegetation loss.
Airport character. Visual amenity: Gatwick staff/visitors.	Pier 7 (10 hectares and 18 metres high)	Maximum footprint and height of development and vegetation loss.
Airport character. Visual amenity: Gatwick staff/visitors, Hampton Hilton Hotel.	Internal access: Larkins Road diversion (Phase 2) and autonomous vehicle route and stations	Maximum footprint and height of development
Tranquillity	Air traffic movements increase to 975 per day.	Maximum number of air traffic movements.
2033-2038		
Landscape/Airport character. Visual amenity River Mole footpath	North Terminal Long Stay decked car park (Phase 2) (4,500 spaces and 13 hectares) (11 metres)	Maximum footprint and height of development and vegetation loss
Airport character. Visual amenity: Gatwick staff/visitors.	Pier 7 (10 hectares and 18 metres high)	Maximum footprint and height of development and vegetation loss.
Landscape/Airport character. Visual amenity: Public footpath, residents.	Gatwick Stream flood compensation area (up to 3 metres deep) construction	Maximum footprint, depth of feature and vegetation loss.

Potential Impact	Maximum Design Scenario	Justification
Airport character. Visual amenity: Gatwick staff/visitors, Hampton Hilton Hotel.	Internal access: Larkins Road diversion (Phase 2) and autonomous vehicle route and stations	Maximum footprint and height of development
Tranquillity	Air traffic movements increase to 975 per day.	Maximum number of air traffic movements.
Design Year: 2038		
Landscape/Airport character. Visual amenity: Public footpath, residents.	Gatwick Stream flood compensation area (up to 3 metres deep)	Maximum footprint, depth of feature and vegetation loss.
Tranquillity	Air traffic movements increase to 1120 per day.	Maximum number of air traffic movements.

8.8. Mitigation and Enhancement Measures Adopted as Part of the Project

8.8.1 A number of measures have been designed into the Project to reduce the potential for impacts on landscape, townscape and visual resources. These are listed in Table 8.8.1.

Table 8.8.1: Mitigation and Enhancement Measures

Measures Adopted as Part of the Project	Justification
Mitigation	
Vegetation retention strategy for all elements of the Project that coincide with existing significant vegetation including hedgerows, woodland, trees, shrubs, wetland and amenity planting or elements of the Project that lie immediately adjacent to significant vegetation that may be affected during the construction phase or during maintenance activities.	To ensure green infrastructure assets are retained wherever possible and adverse impacts on the important features and locally distinctive patterns of development at Gatwick Airport are minimised. To minimise adverse impacts on the character of surrounding landscapes and townscapes. To prevent coalescence of the airport and settlements of Crawley and Horley. To protect important urban green spaces including Riverside Garden Park. To ensure that visually significant vegetation is retained to minimise adverse effects on visual receptors, protect important views and protect the natural beauty and setting of AONBs.
Proposed public open space and footpaths.	To provide a new area or areas of public open space with links to the existing area of Riverside Garden Park. To provide an extension to the River Mole footpath and associated publicly accessible land.
Proposed woodland, tree, scrub, shrub, wetland, amenity and grassland planting. The	To ensure a high quality environment is created within the airport and surrounding landscape/townscape.

Measures Adopted as Part of the Project	Justification
'design year' for tree and shrub planting is 15 years after implementation. This is considered to be the time when vegetation provides a high level of screening or design contribution to the Project. This chapter assesses the elements of the Project at Year 1 when planting is implemented and at Year 15, or before at 2038, where applicable.	To provide replacement/compensation planting where vegetation has been removed, particularly at the North Terminal roundabout improvements.
Proposed earth shaping, embankments, cuttings or bunds.	To ensure that visual screens are provided to minimise adverse effects on visual receptors. To provide replacement/compensation features where they have been removed.
Proposed fences, walls or barriers.	To ensure that visual screens are provided to minimise adverse effects on visual receptors. To provide replacement/compensation features where they have been removed.
Proposed hard landscaping.	To ensure a high quality environment is created within the airport and surrounding landscape/townscape.
Lighting	A lighting strategy will be prepared for the Project, which will take into account the Guidance Notes for the Reduction of Obtrusive Light (Institute of Lighting Professionals, 2011)
Enhancement	
Management of, or implementation of, proposed mitigation to enhance existing green infrastructure including hedgerows, woodland, trees, shrubs, wetland and amenity planting.	To enhance the character and biodiversity of the airport and surrounding landscape/townscape. To enhance the screening capacity of visually significant vegetation.

8.9. Assessment of Effects

Initial Construction Phase: 2024-2029

8.9.1 This section describes the effects that would arise as a result, primarily, of construction activities during the period up to opening of the altered northern runway, although does include some elements of the Project that would be complete and operational before the end of 2029. Key effects are summarised in table format in the summary section at the end of the chapter (see Table 8.13.1). A focussed summary of effects on receptors at representative viewpoints can be found at Appendix 8.9.1, for all assessment phases.

8.9.2 A summary of the maximum design scenario dimensions required for the construction of the following elements of the Project is provided in Table 8.7.1. Photomontages have been prepared for 10 of the representative viewpoint locations illustrating the massing outlines of key elements of

the Project based on winter and summer photography (See Figures 8.9.1 to 8.9.36). Further detail relevant to this section of the assessment is provided below.

Alterations to the Existing Northern Runway

8.9.3 The existing northern runway would be adjusted to reposition the centreline 12 metres further north. The redundant 12 metre strip to the south would be broken out and removed, and then replaced with airfield grassland. The altered runway would be resurfaced and new markings applied.

Reconfiguration/Modification of Taxiways and Holding Areas

8.9.4 The realignment of Taxiway Juliet and the new Taxiway Juliet West Spur would require the construction of new areas of hardstanding. Redundant sections of hardstanding would be broken out and removed, and then replaced with airfield grassland. The altered taxiways would be resurfaced and new markings applied. The new aircraft holding area/Charlie Box would be created by reconfiguring the existing apron and stand area north of Taxiway Juliet.

8.9.5 The extension of Taxiway Lima and Tango: end around taxiway west; end around taxiway east; and new runway exits/entrance taxiways would require the construction of new areas of hardstanding. The altered or new taxiways would be resurfaced and markings applied.

Main Contractor Construction Compound MA1

8.9.6 This would be a securely fenced compound of up to 5 hectares in an area north and east of Perimeter Road South on an area of hardstanding currently occupied by car parking. The compound would contain offices, welfare facilities, laydown area, materials storage, parking and a bus terminal. Batching plants up to 30 metres high would form the tallest elements within the compound.

Airfield Satellite Contractor Compound

8.9.7 This would be a securely fenced compound of up to 6 hectares in an area west of Taxiway Uniform on an area previously occupied by a construction compound for the Boeing hangar, grassland, reed bed and hedgerow. The compound would contain offices, welfare facilities, laydown area, materials storage, parking and a bus terminal. Batching plants up to 30 metres high would form the tallest elements within the compound.

Surface Access Satellite Contractor Compound: South Terminal

8.9.8 This would be a securely fenced compound up to 2 hectares in an area of grazing pasture crossed by hedgerows either to the north of the South Terminal roundabout or south of the M23 spur. The compound would contain offices, welfare facilities, laydown area, materials storage, parking and a bus terminal. Infrastructure would be up to 15 metres high. For the purposes of this chapter, the compound option north of the South Terminal roundabout has been assessed as the maximum design scenario.

Surface Access Satellite Contractor Compound: North Terminal

8.9.9 This would be a securely fenced compound of up to 1.6 hectares, currently occupied by hardstanding for staff car park Y. The compound would contain offices, welfare facilities, laydown area, materials storage, parking and a bus terminal. Batching plants up to 15 metres high would form the tallest elements within the compound.

Pentagon Field Decked Parking

8.9.10 The grazing pasture at Pentagon Field would be removed and the location would initially be used as a spoil receptor site to accommodate a depth of up to 4.4 metres of material. Construction works to provide car parking for 5,800 cars in a decked car park structure up to 8 metres high, occupying a footprint of approximately 8.8 hectares would be undertaken. The operational car park would be enclosed by metal mesh security fencing and mounted lighting would be erected throughout. The implementation of landscape planting proposals around the site perimeter to blend into existing native hedgerows and trees is likely to take place between winter 2029 and winter 2030.

Replacement Purple Parking at Crawter's Field

8.9.11 The grassland and woodland would be cleared, a tarmacadam hardstanding constructed, and road markings and bays applied. The car park would be enclosed by metal mesh security fencing and column mounted lighting would be erected throughout. The implementation of landscape planting proposals to blend into existing native hedgerows and trees is likely to take place between winter 2026 and winter 2027.

Relocation of Substations BP, BR, and A

8.9.12 Substations BP, BR and A would be re-provided, each within an area of approximately 25 m^2, with a maximum height of 5 metres above ground level and up to 3 metres below ground level.

Substation J

8.9.13 This replacement substation is likely to comprise a containerised substation, with an additional generator and transformer to replace Substation BM. The substation would occupy an area of approximately 180 m^2, with a height of 6 metres above ground level and 3 metres below ground level.

Substation BK

8.9.14 Substation BK would be re-provided within an area of approximately 144 m^2, with a maximum height of 6 metres above ground level and 3 metres below ground level

Surface Water Management Features

8.9.15 The relocation of Pond A would take place during the construction phase (to allow completion of the works to taxiways). This would require establishing the pond in its final location further north of the existing location. In addition, it is proposed that the River Mole channel would be widened, reprofiled and relocated to the north of Pond A. Construction activities would require the removal of existing wetland planting, hedgerows and mature trees.

8.9.16 At Museum Field, a flood compensation area would be created with excavation up to approximately 3.5 metres deep within an existing grass field defined by hedgerows and trees. This would be connected to the River Mole by a 12 to 15 metre wide spillway.

8.9.17 The flood compensation area east of Museum Field would require excavation up to approximately 1.8 metres deep within an existing area of grassland and scrub, connected to the River Mole by a spillway. The implementation of landscape planting proposals within these two areas, including wetland grassland, marginal species and native tree and scrub planting, is likely to take place between winter 2025 and winter 2026.

8.9.18 The underground storage feature beneath Car Park Y would require large-scale excavation. The existing Car Park X would be excavated to create a new flood compensation area within the same development footprint and an appropriate car park surface reinstated.

CARE Facility (Option 2) Phase 1 and Commencement of Phase 2

8.9.19 Construction of the CARE facility would require the breakout and removal of existing car park hardstanding, removal of 2 metre high perimeter timber fences and the removal of trees and potentially hedgerow vegetation. The new compound would be approximately 17,550 m^2 and enclosed by secure fencing. The compound would contain biomass boilers, a material recovery facility, a card baling facility, office and welfare facilities and a materials storage area. The main building would be up to 22 metres high, with a 50 metre high flue. Lighting columns and wall mounted lights would provide appropriate light levels for safe night time working.

Noise Mitigation Feature

8.9.20 Reshaping and relocation of the existing noise bund would involve the clearance of the young woodland planting which currently covers the bund. A new earth bund or wall would be constructed adjacent to Lowfield Heath Road and native woodland established to provide an appropriate treatment adjacent to the neighbouring Upper Mole Farmlands and provide an equivalent degree of screening. The implementation of landscape planting proposals is likely to take place between winter 2024 and winter 2025.

Fire Training Ground

8.9.21 The fire training ground would be consolidated and re-provided immediately to the north of its current location. It would include a test rig and other structures up to 25 metres high and lighting columns. Earthworks in the area would be re-engineered to accommodate the flat area of hardstanding and some trees and scrub would be removed. The implementation of any landscape planting proposals is likely to take place between winter 2024 and winter 2025.

North Terminal Extension and Forecourt

8.9.22 The main improvements to the North Terminal International Departure Lounge (IDL) would include a northern extension of 3,120 m^2 and 32.5 metres high and a southern extension of 3,180 m^2 and 27 metres high. In addition, an extension of 6,552 m^2 and 12.5 metres high to the baggage hall and an extension of 650 m^2 and 7 metres high to the baggage reclaim area are proposed. Small amounts of hard and soft landscape would be removed within the forecourt area and re-provided. All works would be complete and operational by 2028, with the exception of the baggage hall extension. The implementation of landscape planting proposals is likely to take place between winter 2027 and winter 2028.

South Terminal Extension and Forecourt

8.9.23 This would include the construction phase and operation of a terminal building extension over four levels up to 30.5 metres high and with a footprint of approximately 3,780 m^2 and a two-storey autonomous vehicle transition space to Pier 7. This would include enhancements to transport corridors, parking areas and pedestrian circulation space. All works would be complete and operational by 2027. The implementation of landscape planting proposals is likely to take place between winter 2027 and winter 2028.

Surface Access Improvements

8.9.24 Lead in works for the commencement of construction of the improvements to the South Terminal roundabout and North Terminal roundabout would take place in 2028 and 2029, including highways vegetation removal.

Hotel at Building Compound Addjacent to Car Rental Location

8.9.25 This would include the construction phase and operation of hotel with up to 200 bedrooms adjacent to the car rental site at South Terminal, up to 16.3 metres in height. The implementation of landscape planting proposals is likely to take place between winter 2025 and winter 2026.

Multi-storey Car Park J

8.9.26 This would include construction phase and operation of parking for 900 cars in a building up to 27 metres high and a footprint of 1 hectare. The implementation of landscape planting proposals is likely to take place between winter 2027 and winter 2028 (after completion of Phase 2 of the construction).

Car Park H

8.9.27 Construction and completion of Phase 1 of this multi-storey 1,800 space car park would be undertaken covering an area of 0.5 hectares and up to 27 metres high.

North Terminal Long Stay Decked Car Park

8.9.28 Construction and completion of Phase 1 of this 4,500 space decked car park would be undertaken covering 13 hectares and up to 11 metres high.

Grounds Maintenance/Surface Transport Facility

8.9.29 Adjacent facilities incorporating separate buildings up to 8 metres and 15 metres high respectively, storage and parking within a fenced yard covering 2.67 hectares would be provided.

Inter-terminal Transit System (ITTS)

8.9.30 The construction phase for improvements to the ITTS would be completed during this period and may include platform and canopy extensions at North and South Terminal stations.

Effects on Landscape Character

Gatwick Airport Urban Character Area

8.9.31 The construction and operational elements described above are located mainly within the existing airport character area. The heavy plant and operations required to undertake the construction works associated with the alterations to the hardstanding of the northern runway, reconfiguration/modifications of taxiways, holding areas and stands would temporarily introduce a slightly discordant element into the airport. Construction compounds would be created within the airport. The surface access satellite contractor compound for the North Terminal roundabout improvements would be located at the redeveloped staff car park Y, previously excavated to accommodate an underground surface water storage facility. The compound and associated activities, including large scale batching plant, would introduce a small concentration of discordant elements into the airport. The loss of green infrastructure in some of these locations and its replacement with the construction compounds and associated activities, including large

scale batching plants, would introduce small concentrations of discordant elements into the airport. The construction of the CARE facility would also require the removal of green infrastructure and the inclusion of large scale tall infrastructure. The placement of spoil and the creation of decked parking at Pentagon Field and replacement Purple Parking at Crawter's Field would result in the loss of relatively large areas of grassland and green infrastructure. The relocation of five substations and the removal of two substations would, on balance, create very minimal change within the airport. Temporary lighting would be required to provide a safe and appropriate working environment during the construction phase.

8.9.32 The construction works and completion of the flood compensation areas at Museum Field and east of Museum Field would require the stripping of grassland and soils and the clearance of small areas of trees and hedgerow vegetation to gain access and create links to the River Mole. The facilities would be seeded and planted to reflect the wetland context of the River Mole and the pasture fields of the neighbouring Mole Valley Open Weald. The relocation of Pond A would require the removal of wetland planting and filling of part of the channel. The rural fringe character of these areas of landscape would be temporarily affected by the discordant construction activities, whilst the operational phase of these elements of the Project would be relatively low key in nature and would lead to limited adverse effects on the fringes of the airports character. The construction activities for the underground surface water storage facility at car park Y would involve removal of this car park and excavations to create the facility. The construction and completion of the flood compensation area at car park X would require the removal of the existing car park, including groups of mature trees, excavations and construction of a new car park surface. The temporary loss of mainly surface car parking and some vegetation to accommodate the works would, however, ensure that, on balance, there would be a minimal effect on character.

8.9.33 The construction works for the North Terminal IDL and baggage hall extensions and the nearby multi-storey car park J would result in changes to prominent buildings and areas within the airport that would be discordant in nature. The completed car park J within this phase would be less discordant within this established urban character context of the airport and would offer some opportunities for landscape planting as there would also be at the North Terminal IDL. The construction activities associated with the creation of the improved South Terminal roundabout would commence in this period, with the clearance of the majority of woodland planting and mature trees to the north and south of the A23/M23 Spur and within the roundabout together with the initial groundworks to create the flyover. The character of this section of the highway network would be considerably changed through green infrastructure loss to accommodate the slightly discordant activities of highways construction.

8.9.34 The construction phase and completion of the South Terminal IDL extension, Hotel at the building compound adjacent to the car rental location and the hotel at car park H adjacent to the Hilton Hotel at South Terminal would increase the scale and mass of tall buildings within this cluster. The construction phase would involve tall structures such as cranes and activities that would temporarily form a discordant addition to the character of the airport. The completed buildings would be prominent within the airport although they would adopt appropriate high quality architecture to ensure the appearance of the building cluster is maintained or enhanced. The loss of mainly surface car parking and low-level buildings of minimal architectural quality to accommodate the improvements would however ensure that, on balance, there would be a neutral effect on character. Existing mature tree and shrub planting around existing car park H would be retained to ensure a high quality setting and visual screen is retained within which to

locate new development. New tree and shrub planting would be incorporated into these schemes to soften the urban form and provide an attractive environment, particularly at ground level.

8.9.35 The construction phase of the North Terminal Long Stay decked car park would introduce large scale activities into the airport. The nature of the activities and the high-level cranes required would temporarily result in prominent and discordant additions to the airport. The existing character of surface car parking would be replaced by construction compounds and activities.

8.9.36 The reconfiguration of the grounds maintenance and surface transport facilities would lead to short term construction effects of the relatively small scale activities and long term operational effects due to the small loss of surface parking and the erection of replacement buildings up to 15 metres high.

8.9.37 The construction activities associated with improvements to the platforms of ITTS station stops at North and South Terminals would have very limited influence over the established airport character.

8.9.38 The nature and scale of the range of construction phase activities would not be completely out of character within an operational airport. The newly operational elements of the Project would be typical of the existing airport and would provide an intensification of existing character. The clearance of areas of green infrastructure to facilitate construction, including diversion of the River Mole, would result in the greatest direct effect on the character area. The Gatwick Airport urban character area would generally be of low sensitivity to a medium magnitude of impact. The duration of these effects would range from short term to medium term. Overall the level of effect would be **minor adverse**, during the day and at night, which would not be significant. However, the loss of pasture, spoil placement and the construction activities for the decked parking at Pentagon Field would have a **major adverse** effect, which would be significant, on this specific parcel of land due to its medium sensitivity to a high magnitude of change.

Low Weald Character Area

8.9.39 The contractor compound north of the South Terminal roundabout would lie within the Low Weald character area within Reigate and Banstead District to the north of Gatwick Airport. The heavy plant and operations required to undertake the construction works would be prominent within horse paddocks on this edge of the character area. This would create a discordant element that has a direct effect on the character area and that would have an influence over the neighbouring urban fringe fields and settlement edge at Horley. The edge of the character area would temporarily be considerably changed through loss of grassland and openness to accommodate the compound construction. The early stages of removal of highway woodland planting and trees to accommodate the construction site for the improved South Terminal roundabout would be at the airport's interface with the Low Weald landscape character area. However, this remnant of farmland within the wider character area is currently highly influenced by the road corridor and urban edge and is considered to be of low sensitivity to this type of change. The high magnitude of direct impact on the fields within the compound site would result locally in a **moderate adverse** effect during the day and at night, which would not be significant. The hotel at the building compound adjacent to the car rental location and the new hotel and two new multi-storey car parks at South Terminal car park H would increase the scale and mass of tall buildings within this cluster. This increase in development would intensify the existing influence that buildings at South Terminal have over the wider landscape of the Low Weald in Reigate and Banstead District and

combined with the minimal influence of the compound would create a medium impact, resulting in a **minor adverse** effect, which would not be significant.

High Woodland Fringes Character Area

8.9.40 At a district level, the location of several of the construction elements near the airport boundary would result in effects on the surrounding rural characteristics of the High Woodland Fringes character area within Crawley District. The decked car parking on raised land at Pentagon Field would lie adjacent to the rural farmland east of the airport. The heavy plant and operations required to place and spread the spoil and undertake the construction activities for the decked car park at Pentagon Field, including cranes, would be discordant in nature and would have an influence over the neighbouring landscape. New hedgerow and tree planting located around the perimeter of the area would be immature during this early phase and only just starting to mitigate effects on the neighbouring rural landscape.

8.9.41 The character and activities associated with the existing airport form an established element of the study area and a context for the construction activities. The characteristic of rural farmland adjacent to an international airport forms an intrinsic part of the High Woodland Fringes character area. The characteristics of the relevant construction activities would be relatively prominent. The sensitivity of the High Woodland Fringes in this context is low and the magnitude of change would be low, resulting in **minor adverse** effects in the medium term during the day and at night, which would not be significant.

Mole Valley Open Weald Character Area

8.9.42 The construction activities for the flood compensation areas at Museum Field, due to their discordant nature, would have effects on the surrounding rural characteristics of the Open Weald in the Mole Valley district. The sensitivity of the character area to these effects in this context is low and the magnitude of change would be low, resulting in **negligible adverse** effects in the medium to long term during the day and at night, which would not be significant.

Upper Mole Farmlands Character Area

8.9.43 The landscape to the south and west of Gatwick Airport lies in the Upper Mole Farmlands area of Crawley District. The activities associated with the reshaping and relocation of the existing noise mitigation feature on the western edge of the airport would also influence the character of neighbouring farmland in the immediate context of the airport.

8.9.44 The construction activities associated with the replacement of the Purple Parking at Crawter's Field and the excavations for surface water management at car park X, although on the edge of the airport, would benefit from a tree belt providing separation from the surrounding rural landscape.

8.9.45 Gatwick Airport forms an established element of the study area and provides a context for the construction activities. The sensitivity of the Upper Mole Farmlands in this context is low and the magnitude of change would be low, resulting in **negligible adverse** effects in the medium term during the day and at night, which would not be significant.

Effects on Townscape Character

Northgate Crawley Townscape Character Area

8.9.46 The scale and mass of the 30 metre high batching plant within the main contractor construction compound, MA1, and of the Grounds Maintenance/Surface Transport Facility construction, would have an influence over the neighbouring Northgate townscape character area of Crawley to the south. The urban character area would be of low sensitivity to a low impact in the long term. The level of effect would be **minor adverse** during the day and at night, which would not be significant.

Horley Townscape Character Area

8.9.47 The construction site, activities and compound for the improvements to the South Terminal roundabout would be located near (but outside of) the suburban edge of this character area, resulting in impacts on the townscape. The scale and discordant nature of the activities would influence a townscape of low sensitivity. A low magnitude of change in the long term would result in a **negligible adverse** effect, which would not be significant.

8.9.48 Effects would be concentrated within the airport and adjoining landscape and townscape of Crawley and Horley districts. There would be no impact on the character of wider landscape and townscape areas within the 5 km radius study area.

Effects on Visual Amenity

Members of Gatwick Staff

8.9.49 The majority of the construction activities and operational elements of development described in the section above would be visible to members of Gatwick Airport staff working in different locations within the airport or using staff car parks and internal access roads. People at their place of work are generally considered to have a low sensitivity to change, particularly given the nature of the change and the context of a busy international airport. The construction activities and the completed elements of the Project may be barely perceptible when seen at distance, or prominent when in close proximity. The magnitude of change would range from negligible to medium resulting in **negligible** to **minor adverse** effects, which would not be significant.

Members of the Public Visiting Gatwick

8.9.50 Some elements of the construction activities and operational elements of development described in the section above would be visible to members of the public using the airport.

8.9.51 The northern runway and taxiway reconfiguration works, noise mitigation feature, fire training ground, relocation of Pond A, replacement parking at Crawter's Field, the airfield satellite contractor compound and flood compensation area at Museum Field would be apparent in views from the south side of the airport at Purple Parking. The activities and developments would be visible in the context of a busy operational airport, particularly with the Boeing hangar directly behind in most views. Occupiers of vehicles are receptors of low sensitivity to a low magnitude of change resulting in a **minor adverse** level of effect during the day and at night, which would not be significant.

8.9.52 Members of the public using the access roads, North and South Terminals, and North Terminal long stay surface car parks and multi-storey car parks would gain some near open views of

construction activities at the CARE facility, North and South Terminal extensions and Long Stay car park, the new hotel at the building compound adjacent to the car rental location, multi-storey car parks J and H, excavations for the underground surface water storage facility at Car Park Y and the hotel at South Terminal. These elements are all large scale and would generally require high level elements such as cranes. The nature and extent of these activities would form discordant elements within the existing airport context and during later stages of the phase would be visible alongside completed new developments. Pedestrians in urban spaces within the airport are receptors of medium sensitivity to no more than a medium magnitude of change, resulting in a **moderate adverse** level of effect during the day and at night, which is not significant. Occupiers of vehicles are receptors of low sensitivity to a medium magnitude of change, resulting in a **minor adverse** level of effect during the day and at night, which would not be significant.

Walkers Using Public Rights of Way

Public Right of Way 359Sy Pentagon Field

8.9.53 Receptors in this location are represented by Viewpoint 10. Walkers would gain open, near views south from a footpath of spoil placement and construction works for the proposed decked car park at Pentagon Field and, at the end of the phase, the complete car park in operation. The construction activities would be discordant and prominent in this rural fringe location immediately adjacent to car parks at South Terminal. Some views would be gained within the context of car parks and decked car parks within the airport. Walkers are receptors of high sensitivity and would experience a medium magnitude of change, resulting in a **major adverse** effect during construction, which would be significant. The completed decked car park would have the same impact on visual receptors, initially before mitigation planting has established or matured.

Public Right of Way 360/Sy South Terminal

8.9.54 Receptors in this location are represented by Viewpoint 3. Walkers would gain open views north of the new hotel at building compound adjacent to the car rental location. The building would add to the concentration of development at South Terminal. The scale and architecture of the hotel would enable an enhancement of the view of the terminal by replacing views of the existing multi-storey car park. Walkers are receptors of high sensitivity and would experience a medium magnitude of change. The adverse impacts of increased scale of development would be partially offset by the beneficial impacts of improved architectural quality within the view. Overall, there would be a **minor adverse** level of effect during the day and a **negligible** effect at night, in the long term, which would not be significant.

Public Right of Way 362a Horley

8.9.55 Receptors in this location are represented by Viewpoint 8. Open views across a foreground of grazed horse paddock would extend up to the contractor compound for the South Terminal roundabout. Hoardings would define the boundary with large plant and activities visible above and the tall elements of the batching plant particularly prominent against the skyline. Walkers are receptors of high sensitivity and would experience a medium magnitude of change resulting in a **moderate adverse** effect during the day and a low magnitude of change and a **minor adverse** effect at night, for the long term, which would not be significant.

Cyclists

National Cycle Route 21

8.9.56 Cyclists using the national cycle route between the A23 and the railway would gain filtered views through vegetation, in winter only, of the tallest elements within the main contractor compound that would be of negligible magnitude, leading to **minor adverse** effects, which would not be significant. In addition, when travelling further north, views of the new hotel at building compound adjacent to the car rental location would add to the concentration of development at South Terminal. The scale and architecture of the building would enable an enhancement of the view of the terminal by replacing views of the existing multi-storey car park. Receptors would be of high sensitivity to a low magnitude of change, resulting in a **minor adverse** effect, which would not be significant. Early stages of vegetation removal for surface access improvements at the end of this phase may be visible from the cycleway within Riverside Garden Park. Views of traffic and construction infrastructure may be visible, heavily filtered through trees within the park. Receptors would be of high sensitivity to a negligible magnitude of change, resulting in a **negligible adverse** effect, which would not be significant.

Occupiers of Commercial Properties

Premier Inn

8.9.57 Occupiers of the Premier Inn Hotel at North Terminal would gain views of the North Terminal extension construction activities and the excavations at car park Y. Occupiers of hotel rooms are receptors of medium sensitivity to a low to medium magnitude of change resulting in a **minor to moderate adverse** effect during the day and at night, which would not be significant.

Hilton Hotel

8.9.58 Occupiers of rooms on the east facing elevation of the Hilton Hotel would initially gain near, open views of the extensive construction site and activities for the hotel and multi-storey car parks at car park H. The scale and nature of the activities would be discordant and dominant in some views. Receptors would be of medium sensitivity to a medium magnitude of change in the medium to long term, resulting in a **moderate adverse** effect during the day and at night, which would not be significant. When complete, the new buildings would form an extension of the cluster of buildings at South Terminal. Part of the open views of the existing car park and surrounding trees would be replaced by large scale tall buildings in close proximity. The completed buildings would be prominent in views, although they would be of an appropriate, high quality architectural treatment. Receptors would experience a medium magnitude of change in the long term, resulting in a **moderate adverse** effect during the day and at night, which would not be significant.

Roband Electronics

8.9.59 Construction works for the noise bund would be visible in near, open views gained by people at their place of work immediately adjacent to the airport. Removal/remodelling of the earth bund and the vegetation on it would open up some views across the airport. The remodelling activities and construction of a new barrier would be discordant and at times prominent, in winter when vegetation around the property is not in leaf, in close proximity to receptors. Occupiers of the property are receptors of low sensitivity to a medium magnitude of change resulting in a **minor adverse** level of effect during the day and at night, which would not be significant.

Meadowcroft House

8.9.60 Occupiers of the office building at Meadowcroft House on the southern edge of Horley would lie immediately adjacent to the contractor compound for the South Terminal roundabout improvements. Trees and hedgerows along the northern boundary of the compound would be retained and protected during the construction phase to ensure a screen is maintained to minimise any visual effects. In combination with mature boundary vegetation within the grounds of the property, views during summer when trees are in leaf would be largely screened. During the winter near filtered views south of the compound, taller infrastructure and activities would be prominent as discordant additions to views, in place of the horse paddocks. Lighting would also be visible in winter against a backdrop of existing lighting columns at the South Terminal roundabout. Occupiers of the property are receptors of low sensitivity to a medium magnitude of change resulting in a **minor adverse** level of effect during the day and at night, which would not be significant.

Occupiers of Vehicles and Trains

Lowfield Heath Road

8.9.61 Construction works for the noise bund would be visible in near, open views gained by occupiers of vehicles travelling along Lowfield Heath Road. The activities would be slightly discordant at the interface of the airport with the rural landscape. Some views would be gained with a backdrop of the airport, opened up as the earth bund is remodelled. Occupiers of vehicles are receptors of low sensitivity to a medium magnitude of change resulting in a **minor adverse** level of effect during the day and at night, which would not be significant.

Balcombe Road

8.9.62 Receptors using Balcombe Road adjacent to Pentagon Field are represented by Viewpoint 9. Spoil placement activities and construction works for the decked car park at Pentagon Field would be large in scale, conspicuous and discordant in nature. The construction phase would completely change the character of a grazed field on the perimeter of the airport in the short term. Construction activities would be visible in near, open views gained by occupiers of vehicles travelling along Balcombe Road or pedestrians using the roadside pavement. The activities would be prominent at the interface of the airport with the rural landscape. Some views would be gained with a backdrop of decked car parks and hotels within the airport. Occupiers of vehicles are receptors of low sensitivity to a high magnitude of change during construction resulting in a **moderate adverse** level of effect during the day and at night, which would not be significant. Pedestrians using the pavement are receptors of medium sensitivity and would experience a **major adverse** effect which would be significant.

8.9.63 The completed decked parking at Pentagon Field would include large-scale concrete and steel structures with signage and lighting surrounded by a security fence. The car park would change the character of a grazed field on the perimeter of the airport. However, the roadside hedgerow would be retained and, if maintained to a higher level, would partially screen or soften some views of the new development. Decked car parks are a typical feature of the airport and would result in an intensification of an existing land use within views from the road. Occupiers of vehicles are receptors of low sensitivity to a high magnitude of change resulting in a **moderate adverse** level of effect during the day and at night, which would not be significant. Pedestrians using the roadside pavement are of medium sensitivity in this location. There would be a high

magnitude of change resulting in a **major adverse** level of effect during the day and at night, which would be significant.

8.9.64 Receptors travelling along Balcombe Road could also gain views of the contractor compound for the South Terminal roundabout improvements immediately north of the M23. Near open views from a short section of the road would include the compound and construction activities in place of the existing fields of grassland surrounded by trees and distant high-rise buildings at Horley. These discordant additions to the view would be prominent. Lighting would also be visible in winter against a backdrop of existing lighting columns at the South Terminal roundabout. Occupiers of vehicles would experience a medium magnitude of change resulting in a **minor adverse** level of effect and pedestrians using the pavement would experience a **moderate adverse** effect during the day and at night, which would not be significant.

Ifield Road

8.9.65 Receptors in this location are represented by Viewpoint 13. The heavy plant and construction activities associated with the northern runway, reconfiguration/modifications of taxiways and the noise mitigation feature have some potential to be visible through gaps in the roadside hedgerow in the middle distance. The activities are likely to be barely discernible from the backdrop of existing airport infrastructure. Occupiers of vehicles are receptors of low sensitivity to a negligible magnitude of change resulting in a **negligible** adverse effect during the day and at night, which would not be significant.

Railway

8.9.66 Occupiers of trains on the railway would gain brief, filtered views through rail side vegetation in winter only of the tallest elements within the main contractor construction compound and South Terminal satellite contractor compound, the Grounds Maintenance and Surface Transport buildings and the new hotel at building compound adjacent to the car rental location. Passengers would be of low sensitivity to a low to negligible magnitude of change, resulting in a **minor** or **negligible adverse** effect, which would not be significant.

Mid to Long Distance Views

8.9.67 Mid to long distance views from the surrounding landscape may include new tall buildings and high level construction activities such as cranes in several locations. These would form recognisable or barely perceptible additions, some slightly discordant in nature that, if visible, would be seen above intervening tree tops and within areas of existing built development at the airport. These types of views may be gained by medium to high sensitivity receptors at Viewpoint 12 at Rowley Farm bridleway, Viewpoint 13 at Lowfield Heath Road, at Viewpoint 14 on the Sussex Border Path east of Charlwood, Viewpoint 15 at Norwood Hill, Viewpoint 16 at Turners Hill and Viewpoint 17 at Tilgate Hill. The change in view would be no more than negligible, leading to **negligible to minor adverse** effects in the medium term, during the day and at night, which would not be significant.

Significance of Effects

8.9.68 No further mitigation or monitoring is required and therefore the significance of effects would remain as presented above in the short to medium term. However, planting proposals would be included in many of the elements of the Project design. At the time of assessment, the planting would be in place, but it would be immature and would not have reached its intended design year.

In time, as mitigation planting matures to soften and screen views of development, the level of effect on visual receptors is likely to reduce.

2030-2032

8.9.69 This section describes the effects that would arise as a result of ongoing construction activities occurring during 2030 to 2032 and the operational activities associated with the first full year of runway opening. Key effects are summarised in table format in the summary section at the end of the chapter (see Table 8.13.1).

8.9.70 A summary of the maximum design scenario dimensions required for the construction of the following elements of the Project is provided in Table 8.7.1. Further detail relevant to this section of the assessment is provided below.

Contractor Compounds: MA1, Airfield Satellite, North Terminal and South Terminal

8.9.71 These construction compounds would continue to be in use through this period.

Surface Access Satellite Contractor Compound: Longbridge Roundabout

8.9.72 This would be a securely fenced compound of up to 0.65 hectares, currently occupied by grassland surrounded by hedgerows and trees north of the Longbridge roundabout. The compound would contain offices, welfare facilities, laydown area and materials storage. Infrastructure would be up to 5 metres high and be in use from 2030.

CARE Facility

8.9.73 The completion of Phase 2 of the construction activities at the CARE facility would include an expansion of the Phase 1 development, including further construction of foundations and concrete slabs, installation of a biomass boiler (or equivalent) and bunded diesel tank. The facility would be completed during 2030 and would be 22 metres high with a 50 metre high flue. New hedgerow and tree planting would be located around the perimeter of the development, where possible, to compensate for any vegetation removal and provide an appropriate character within the airport and visual separation and screening from surrounding roads and public car parks. The implementation of landscape proposals is likely to take place between winter 2031 and winter 2032.

Motor Transport Facility

8.9.74 The completed Motor Transport Facility would include replacement storage buildings and workshop up to 15 metres high and refuelling and wash area. The compound would be approximately 15,600 m^2. As for CARE, Phase 2 works would be completed in 2030, with implementation of landscape proposals likely to take place between winter 2031 and winter 2032.

Hangar

8.9.75 The construction phase of a new hangar located north of Larkins Road is anticipated to commence in 2032. The building would be up to 32 metres high with a footprint of approximately 12,440 m^2.

North Terminal Hotel and Multi-Storey Car Park Y

8.9.76 Construction and completion of the 400 bedroom North Terminal hotel up to 27 metres high and Phase 1 of multi-storey car park Y with 4,000 spaces and a footprint of 1.9 hectares.

North Terminal Long Stay Decked Car Park

8.9.77 Construction and completion of Phase 2 of this 4,500 space decked car park would be undertaken, covering 13 hectares and up to 11 metres high.

Pier 7

8.9.78 Commencement of construction of buildings, structures and apron would take place.

Offices and Hotel at South Terminal

8.9.79 By 2032, the hotel with up to 400 bedrooms up to 27 metres in height and offices 3,072 m^2 and 27 metres high would be operational in the location of car park H. New ornamental tree and shrub planting would be located throughout external areas and around the perimeter of the development, where possible, to compensate for any vegetation removal and provide a high quality setting and appropriate character within the airport and visual separation and screening from surrounding roads and public car parks. The implementation of landscape proposals is likely to take place between winter 2031 and winter 2032.

Internal Access

8.9.80 Construction works would commence for the Larkins Road diversion and autonomous vehicle route and stations at North and South Terminals, as well as Pier 7.

North Terminal Extension

8.9.81 The construction works for the extension to the baggage hall at the North Terminal would be complete.

Surface Access Improvements

8.9.82 The main construction works for the South Terminal roundabout improvements would involve a flyover crossing the existing roundabout, approximately 8 metres high and 130 metres long supported by earthworks and reinforced earth-walls. The design would include lighting columns and acoustic barriers. The design would be developed within highways land and would require no long-term land take within Riverside Garden Park and little, if any, vegetation removal for construction from this public open space. The North Terminal roundabout improvements would involve a flyover, including the realigned A23 from the South Terminal roundabout to the Longbridge roundabout. The elevated links at the North Terminal grade separated junction would sit approximately 8 metres above the roundabout. The flyover structure would comprise a four span steel beam structure with concrete slab on concrete abutments, piers and retaining walls. The construction of the improvements to the Longbridge roundabout would take place in 2031 and 2032, including removal of highways vegetation and adjacent vegetation adjoining the River Mole and the installation of a temporary footbridge over the River Mole. The works, including the new River Mole bridge and extension to the decked structure of the Brighton Road/A23 London Road segregated left turn lane and creation of two attenuation ponds would be complete by the end of 2032. The implementation of landscape planting proposals is likely to take place following removal of the construction compound between winter 2033 and winter 2034.

Pentagon Field Decked Car Park

8.9.83 Car parking for 5,800 cars in a decked car park structure up to 8 metres high, occupying a footprint of approximately 8.8 hectares would be complete by the start of this phase and planting proposals would be immature. The car park would be enclosed by metal mesh security fencing and column mounted lighting would be erected throughout.

Provision of New Remote Stands

8.9.84 Work to provide new concrete hardstanding to create remote stands in the area known as Oscar and a Code C stand north of the new hangar would be completed during 2031.

Effects on Landscape Character

Gatwick Airport Character Area

8.9.85 Many of the airfield elements of the Project, which were constructed within the initial construction phase between 2024 and 2029 would be operational by 2030. The alterations to the hardstanding associated with the realignment of the northern runway, reconfiguration/modifications of taxiways, holding areas and stands would be in place and would form a relatively minor increase in hardstanding and a decrease in grassland within the airport. The replacement Purple Parking at Crawter's Field would also have been established in the initial construction phase and would represent relatively large areas of hardstanding with security fencing, signage and lighting, introducing a large number of vehicles parked or moving through the areas. The re-engineering of car park X to accommodate the flood compensation area would be complete and would have minimal influence over the character of the airport. Car parks are a typical feature of the airport and an increase in parking would result in an intensification of an existing land use. The relocation of five substations and the removal of two substations would, on balance, create very minimal change within the airport.

8.9.86 Three construction compounds would be operational within this character area throughout this phase of the Project. The loss of green infrastructure in some of these locations and its replacement with the compound and associated activities, including large scale batching plants, would introduce small concentrations of discordant elements into the airport. The ongoing second phase of construction at the CARE facility would initially form a slightly discordant feature in the airport. This would be completed and the facility would be operational by the end of 2030. The completed CARE facility would form a slightly discordant feature within the airport. However, these effects would be partially offset by the removal of disused infrastructure at the existing CARE facility. The CARE facility Option 2 flue location and high-level cranes associated with the North Terminal roundabout improvements are more likely to influence the adjoining landscape of the Open Weald rural landscape than the flue at the CARE Option 1 location and are therefore considered the worst case scenario throughout the PEIR chapter.

8.9.87 The ongoing construction works for the North Terminal baggage handling extension and the surface access improvements would continue to be discordant in nature. The completed South Terminal extension, South Terminal hotel, the new hotel at building compound adjacent to the car rental location and multi-storey car park H and the construction and completion of offices, all of which are adjacent to the South Terminal, would significantly increase the scale and mass of tall buildings within this cluster. The buildings would be prominent within the airport although they would adopt appropriate high quality architecture to ensure the appearance of the building cluster is maintained or enhanced. The loss of mainly surface car parking and low-level buildings of

minimal architectural quality to accommodate the improvements would, however, ensure that, on balance, there would be a neutral effect on character. Existing mature tree and shrub planting around existing car park H would be retained to ensure a high quality setting and visual screen is retained within which to locate extensive new development. The Pentagon Field decked car park would be complete and operational.

8.9.88 The Museum Field and east of Museum Field flood compensation areas and the diversion of the River Mole would be operational. New mitigation planting would be immature and only just starting to soften the engineered landforms to mitigate effects, after a maximum of three years. A public footpath link would be extended south along the River Mole and would form a loop around the Museum Field flood compensation area providing a benefit for the local community.

8.9.89 Improvements to the platforms at ITTS station stops at North and South Terminals would have very limited influence over the established airport character.

8.9.90 The construction phase of the North Terminal and South Terminal roundabout improvements, flyovers and A23 improvements would be ongoing and vegetation clearance work would be required at the Longbridge roundabout. The extensive construction activities would be prominent and discordant within the road corridor and on the edge of the airport and Riverside Garden Park.

8.9.91 The early construction phase of the additional stands south of Pier 7 would require the demolition of existing structures in the area known as Oscar and the creation of a new area of concrete hardstanding. On balance, this would create a slight improvement in the character of this part of the airport.

8.9.92 Temporary lighting would be required to provide a safe and appropriate working environment during the construction phase.

8.9.93 The newly operational elements of the Project would be typical of the existing airport and would provide an intensification of existing character. The construction of large-scale buildings and structures across the airport would result in the greatest direct effect on the character area, however the nature and scale of the developments and construction phase activities would not be completely out of character within an operational airport. Overall there would be a general perception of an increase in the scale and mass of large buildings and structures within the airport and a slight reduction in the extent of green infrastructure. The Gatwick Airport urban character area, within the wider Low Weald landscape of West Sussex, would be of low sensitivity to a medium magnitude of impact. The duration of these effects would range from short to medium term for construction phase effects to long term (permanent) for operational phase effects. Overall, the level of effect would be **minor adverse**, during the day and at night, which would not be significant. However, the operational Pentagon Field decked car park would be located within an open grazed field that is uncharacteristic of the wider airport and would have a medium sensitivity to change. The Project would have a high magnitude of impact and a **major adverse** and significant effect on this particular element of the Gatwick Airport character area.

High Woodland Fringes Character Area

8.9.94 The location of several of the construction elements near the airport boundary would result in effects on the surrounding rural characteristics of the High Woodland Fringes within Crawley District. The operational decked car parking at Pentagon Field would lie adjacent to the rural farmland of the character area. The scale and mass of the structure and earthworks and the

parked and moving vehicles would have an influence over the neighbouring landscape. The lighting on the top deck and vehicle lights would have an influence over the rural character at night. New hedgerow and tree planting located around the perimeter of the Project would be immature and would provide very limited mitigation at this time. The new car park would form an extension of existing airport infrastructure and character, extending the current influence over neighbouring farmland. However, there would be no loss of features or characteristics of the character area. The sensitivity of the High Woodland Fringes to these impacts in this context is low and the magnitude of change would be low, resulting in **minor adverse** effects in the long term during the day and at night, which would not be significant.

8.9.95 The character and activities associated with Gatwick form an established element of the study area and a context for the Project. The characteristic of rural farmland adjacent to an international airport forms part of the character of the area. The sensitivity of the High Woodland Fringes to these activities in this context is low and the magnitude of change would be low, resulting in **minor adverse** effects in the short to long term during the day and at night, which would not be significant.

Upper Mole Farmlands Character Area

8.9.96 The completed noise mitigation feature on the western edge of the airport would have a similar influence over the adjacent landscape character of the Upper Mole Farmlands to the existing situation. Before planting mitigation has matured, the low magnitude impact on the low sensitivity receptor would lead to a **negligible adverse** effect, which would not be significant.

Mole Valley Open Weald Landscape Character Area

8.9.97 The surface access improvements for Longbridge Roundabout, including the satellite contractor compound, would be located within the Mole Valley Open Weald, adjacent to the Church Road Horley conservation area. Vegetation removal around the junction would open up this part of the surface access network. The heavy plant and operations required to undertake the construction works would be prominent within pasture fields and planted road verges on this edge of the character area. This would create a discordant element that has a direct effect on the character area. The edge of the character area would temporarily be considerably changed through loss of grassland, trees and openness to accommodate the construction activities, compound and creation of an attenuation pond. However, this edge of farmland within the wider character area is currently highly influenced by the Longbridge road junction and urban edge of Horley and is considered to be of low sensitivity to this type of change. The high magnitude of direct impact on the field would result locally in a **moderate adverse** effect during the day and at night during construction, which would not be significant. Following completion of the surface access improvements at the Longbridge roundabout the compound would be removed and an attenuation pond created. New hedgerow and tree planting beside the junction and grass seeding and marginal planting associated with the attenuation pond would be immature during this early phase and only just starting to mitigate effects on the fringes of this landscape.

8.9.98 The location of the Museum Field flood compensation area near the airport boundary would result in effects on the surrounding rural characteristics of the Open Weald in the Mole Valley district, although in this location the fields within the Gatwick Airport character area of Crawley District share more characteristics of, and are contiguous with, the Open Weald. The completed features would be located adjacent to the rural farmland of the character area. The developments would have a very limited influence over the neighbouring landscape. The sensitivity of the character

area to these effects in this context is low and the magnitude of change would be low, resulting in **negligible adverse** effects in the long term during the day and at night, which would not be significant.

Low Weald Character Area

8.9.99 The ongoing operation of the contractor compound north of the South Terminal roundabout would continue to have direct effects on the horse paddocks within the rural fringe of Horley. The conspicuous and discordant nature of the activities would have a high magnitude of direct impact on a low sensitivity receptor, resulting in a **moderate adverse** effect during the day and at night in the long term, which would not be significant.

8.9.100 The increase in scale and mass of tall buildings at South Terminal would continue to influence the adjacent landscape of the Low Weald in Reigate and Banstead District.

8.9.101 The removal of highway woodland planting and trees would expose views of the construction activities for the improved South Terminal roundabout at the airport's interface with the Low Weald landscape character area. The heavy plant and operations required to undertake the construction works would be prominent on this edge of the character area. However, this discordant element would lie adjacent to the contractor compound, limiting any influence over the nearby urban fringe fields at Horley. The edge of the character area would continue to be temporarily influenced through green infrastructure loss to accommodate the highways construction. The surface access infrastructure would be complete and operational by the end of this phase. This character area is currently highly influenced by the road corridor and urban edge and is considered, overall, to be of low sensitivity to this type of change. The low magnitude of impact would result in a **minor adverse** effect during the day and at night, which would not be significant.

Effects on Townscape Character

Northgate Crawley Townscape Character Area

8.9.102 During its operation, the main contractor construction compound MA1 would have an influence over the neighbouring Northgate townscape character area of Crawley to the south. The urban character area would be of low sensitivity to a low magnitude of temporary impact in the long term. The level of effect would be **minor adverse** during the day and at night, which would not be significant.

Horley Townscape Character Area

8.9.103 The surface access improvements for Longbridge roundabout would be located partly within the Horley townscape character area within the Church Road Horley conservation area. Vegetation removal around the junction, and particularly on Brighton Road, would open up the junction to the edge of Horley. A strip of woodland approximately 10 metres wide would be removed to accommodate the widened decked structure on Brighton Road. The woodland belt on the edge of Horley is approximately 75 metres wide at this point and the loss of 10 metres would not be sufficient to open up views from residents within the three storey apartments blocks at Longbridge Road. The heavy plant and operations required to undertake the construction works would be prominent within open space and the planted road verge. This would create a discordant element that has a direct effect on the character area. The edge of the character area would temporarily be considerably changed through loss of a limited number of trees and temporary loss of

grassland and openness to accommodate the construction activities and creation of an attenuation pond. This green space on the settlement edge is currently influenced by the Longbridge road junction and is considered to be of medium sensitivity to this type of change. The medium magnitude of direct impact on the open space and influence of further construction activities and compound in the adjacent Open Weald character area would result locally in a **moderate adverse** effect during the day and at night during construction, which would not be significant. Following completion, new hedgerow and tree planting beside the junction and grass seeding and marginal planting associated with the attenuation pond would be immature during this early phase and only just starting to mitigate effects on the fringes of this landscape.

8.9.104 The construction site, activities and compounds for the South Terminal roundabout and North Terminal roundabout would be located near (but outside of) the suburban edge of the character area, resulting in indirect impacts on the townscape. The scale and discordant nature of the activities, including highway vegetation removal and heavy plant movement, would influence a townscape of mainly low sensitivity. A low magnitude of temporary change in the medium term would result in a **negligible adverse** effect, which would not be significant. The surface access improvements would not encroach into the Riverside Garden Park on the edge of Horley and would avoid direct effects and loss of features within this urban green space. The effect on the character of this part of the Horley Townscape character area would be **moderate adverse** during the day and at night, which would not be significant.

Effects on Visual Amenity

Members of Gatwick Staff

8.9.105 The alterations to the hardstanding of the northern runway, reconfiguration/modifications of taxiways, holding areas and stands would form a relatively minor change to views for most members of staff within the airport. The number of Air Traffic Movements (ATMs), including aircraft movements on the ground, as a result of the Project is estimated to increase by up to approximately 5% by 2029. It is highly unlikely that receptors, who currently experience generally low levels of tranquillity, would be able to perceive a 5% increase in aircraft using runways and taxiways at Gatwick. Therefore, it is considered that there would be no readily perceived change to the baseline level of visible/audible aircraft in 2029 (compared to forecast future baseline numbers without the Project) and, therefore, no significant effect is likely. The completion of decked parking at Pentagon Field and replacement Purple Parking at Crawter's Field would form relatively large, although typical, features of the airport and would result in an intensification of an existing land use. The extensions to North and South Terminals, the new hotel at the building compound adjacent to the car rental location, multi-storey car park J and the hotel and multi-storey car parks east of the Hilton Hotel at car park H would introduce further tall buildings within these building clusters. The construction phase and completion of the three office buildings at car park H would be visually discordant initially before adding to the cluster of tall buildings in this area. The completed buildings, although prominent, would be of a high quality architectural design to maintain the appearance of the airport. Existing mature tree and shrub planting around existing car park H would be retained to minimise views of newly built development and reduce the apparent scale and mass of buildings. The ongoing construction of the extension to the baggage reclaim hall at the North Terminal IDL would involve high level cranes and activities that would temporarily be prominent or dominant in some near views and visually discordant in nature. The new native planting on the extended and reconfigured noise mitigation feature would be up to eight years old and would provide additional screening within and into the airport, softening this

large engineered feature. This would form a typical element of the airport and would be no more conspicuous than existing infrastructure. Three construction compounds within the airport and two on the northern edge would be operational, including tall batching plant infrastructure, and would be generally discordant in nature. The relocated substations would create very minimal change within the airport.

8.9.106 The second phase of construction of the CARE facility would continue to form a slightly discordant feature within the airport which would be slightly reduced when complete and operational. The large-scale clearance of woodland planting and mature trees within the A23/M23 corridor to create the surface access improvements would open up views of these prominent activities and ultimately the flyovers and transport infrastructure when complete within this phase. The various flood compensation areas would be complete and initially slightly conspicuous within their predominantly rural fringe locations before planting proposals have matured, although not visible for most people working at Gatwick Airport.

8.9.107 The operational elements of the Project and the construction activities described above would be visible to members of Gatwick staff working in different locations within the airport or using staff car parks and internal access roads. People at their place of work are generally considered to have a low sensitivity to change, particularly given the nature of the change and the context of a busy international airport. The construction activities and completed elements of the Project may be barely perceptible when seen at distance, or prominent and at times dominant when in close proximity. The magnitude of change would range from negligible to medium resulting in **negligible to minor adverse** effects, which would not be significant.

Members of the Public Visiting Gatwick

8.9.108 Some elements of the construction activities and operational elements described in the section above would be visible to members of the public using the airport.

8.9.109 The reconfigured noise mitigation feature and fire training ground, replacement Purple Parking at Crawter's Field, airfield satellite contractor compound and River Mole diversion would be apparent in views from the south side of the airport at the remaining area of Purple Parking. The operational infrastructure would be visible in the context of a busy operational airport, particularly the Boeing hangar directly behind in most views. The northern runway and taxiway, stands and holding area reconfigurations, and the slight increase in aircraft using them, would be barely perceptible. Occupiers of vehicles are receptors of low sensitivity to a low magnitude of change resulting in a **minor adverse** level of effect during the day and at night, which would not be significant.

8.9.110 Members of the public using the airport access roads and car parks would gain some near open views of ongoing construction activities at the CARE facility, North Terminal Long Stay Decked Car Park, North Terminal improvements and initially offices at car park H alongside the completed elements. Completed elements would include multi-storey car park J, South Terminal extension, hotel and multi-storey car park at car park H, new hotel at building compound adjacent to the car rental location, the office buildings (later, when complete) at car park H and activities at the surface access satellite compound at North Terminal. Receptors in one of these locations are represented by Viewpoint 1 at Perimeter Road North. These elements are large scale and, during construction, would also include high level elements such as cranes. The nature and extent of the construction activities would form discordant elements within the existing airport context and the newly completed infrastructure would form an intensification of existing character. Occupiers of

vehicles are receptors of low sensitivity to a medium magnitude of change resulting in a **minor adverse** level of effect during the day and at night, which would not be significant. Pedestrians using public right of way 346/2Sy which follows the roadside pavement on Perimeter Road North are receptors of medium sensitivity and are also represented by Viewpoint 1. Receptors would experience a low magnitude of change leading to a **minor adverse** effect, which would not be significant.

8.9.111 Occupiers of vehicles would gain mid-distance views of the surface access satellite contractor compound (North Terminal) from multi-storey car parks at North Terminal. Occupiers of vehicles are receptors of low sensitivity to a low magnitude of change resulting in a **minor adverse** level of effect during the day and at night, which would not be significant.

8.9.112 Members of the public using the North Terminal buildings and forecourt would gain views of the completed multi-storey car park J and baggage reclaim extension, including high level cranes, and potentially gain glimpses of the other North Terminal extensions in the context of complex airport infrastructure. Receptors are of medium sensitivity to a low magnitude of change resulting in a **minor adverse** effect during the day and at night, which would not be significant.

Walkers Using Public Rights of Way

Public Right of Way 359/Sy Pentagon Field

8.9.113 Receptors in this location are represented by Viewpoint 10. Walkers would gain open, near views of the decked car park, including parked cars and traffic which would completely change the character of a grazed field on the perimeter of the airport. Decked car parks are a typical feature of the airport in views from sections of this footpath and this would result in an intensification of an existing land use within views gained during a journey. Perimeter planting would be immature at this stage, although it would begin to soften and screen views of the Project and partially mitigate effects on views. Walkers are receptors of high sensitivity and would experience a medium magnitude of change, resulting in a **major adverse** effect in the medium term, which would be significant.

Public Right of Way 360/Sy South Terminal

8.9.114 Receptors in this location are represented by Viewpoint 3. Walkers would continue to gain open views of the new hotel in front of the existing multi-storey car park. Walkers are receptors of high sensitivity and would experience a medium magnitude of both adverse and beneficial changes as a result of a larger and more prominent building, although of improved architectural quality, leading to, on balance, a **minor adverse** level of effect during the day and a **negligible adverse** effect at night, in the long term, which would not be significant.

Public Right of Way 362a Horley

8.9.115 Receptors in this location are represented by Viewpoint 8. Open views across a foreground of grazed horse paddock would extend up to the contractor compound for the South Terminal roundabout improvements. Hoardings would define the boundary with large plant and activities visible above and the tall elements of the batching plant particularly prominent against the skyline. Construction activities associated with the South Terminal roundabout and flyover would initially be prominent on the embankment beyond including temporary lighting visible in place of existing columns on the A23 and against the backdrop of lighting at the airport. By the end of this phase the South Terminal roundabout and flyover would be operational and visible at a higher level

beyond, including views of moving traffic using the flyover. Lighting would be visible in place of existing columns on the A23 and against the backdrop of lighting at the airport. New roadside planting, if implemented at this stage, would be immature and would not mitigate effects on views. Walkers are receptors of high sensitivity and would experience a medium magnitude of change resulting in a **moderate adverse** effect during the day and a low magnitude of change and a **minor adverse** effect at night, for the medium to long term, which would not be significant.

River Mole Public Right of Way

8.9.116 Receptors in this location are represented by either Viewpoint 4 or 5. Walkers would continue to gain near, filtered views of the taller elements within the surface access satellite contractor compound at North Terminal, previously described in the assessment for 2024 to 2029. Views south west from Viewpoint 5 may include cranes for the construction of North Terminal long stay decked car park (Phase 2) and the CARE facility building and flue, visible filtered through intervening vegetation. Receptors are of high sensitivity with a negligible magnitude of impact, resulting in **minor adverse** effects, during the day and at night, for the medium term, which would not be significant.

Public Right of Way 574 and Church Meadows Public Open Space Horley

8.9.117 Views across a foreground of mown grassland and scattered trees along the River Mole would include more open views of the Longbridge roundabout due to roadside vegetation removal together with the contractor compound and River Mole bridge improvement works. Large plant and activities would be clearly visible and tall elements of the batching plant above hoardings would be prominent against the skyline. Walkers are receptors of high sensitivity and would experience a medium magnitude of change resulting in a **moderate adverse** effect during the day and a low magnitude of change and a **minor adverse** effect at night, for the short term, which would not be significant. Following completion, new hedgerow and tree planting beside the junction and grass seeding and marginal planting associated with the attenuation pond would be immature during this early phase and only just starting to mitigate effects on views gained by walkers within the conservation area.

New Public Footpath linking Museum Field Water Storage Facility to Public Right of Way 347Sy

8.9.118 The new footpath would introduce a new visual receptor group to the airport. Walkers using this new footpath link would gain a diverse sequence of views of both the naturalistic elements of the land on the fringes of Gatwick and many operational aspects of the airport. The River Mole diversion, the flood compensation area and the landscape of the Open Weald to the west and Gatwick's runways would be visible together with taxiways, car parks on the south side of the airport, the relocated fire training ground, noise barrier and aircraft taking off and landing and using taxiways. Landscape planting proposals for the flood compensation areas in particular would be up to eight years old and would soften and merge these features into the surrounding rural landscape.

Cyclists

National Cycle Route 21

8.9.119 Cyclists using the national cycle route between the A23 and the railway would continue to gain views of the completed hotel at the building compound adjacent to the car rental location and filtered views through vegetation, in winter only, of the tallest elements within the main contractor

compound. Receptors would be of high sensitivity to a low magnitude of change, resulting in a **minor adverse** effect, which would not be significant. Where the cycle route passes beneath the A23 and through Riverside Garden Park it is anticipated that it would be maintained along its existing alignment during the construction phase of the surface access improvements. If the route remains open, receptors in this location are represented by Viewpoint 6. Removal of all highway planting would reveal more open views of the A23 construction activities. The construction site and earth-moving and construction activities would form a large scale and discordant addition to the view. At night the lit corridor would be considerably more prominent in the view against a backdrop of skyglow from the airport. Cyclists are receptors of high sensitivity to a medium magnitude of change in the short term, resulting in a **moderate adverse** effect, during the day and at night, which would not be significant. Visitors to the park on foot are also of high sensitivity to a medium magnitude of change, resulting in a moderate adverse effect during the day and at night, which would not be significant and are also represented by Viewpoint 6.

Occupiers of Residential Properties

Horley Residential Edge

8.9.120 Receptors in this location are represented by Viewpoint 7. Highway planting within the A23 corridor would be removed to accommodate the surface access improvements. Trees and vegetation within Riverside Garden Park would be retained. Removal of highway screening vegetation would reveal some filtered views of the A23 North Terminal and South Terminal roundabouts construction activities through retained vegetation within the park and also garden vegetation and fences within a range of nearby properties on several roads on the fringes of Horley including:

- approximately 40 properties on The Crescent;
- approximately 30 properties on Riverside;
- two properties on Woodroyd Gardens;
- four properties on Cheyne Walk;
- 15 properties on Longbridge Road; and
- four first floor and four second floor apartments of two blocks of three story buildings on Longbridge Road.

8.9.121 The South Terminal and North Terminal roundabout construction site and earth-moving and construction activities would form a discordant addition to the view, visible through vegetation. The degree of visibility of these activities would depend largely on the amount of vegetation in Riverside Garden Park and tree and shrub vegetation within the gardens of properties. At night the lit corridor of works would be visible, filtered through vegetation against a backdrop of skyglow from the airport. Receptors at many properties listed above are unlikely to experience a perceptible change in view in the summer due to the screening properties of intervening vegetation when in leaf. The levels of effect defined below relate predominantly to winter views as a worst case. Occupiers of residential properties are receptors of high sensitivity to a generally negligible magnitude of change in the medium term, resulting in a **minor adverse** effect, during the day and at night, which would not be significant.

Occupiers of Commercial Properties

Premier Inn

8.9.122 Occupiers of the Premier Inn Hotel at North Terminal would gain similar views to those described above at the neighbouring multi-storey car park. Occupiers of rooms in west facing locations would gain oblique views of the North Terminal extension works and completed elements. Occupiers of hotel rooms are receptors of medium sensitivity to a low magnitude of change resulting in a **minor adverse** effect during the day and at night, which would not be significant.

8.9.123 Occupiers of a second Premier Inn Hotel adjacent to staff car park Y would gain near views filtered through intervening trees, in winter only, of the surface access satellite contractor compound at North Terminal. The activities to create and operate the compound would be discordant in the view, for a medium-term duration. Occupiers of rooms in south west facing locations would gain mid-distance views of the North Terminal extension works and completed elements. Occupiers of hotel rooms are receptors of medium sensitivity to a medium to low magnitude of change resulting in a **moderate to minor adverse** level of effect during the day and at night, which would not be significant.

Hilton Hotel

8.9.124 Occupiers of rooms on the east facing elevation of the Hilton Hotel would initially gain near, open views of the extensive construction site and activities for the South Terminal hotel, offices and multi-storey car park H (Phase 2) in the context of the previously completed phases of the car park and hotel. The scale and nature of the activities would be discordant and dominant in most views. Receptors would be of medium sensitivity to a high magnitude of change in the medium term, resulting in a **major adverse** effect during the day and at night, which would be significant. When complete, the new developments would form an extension of the cluster of buildings at South Terminal. Open views of the existing car park and surrounding trees would be replaced by large scale tall buildings in close proximity that would obscure views. The completed buildings, although dominant in views, would be of an appropriate architectural design to maintain the appearance and quality of the airport. Receptors would experience a high magnitude of change in the long term, resulting in a **moderate adverse** effect during the day and at night, which would not be significant.

Travelodge

8.9.125 Occupiers of south east facing rooms would gain partially filtered, relatively near views through boundary vegetation in the winter of the surface access satellite contractor compound at North Terminal. Occupiers of hotel rooms are receptors of medium sensitivity to a low magnitude of change, depending on the season, resulting in a **minor adverse** level of effect during the day and at night, which would not be significant.

Members of the Public Using the McDonalds and KFC at South Terminal

8.9.126 The previous clearance of the majority of woodland planting and mature trees to the south of the A23 as part of the initial works to improve the South Terminal roundabout and to create the flyover would reduce the extent of screening vegetation and open up views of the construction activities initially. The activities would be prominent and discordant in close proximity to receptors, particularly in the winter when vegetation is not in leaf. By the end of the phase the completed South Terminal roundabout, A23 flyover and traffic would form prominent elements of high-level

transport infrastructure, partially visible through a narrow strip of retained planting in the summer, with more open views in the winter when vegetation is not in leaf. The Project, including moving traffic and lighting would be prominent in close proximity to receptors. Receptors at north facing windows and outdoor spaces would be of medium sensitivity in the short to medium term. The magnitude of impact would be medium, leading to **moderate adverse** effects during the day and at night, which would not be significant.

Roband Electronics

8.9.127 The noise mitigation feature would be visible in near, open views gained by people at their place or work immediately adjacent to the airport. By the end of this phase new tree and shrub planting up to eight years old would help to blend the engineered feature into the surroundings. Occupiers of the property are receptors of low sensitivity to a low magnitude of change resulting in a **minor adverse** level of effect during the day and at night, which would not be significant.

Meadowcroft House

8.9.128 Receptors would gain filtered views through boundary vegetation of the contractor compound for the South Terminal roundabout improvements. Large plant and activities would be visible above hoardings whilst the batching plant would be more prominent against the skyline. Construction activities associated with the South Terminal roundabout and flyover would initially be visible beyond, through vegetation. Temporary lighting would be visible in place of existing columns on the A23 and against the backdrop of lighting at the airport. By the end of the phase the completed flyover, infrastructure and traffic using the road would be prominent in the view. People at their place of work are receptors of low sensitivity and would experience a medium magnitude of change resulting in a **minor adverse** effect, during the day and at night, for the medium term, which would not be significant.

Occupiers of the Amadeus Building and Schlumberger House Commercial Properties at South Terminal

8.9.129 Initially the South Terminal roundabout and flyover construction activities, followed by the completed scheme and traffic, visible due to previous vegetation clearance would change views for people at their place of work in the Amadeus building and Schlumberger House. Receptors at north facing windows and outdoor spaces would be of low sensitivity in the short to medium term. The magnitude of impact would be medium, leading to **minor adverse** effects during the day and at night, which would not be significant.

Occupiers of Vehicles and Trains

A23

8.9.130 Occupiers of vehicles travelling along the A23/M23 would pass through the construction works for the South Terminal roundabout and North Terminal roundabout in 2030 and the North Terminal roundabout and Longbridge roundabout in 2031 to 2032. Receptors would gain open views revealed by the vegetation clearance activities. Existing infrastructure and buildings within the airport would be visible with the associated South Terminal surface access contractor compound immediately to the north, changing the largely green backdrop to the busy road corridor. The scale and nature of the construction activities would be prominent and at times dominant in views. As the construction works progress the South Terminal roundabout improvements would be completed within this phase. Occupiers of vehicles would be of low sensitivity to a high magnitude

of change, leading to a **moderate adverse** effect during the day and at night in the short to medium term, which would not be significant.

Lowfield Heath Road

8.9.131 As the proposed planting on the reconfigured and realigned noise mitigation feature becomes established after a period of up to eight years, it would have a similar appearance to the existing feature near Lowfield Heath Road, becoming a wall feature as it extends north east into the airport. The low sensitivity receptors would experience a low magnitude of change and a **negligible adverse** effect during the day and at night, which would not be significant.

Balcombe Road

8.9.132 Receptors in this location are represented by Viewpoint 9. The completed decked parking at Pentagon Field would include large-scale concrete and steel structures with signage and lighting surrounded by a security fence. The car park would completely change the character of a grazed field on the perimeter of the airport. However, the roadside hedgerow would be retained and, if maintained to a higher level and supplemented with additional tree planting, would partially screen or soften some views of the new development. Decked car parks are a typical feature of the airport and would result in an intensification of an existing land use within views from the road. Occupiers of vehicles are receptors of low sensitivity to a high magnitude of change resulting in a **moderate adverse** level of effect during the day and at night, which would not be significant.

8.9.133 Pedestrians using the roadside pavement are of medium sensitivity in this location. There would be a high magnitude of change resulting in a **major adverse** level of effect during the day and at night, which would be significant.

Ifield Road

8.9.134 Receptors in this location are represented by Viewpoint 13. The reconfigured northern runway, reconfiguration/modifications of taxiways and the noise mitigation feature would be barely perceptible in views through gaps in the roadside hedgerow. Occupiers of vehicles are receptors of low sensitivity to a negligible magnitude of change resulting in a **negligible adverse** effect during the day and at night, which would not be significant.

Railway

8.9.135 Occupiers of trains on the railway would continue to gain brief, filtered views west through vegetation in winter only of the tallest elements within the main contractor construction compound and of the completed hotel at the building compound adjacent to the car rental location. In these locations passengers would be of low sensitivity to a negligible magnitude of change, resulting in a **negligible adverse** effect, which would not be significant. Near and relatively open views east of the South Terminal roundabout and flyover construction activities and associated contractor compound would be visible on the northern edge of the airport. Views of the highway construction would be revealed through the removal of roadside vegetation. The activities and compound would form large scale discordant additions to the views in the short to medium term. The magnitude of change would be high, resulting in **minor to moderate adverse** effects during the day and at night, which would not be significant.

Mid to Long Distance Views

8.9.136 Mid to long distance views from the surrounding landscape may include tall buildings or high level construction activities such as cranes in several locations. These would form recognisable or barely perceptible additions, some slightly discordant in nature that, if visible, would be seen above intervening tree tops and within areas of existing built development at the airport. These types of views may be gained by medium to high sensitivity receptors at Viewpoint 12 at Rowley Farm bridleway, Viewpoint 13 at Lowfield Heath Road, at Viewpoint 14 on the Sussex Border Path east of Charlwood, Viewpoint 15 at Norwood Hill, Viewpoint 16 at Turners Hill and Viewpoint 17 at Tilgate Hill. The change in view would be no more than negligible, leading to **negligible to minor adverse** effects in the medium term, during the day and at night, which would not be significant.

8.9.137 The slight increase in aircraft using realigned and reconfigured runways and taxiways at Gatwick would be barely perceptible. Therefore, it is considered that there would be no readily discernible change to the existing baseline level of visible or audible aircraft in 2030 to 2032 and, therefore, no significant effect.

Significance of Effects

8.9.138 No further mitigation or monitoring is required and therefore the significance of effects would remain as presented above. However, planting proposals would be included in many of the elements of the Project design. In 2030, the planting would be in place, but it would be immature and would not have reached its intended design year. In time, as mitigation planting matures, the level of effect on visual receptors is likely to reduce.

Effects on Tranquillity within Nationally Designated Landscapes

8.9.139 The number of overflights within the study area as a result of the Project is estimated to increase by up to approximately 5% by 2030 to 2032. It is highly unlikely that receptors would be able to perceive a 5% increase in overflying aircraft within the study area. Therefore, it is considered that high sensitivity receptors would experience a negligible magnitude of change, resulting in no more than a **Negligible adverse** effect (compared to forecast future baseline numbers without the Project), which is not significant.

2033-2038

8.9.140 This section describes the effects that would arise as a result of a small number of ongoing construction activities occurring during 2033 to 2038 and the mainly operational activities associated with this assessment year period. The latter includes the elements of the Project assessed within the previous sections for 2024 to 2029 and 2030 to 2032. Key effects are summarised in table format in the summary section at the end of the chapter (see Table 8.13.1).

8.9.141 A summary of the maximum design scenario dimensions required for the construction of the following elements of the Project is provided in Table 8.7.1. Further detail relevant to this section of the assessment is provided below.

Hangar

8.9.142 A new hangar located north of Larkins Road is anticipated to be complete by the end of 2033. The building would be up to 32 metres high with a footprint of approximately 12,440 m^2.

Internal Access

8.9.143 The Larkins Road diversion (Phase 2) and provision of autonomous vehicles stations at North and South Terminals would be completed and operational by 2034.

Pier 7

8.9.144 The construction of Pier 7 would be completed in 2034. This would be a steel portal frame and concrete building with ground floor plus two levels up to 18 metres high and concrete apron up to 10.1 hectares.

Multi-Storey Car Park Y

8.9.145 Phase 2 construction of the multi-storey car park Y would be undertaken in 2034, for completion in 2035. This would provide 4,000 spaces and a footprint of 1.9 hectares.

Gatwick Stream Flood Compensation

8.9.146 An area of 18,000 m^2 and up to approximately 3 metres deep within an area of three grass fields partly defined by trees and hedgerows, connected to the Gatwick Stream by a spillway.

Contractor Compounds: MA1, Airfield Satellite, North Terminal and South Terminal and Longbridge Roundabout

8.9.147 Completion of activities and restoration of compounds to existing land uses. An attenuation pond would be incorporated into the restoration proposals at the Longbridge Roundabout.

Effects on Landscape Character

Gatwick Airport Character Area

8.9.148 All of the elements of the Project constructed within the first phases of development would now be operational. The alterations to the hardstanding of the northern runway, reconfiguration/ modifications of taxiways, holding areas and stands would be as set out for 2024 to 2032, forming a relatively minor increase in hardstanding and a decrease in grassland within the airport compared to the existing baseline. The replacement Purple Parking at Crawter's Field would also have resulted in an intensification of an existing land use. The completion and operation of the North Terminal extensions would form large scale additions to tall buildings that would be prominent within the airport, although they would adopt appropriate high quality architecture to ensure the appearance of the building cluster is maintained or enhanced ensuring that, on balance, there would be a neutral effect on character. The five relocated substations would create very minimal change within the airport. The completion of the improved South Terminal and North Terminal roundabouts and new flyovers would introduce large scale concrete structures, steep retained earthworks and widened carriageways with associated lighting columns. The Project would considerably change the transport corridor and influence the airport edge. The completed Longbridge roundabout would be a relatively low key improvement to the existing junction arrangement. The appropriate use of high quality structures and landscape planting treatments to integrate the new infrastructure with its surroundings would ensure the appearance of the road corridor is, on balance, maintained in the long term.

8.9.149 The main contractor compound, surface access satellite compounds (airfield, South Terminal roundabout and North Terminal roundabout) would continue to be operational up to the end of 2035, forming conspicuous and large-scale additions to the character area. The completed CARE

facility would form a slightly discordant feature within the airport. However, these effects would be partially offset by the removal of disused infrastructure at the existing CARE facility. Replacement and new perimeter tree and shrub planting would be up to eight years old by 2038 and would begin to soften and screen the main elements of the CARE facility within the wider airport context. The CARE facility Option 2 flue location and high-level cranes within the North Terminal roundabout improvements are more likely to influence the adjoining landscape of the Open Weald rural landscape than the flue at the CARE Option 1 location. The operational flood compensation areas and River Mole diversion would form low key additions to the airport that would reflect the rural fringe character of their immediate settings. The mitigation landscape scheme of native habitats would be approximately 13 years old by the end of this phase and would have begun to achieve its intended design function, merging with the surroundings and softening the engineered features, providing beneficial effects to offset any remaining adverse effects. The public footpath link extending south along the River Mole and looping around the Museum Field flood compensation area would provide a long term benefit for the local community.

8.9.150 The operational South Terminal extension, South Terminal hotel, the new hotel at the building compound adjacent to the car rental location, office buildings and multi-storey car park H adjacent to the South Terminal would significantly increase the scale and mass of tall buildings within this cluster. The buildings would be prominent within the airport, although they would adopt appropriate high quality architecture to ensure the appearance of the building cluster is maintained or enhanced. The loss of mainly surface car parking and low-level buildings of minimal architectural quality to accommodate the improvements would, however, ensure that, on balance, there would be a neutral effect on character. Existing mature tree and shrub planting around existing car park H would be retained to ensure a high quality setting and visual screen is retained within which to locate extensive new development. Additional landscape planting proposals would be up to approximately 10 years old and would contribute to the high quality scheme of external spaces.

8.9.151 The operational decked car park at Pentagon Field would continue to form a large scale and prominent addition to the landscape on the edge of the airport. The change from grazed field to large scale infrastructure, traffic, lighting and signage would be prominent. The perimeter planting proposals would be up to eight years old by the end of this phase and would help to merge the proposals with the surrounding hedgerows and woodland on the edge of the airport and filter views of the development, reducing its apparent scale and mass.

8.9.152 The completion and operation in 2034 of the Pier 7 building and concrete hardstanding would require the demolition of existing structures in the area known as Oscar. On balance, this would create a slight improvement in the character of this part of the airport. Temporary lighting would be required to provide a safe and appropriate working environment during the limited parts of the Project remaining under construction.

8.9.153 The newly operational elements of the Project would be typical of the existing airport and would provide an intensification of existing character. The final phase of construction of large-scale buildings and structures across the airport would result in a temporary direct effect on the character area, however the nature and scale of the developments and construction phase activities would not be completely out of character within an operational airport. Overall, there would be a general perception of an increase in the scale and mass of large buildings and structures within the airport and a slight reduction in the extent of green infrastructure. The Gatwick Airport urban character area, within the wider Low Weald landscape of West Sussex,

would be of low sensitivity to a medium magnitude of impact. The duration of these effects would range from short to medium term for construction phase effects to long term (permanent) for operational phase effects. Overall, the level of effect would be **minor adverse**, during the day and at night, which would not be significant. However, the operational Pentagon Field decked car park would be located within an open grazed field that is uncharacteristic of the wider airport and would have a medium sensitivity to change. The Project would continue to have a high magnitude of impact and a **major adverse** and significant effect on this particular element of the Gatwick Airport character area.

High Woodland Fringes Character Area

8.9.154 The decked car parking at Pentagon Field would lie adjacent to the rural farmland of the character area. The scale and mass of the structure and the parked and moving vehicles would have an influence over the neighbouring landscape. The lighting on the top deck and vehicle lights would have an influence over the rural character at night. New hedgerow and tree planting located around the perimeter of the Project would be reaching maturity and would provide some mitigation at this time. The new car park would form an extension of existing airport infrastructure and character, extending the current influence over neighbouring farmland. However, there would be no loss of features or characteristics of the character area. The sensitivity of the High Woodland Fringes to these impacts in this context is low and the magnitude of change would be low, resulting in **minor adverse** effects in the long term during the day and at night, which would not be significant.

Upper Mole Farmlands Character Area

8.9.155 The completed noise mitigation feature with mature native planting established on the western edge of the airport would continue to have negligible effects on the adjoining rural character area in the long term.

8.9.156 The replacement Purple Parking at Crawter's Field would lie adjacent to the Upper Mole Farmlands character area. Some tree clearance, new hardstanding, security fencing, signage, lighting and cars would influence the rural character of the neighbouring landscape, although the retention of existing woodland adjacent to the airport perimeter fence would ensure that effects are minimised. Car parks are a typical feature of the airport in this location and would extend and intensify an existing influence. The sensitivity of the character area to these effects in this context is low and the magnitude of change would be low, resulting in **negligible adverse** effects in the long term during the day and at night, which would not be significant.

Mole Valley Open Weald Character Area

8.9.157 The construction activities at the Longbridge Roundabout contractor compound would extend into the early part of this phase and would have a direct, temporary effect on the landscape on the edge of Horley until the end of 2033. The conspicuous and discordant nature of the activities would have a high magnitude of direct impact on a low sensitivity receptor, resulting in a **moderate adverse** effect during the day and at night in the long term, which would not be significant. The landscape planting proposals associated with the Longbridge roundabout and attenuation feature would be newly established and no more than four years old and would provide some beneficial impacts to partially offset any adverse effects on the character of the field or influence over the neighbouring open space and conservation area. Following completion of the surface access improvements at Longbridge the compound would be removed and the

grassland reinstated. The low sensitivity character area and low magnitude of beneficial and adverse effects would, in the long term, result in **neutral** effects.

8.9.158 The operational flood compensation areas at Museum Fields and the River Mole diversion, due to their low key nature and established landscape planting and grassland seeding proposals, would have limited influence over the character of the neighbouring rural area.

8.9.159 The top of the new hangar on the north-west side of the airport may be intervisible with this neighbouring landscape, in the context of other existing, similar elements of development at the airport.

8.9.160 The sensitivity of the character area to these effects in this context is low and the magnitude of change would be low, resulting in **negligible adverse** effects in the medium to long term during the day and at night, which would not be significant.

Low Weald Character Area

8.9.161 The ongoing operation until the end of 2035 of the surface access contractor compound north of the South Terminal roundabout would continue to have a high magnitude of direct impact on a low sensitivity receptor, resulting in **moderate adverse** effects on the horse paddocks of the rural fringe of Horley during the day and at night, which would not be significant. Following completion of the surface access improvements the compound would be removed and the grassland reinstated. The long term direct effect on the character area would be neutral.

8.9.162 The new hotels, offices and multi-storey car parks at South Terminal would increase the scale and mass of tall buildings within this cluster. This increase in development would intensify the existing influence that buildings at South Terminal have over the adjacent landscape of the Low Weald in Reigate and Banstead District.

8.9.163 The operational South Terminal roundabout and flyover structure would change the character of the A23/M23 transport corridor in this location beyond the edge of the Low Weald character area. The removal of the majority of existing highway woodland planting and trees and introduction of large-scale concrete structures, steep retained earthworks and widened carriageways with associated lighting columns would intensify development in this location and place moving traffic at a higher level within the adjacent character area. The character area is considered to be of low sensitivity to these types of changes. The medium magnitude of impact would result in a **minor adverse** effect during the day and at night, which would not be significant. By the end of this phase new highway planting would be up to six years old and would start to screen and soften the large scale engineered structures and traffic movement, particularly during the summer when in leaf.

Effects on Townscape Character

Northgate Crawley Townscape Character Area

8.9.164 The main contractor construction compound MA1 would continue to have an influence over the neighbouring Northgate townscape character area until its removal in 2035. The urban character area would be of low sensitivity to a low impact in the long term. The level of effect would be **minor adverse** during the day and at night, which would not be significant.

Horley Townscape Character Area

8.9.165 The landscape planting proposals associated with the Longbridge roundabout and attenuation feature would be immature four years after implementation and would partially offset adverse effects on the character of the open space and conservation area. The low sensitivity of the character area to these changes and low magnitude of beneficial and adverse impacts would, in the long term, result in **neutral** effects.

8.9.166 The North Terminal roundabout and surface access improvements would be operational immediately adjacent to the public open space of Riverside Garden Park on the edge of this townscape character area. The Riverside Garden Park is of medium sensitivity to a low magnitude of change in the long term, resulting in **minor adverse** effects during the day and at night, which would not be significant. By the end of this phase new highway planting would be up to six years old and would start to screen and soften the large scale engineered structures and traffic movement, particularly during the summer when in leaf.

8.9.167 The urban edge of Horley would not be directly affected by the North Terminal roundabout or other highway improvements. However, the loss of vegetation and the large scale engineered structures in close proximity to the residential district would have an adverse influence over it. The majority of the character area is of low sensitivity to this type of effect. The magnitude of change would be low and the level of effect during the day and night time would be **negligible adverse**, which would not be significant.

Effects on Visual Amenity

Members of Gatwick Staff

8.9.168 The alterations to the hardstanding of the northern runway, reconfiguration/modifications of taxiways, holding areas and stands, relocated substations and operational surface water management features would continue to form a relatively minor change to views for most members of staff within the airport, previously described in 2030 to 2032. The number of ATMs, including aircraft movements on the ground, as a result of the Project is estimated to increase by up to approximately 20% by the end of 2032 and would remain at this level during 2033 to 2038. Aircraft currently form a regular visible or audible feature that forms a slightly discordant aspect within the airport. An increase of aircraft may be discernible to some observers or barely perceptible as an increase to other observers and not significant. Some people may be unable to perceive the increase in the number of aircraft and would therefore experience no discernible effect. The replacement surface parking (Purple Parking) at Crawter's Field would continue to form a relatively large, although typical, feature of the airport. The extension and reconfiguration of the noise mitigation feature and the relocated fire training ground would also form typical elements of the airport and would be no more conspicuous than existing infrastructure. The MA1 main contractor compound, North Terminal satellite contractor compound and Airfield satellite contractor compound would continue to form discordant and at times prominent features within the airport until their removal in 2035.

8.9.169 The operational South Terminal roundabout and flyover, including moving traffic, would be prominent in views from locations on the northern edge of the airport and more apparent than the existing road due to earlier vegetation removal and the raised level of the flyover. New planting would be up to six years old at the end of this phase and would start to mitigate visual effects. The North Terminal roundabout, flyover and A23 improvements would form a large scale and

prominent addition to the edge of the airport. Views from the edge of the airport that would initially be opened up through the large-scale removal of mature highway planting would start to be filtered and screened by new planting.

8.9.170 The North Terminal extensions would form large scale additions to existing tall buildings that, whilst visually prominent, would be of a high quality design to merge with existing buildings within the cluster.

8.9.171 The completed new hangar north of Larkins Road would form a large scale, visually prominent element in the western part of the airport. The building would be dominant in near open views from roads and hardstanding in the long term. The building would have a similar appearance in terms of scale, form and materials to the nearby Boeing hangar and would be characteristic of the airport.

8.9.172 The South Terminal extension, South Terminal hotel, the hotel at the building compound at the car rental location, office buildings and multi-storey car park H adjacent to the South Terminal would introduce further tall buildings within this cluster. The new buildings, although prominent, would be of a high quality architectural design to maintain the appearance of the airport. Existing mature tree and shrub planting around existing car park H would be retained to minimise views of built development and reduce the apparent scale and mass of buildings. New tree and shrub planting within external spaces would form an attractive setting for these buildings.

8.9.173 The North Terminal Long Stay decked car park would introduce large scale structures into the airport, currently occupied by surface parking. The scale and mass of the decked car park would form a prominent addition to near views and to the back drop of more distant views across the airport. New perimeter tree and shrub planting would be up to six years old and would soften and screen the base of the structure within the airport context.

8.9.174 The Pentagon Field decked car park would form a large scale and visually prominent structure that would extend and intensify existing areas of car parking within the airport. Perimeter planting proposals would be up to nine years old and relatively well established. The vegetation would screen and filter views of the decked structure and soften its appearance on the edge of the airport.

8.9.175 The operational elements of the Project and the final stages of some construction activities described above would be visible to members of Gatwick staff working in different locations within the airport or using staff car parks and internal access roads. People at their place of work are generally considered to have a low sensitivity to change, particularly given the nature of the change and the context of a busy international airport. The elements of the construction activities and the larger operational developments may be barely perceptible when seen at distance, or prominent and at times dominant when in close proximity. The magnitude of change would range from negligible to high resulting in **negligible to moderate adverse** effects, which would not be significant.

Members of the Public Visiting Gatwick

8.9.176 The reconfigured noise mitigation feature and fire training ground, replacement Purple Parking at Crawter's Field and airfield satellite contractor compound would continue to be apparent in views from the south side of the airport at Purple Parking, previously described in 2030 to 2032. The operational northern runway and taxiway reconfigurations would continue to be barely

perceptible. Occupiers of vehicles are receptors of low sensitivity to a low magnitude of change resulting in a **minor adverse** level of effect during the day and at night, which would not be significant.

8.9.177 Members of the public using the airport access roads and North Terminal long stay surface car parks would gain some near open views of ongoing construction activities at the surface access satellite compound at North Terminal and operational CARE facility, multi-storey car park J, the various elements of the North Terminal extension, the hangar north of Larkins Road, South Terminal extension, South Terminal hotel, the hotel at the building compound at the car rental location, office buildings, multi-storey car park H adjacent to the South Terminal, North Terminal long stay decked car park, the North Terminal roundabout and flyover. These elements of the Project would introduce further tall buildings and structures, generally in close proximity to existing building clusters. Receptors in one of these locations are represented by Viewpoint 1 at Perimeter Road North. These developments are large scale and prominent. The nature and extent of these developments would form prominent and at times dominant elements within the existing and future baseline airport context. Occupiers of vehicles are receptors of low sensitivity to a medium to high magnitude of change resulting in a **minor or moderate adverse** level of effect during the day and at night, which would not be significant. Pedestrians using public right of way 346/2Sy are receptors of medium sensitivity, also represented by Viewpoint 1, and would continue to experience **minor adverse** effects, which would not be significant.

8.9.178 Occupiers of vehicles at North Terminal multi-storey car parks are of low sensitivity and would continue to gain views of the surface access satellite compound, previously described in 2030 to 2032. The low magnitude of change would result in a **minor adverse** level of effect during the day and at night, which would not be significant. Following completion of the surface access improvements the compound would be removed. The long term effect on views would be neutral.

8.9.179 Occupiers of west facing locations in the Premier Inn Hotel at North Terminal would gain views of the completed North Terminal extensions as minor intensifications of the existing building cluster. Receptors would be of medium sensitivity to a negligible magnitude of change in the long term, resulting in a **negligible adverse** effect during the day and at night, which would not be significant.

8.9.180 Members of the public using the North Terminal buildings and forecourt would potentially gain glimpses of the terminal extensions as minor additions to the complex airport infrastructure. Receptors are of medium sensitivity to a negligible magnitude of change resulting in a **minor adverse** effect in the long term, during the day and at night, which would not be significant.

Walkers using Public Rights of Way

River Mole Public Right of Way

8.9.181 Receptors in this location are represented by either Viewpoint 4 or 5. Walkers would continue to gain near, filtered views of the taller elements within the surface access satellite contractor compound at North Terminal up to the end of 2035, previously described in 2030 to 2032. Views south west from Viewpoint 5 may include the CARE facility Option 2 building and flue, visible filtered through intervening vegetation in winter only. Receptors are of high sensitivity to a negligible magnitude of impact, resulting in **minor adverse** effects, during the day and at night, for the medium term, which would not be significant.

Public Right of Way 359/Sy Pentagon Field

8.9.182 Receptors in this location are represented by Viewpoint 10. Walkers would gain open, near views of the large scale, decked car park, including parked cars and traffic. The car park would completely change the character of an open, grazed field on the perimeter of the airport, obscuring views beyond. Car parks, including decked car parks, are a typical feature of the airport in views from sections of this footpath and would result in an intensification of an existing land use within views gained during a journey. Perimeter planting including native trees and shrubs would be up to nine years old and relatively well established by the end of this phase. The new vegetation would, in summer in particular when in leaf, make a significant contribution to the mitigation of effects on views. Walkers are receptors of high sensitivity and would experience a medium magnitude of change. On balance, when considering the beneficial effects of new planting in combination with the adverse effects of development the effect would be **moderate adverse** in the long term during the day and at night, which would not be significant.

Public Right of Way 360/Sy South Terminal

8.9.183 Receptors at Viewpoint 3 would continue to gain open views of the new hotel in front of the existing multi-storey car park. Walkers are receptors of high sensitivity and would experience a medium magnitude of both adverse and beneficial changes leading to, on balance, a **minor adverse** level of effect during the day and a **negligible adverse** effect at night, in the long term, which would not be significant.

Public Right of Way 360/1Sy Tinsley Green

8.9.184 Receptors in this location are represented by Viewpoint 11. Walkers would gain narrow open near views and filtered views of the earth moving activities required to construct the Gatwick Stream flood compensation area and the completed facility. Some existing tree and shrub vegetation would be removed to accommodate the works, although most would be retained. Views would be gained with a glimpsed backdrop of existing flood compensation land and infrastructure at Crawley Sewage Treatment Works. Walkers are receptors of high sensitivity and would experience a low magnitude of change, resulting in a **moderate adverse** effect in the medium to long term, which would not be significant.

Public Right of Way 362a Horley

8.9.185 Receptors in this location are represented by Viewpoint 8. Walkers would continue to gain open views to the contractor compound for the South Terminal roundabout previously described in 2030 to 2032, until the removal of the compound by the end of 2035. The South Terminal roundabout and flyover would now be operational and visible at a higher level beyond, including moving traffic. Lighting would be visible in place of existing columns on the A23 and against the backdrop of lighting at the airport. Walkers are receptors of high sensitivity and during the use of the construction compound would temporarily experience a medium magnitude of change resulting in a **moderate adverse** effect, during the day and a low magnitude of change and a **minor adverse** effect at night, for the short term, which would not be significant. When the construction compound is removed and the land restored to grazing paddocks the surface access improvements would result in a long term low magnitude of change and a **minor adverse** effect in the day and a negligible magnitude of change and a **negligible adverse** effect at night, which is not significant.

New Public Footpath linking Museum Field Water Storage Facility to Public Right of Way 347Sy

8.9.186 Walkers using this new footpath link would continue to gain a view of operational aspects of the airport in the naturalistic context of the land on the fringes of Gatwick. The River Mole diversion, flood compensation areas, taxiways, car parks, relocated fire training ground, noise barrier and aircraft taking off and landing and using taxiways would be visible within the context of landscape planting proposals that would be up to 14 years old. The mature planting would offer significant mitigation of visual effects and would integrate these features into the surrounding rural landscape.

Public Right of Way 574 and Church Meadows Public Open Space Horley

8.9.187 Following completion of the surface access improvements at the Longbridge roundabout in 2032 and the removal of the construction compound in 2033 new hedgerow and tree planting beside the junction and grass seeding and marginal planting associated with the attenuation pond would be up to four years old and would partially filter and screen views of the junction arrangement and soften the attenuation feature, providing greater visual and ecological diversity within this open space. Walkers are receptors of high sensitivity and would experience a low magnitude of both adverse and beneficial changes resulting in, on balance, a **negligible** adverse effect during the day and at night, for the long term, which would not be significant.

Cyclists

National Cycle Route 21

8.9.188 Cyclists using the national cycle route between the A23 and the railway would continue to gain filtered views through vegetation, in winter only, of the tallest elements within the main contractor compound and the new hotel at the building compound at the car rental location, up to 2035, as previously described in 2030 to 2032, leading to **minor adverse** effects, which would not be significant. Where the cycle route passes beneath the A23 and through Riverside Garden Park it is anticipated that it would be maintained along its existing alignment during the construction phase of the surface access improvements. If the route remains open, receptors in this location are represented by Viewpoint 6. Removal of all highway vegetation would reveal more open views of the A23 and traffic when operational. At night the lit corridor would be slightly more prominent in the view against a backdrop of skyglow from the airport. Cyclists are receptors of high sensitivity to a medium magnitude of change in the short term, resulting in a **moderate adverse** effect, during the day and at night, which would not be significant. Visitors to the park on foot would experience the same level of effect. New highway planting would be up to six years old and not mature, providing limited screening.

Occupiers of Commercial Properties

Premier Inn

8.9.189 Occupiers of the Premier Inn Hotel adjacent to staff car park Y would continue to gain near views through boundary vegetation, mainly in winter, of the surface access satellite contractor compound at North Terminal including 15 metre high batching plant up to 2035, resulting in **moderate adverse** effects during the day and at night. Occupiers of hotel rooms facing south west towards the North Terminal extensions would experience a negligible magnitude of change resulting in a **negligible adverse** level of effect during the day and at night, which would not be significant.

Hilton Hotel

8.9.190 Occupiers of rooms on the east facing elevation of the Hilton Hotel would continue to gain views of the completed South Terminal Hotel offices and multi-storey car park H. The completed buildings, although dominant in views, would be of an appropriate architectural design to maintain the appearance and quality of the airport. Landscape planting proposals would be up to seven years old and would contribute to the overall quality and character of the new development, softening views of the architecture and external spaces. Medium sensitivity receptors would experience a high magnitude of change in the long term, resulting in a **moderate adverse** effect during the day and at night, which would not be significant.

Travelodge

8.9.191 Occupiers of south east facing rooms would continue to gain views of the surface access satellite contractor compound at North Terminal until 2035 before it is decommissioned, leading to a **moderate to minor adverse** level of effect during the day and at night, which would not be significant.

Members of the Public Using the McDonalds and KFC at South Terminal

8.9.192 The operational South Terminal roundabout and A23 flyover would continue to form partially visible elements of high-level transport infrastructure, filtered through retained vegetation and some additional new planting up to six years old by the end of this phase. Summer views are likely to be limited to lighting columns and tops of signage and tall vehicles. Receptors at north facing windows and outdoor spaces would be of medium sensitivity. The magnitude of impact would be low, leading to **minor adverse** effects in the long term during the day and at night, which would not be significant.

Roband Electronics

8.9.193 The noise mitigation feature would be completely clothed in mature native planting up to 14 years old by the end of this phase. The feature would merge successfully with the surrounding vegetation and countryside. Occupiers of the property are receptors of low sensitivity to a negligible magnitude of change resulting in a **negligible adverse** level of effect during the day and at night, which would not be significant.

Meadowcroft House

8.9.194 Receptors would continue to gain filtered views through boundary vegetation of the contractor compound for the South Terminal roundabout up to 2035, when it would be removed and grazed paddocks would be reinstated. The A23 roundabout and flyover would continue to be visible at a higher level beyond, including moving traffic. New lighting would be visible in place of existing columns on the A23 and against the backdrop of lighting at the airport. People at their place of work are receptors of low sensitivity and would experience a medium magnitude of change resulting in a **minor adverse** effect, during the day and at night, for the short term construction activities, reducing to a low magnitude of change and a **minor adverse** effect in the long term, which would not be significant.

Occupiers of the Amadeus Building and Schlumberger House Commercial Properties at South Terminal

8.9.195 People at their place of work in the Amadeus building and Schlumberger House would continue to be affected by the operational South Terminal roundabout, A23 flyover and traffic. By the end of this phase, the planting of native trees and shrubs would be up to eight years old and would partially replace the earlier phase of vegetation clearance which opened up previously concealed views of the transport corridor. Receptors at north facing windows and outdoor spaces would be of low sensitivity in the long term. The magnitude of impact would be low to medium depending on the floor of the building, leading to **negligible to minor adverse** effects during the day and at night, which would not be significant.

Occupiers of Vehicles and Trains

A23

8.9.196 Occupiers of vehicles travelling along the A23/M23 would pass through the completed surface access improvements between South Terminal and the Longbridge roundabout. By the end of this phase, the planting of native trees and shrubs around the South Terminal junction would be up to eight years old and would partially replace the earlier phase of vegetation clearance which opened up views out from the transport corridor that were previously concealed. Views from the A23 at the North Terminal junction would remain relatively open during this stage. Existing infrastructure and buildings within the airport would be visible, initially together with the associated contractor compounds immediately to the north and south. Occupiers of vehicles would be of low sensitivity to a low to medium magnitude of change, leading to a **negligible to minor adverse** effect during the day and at night in the medium to long term, which would not be significant.

Lowfield Heath Road

8.9.197 The reconfigured and realigned noise mitigation feature would be completely clothed in mature native planting up to 14 years old by the end of this phase. The feature would merge successfully with the surrounding vegetation and countryside. Occupiers of vehicles are low sensitivity receptors and would experience a negligible magnitude of change and a **negligible adverse** level of effect during the day and at night, which would not be significant.

Balcombe Road

8.9.198 Receptors in this location are represented by Viewpoint 9. The completed decked parking at Pentagon Field would be large in scale changing the character of a grazed field on the perimeter of the airport. The roadside hedgerow would be retained and maintained to a higher level and the additional tree and shrub planting, which would be up to nine years old by the end of this phase, would screen and soften many views of the new development. Decked car parks are a typical feature of the airport and would result in an intensification of an existing land use within views from the road. Occupiers of vehicles are receptors of low sensitivity to a medium magnitude of change resulting in a **minor adverse** level of effect during the day and at night, which would not be significant.

8.9.199 Pedestrians using the roadside pavement are of medium sensitivity in this location. There would be a medium magnitude of change resulting in a **moderate adverse** level of effect during the day and at night, which would not be significant.

Ifield Road

8.9.200 Receptors in this location are represented by Viewpoint 13. The reconfigured northern runway, reconfiguration/modifications of taxiways and the noise mitigation feature would continue to be barely perceptible in views through gaps in the roadside hedgerow, as previously described for 2026, resulting in a **negligible** effect, which would not be significant.

Railway

8.9.201 Occupiers of trains on the railway would continue to gain brief, filtered views of the tallest elements within the main contractor construction compound until 2035 (when it would be removed) and views east of the construction activities at the Gatwick Stream flood compensation area. In these locations passengers would be of low sensitivity to a negligible magnitude of change, resulting in a **negligible adverse** effect, which would not be significant. Near views of the new hotel at the building compound at the car rental location would be gained against a backdrop of the large-scale South Terminal. Low sensitivity receptors are likely to perceive a negligible magnitude of change and no more than **negligible adverse** effects on views, which would not be significant.

8.9.202 Near, relatively open views west would be gained of the operational A23 roundabout and flyover at North Terminal and also views east to the associated contractor compound until 2035 when it would be removed. Views of the operational surface access improvements would be initially revealed through the removal of roadside vegetation. By the end of this phase new roadside planting would be up to six years old and would start to screen and filter views of traffic. The development and compound would form prominent and at times discordant additions to the views in the short to medium term. The magnitude of change would be medium for low sensitivity receptors, resulting in **negligible to minor adverse** effects during the day and at night, which would not be significant.

Occupiers of Residential Properties

Horley Residential Edge

8.9.203 Receptors in this location are represented by Viewpoint 7. The previous removal of highway planting beside the A23 to accommodate the surface access improvements would initially reveal some filtered views of the A23 development and traffic through retained vegetation within the park and also garden vegetation and fences within a range of nearby properties on several roads on the fringes of Horley including:

- approximately 40 properties on The Crescent;
- approximately 30 properties on Riverside;
- two properties on Woodroyd Gardens;
- four properties on Cheyne Walk;
- 15 properties on Longbridge Road; and
- four first floor and four second floor apartments of two blocks of three story buildings on Longbridge Road.

8.9.204 The operational development would form a slight intensification of highway infrastructure for receptors. The degree of visibility of the development would depend largely on the intervening vegetation in Riverside Garden Park and the amount of tree and shrub vegetation within the gardens of properties. At night the lit road corridor would be visible, filtered through vegetation

against a backdrop of skyglow from the airport. Receptors at many properties listed above are unlikely to experience a perceptible change in view in the summer due to the screening properties of intervening vegetation when in leaf. The levels of effect defined below relate predominantly to winter views as a worst case. Occupiers of residential properties are receptors of high sensitivity to a negligible magnitude of change in the long term, resulting in a **minor adverse** effect, during the day and at night, which would not be significant.

Mid to Long Distance Views

8.9.205 Mid to long distance views from the surrounding landscape may include tall buildings or some high level construction activities such as cranes in limited locations. These would form recognisable additions, some slightly discordant in nature that would generally be visible above intervening tree tops and within areas of existing built development at the airport. These types of views may be gained by receptors at Viewpoint 12 at Rowley Farm bridleway, Viewpoint 13 at Lowfield Heath Road, at Viewpoint 14 on the Sussex Border Path east of Charlwood, Viewpoint 15 at Norwood Hill, Viewpoint 16 at Turners Hill and Viewpoint 17 at Tilgate Hill. The magnitude of change in view would be no more than negligible for generally high sensitivity receptors, leading to **negligible to minor adverse** effects in the medium to long term, during the day and at night, which would not be significant.

8.9.206 The increase in aircraft using realigned and reconfigured runways and taxiways at Gatwick Airport would form a barely perceptible intensification of an existing element of distant views of the airport. Therefore, it is considered that there would be no significant change to the existing baseline level of visible aircraft in 2033 to 2038.

Significance of Effect

8.9.207 No further mitigation or monitoring is required and therefore the significance of effects would remain as presented above. However, planting proposals would be included in many of the elements of the Project design. At the time of this assessment phase, the planting for most elements of the Project would be in place and would range from one year old to up to 14 years old. The beneficial effects of landscape mitigation have been included, where relevant, in the assessment above and levels of effect have been assessed accordingly. As mitigation planting continues to mature, the level of adverse effects on visual receptors is likely to reduce further.

Effects on Tranquillity within Nationally Designated Landscapes

8.9.208 The assessment of effects on the perception of tranquillity during the day and night time forms part of the landscape, townscape and visual impact assessment and draws on the assessment of overflights reported in Chapter 14: Noise and Vibration. The Gatwick Airport only overflight analysis is illustrated in Figures 8.6.3 and 8.6.5 and the combined analysis of all overflights within a wider 35 mile radius around Gatwick Airport is illustrated in Figures 8.6.4 and 8.6.6. In addition, the change in the numbers of overflights expected at nine well known and popular locations within nationally designated landscapes has been assessed individually. The assessment of the Project by the end of 2032 is approximated by considering the change in the total number of daily overflights at these locations that would arise if up to approximately 20% more Gatwick fights were added to the actual number of overflights in the baseline scenario of 2018. Appendix 14.9.2 of Chapter 14: Noise of the PEIR gives details of the methodology. 2032 is modelled as the interim year up to which air traffic numbers would increase. The results are summarised in Table 8.9.1.

Table 8.9.1: Increase in Daily Overflights at Assessment Locations

Assessment Location	Designation	Non-Gatwick Daily Overflights	Gatwick Daily Overflights	Non-Gatwick and Gatwick Daily Overflights	Non-Gatwick Overflights and Gatwick+ up to 20% Overflights by 2032	% Increase with Gatwick	Increase in Gatwick daily overflights
Hever Castle	High Weald AONB	9	246	255	304	19%	49
Ashdown Forest	High Weald AONB	3	85	88	105	19%	17
Wakehurst Place	High Weald AONB	1	12	13	15	18%	2
Leith Hill	Surrey Hills AONB	1	3	4	5	16%	0.7
Witley and Milford Commons	Surrey Hills AONB	17	1	19	19	1%	0.3
Petworth House	South Downs National Park	11	2	12	12	3%	0.3
Temple of the Winds, Blackdown	South Downs National Park	16	4	20	21	4%	0.8
Ditchling Beacon	South Downs National Park	9	4	13	13	6%	0.7
Firle Beacon	South Downs National Park	6	10	16	18	12%	2

8.9.209 The landscape and communities within the flight corridor over the High Weald AONB east of Gatwick Airport and south of Edenbridge would experience an increase in overflights of between approximately 15 and 20% to the existing baseline of more than 200 flights a day, by the year 2032. In the area of the AONB that fans out and curves to the south and west from Hever to Crowborough, where there are currently between 100 and 200 flights a day, the increase would also range from 15 to 20% of flights. Examples of people living within or using the AONB in these locations include visitors to Hever Castle and the Ashdown Forest. People would experience a relatively high level of tranquillity in landscapes of high scenic quality. These receptors are likely to be of high or very high sensitivity to change. Overflying aircraft at less than 7,000 feet currently form a regular visible or audible feature that forms a slightly discordant aspect when experiencing the landscape. The special qualities that people living within and visiting the High Weald AONB including its relative tranquillity and dark skies, whilst affected to some extent as a result of an increase in the number of overflying aircraft, would still be positive qualities that would be perceived. The largest increase in overflights would be in areas that currently experience the greatest number of overflights, where relative tranquillity is slightly lower. An increase of up to 20% in the number of aircraft following the same flight paths may be discernible to some residents or observers or barely perceptible as an increase to others. The magnitude of change would be negligible leading to **minor adverse** effects on the perception of tranquillity during the day and at night, which is not significant. Some people within the AONB may be unable to perceive the increase in the number of aircraft and would therefore experience no discernible effect to the level of tranquillity.

8.9.210 Areas of the High Weald AONB within the wider study area are generally overflown by 1 to 10 flights a day or 10 to 50 flights a day. In these two areas, people within the landscape would experience between 1 and 10 additional flights a day, respectively. The effects on the level of perceived tranquillity for high sensitivity receptors as a result of a negligible magnitude of change would be **minor adverse** as described above, which would not be significant.

8.9.211 Areas of the High Weald AONB within the 5 km radius study area are currently influenced by the large urban mass of Crawley, the concentration of people, the movement of traffic, the lighting associated with these and to a lesser extent, the intermittently visible and audible aircraft at Gatwick Airport. The presence of additional overflying aircraft in this baseline context would not lead to a significant increase in the perception of overall tranquillity or a significant change in the ability of people to enjoy the special qualities of the landscape of the fringes of the High Weald.

8.9.212 Large areas of the Surrey Hills AONB are overflown by Gatwick aircraft. A broad area of the designated landscape south of the settlements of Godalming to Haslemere is overflown by 1 to 10 flights a day and an area east of Godalming to Dorking is generally overflown by 1 to 10 or 10 to 50 flights a day. Some of these areas and communities would experience no increase in aircraft whilst others would experience an increase of between 1 and 5 flights. A small area of the AONB is overflown by 100 to 200 flights a day. In this location an increase of between 15 and 20% of flights would occur. These areas include popular and distinctive locations and local communities. People of high sensitivity using open rural spaces in the AONB such as Leith Hill would experience a negligible magnitude of change and no more than **minor adverse** effects as described above, which would not be significant. People using open spaces at Witley and Milford Commons would experience imperceptible change in the level of effects.

8.9.213 Smaller areas of the landscape on the southern edge of the Kent Downs AONB between the settlements of Merstham and Westerham and south of Sevenoaks are generally overflown by

between 1 and 10 Gatwick flights a day with smaller areas overflown by between 10 and 50 flights a day. People living within or using the landscape of the Kent Downs AONB would generally experience an increase in overflights of between 5 and 10%. The level of effects on the perception of tranquillity of high sensitivity receptors within these landscapes would be of negligible magnitude leading to **minor adverse** effects as described above, which would not be significant.

8.9.214 There would be very limited additional flights at less than 7,000 feet above ground level over the South Downs National Park. Small areas on the northern fringes of the designated landscape would generally experience an increase of between 0 and 5% as a result of the Project. The level of effects on the perception of tranquillity within landscapes at Temple of the Winds and Firle Beacon would be no more than **minor adverse** as described above, which would not be significant. People using open spaces at Petworth House and Ditchling Beacon would experience imperceptible effects.

8.9.215 Notwithstanding the potential 20% increase in the number of flights at less than 7,000 feet above ground level by 2032, in terms of noise emission levels, the future baseline would include changes in the aircraft fleet to quieter types. It is predicted that in 2032 there would be a reduction in the area of landscape and townscape affected by aircraft noise and, therefore, the number of residents affected living in the affected area, which supports the assessment of minor adverse effects within the study area.

Design Year: 2038 and Beyond

8.9.216 This section describes the continuing change in the level of effects that would occur as a result of the maturing landscape mitigation proposals embedded within many elements of the Project. The change in the landscape or townscape character or visual amenity as a result of planting proposals has been included in the sections above through the 15 year construction programme from 2024 to 2038. However, the design year for landscape planting, where it begins to reach its intended function at maturity is generally considered to be 15 years after implementation. Elements of the Project completed in the early years of the construction programme that have planting proposals associated with them would be 12 to 14 years old by the end of 2038. The beneficial effect on character and visual amenity of this relatively mature planting is described and assessed above for the following developments:

- noise mitigation feature;
- fire training ground;
- relocation of Pond A;
- flood compensation at Museum Field and land east of Museum Field;
- River Mole diversion;
- replacement Purple Parking at Crawter's Field;
- South Terminal extensions and forecourt (most elements); and
- North Terminal extensions and forecourt (most elements).

8.9.217 The following section of this chapter will therefore focus on the elements of the Project completed within the mid to later part of the 15 year programme where landscape planting proposals are immature at 2038 (between one and nine years old) and yet to achieve their design function:

- CARE Facility;
- New hangar;

- Pentagon Field decked car park;
- Offices, hotel and multi-storey car park at South Terminal car park H;
- North Terminal Long stay decked car park;
- Surface access/ North Terminal, South Terminal and Longbridge roundabouts; and
- Gatwick Stream flood compensation area.

8.9.218 Key effects are summarised in table format in the summary section at the end of the chapter (see Table 8.13.1).

8.9.219 A summary of the maximum design scenario dimensions required for the following elements of the Project is provided in Table 8.7.1. Further detail of the landscape mitigation proposals that would reach maturity after 2038 (in addition to those already identified) is provided below.

CARE Facility

8.9.220 The landscape proposals associated with the 22 metre high CARE Facility with a 50 metre high flue would reach maturity in 2045.

New Hangar

8.9.221 The landscape proposals associated with the 32 metre high new hangar north of Larkins Road would reach maturity in 2048.

Pentagon Field Decked Car Park

8.9.222 The landscape proposals associated with the decked car park structure up to 8 metres high on land raised by up to 4.4 metres, occupying a footprint of approximately 8.8 hectares would reach maturity in 2044.

Offices, Hotel and Multi-storey Car Park at South Terminal Car Park H

8.9.223 The landscape proposals associated with the group of new buildings up to 27 metres high in car park H would reach maturity in 2045.

North Terminal Long Stay Decked Car Park

8.9.224 The landscape proposals associated with the decked car park covering 13 hectares and up to 11 metres high would reach maturity in 2048.

Surface Access/ North Terminal, South Terminal and Longbridge Roundabouts

8.9.225 The landscape proposals associated with the surface access improvements incorporating steel and concrete flyovers at North and South Terminal Roundabouts, extensive earthworks and reinforced earth-walls and acoustic barriers would reach maturity in 2047 to 2050.

Gatwick Stream Flood Compensation Area

8.9.226 The landscape proposals associated with the flood compensation area of 18,000 m^2 within hedgerow bounded grass fields would reach maturity in 2053.

Effects on Landscape Character

Gatwick Airport Character Area

8.9.227 The completed and operational elements of the Project are described above in the 2033 to 2038 phase. The elements of the Project listed above all lie within the Gatwick Airport Character Area and the beneficial nature of the landscape mitigation proposals would improve the character and quality of the airport when mature. All elements of the Project constructed within the earlier phases of the Project would now be operational. The alterations to the hardstanding of the northern runway, reconfiguration/modifications of taxiways, holding areas and stands would represent a relatively minor increase in hardstanding and a decrease in grassland within the airport. The replacement Purple Parking at Crawter's Field would have formed an intensification of an existing typical land use within the airport.

8.9.228 The South Terminal hotel, office buildings and multi-storey car park H would significantly increase the scale and mass of tall buildings within this cluster. Existing mature tree and shrub planting around existing car park H would be retained and supplemented with ornamental tree and shrub planting to form an attractive, integrated series of external spaces that connect public and private areas.

8.9.229 The A23 surface access improvements, comprising the improved South Terminal and North Terminal roundabouts, new flyovers and steep retained earthworks requires the removal of large areas of mature woodland and scrub planting. After 15 years the new woodland planting would begin to achieve similar levels of softening and screening of the road improvements and connect with adjoining areas of vegetation at Riverside Garden Park and within the airport, reinstating the highway character.

8.9.230 The Pentagon Field decked car park and North Terminal Long Stay decked car park would introduce large scale structures on the edge of the airport that form either an intensification or extension of existing, typical airport infrastructure. The new tree and shrub planting associated with the North Terminal car park would be located around the perimeter of the scheme, integrating with the network of vegetation strips currently typical of the internal airport layout. The planting would soften the outline and reduce the apparent scale and massing of this extensive structure. New hedgerow and tree planting located around the perimeter of the Project at Pentagon Field would provide an appropriate framework of green infrastructure incorporating native species typical of this farmland edge location and planting within the airport.

8.9.231 The CARE Facility would include large scale tall buildings and a tall slender flue. Screen fencing and perimeter tree and shrub planting of predominantly native species would screen low level visual clutter of industrial character that would otherwise influence the character of the airport. Planting would integrate with the overall existing and proposed green infrastructure at Gatwick Airport.

8.9.232 The new hangar north of Larkins Road would incorporate perimeter tree and shrub planting, particularly to the north, to soften the apparent scale and mass of the large scale built form within the context of airport infrastructure and the wider rural landscape to the north.

8.9.233 Native tree and shrub planting would be used to supplement and enhance existing hedgerows at Museum Field. The engineering works for the flood compensation areas would be softened and

merged into the pattern of farmed fields on the western edge of Gatwick Airport, resulting in minimal impact on the character of the airport.

8.9.234 The adverse impacts of the addition of large-scale buildings and structures across the airport would be partially offset by the beneficial impacts of landscape mitigation measures which would be fully mature. Overall, the long term level of effect would be **minor adverse**, during the day and at night, which would not be significant. However, the more sensitive rural fringe nature of the Pentagon Field site to the change as a result of the decked car park would result in a high magnitude of impact that cannot be further mitigated through landscape proposals. There would be a **major adverse** effect, which would be significant.

High Woodland Fringes Character Area

8.9.235 The decked car parking at Pentagon Field would lie adjacent to the rural farmland of the character area. The new hedgerow and tree planting located around the perimeter of the Project site would now be mature and would provide screening and a strong landscape edge feature to the airport. The sensitivity of the High Woodland Fringes to these impacts in this context is low and the magnitude of change would be negligible, resulting in **negligible** effect in the long term during the day and at night, which would not be significant.

Mole Valley Open Weald Character Area

8.9.236 The landscape planting proposals associated with the Longbridge roundabout and attenuation feature would provide beneficial impacts and would offset any adverse effects on the character of the field or influence over the neighbouring open space and conservation area. The low sensitivity character area and low magnitude of beneficial and adverse effects would, in the long term, result in **neutral** effects.

8.9.237 The taller and more mature planting around the CARE Facility is unlikely to screen the top of the flue. Red aviation warning lights, if required, would continue to be visible as small, although prominent, light sources in the context of a well-lit airport at night.

8.9.238 At night, light sources at the North Terminal Long Stay decked car park and the new hangar may continue to be visible in the winter through bare intervening vegetation. The Project would intensify the existing well-lit character of the airport and would have minimal additional influence outside of the airport.

8.9.239 The sensitivity of the character area to these effects in this context is low and the magnitude of change would be low, resulting in no more than **negligible adverse** effects in the long term during the day and potentially **minor adverse** effects at night, which would not be significant.

Low Weald Character Area

8.9.240 The visibility of the tops of tall buildings within the South Terminal cluster would not be influenced by the landscape proposals and would continue to have an influence over the adjacent landscape of the Low Weald in Reigate and Banstead District.

8.9.241 The extensive woodland planting associated with the improved South Terminal roundabout and flyover structure would be sufficiently mature to further improve the character of the A23/M23 transport corridor in this location and would reduce its influence over the farmland on the edge of the Low Weald character area. The character area is considered to be of low sensitivity to these

types of changes. The low magnitude of impact would result in a **negligible** effect during the day and at night, in the long term, which would not be significant.

Effects on Townscape Character

Northgate Crawley Townscape Character Area

8.9.242 Restoration of the main contractor construction compound MA1 to its existing use of staff car park would have a **no change/neutral** effect on this character area.

Horley Townscape Character Area

8.9.243 The landscape planting proposals associated with the Longbridge roundabout and attenuation feature would be mature and would offset any adverse effects on the character of the open space and conservation area. The low sensitivity of the character area to these changes and low magnitude of beneficial and adverse impacts would, in the long term, result in **neutral** effects.

8.9.244 The mature woodland planting incorporated into the improved surface access corridor would restore the buffer between the road and the Riverside Garden Park within this townscape character area. The effect on character of this part of the Horley Townscape character area would be of negligible magnitude on a medium sensitivity receptor, leading to long term **negligible** effects in the day and at night, which would not be significant.

Effects on Visual Receptors

Members of Gatwick Staff

8.9.245 The tallest building and the flue at either of the CARE facility option locations would continue to form prominent or recognisable features with an industrial character, slightly at odds within the airport context.

8.9.246 The mature planting associated with the three flood compensation areas would not be visible for most people working at Gatwick Airport.

8.9.247 The operational North and South Terminal roundabouts, flyovers and A23 improvements, including moving traffic, would be largely screened by mature woodland planting in views from locations on the northern edge of the airport and slightly more apparent than the existing road where the raised level of the flyovers can be seen. At night, lighting columns would be slightly more apparent in some locations, creating a slight intensification of effects in a well-lit context.

8.9.248 The mature planting at the base of the new hangar north of Larkins Road would filter and screen some views of this large scale, visually prominent element in the western part of the airport.

8.9.249 The South Terminal hotel, office buildings and multi-storey car park H would introduce further tall buildings of a high quality architectural design within these main development clusters. Existing planting around existing car park H would be retained to screen or minimise views of new built development and additional ornamental tree and shrub planting would form an attractive, integrated series of external spaces for members of Gatwick Airport staff.

8.9.250 The mature tree and shrub planting associated with the Pentagon Field decked car park and North Terminal Long Stay decked car park would soften the outline and reduce the apparent scale and massing of these large-scale structures. Perimeter hedgerow and tree planting would

provide an appropriate framework of green infrastructure typical of internal infrastructure and the neighbouring farmland.

8.9.251 The operational elements of the Project would be visible to members of Gatwick Airport staff working in different locations within the airport or using staff car parks and internal access roads. People at their place of work are generally considered to have a low sensitivity to change, particularly given the nature of the change and the context of a busy international airport. The various elements of the Project may be barely perceptible when seen at distance, or prominent and at times dominant when in close proximity. The magnitude of change would range from generally negligible or low to, in some cases high, resulting in generally **negligible to minor adverse** effects with some **moderate adverse** effects, which would not be significant.

Members of the Public Visiting Gatwick

8.9.252 Members of the public using the airport access roads and North Terminal long stay surface car parks would continue to gain some near open views of the CARE facility, North Terminal Long Stay decked car park, the new hangar, the North Terminal and South Terminal roundabout and flyover, South Terminal hotel, office buildings and multi-storey car park H adjacent to the South Terminal. After 15 years the new woodland planting would begin to achieve similar levels of softening and screening of the road improvements and would provide an attractive, integrated series of external spaces that connect public and private areas and opportunities to filter and screen views of tall buildings and structures, generally in close proximity to existing building clusters. The nature and extent of these developments would be less prominent in near views within the airport context. Occupiers of vehicles are receptors of low sensitivity to a negligible to medium magnitude of change resulting in a **negligible or minor adverse** level of effect during the day and at night, which would not be significant. Pedestrians using public right of way 346/2Sy would experience **negligible to minor adverse** effects in 2048, which would not be significant.

Walkers using Public Rights of Way

River Mole Public Right of Way

8.9.253 Receptors in this location are represented by Viewpoints 4 and 5. Walkers would gain near, heavily filtered views through intervening vegetation of the flue and lighting at the CARE facility. Walkers would be of high sensitivity to negligible impacts resulting in **minor adverse** effects, during the day and at night, in the long term, which would not be significant.

Public Right of Way 359/Sy Pentagon Field

8.9.254 Receptors in this location are represented by Viewpoint 10. Walkers would gain filtered and partially screened, near views through mature tree and shrub planting of the decked car park and traffic, more so in the winter when vegetation is not in leaf. Walkers are receptors of high sensitivity and would experience a low magnitude of change, resulting in a **moderate adverse** effect in the winter when vegetation is generally bare and a **minor adverse** effect in the summer, which would not be significant.

Public Right of Way 360/1Sy Tinsley Green

8.9.255 Receptors in this location are represented by Viewpoint 11. Walkers would gain some near open and some filtered views of the flood compensation area with landscape mitigation proposals in place. The grass seeded slopes of the earthworks would be relatively inconspicuous within this

context although would slightly change the character of the grassland fields. Walkers are receptors of high sensitivity to a low magnitude of change, resulting in a **minor adverse** level of effect, which is not significant.

Public Right of Way 236a Horley

8.9.256 Receptors in this location are represented by Viewpoint 8. The new replacement woodland planting incorporated into the A23 scheme would be sufficiently mature, screening and filtering views of the road infrastructure and traffic, more so in the summer when in leaf. The moving traffic would remain noticeable in winter, particularly on the new raised overbridge. Walkers are receptors of high sensitivity and would experience a medium magnitude of change in the winter resulting in a **moderate adverse** effect and a low magnitude of change and a **minor adverse** effect in the summer, during the day. At night there would be a low magnitude of change and a **minor adverse**, for the long term, which would not be significant.

Public Right of Way 574 and Church Meadows Public Open Space Horley

8.9.257 Walkers crossing this open space within the Church Road Horley conservation area would gain filtered views through foreground trees of the well vegetated attenuation pond and mature, replacement roadside vegetation which would be sufficient to screen and filter most views of the traffic and infrastructure of the Longbridge roundabout. Walkers are receptors of high sensitivity and would experience a low magnitude of beneficial changes resulting in **minor beneficial** effects during the day and at night, for the long term, which would not be significant.

Cyclists

National Cycle Route 21

8.9.258 Cyclists using the national cycle route through Riverside Garden Park are represented by Viewpoint 6. New replacement woodland planting within the surface access scheme would be sufficiently mature after 15 years to screen and filter views of the road infrastructure and traffic, more so in the summer when in leaf. The moving traffic would remain noticeable in winter. Cyclists are receptors of high sensitivity to a low magnitude of change in the long term, resulting in a **moderate adverse** effect in winter, during the day and at night and **minor adverse** effects in the summer, during the day and at night, which would not be significant. Pedestrians using the path would experience the same levels of effect.

Occupiers of Commercial Properties

Hilton Hotel

8.9.259 Occupiers of rooms on the east facing elevation of the Hilton Hotel would benefit from the mature street trees and shrub planting associated with the new South Terminal hotel to filter and soften views of the buildings and street scene. Medium sensitivity receptors would experience a medium magnitude of change in the long term, resulting in a **moderate adverse** effect during the day and at night, which would not be significant.

Members of the Public using the McDonald's and KFC at South Terminal

8.9.260 Woodland planting associated with the South Terminal roundabout and A23 flyover would filter and screen views of the road infrastructure and traffic for people at north facing windows and outdoor spaces. Receptors would be of medium sensitivity in the long term. The magnitude of

impact would be low, leading to **minor adverse** effects during the day and at night, which would not be significant.

Meadowcroft House

8.9.261 The South Terminal roundabout and flyover would be visible at a higher level beyond a foreground of pasture fields, filtered through mature woodland planting, including moving traffic and lighting. People at their place of work are receptors of low sensitivity and would experience a low magnitude of change resulting in a **minor adverse** effect, during the day and at night, for the long term, which would not be significant.

Occupiers of the Amadeus Building and Schlumberger House Commercial Properties at South Terminal

8.9.262 The mature woodland planting associated with South Terminal roundabout and flyover would filter views of development, traffic, lighting and signage. People at their place of work in the Amadeus building and Schlumberger House would continue to be affected by the South Terminal roundabout, flyover and traffic in 2038, more so in the winter when vegetation is not in leaf. Receptors at north facing windows and outdoor spaces would be of low sensitivity in the long term. The magnitude of impact would be low to medium depending on the floor of the building, leading to **negligible** to **minor adverse** effects during the day and at night, which would not be significant.

Occupiers of Vehicles and Trains

A23

8.9.263 Occupiers of vehicles travelling along the A23/M23 would pass through belts of mature woodland and scrub planting either side of the road. Views out to existing and new development at Gatwick Airport, Riverside Garden Park at Horley and the rural landscape would be largely screened or heavily filtered in the summer when vegetation is in leaf and less filtered in the winter. The sequence of views experienced at speed by occupiers of vehicles would be focused on the road, traffic and green infrastructure, similar to the existing situation. The overbridges at the North and South Terminal roundabouts would provide greater opportunity for elevated views of the surroundings, partially filtered by vegetation. Occupiers of vehicles would be of low sensitivity to a negligible to low magnitude of change, leading to a **negligible to minor adverse** effect during the day and at night in the long term, which would not be significant.

Balcombe Road

8.9.264 Receptors in this location are represented by Viewpoint 9. Occupiers of vehicles travelling along this road would gain filtered and partially screened, near views through the roadside hedgerow retained and maintained to a higher level and mature tree and shrub planting, of the decked car park and traffic, more so in the winter when vegetation is not in leaf. Views of decked car parks through surrounding green infrastructure are a typical feature of the airport and would result in an intensification of an existing land use within views from the road. Occupiers of vehicles are receptors of low sensitivity to a low magnitude of change resulting in a **negligible or minor adverse** level of effect during the day and at night, which would not be significant.

8.9.265 Pedestrians using the roadside pavement are of medium sensitivity in this location. There would be a low magnitude of change resulting in a **minor to moderate adverse** level of effect during the day and at night, which would not be significant.

Railway

8.9.266 Passengers would gain near relatively open, glimpsed views east and west of the A23 improvements including flyovers set within a framework of mature woodland and scrub planting and grass verges. The highway corridor, traffic, signage and lighting would form prominent elements in views in the long term however, by 2048 this would be similar to the existing situation. The magnitude of change would be low for low sensitivity receptors, resulting in **negligible adverse** effects during the day and at night, which would not be significant.

Occupiers of Residential Properties

Horley Residential Edge

8.9.267 Receptors in this location are represented by Viewpoint 7. New replacement woodland planting within the surface access scheme would be sufficiently mature after 15 years to screen and filter views of the road infrastructure and traffic, more so in the summer when in leaf. The moving traffic would remain noticeable in winter. Occupiers of the following nearby properties on the fringes of Horley would gain filtered views of the improvements and mature planting through retained vegetation within the park and private gardens and over garden fences:

- approximately 40 properties on The Crescent;
- approximately 30 properties on Riverside;
- two properties on Woodroyd Gardens;
- four properties on Cheyne Walk;
- 15 properties on Longbridge Road; and
- four first floor and four second floor apartments of two three story blocks on Longbridge Road.

8.9.268 At night in the winter the lighting columns, lit signs and vehicle lights would be barely discernible, filtered through vegetation against a backdrop of skyglow from the airport. Receptors at many properties listed above are unlikely to experience a perceptible change in view in the summer due to the screening properties of intervening vegetation when in leaf. The levels of effect defined below relate predominantly to winter views as worst case scenarios. Occupiers of residential properties are receptors of high sensitivity to a negligible magnitude of change in the long term, resulting in a **minor adverse** effect, during the day and at night, which would not be significant. During the summer when vegetation is in leaf there is unlikely to be any discernible change in view by 2048.

Mid to Long Distance Views

8.9.269 Mid to long distance views from the surrounding landscape may include the tops of new tall buildings and the CARE flue stack in the context of existing tall buildings. These would form recognisable or barely perceptible additions seen above intervening tree tops. The mature landscape planting proposals would not change these mid to long distance views. Receptors of generally high sensitivity at Viewpoint 12 at Rowley Farm bridleway, Viewpoint 13 at Lowfield Heath Road, at Viewpoint 14 on the Sussex Border Path east of Charlwood, Viewpoint 15 at Norwood Hill, Viewpoint 16 at Turners Hill and Viewpoint 17 at Tilgate Hill would experience no more than a negligible change in view, leading to **negligible to minor adverse** effects in the long term, during the day and at night, which would not be significant.

Significance of Effects

8.9.270 The above assessment has taken into account the planting proposals included in many of the elements of the Project, including an assessment of the effect once this has matured. No further mitigation or monitoring is required and therefore the significance of effects would remain as presented above.

Effects on Tranquillity within Nationally Designated Landscapes

8.9.271 The heat mapping for the proposed overflights, during both day and night time, is based on an increase of up to approximately 20% by the end of 2032 and would remain at this level at 2038. Figure 8.6.5 shows the increase in the number of overflights in each grid square as a colour and Figure 8.6.6 shows the increase in Gatwick flights combined with non-Gatwick flights. The areas of the landscape currently overflown by the largest number of aircraft would experience the greatest number of additional aircraft. The data within Table 8.9.1 are also relevant to the assessment of effects in 2038.

8.9.272 The landscape and communities within the flight corridor over the High Weald AONB east of Gatwick and south of Edenbridge would experience an increase in overflights of between approximately 15 to 20% to the existing baseline of >200 flights a day. In the area of the AONB that fans out and curves to the south and west from Hever to Crowborough, where there are currently between 100 and 200 flights a day, the increase would also range from 15 to 20%. Examples of people living within or using the AONB in these locations include visitors to Hever Castle and the Ashdown Forest. People would experience a relatively high level of tranquillity in landscapes of high scenic quality. These receptors are likely to be of high or very high sensitivity to change. Overflying aircraft at less than 7,000 feet currently form a regular visible or audible feature that forms a slightly discordant aspect when experiencing the landscape. An increase of up to 20% in the number of aircraft following the same flight paths may be discernible to some observers or barely perceptible as an increase to other observers. The magnitude of change for high sensitivity receptors would be negligible leading to **minor adverse** effects on the perception of tranquillity during the day and at night, which would not be significant. Some people within the AONB may be unable to perceive the increase in the number of aircraft and would therefore experience no discernible effect to the level of tranquillity. Areas of the High Weald AONB within the study area are generally overflown by 1 to 10 flights a day or 10 to 50 flights a day. In these two areas people within the landscape would experience between 1 and 10 additional flights a day respectively. The effects on the level of perceived tranquillity would be the same as described above.

8.9.273 Large areas of the Surrey Hills AONB are overflown by Gatwick aircraft. A broad area of the designated landscape south of the settlements of Godalming to Haslemere is overflown by 1 to 10 flights a day and an area east of Godalming to Dorking is generally overflown by 1 to 10 or 10 to 50 flights a day. Some of these areas would experience no increase in aircraft whilst others would experience an increase of between 1 and 5 flights. A small area of the AONB is overflown by 100 to 200 flights a day. In this location an increase of between 15 and 20% of flights would occur. High sensitivity receptors in these areas, which include popular and distinctive open rural spaces in the AONB such as Leith Hill would experience a negligible magnitude of change and no more than **minor adverse** effects as described above, which would not be significant. People using open spaces at Witley and Milford Commons would experience imperceptible effects.

8.9.274 Smaller areas of the landscape on the southern edge of the Kent Downs AONB between the settlements of Merstham and Westerham and south of Sevenoaks are generally overflown by between 1 and 10 Gatwick flights a day with further small areas overflown by between 10 and 50 flights a day. People living within or using the landscape of the Kent Downs AONB within areas overflown by between 1 and 10 flights would generally experience an increase in overflights of between 5 and 10%. The level of effects on the perception of tranquillity as a result of high sensitivity receptors experiencing negligible change within these landscapes would be **minor adverse** as described above, which would not be significant.

8.9.275 There would be very limited additional flights of less than 7,000 feet above ground level over the South Downs National Park. Small areas on the northern fringes of the designated landscape would generally experience an increase of between 0 and 5% as a result of the Project. The level of effects on the perception of tranquillity for high sensitivity receptors at Temple of the Winds and Firle Beacon within these landscapes would be no more than **minor adverse** as described above as a result of a negligible magnitude of change, which would not be significant. People using open spaces at Petworth House and Ditchling Beacon would experience imperceptible effects.

8.9.276 The maximum predicted increase in the number of overflights by 2038 is based on the same 20% as described previously in the assessment for 2033 to 2038. The presence of additional overflying aircraft in the various baseline contexts of the nationally designated landscapes within the study area would not lead to a significant increase in the perception of overall tranquillity or a significant change in the ability of people to enjoy the special qualities of the landscapes.

8.9.277 Notwithstanding the potential 20% increase in the number of flights at less than 7,000 feet above ground level by the end of 2032 up to 2038, in terms of noise emission levels, the future baseline would include changes in the aircraft fleet to quieter types. Between 2032 and 2038 the fleet would continue to change to quieter types, resulting in further reductions in baseline levels. It is predicted that in 2038 there would be a reduction in the area of landscape and townscape affected by aircraft noise and, therefore, the number of residents affected living in the affected area, which supports the assessment of minor adverse effects within the study area.

8.10. Potential Changes to the Assessment as a Result of Climate Change

8.10.1 Chapter 15: Climate Change and Carbon of this PEIR presents statistics for predicted changes in the climate between 2020 and 2079 as a result of extreme weather events of heat, cold, rainfall, drought and wind. It is predicted that mean temperatures will increase, winter precipitation will increase; and summer precipitation will decrease.

8.10.2 Overall the frequency of hot days, dry spells and heavy rainfall is predicted to increase. The predictions are that hot day temperatures >25 ^{o}C and heavy rainfall will pose an increased risk to Gatwick Airport operations and fewer cold temperatures will pose a decreased risk.

8.10.3 The baseline situation described within this landscape, townscape and visual resources chapter includes landscapes of the Low Weald and High Weald. These contain various types of vegetation including native woodlands, hedgerows, trees, grassland and wetlands. The climate change predictions are unlikely to be sufficient to lead to a change in the baseline vegetation conditions for the purposes of this assessment. The various components of the landscape and the intrinsic character will remain essentially the same. The assessment of effects on landscape character and the related assessment of visual effects would therefore be the same as presented within this chapter.

8.10.4 Landscape mitigation proposals provide an opportunity to build in climate resilient solutions for the Project. Key elements would be:

- vegetation retention strategy to ensure the maximum extent of green infrastructure is retained within the Project site boundary;
- earthworks cut and fill balance to retain and reuse the maximum volume of spoil within the Project site boundary;
- planting proposals appropriate to the Gatwick location and to the future climate change scenario;
- enhancement of green infrastructure through management proposals; and
- preparation of Landscape and Environmental Management Plan (LEMP) for long term objectives.

8.11. Cumulative Effects

Zone of Influence

8.11.1 The zone of influence (ZoI) for Landscape, Townscape and Visual Resources has been identified based on the spatial extent of likely effects within the 5 km radius study area defined by the ZTV for the Project.

Screening of Other Developments and Plans

8.11.2 The Cumulative Effect Assessment (CEA) takes into account the impact associated with the Project together with other developments and plans. The developments and plans selected as relevant to the CEA presented within this chapter are based upon the results of a screening exercise undertaken as part of the 'CEA short list' of developments (see Appendix 19.4.1). Each development on the CEA long list has been considered on a case by case basis for scoping in or out of this chapter's assessment based upon data confidence, effect-receptor pathways and the spatial/temporal scales involved.

8.11.3 In undertaking the CEA for the Project, it is important to bear in mind that the likelihood of other developments and plans being constructed varies depending on how far along the planning process they are. For example, relevant developments and plans that are already under construction are likely to contribute to a cumulative impact with the Project (providing impact or spatial pathways exist), whereas developments and plans not yet approved or not yet submitted are less certain to contribute to such an impact, as some may not achieve approval or may not ultimately be built due to other factors. For this reason, all relevant development and plans considered cumulatively alongside the Project have been allocated into 'Tiers', reflecting their current stage within the planning and development process. Appropriate weight is therefore given to each Tier in the decision-making process when considering the potential cumulative impact associated with the Project (eg it may be considered that greater weight can be placed on the Tier 1 assessment relative to Tier 2 or Tier 3). Further details of the screening process for the inclusion of other developments and plans in the short list and a description of the Tiers are provided in Chapter 19: Cumulative Effects and Inter-relationships.

8.11.4 The specific developments scoped into the CEA for Landscape, Townscape and Visual Resources and the Tiers into which they have been allocated, are outlined in Table 8.11.1. The developments included as operational in this assessment have been commissioned since the baseline studies for this Project were undertaken and as such have been excluded from the

baseline assessment set out in this chapter. The baseline environment, including such developments, will be reviewed and updated in the ES. Full details of each of the developments are provided in Appendix 19.4.1.

8.11.5 The short-listed cumulative developments within the 5 km radius study area for the Project which have not been considered in the CEA set out in this chapter of the PEIR include residential and commercial developments located within the urban townscapes of Crawley and Horley and the edges of smaller settlements. There would be no direct cumulative effect on the Gatwick Airport Urban Character Area as these developments are located outside of this character area. There would also be no intervisibility for members of staff and visitors to Gatwick Airport with buildings and infrastructure at the Project and cumulative developments and therefore no opportunity for adverse effects on visual receptors in these locations. Cumulative visual effects would be limited to receptors on the southern edge of Horley.

8.11.6 Sixteen of the 41 short listed cumulative developments have been assessed in the CEA for this chapter of the PEIR (albeit several of these applications relate to the Forge Wood development). These include predominantly residential developments and some commercial developments.

Table 8.11.1: List of Other Developments and Plans considered within CEA

Description of Development/Plan	Planning Phase	Distance from the Project	Date of Construction (if applicable)	Overlap with the Project?
Tier 1				
CR/2016/0858/ARM Residential led scheme 2.47 hectares (reserved matters).	Under construction	1.6 km	Under construction	All phases
CR/2016/0083/ARM Residential led scheme 4.7 ha, 249 dwellings.	Under construction	2.1 km	Under construction	All phases
CR/2016/0962/ARM Residential led scheme 4.59 ha, 151 dwellings.	Under construction	2.2 km	Under construction	All phases
CR/2016/0114/ARM Residential led scheme 4.7 ha, 75 dwellings.	Under construction	2.1 km	Under construction	All phases
CR/2016/0780/ARM Residential led scheme 6.24 ha, 225 dwellings.	Under construction	2.2 km	Under construction	All phases
CR/2018/0544/OUT Scoped out of assessment	Located within urban centre of Crawley with no intervisibility with Project.			
CR/2017/0810/FUL Park and ride car park for 892 vehicles, 2.78 ha	Awaiting decision	1.2 km	2021 to 2024	All phases

Description of Development/Plan	Planning Phase	Distance from the Project	Date of Construction (if applicable)	Overlap with the Project?
CR/2018/0894/OUT Residential led scheme 5.5 ha, 185 dwellings.	Awaiting decision	1.3 km	2021 to 2022	All phases
CR/2016/0997/FUL Scoped out of assessment	Located within urban centre of Crawley with no intervisibility with Project.			
CR/2012/0134/OUT Scoped out of assessment	Located within urban centre of Crawley with no intervisibility with Project.			
CR/2017/0997/OUT Scoped out of assessment	Located within urban centre of Crawley with no intervisibility with Project.			
R&B. 04/02120/OUT Scoped out of assessment	Located on northern urban edge of Horley, distant from Project site with no intervisibility with Project.			
T. 2019/548/EIA Scoped out of assessment	Located on northern urban edge of Copthorne, distant from Project site with no intervisibility with Project.			
H. DC/17/2481 Scoped out of assessment	Located on south-western urban edge of Crawley, distant from Project site with no intervisibility with Project.			
MS. 13/04127/OUTES Scoped out of assessment	Located east of M23, distant from Project site with no intervisibility with Project.			
CR/2015/0552/NCC (and subsequent reserved matters and non-material amendment applications) Residential 1900 dwellings, business, retail and community facilities.	Crawley Local Plan 2030 Adopted	1.6 km	Completion 2027	All phases
CR/2019/0542/FUL Residential 152 apartments and ground level retail/commercial. Scoped out of assessment	Located within urban centre of Crawley with no intervisibility with Project.			
CR/2015/0718/ARM Residential 169 dwellings. Known as Forge Wood.	Granted permission	1.6 km	Completion 2027	All phases
20/02515/SCREEN Crematorium Scoped out of assessment	Located more than 7 km from site with no intervisibility with Project			
20/02017/S73 Residential 43 apartments Scoped out of assessment	Located within urban centre of Horley with no intervisibility with Project.			
DC/10/1612 Residential 2500 retail and community	Located more than 6 km from site with no intervisibility with Project			

Description of Development/Plan	Planning Phase	Distance from the Project	Date of Construction (if applicable)	Overlap with the Project?
Scoped out of assessment				
EIA/20/0004 Residential up to 4000 dwellings	Allocated. Scoping	1.5 km	Not known	All phases
13/04127/OUTES Residential up to 500 dwellings and B1/B8 Scoped out of assessment	Located more than 8 km from site with no intervisibility with Project			
DM/20/4127 Commercial Scoped out of assessment	Located more than 7 km from site with no intervisibility with Project			
CR/2018/0273/FUL Gatwick transport improvements Scoped out of assessment	Relevant to traffic assessment only			
Tier 2				
EIA/20/0004	As above			
TR020003 (PINS Reference) London Borough of Hillingdon Scoped out of assessment	Located distant from Project site with no intervisibility with Project.			
Tier 3				
Outline application CR/2018/0544/OUT Tinsley Lane Residential led scheme Scoped out of assessment	Located within urban centre of Crawley with no intervisibility with Project.			
Land west of Balcombe Road, Horley Strategic Business Park	Development Management Plan 2018-2027	0.4 km	Unknown	All phases
Land off The Close and Haroldslea Drive Residential led scheme 40 dwellings, 2.4 ha	Development Management Plan 2018-2027	1.2 km	Unknown	All phases
Land North of Rosemary Lane Charlwood Scoped out of assessment	Located north of urban edge of Charlwood with no intervisibility with Project.			
Land east of Ifield Road Residential development 150 dwellings, 9 hectares.	Housing and Traveller Site Plan Adopted 2014	1.4 km	Unknown	All phases

Description of Development/Plan	Planning Phase	Distance from the Project	Date of Construction (if applicable)	Overlap with the Project?
Land adjacent to Desmond Anderson Residential 150 dwellings Scoped out of assessment	Located more than 6 km from site with no intervisibility with Project			
Land to the southeast of Heathy Farm, Balcombe Road Residential 150 dwellings Scoped out of assessment	Located on northern edge of Crawley with no intervisibility with Project.			
Telford Place/ Haslett Avenue Residential 300 dwellings Scoped out of assessment	Located within urban centre of Crawley with no intervisibility with Project.			
Crawley College Residential 400 dwellings Scoped out of assessment	Located within urban centre of Crawley with no intervisibility with Project.			
Land east of Balcombe Road and South of the M23 Spur - 'Gatwick Green' Industrial	Allocated	0	Unknown	All phases
Land at Plough Road and Redehall Road, Smallfield Residential 160 dwellings Scoped out of assessment	Located at Smallfield with no intervisibility with Project.			
Land North of Plough Road, Smallfield Residential 120 dwellings Scoped out of assessment	Located at Smallfield with no intervisibility with Project.			
Land West of Reigate Road, Hookwood Site Allocation Policy SA42 Residential 450 dwellings	Consultation Draft Local Plan	0.3 km	Unknown	All phases
Gatwick Airport Sewage Treatment Works	None, as yet	0	Unknown	Possible

Cumulative Effects Assessment

8.11.7 A description of the significance of cumulative effects upon Landscape, Townscape and Visual receptors arising from each identified impact is given below.

Initial Construction Phase: 2024 - 2029

Effects on Landscape and Townscape Character

High Woodland Fringes Character Area

8.11.8 The developments considered within the cumulative effects assessment (CEA) generally lie within the High Woodland Fringes character area in Crawley District. The addition of 10 (five of which combine to form the Forge Wood development) of the predominantly residential cumulative developments (nine Tier 1 and one Tier 3) into the Crawley urban fringe landscape of ribbon developments, fields and copses extending up to the edge of Gatwick Airport would form a more developed character area, adjacent to which some elements of the Project would be placed. The urban fringe characteristics of the High Woodland Fringes would be considerably intensified within this character area as a result of the construction phase or completed 10 cumulative developments. The intrinsic character of the area would be changed to residential development within a framework of woodland and hedgerows on the edge of Gatwick Airport. The Pentagon Field decked car park within Gatwick Airport would be developed on the edge of the High Woodland Fringes character area. The condition of the character area would be ordinary to good and the overall sensitivity would be low to medium. The ongoing construction or completion of 10 CEA developments, together with the influence of the construction phase of the Project would result in a high magnitude of change, leading to a **major adverse** level of cumulative landscape effect in the day and at night, which would be significant. The Project (primarily the deposit of spoil and construction of the car park at Pentagon Field), in the context of the 10 combined much larger and more influential CEA developments, would make a negligible contribution to this cumulative effect, which relates to the introduction of residential development.

Upper Mole Farmlands Character Area

8.11.9 One Tier 1 CEA development lies within the Upper Mole Farmlands character area on the western fringes of Crawley and separated from Gatwick Airport by 1.5 km of farmland. The addition of an extensive residential development into the rural/urban fringe landscape would form a more developed character area which partially overlaps with the proposed ZTV for the Project. The intrinsic character of the area would become residential edge. No elements of the Project would be developed within this character area. The overall sensitivity of the character area would be low. The construction or completion of CEA development, together with the indirect effect of the construction and operation phase of the Project would result in a high magnitude of change, leading to a **major adverse** level of cumulative landscape effect in the day and at night in the medium term, which would be significant. However, the Project would make no more than a negligible contribution to this cumulative effect.

Low Weald Character Area

8.11.10 Two Tier 3 CEA developments lie within the Low Weald character area on the southern fringes of Horley. The addition of a residential and a commercial development into the Horley urban fringe landscape of residential developments and horse paddocks extending up to the A23 and the edge of Gatwick Airport would form a more developed character area, within which some elements of the Project would be placed. The urban fringe characteristics of the Low Weald would be intensified within this character area as a result of the construction phase or completed cumulative developments. The intrinsic character of the area would remain residential edge and rural fringe on the edge of Gatwick Airport. The contractor compound for the South Terminal roundabout improvements would be located within paddocks on the edge of the Low Weald

character area. The condition of the character area would be ordinary, and the overall sensitivity would be medium. The construction or completion of two CEA developments, together with the direct effect of the construction phase of the compound would result in a high magnitude of temporary change, leading to a **major adverse** level of cumulative landscape effect in the day and at night in the medium term, which would be significant. The Project (primarily the construction and operation of the temporary contractor's compound) would make a medium contribution to this cumulative effect while the construction compound is present. In the long term, when the temporary compound is removed, the Project will make no more than a negligible contribution to the cumulative effect.

Effects on Visual Receptors

8.11.11 The Horley Business Park development west of Balcombe Road and the contractor's compound for the South Terminal roundabout improvements occupy, at least in part, the same parcel of land. Assuming that there is some overlap in the long-term temporary phase of the compound and the construction or operation of the business park, temporary cumulative visual effects would occur. There would be no cumulative visual effects on visual receptors previously identified within this chapter as a result of any other cumulative development and the Project.

Public Right of Way 362a Horley

8.11.12 The Horley Business Park development west of Balcombe Road would be located within the horse paddock immediately south of public right of way 362a, which is represented by Viewpoint 8. The CEA development would obscure views beyond to the Project, either during construction or at completion, preventing any cumulative effects.

Meadowcroft House

8.11.13 Receptors would gain filtered views through boundary vegetation of the Horley Business Park development either during construction or at completion in combination with the contractor's compound for the South Terminal roundabout improvements and vegetation clearance within the A23 corridor. People at their place of work are receptors of low sensitivity to a medium magnitude of change resulting in **minor adverse** cumulative effects during the day and night, for the medium or long term, which would not be significant. The effects on views of the contractor's compound and A23 improvements would make a low contribution to this temporary cumulative effect.

Occupiers of vehicles using the A23/M23 spur and trains on the railway

8.11.14 Occupiers of vehicles travelling on the A23/M23 spur and passengers travelling on the railway would gain views of the Horley Business Park development either during construction or at completion in combination with the contractor's compounds for the North and South Terminal roundabouts and vegetation clearance for the A23 improvements. Occupiers of vehicles and passengers on trains are receptors of low sensitivity to a high magnitude of temporary change resulting in **moderate adverse** effects during the day and night, for the medium or long term, which would not be significant. The views of the Project would make a medium contribution to this cumulative effect.

First Full Year of Operation: 2030 - 2032

Effects on Landscape and Townscape Character

High Woodland Fringes Character Area

8.11.15 The 10 predominantly residential CEA developments within the same High Woodland Fringes character area are likely to be complete by 2030. The 10 developments would contribute to a more developed character area, adjacent to which development at Pentagon Field within Gatwick Airport would be placed. The urban fringe characteristics of the High Woodland Fringes would be considerably intensified within this character area as a result of the cumulative developments. The intrinsic character of the area would be changed in the long term to residential development within a framework of woodland and hedgerows on the edge of Gatwick Airport. The operation of the Pentagon Field decked car park within Gatwick Airport would be on the edge of the High Woodland Fringes character area. The condition of the character area would be ordinary to good and the overall sensitivity would be low to medium. The 10 completed CEA developments, together with the influence of the operational/construction phases of the Project would result in a high magnitude of change, leading to a **major adverse** level of cumulative landscape effect in the day and at night, which would be significant. The Project, which primarily comprises the operation of the decked car park at Pentagon Field, would make a negligible contribution to this cumulative effect.

Upper Mole Farmlands Character Area

8.11.16 One Tier 1 CEA development lies within the Upper Mole Farmlands character area and no elements of the Project. The construction or completion of CEA development, together with the indirect effect of the construction and operation phase of the Project would result in a high magnitude of change, leading to a **major adverse** level of cumulative landscape effect in the day and at night in the medium term, which would be significant. However, the Project would make no more than a negligible contribution to this cumulative effect.

Low Weald Character Area

8.11.17 The addition of a residential and a commercial development as CEA developments into the Horley urban fringe landscape of horse paddocks on the edge of residential developments, extending up to the A23 and the edge of Gatwick Airport would form a more developed character area, within which the temporary contractor compound would be placed. The urban fringe characteristics of the Low Weald would be intensified within this character area as a result of the construction phase or completed cumulative developments. The intrinsic character of the area would remain residential edge and rural fringe on the edge of Gatwick Airport. The contractor compound for the South Terminal roundabout improvements would be developed within paddocks on the edge of the Low Weald character area. The condition of the character area would be ordinary, and the overall sensitivity would be medium. The construction or completion of two CEA developments, together with the direct effect of the operational phase of the compound would result in a high magnitude of change, leading to a **major adverse** level of cumulative landscape effect in the day and at night, which would be significant. The Project, which primarily comprises the construction and operation of the contractor's compound, would make a medium contribution to this long term temporary cumulative effect. In the long term when the temporary compound is removed, the Project will make no more than a negligible contribution to the cumulative effect.

Mole Valley Open Weald Character Area

8.11.18 The two Tier 1 CEA developments lie within the Open Weald character area on the fringes of Charlwood and Hookwood and are separated from Gatwick Airport by approximately 0.3 km of farmland and settlement fringe. The addition of two residential/commercial developments into the rural/urban fringe landscape would form a more developed character area. The intrinsic character of the area would become urban edge. The contractor compound for the improved Longbridge roundabout and attenuation pond would be located within fields on the edge of the Open Weald character area. The overall sensitivity of the character area would be medium. The construction or completion of CEA development, together with the direct effect of the construction and operational phase of the Project would result in a high magnitude of change, leading to a **major adverse** level of cumulative landscape effect in the day and at night in the medium term, which would be significant. However, in the long term, when the landscape proposals at the Longbridge roundabout are mature, the Project would make no more than a negligible contribution to this cumulative effect.

Effects on Visual Receptors

Meadowcroft House

8.11.19 Receptors would gain filtered views through boundary vegetation of the Horley Business Park development either during construction or at completion in combination with the contractor's compound for the South Terminal roundabout improvements and construction of the South Terminal roundabout flyover. People at their place of work are receptors of low sensitivity to a medium magnitude of change resulting in **minor adverse** cumulative effects during the day and night, for the medium or long term, which would not be significant. The views of the Project would make a low contribution to this cumulative effect.

A23/M23 spur and Railway

8.11.20 Occupiers of vehicles travelling on the A23 and passengers travelling on the railway would gain views of the Horley Business Park development either during construction or at completion in combination with the contractor's compound for the South Terminal roundabout and the extensive engineering works for the A23 improvements. Occupiers of vehicles and passengers on trains are receptors of low sensitivity to a high magnitude of temporary change resulting in **moderate adverse** effects during the day and night, for the medium or long term, which would not be significant. The views of the Project would make a medium contribution to this cumulative effect.

Interim Assessment Year: 2033 - 2038

Effects on Landscape and Townscape Character

High Woodland Fringes Character Area

8.11.21 The 10 predominantly residential CEA developments within the same High Woodland Fringes character area would be complete by 2033. The 10 developments would contribute to a more developed character area, adjacent to which, development at Pentagon Field within Gatwick Airport would be placed. The urban fringe characteristics of the High Woodland Fringes would be considerably intensified within this character area as a result of the cumulative developments. The intrinsic character of the area would be changed in the long term to residential development within a framework of woodland and hedgerows on the edge of Gatwick Airport. The completed Pentagon Field decked car park within Gatwick Airport would be on the edge of the High

Woodland Fringes character area. The condition of the character area would be ordinary to good and the overall sensitivity would be low to medium. The 10 completed CEA developments, together with the influence of the operational phase of the Project would result in a high magnitude of change, leading to a **major adverse** level of cumulative landscape effect in the day and at night, which would be significant. The decked car park at Pentagon Field would make a low contribution to this cumulative effect which primarily relates to the introduction of residential development.

Upper Mole Farmlands Character Area

8.11.22 The addition of one CEA development to the Upper Mole Farmlands character area on the western fringes of Crawley would form a more developed character area which partially overlaps with the proposed ZTV for the Project. The intrinsic character of the area would become residential edge. The overall sensitivity of the character area would be low. The construction or completion of CEA development, together with the indirect effect of the construction and operation phase of the Project would result in a high magnitude of change, leading to a **major adverse** level of cumulative landscape effect in the day and at night in the medium term, which would be significant. However, the Project would make no more than a negligible contribution to this cumulative effect.

Low Weald Character Area

8.11.23 The addition of a residential and a commercial development as CEA developments into the Horley urban fringe landscape of horse paddocks on the edge of residential developments, extending up to the A23 and the edge of Gatwick Airport would form a more developed character area, within which the temporary contractor compound would be placed. The urban fringe characteristics of the Low Weald would be intensified within this character area as a result of the construction phase or completed cumulative developments. The intrinsic character of the area would remain residential edge and rural fringe on the edge of Gatwick Airport. The contractor compound for the A23 and South Terminal roundabout would be developed within paddocks on the edge of the Low Weald character area. The condition of the character area would be ordinary, and the overall sensitivity would be medium. The construction or completion of two CEA developments, together with the direct effect of the use of the compound would result in a high magnitude of change, leading to a **major adverse** level of cumulative landscape effect in the day and at night, which would be significant. The Project, which primarily comprises the construction and use of the contractor's compound, would make a medium contribution to this temporary long term cumulative effect. In the long term when the temporary compound is removed, the Project will make no more than a negligible contribution to the cumulative effect.

Mole Valley Open Weald Character Area

8.11.24 The addition of two CEA developments to the Open Weald character area on the fringes of Charlwood and Hookwood, would form a more developed and slightly less rural character area. The Longbridge roundabout improvements would be complete and landscape proposals in place, partially reinstating the character of this area. There would be no long-term cumulative effects on landscape character as a result of the Project.

Effects on Visual Receptors

Meadowcroft House

8.11.25 Receptors would gain filtered views through boundary vegetation of the Horley Business Park development either during construction or at completion in combination with the contractor's compound for the South Terminal roundabout improvements and completed South Terminal roundabout flyover. People at their place of work are receptors of low sensitivity to a medium magnitude of change resulting in **minor adverse** effects during the day and night, for the medium or long term, which would not be significant. The views of the Project would make a low contribution to this cumulative effect.

A23/M23 spur and Railway

8.11.26 Occupiers of vehicles travelling on the A23/M23 spur and passengers travelling on the railway would gain views of the Horley Business Park development either during construction or at completion in combination with the contractor's compound for the South Terminal roundabout improvements and the completed A23 improvements. Occupiers of vehicles and passengers on trains are receptors of low sensitivity to a high magnitude of change resulting in **moderate adverse** effects during the day and night, for the medium or long term, which would not be significant. The views of the Project would make a medium contribution to this cumulative effect.

Design Year: 2038 and Beyond

Effects on Landscape and Townscape Character

High Woodland Fringes Character Area

8.11.27 The 10 predominantly residential CEA developments within the same High Woodland Fringes character area would be complete by 2038 and would contribute to a more developed character area, adjacent to which, development at Pentagon Field and the A23 improvements within Gatwick Airport would be placed. The urban fringe characteristics of the High Woodland Fringes would be considerably intensified within this character area as a result of the cumulative developments. The intrinsic character of the area would be changed in the long term to residential development within a framework of woodland and hedgerows on the edge of Gatwick Airport. The operational Pentagon Field decked car park and A23 corridor within Gatwick Airport would be on the edge of the High Woodland Fringes character area and would include extensive landscape planting proposals that would be reaching maturity and providing beneficial impacts to offset adverse effects of large scale development. The condition of the character area would be ordinary to good and the overall sensitivity would be low to medium. The 10 completed CEA developments, together with the influence of the Project would result in a high magnitude of change, leading to a **major adverse** level of cumulative landscape effect in the day and at night, which would be significant. The decked car park at Pentagon Field and A23 improvements, would, on balance, make a negligible contribution to this cumulative effect.

Upper Mole Farmlands Character Area

8.11.28 The addition of one large CEA development to the Upper Mole Farmlands character area on the western fringes of Crawley would form a more developed character area which partially overlaps with the proposed ZTV for the Project. The intrinsic character of the area would become residential edge. The overall sensitivity of the character area would be low. The construction or completion of CEA development, together with the indirect effect of the operational phase of the

Project would result in a high magnitude of change, leading to a **major adverse** level of cumulative landscape effect in the day and at night in the long term, which would be significant. However, the Project would make no more than a negligible contribution to this cumulative effect.

Low Weald Character Area

8.11.29 By 2038 the temporary contractor compound adjacent to the South Terminal roundabout would be removed from the Low Weald character area and the horse paddocks would be restored. There would no longer be a direct impact on the character area as a result of the Project. The addition of a residential and a commercial development as cumulative developments into the Horley urban fringe landscape of horse paddocks on the edge of residential developments, extending up to the A23 and the edge of Gatwick Airport would form a more developed character area, adjacent to which the improved A23 surface access corridor would be placed. The urban fringe characteristics of the Low Weald would be intensified within this character area as a result of the construction phase or completed CEA developments. The intrinsic character of the area would remain residential edge and rural fringe on the edge of Gatwick Airport. The condition of the character area would be ordinary, and the overall sensitivity would be medium. The construction or completion of two CEA developments, together with the influence of the operational phase of the A23 within the adjoining Gatwick Airport Urban character area would result in a medium magnitude of change, leading to a **moderate adverse** level of cumulative landscape effect in the day and at night, which would not be significant. The Project, which is primarily the operation of the improved A23 within a mature landscape framework, adjacent to the edge of this character area, would make, on balance, a negligible contribution to this cumulative effect in the long term.

Effects on Visual Receptors

Meadowcroft House

8.11.30 Receptors would gain filtered views through boundary vegetation of the Horley Business Park development either during construction or at completion in combination with the completed South Terminal roundabout flyover and mature highway planting. People at their place of work are receptors of low sensitivity to a medium magnitude of change resulting in **minor adverse** cumulative effects during the day and night, for the long term, which would not be significant. The views of the Project would make a negligible contribution to this cumulative effect.

A23/M23 spur and Railway

8.11.31 Occupiers of vehicles travelling on the A23 and passengers travelling on the railway would gain views of the Horley Business Park development either during construction or at completion in combination with the completed A23 improvements within a corridor of mature landscape planting, resembling the existing situation. Occupiers of vehicles and passengers on trains are receptors of low sensitivity to a medium magnitude of change resulting in **minor adverse** effects during the day and night, for the medium or long term, which would not be significant. The views of the Project would make a low contribution to this cumulative effect.

Cumulative Effects on Tranquillity within Nationally Designated Landscapes

8.11.32 There is likely to be a cumulative effect on tranquillity experienced within nationally designated landscapes within the study area as a result of an increase in overflying aircraft from the Project together with overflying aircraft from other airports. However, preliminary conclusions drawn at

this stage are that the cumulative effect would not increase the level of effect previously identified for the Project in Section 8.9 of this chapter.

8.12. Inter-Related Effects

8.12.1 This chapter of the PEIR assesses the effects on landscape and townscape character and visual receptors as a result of the Project. There is an interrelationship with other environmental topics including historic environment, ecology, recreation and noise. Whilst the assessment of effects on character includes land that contains heritage and ecological assets, effects on heritage assets and their context and settings are considered within Chapter 7: Historic Environment and the effects on flora and fauna within habitats is considered within Chapter 9: Ecology and Nature Conservation. Whilst the assessment of effects on visual receptors includes people using recreational assets, effects on public open space and public rights of way are considered within Chapter 18: Agricultural Land Use and Recreation. Whilst the assessment of effects on landscape character and visual resources includes the influence of overflying aircraft on people's perception of tranquillity within the landscape, the effects of aircraft noise on people are considered within Chapter 14: Noise and Vibration. For further information reference Chapter 19: Cumulative Effects and Inter-relationships.

8.13. Summary

Initial Construction Phase: 2024-2029

Landscape and Townscape Character

8.13.1 The construction works associated with the northern runway, reconfiguration/modifications of taxiways, holding areas and stands would temporarily introduce a slightly discordant element into the airport. Two of the construction compounds and the first phase of the CARE facility would introduce small concentrations of discordant elements within the airport. The construction phase and completion of the South Terminal extension, the hotel at the building compound at the car rental location and hotel and multi-storey car park H adjacent to the South Terminal would increase the scale and mass of tall buildings within this cluster. The construction works for the North Terminal IDL, baggage hall and multi-storey car park J would result in changes to prominent buildings and areas within the airport that would be discordant in nature. The clearance of the majority of woodland planting and mature trees as part of the surface access improvements would considerably change this road corridor. The placement of spoil and creation of decked parking at Pentagon Field and replacement Purple Parking at Crawter's Field would result in the loss of relatively large areas of grassland and green infrastructure within the airport leading to **major adverse** and significant effects at Pentagon Field. However, the nature and scale of the range of construction phase activities would not be completely out of character within an operational airport. These activities would occur in combination with the completed large-scale buildings and infrastructure of hotels, decked and multi-storey car parks. Overall, the level of effect on the low sensitivity Gatwick Airport urban character area would be **minor adverse**, during the day and at night, which would not be significant.

8.13.2 The contractor compound north of the South Terminal roundabout would lie within horse paddocks on the urban fringe of Horley within the Low Weald character area north of Gatwick airport. The edge of the low sensitivity character area would temporarily be considerably changed resulting in a **moderate adverse** direct effect during the day and at night, which would not be

significant. An increase in built form within Gatwick Airport would also create a **minor adverse** effect on the wider character area during the day and at night, which would not be significant.

8.13.3 The heavy plant and operations required to undertake construction works, adjacent to the High Woodland Fringes, Upper Mole Farmlands and Open Weald landscapes and Northgate Crawley and Horley townscape character areas would temporarily create slightly discordant elements that would have an influence over the neighbouring landscapes and townscapes however, these would range from **negligible to minor adverse**, which would not be significant.

Visual Amenity

8.13.4 High sensitivity walkers using public rights of way and medium sensitivity pedestrians using the pavement adjacent to Pentagon Field would gain open, near views of construction works and the completed decked car park, resulting in **major adverse** effects in the short to medium term, which would be significant.

8.13.5 High sensitivity walkers using public right of way 362a near the surface access contractor compound at south terminal would gain open views during the construction phase. The magnitude of change would be medium and the level of effect **moderate adverse** during the day and at night, which would not be significant. Occupiers of the Premier Inn hotel adjacent to staff car park Y would gain near views filtered through intervening trees in winter only, of the surface access satellite contractor compound at North Terminal. Occupiers of the Hilton Hotel at South Terminal would gain near views of the new hotel and multi-storey car park at car park H. Medium sensitivity receptors would experience **moderate adverse** effects during the day and at night, which would not be significant. Occupiers of vehicles travelling past the Pentagon Field decked car park would also experience **moderate adverse** effects during the day and night. Low sensitivity occupiers of vehicles travelling on Balcombe Road adjacent to Pentagon Field would gain open, near views of construction works and the completed decked car park, resulting in **moderate adverse** effects in the short to medium term, which would not be significant.

8.13.6 High sensitivity cyclists using the NCR 21 in close proximity to the new hotel at the car rental location would gain open views of the construction phase. The magnitude of change would be low to negligible and the level of effect minor adverse during the day and at night, which would not be significant. The level of effect experienced in the short to medium term by all other receptors within the airport or within the surrounding landscape and townscapes, as a result of mainly construction phase activities and some completed developments within the Project, would be **negligible or minor adverse**, which would not be significant.

First Full Year of Opening: 2030-2032

Landscape and Townscape Character

8.13.7 The operational northern runway, taxiways, stands, substations and decked carparks, terminal extensions, multi-storey car park, hotels at South Terminal and replacement Purple Parking would be typical of the existing airport and would provide an intensification of existing character, although impacts would be minimised through high quality design. The ongoing surface access improvements, CARE facility and North Terminal decked car park and the River Mole diversion and compensation areas would result in the greatest additional direct effect on the character area. The Gatwick Airport urban character area would be of low sensitivity to a medium magnitude of impact. The duration of these effects would range from short term for construction

phase effects to long term for operational phase effects. Overall, the level of effect would be **minor adverse**, during the day and at night, which would not be significant. However, the completed decked car park at Pentagon Field would have a **major adverse** and significant effect on this specific and more sensitive parcel of land.

8.13.8 The contractor compound at the South Terminal roundabout would continue to have **moderate adverse** (direct) effects and **minor adverse** effects (arising from activities outside the character area) on the Low Weald character area, which would not be significant. The Longbridge roundabout compound would lie within a field on the edge of the Mole Valley Open Weald character area. The edge of this low sensitivity character area would temporarily be changed resulting in **moderate adverse** effects during the day and at night, which would not be significant. Construction works for the Longbridge roundabout would also extend into the edge of the Horley townscape character area within the Church Road conservation area. The character area is of medium sensitivity to direct medium impacts during construction, resulting in **moderate adverse** effects.

8.13.9 The operational elements of the Project and the heavy plant and operations required to undertake construction works adjacent to the High Woodland Fringes and Upper Mole Farmlands landscapes and Northgate townscape of Crawley would temporarily create slightly discordant elements that would have an influence over the neighbouring landscapes and townscapes, however these would range from **negligible to minor adverse**, which would not be significant.

Visual Amenity

8.13.10 High sensitivity walkers using public rights of way and pavement at Balcombe Road adjacent to Pentagon Field would continue to gain open, near views of the decked car park, resulting in **major adverse** effects in the long term, which would be significant.

8.13.11 Occupiers of the Hilton Hotel would gain near open views of the new hotel, office and multi-storey car park initially under construction and then when complete resulting in **major adverse** and significant effects. Occupiers of the Premier Inn hotel adjacent to staff car park Y would continue to gain near views of the surface access satellite contractor compound at North Terminal. Walkers using the public right of way at Horley would continue to gain views of the contractor compound, in addition to the construction activities at the South Terminal roundabout. Medium sensitivity receptors would experience **minor to moderate adverse** effects during the day and at night, which would not be significant. Occupiers of vehicles travelling along the A23/M23 would pass through the construction works and occupiers of trains would pass in close proximity. Receptors would gain near views of the construction activities, existing infrastructure and buildings within the airport and the associated contractor compound within a corridor of cleared vegetation. Receptors at north facing windows and outdoor spaces of the KFC and McDonalds at South Terminal and cyclists and visitors on foot at Riverside Garden Park would gain open or filtered views of the A23 construction activities revealed by vegetation clearance. Walkers using public rights of way at Church Meadow Horley would gain near views of the Longbridge roundabout construction compound and completed junction improvements and occupiers of vehicles on Balcombe Road would gain open views of the Pentagon Field decked car park. Receptors in these locations would experience **moderate adverse** effects in the short to medium term, during the day and at night, which would not be significant.

8.13.12 The level of effect experienced in either the short, medium or long term by all other receptors within the airport or within the surrounding landscape and townscapes, as a result of construction

phase activities and completed developments, would be **negligible or minor adverse**, which would not be significant.

Effects on Tranquillity within Nationally Designated Landscapes

8.13.13 The change in the number of overflights at less than 7,000 feet above ground level within the study area as a result of the Project is estimated to be an increase of up to approximately 5% by 2029. It is highly unlikely that receptors would be able to perceive a 5% increase in overflying aircraft following the same flight paths and, therefore, it is considered that any change to the future baseline level of tranquillity in 2029 would be no more than **negligible adverse** and not significant or barely perceptible, equating to a no change situation.

2033 to 2038 (Design Year)

Landscape and Townscape Character

The newly operational elements of the Project, in addition to the development completed in earlier phases, would be typical of those on the existing airport and would provide an intensification of existing character. The construction of large-scale buildings and structures across the airport would result in the greatest direct effect on the Gatwick Airport character area, however the nature and scale of the developments and construction phase activities would not be completely out of character within an operational airport. Overall there would be a general perception of an increase in the scale and mass of large buildings and structures within the airport and A23/M23 corridor and a slight reduction in the extent of green infrastructure. As new mitigation planting matures it would provide a positive addition to the airport and would result in beneficial effects. The duration of these effects would range from short to medium term for construction phase effects to long term for operational phase effects. Overall the level of effect would be **minor adverse**, during the day and at night, which would not be significant. However, the completed Pentagon Field decked car park located within an open grazed field would have a **major adverse** and significant effect on this particular element of the Gatwick Airport character area.

8.13.14 The contractor compound at the South Terminal roundabout would continue to have **moderate adverse** (direct) effects and **minor adverse** effects (from activities outside the character area) on the Low Weald character area, which would not be significant. The Longbridge roundabout improvements would have a high magnitude of impact on a low sensitivity receptor, resulting in a **moderate adverse** effect, which would not be significant.

8.13.15 The operational elements of the Project and the heavy plant and operations required to undertake construction works adjacent to the High Woodland Fringes, Upper Mole Farmlands and Open Weald landscapes and Northgate townscape of Crawley and Horley townscape character areas would temporarily create slightly discordant elements that would have an influence over the neighbouring landscapes and townscapes, however these would range from **negligible to minor adverse**, which would not be significant.

Visual Amenity

8.13.16 There would be no significant adverse effects on visual receptors within the study area by the end of this phase in 2038. Landscape mitigation planting incorporated into many elements of the Project would be of sufficient maturity to provide and attractive setting and screening to offset any adverse effects of new built form. High sensitivity walkers using public rights of way adjacent to Pentagon Field would gain filtered and partially screened views of the completed decked car

park. Pedestrians using the pavement on Balcombe Road would also gain near open views of the construction of Pentagon Field decked car park. Occupiers of rooms on the east facing elevation of the Hilton Hotel would gain near, open views of the South Terminal hotel, office buildings and multi-storey car park H. Walkers on the edge of Horley would gain open views of the surface access contractor compound. The impacts would result in **moderate adverse** effects for each of these receptor groups in the medium to long term, which would not be significant.

8.13.17 Cyclists using the National Cycle Route 21 through Riverside Garden Park would gain filtered views of the A23 construction activities initially and ultimately completed infrastructure and traffic, in the context of maturing new planting. At night the lit corridor would be slightly more prominent in the view against a backdrop of skyglow from the airport. Cyclists are receptors of high sensitivity to a low magnitude of change in the medium to long term, resulting in a **moderate adverse** effect, during the day and at night, which would not be significant. Visitors to the park on foot would experience the same level of effect.

8.13.18 Occupiers of vehicles travelling along the A23 would initially pass through the surface access construction works and then the completed road corridor by the end of the phase and occupiers of trains would pass in close proximity. Receptors would initially gain near views of the activities revealed through vegetation removal, existing infrastructure and buildings within the airport and the associated contractor compound. Receptors at north facing windows and outdoor spaces of the KFC and McDonalds at South Terminal would gain open views of the new A23 roundabout and flyover. Occupiers of residential properties on the southern edge of Horley would gain heavily filtered views of the A23 construction and completion. Receptors in these locations would experience **moderate to negligible adverse** effects in the medium to long term, during the day and at night, which would not be significant

8.13.19 Changes in views as a result of the construction activities at the North Terminal Long Stay decked car park and the North Terminal roundabout and flyover, and the completed South Terminal extension, South Terminal hotel, the hotel at the building compound at the car rental location, office buildings and multi-storey car park H adjacent to the South Terminal would affect visitors to Gatwick. The nature and extent of these activities and developments would form prominent and at times dominant elements within the airport context. Receptors of generally medium to low sensitivity to a medium to high magnitude of change would experience a **minor or moderate adverse** level of effect during the day and at night, which would not be significant.

8.13.20 The operational elements of the Project and the construction activities described above would be visible to members of Gatwick staff working in different locations within the airport or using staff car parks and internal access roads. The construction activities may be barely perceptible when seen at distance, or prominent and at times dominant when in close proximity. The magnitude of change would range from negligible to high resulting in **negligible to moderate adverse** effects, which would not be significant.

8.13.21 The level of effect experienced in the medium to long term by all other receptors within the airport or within the surrounding landscape and townscapes, as a result of construction and operational phase activities, would be **negligible or moderate adverse**, which would not be significant.

Effects on Tranquillity within Nationally Designated Landscapes

8.13.22 Overflying aircraft at less than 7,000 feet above ground level currently form a regular visible or audible feature that forms a discordant influence when experiencing the landscapes of the High

Weald AONB within the study area. Overflying aircraft form a less frequent influence on tranquillity experienced in landscapes of the Surrey Hills AONB, Kent Downs AONB and South Downs National Park. An increase of up to 20% in the number of aircraft following the same flight paths may be discernible to some observers or barely perceptible as an increase to other observers. The magnitude of change would be negligible leading to **minor adverse** effects on the perception of tranquillity during the day and at night, which would not be significant. Some people within the nationally designated landscapes may be unable to perceive the increase in the number of aircraft and would therefore experience no discernible effect to the level of tranquillity.

2038 and Beyond (Landscape Design Year)

Landscape and Townscape Character

8.13.23 The completion and operation of large-scale buildings and structures across the airport would result in the greatest direct impact on the character area, however the nature and scale of the developments would be characteristic of an operational international airport and intensify the character of Gatwick. There would be a continuing change in the level of effects beyond 2038, as a result of the maturing landscape mitigation proposals associated with the CARE facility, the new hangar, Pentagon Field decked car park, offices, hotel, multi-storey car park H, North Terminal long stay decked car park, surface access improvements and Gatwick Steam flood compensation areas. The Gatwick Airport urban character area would be of low sensitivity to a medium magnitude of impact. Overall the level of effect would be **minor adverse**, during the day and at night, which would not be significant. However, the more sensitive rural fringe nature of the Pentagon Field site to the change as a result of the decked car park would result in a high magnitude of impact that cannot be further mitigated through landscape proposals. There would be a **major adverse** effect, which would be significant.

8.13.24 The operational elements of the Project, in conjunction with the mature mitigation, adjacent to the High Woodland Fringes, Mole Valley Open Weald and Low Weald landscapes and Horley townscape character area, would have some influence over the neighbouring landscapes and townscapes however, these would lead to **negligible adverse** effects, which would not be significant.

Visual Amenity

8.13.25 Walkers using public rights of way adjacent to Pentagon Field would gain open, near views of the decked car park as a large-scale addition to the rural fringe, in place of an open field. Cyclists using the National Cycle Route 21 through Riverside Garden Park and people using the open space would gain near views of the operational A23 including signage, lighting and moving traffic, as prominent elements in views which currently include these features. Walkers using the public footpath on the outskirts of Horley would gain prominent views of the new South Terminal roundabout. The impacts would result in **moderate to minor adverse** effects for high sensitivity receptors in the long term in the day and night as mitigation planting matures to soften and screen the Project, which would not be significant.

8.13.26 The operational elements of the Project would be visible to members of Gatwick staff working in different locations within the airport or using staff car parks and internal access roads in the context of a busy international airport. The A23 improvements, including moving traffic, would be largely screened by mature woodland planting in views from locations on the northern edge of the airport. The cluster of buildings at the South Terminal car park H would be visible in the context of

ornamental tree and shrub planting, integrated with the built form. The various elements of the development may be barely perceptible when seen at distance, or prominent and at times dominant when in close proximity. The magnitude of change would range from generally negligible or low to, in some cases high, resulting in generally **negligible to minor adverse** effects with some **moderate adverse** effects, which would not be significant.

8.13.27 Members of the public using the airport access roads and car parks would gain near views of the CARE facility, North Terminal Long Stay decked car park, the new hangar north of Larkins Road, the surface access improvements, the hotel at the building compound at the car rental location, office buildings and multi-storey car park H adjacent to the South Terminal within a framework of mature planting. The nature and extent of these developments would form visible and at times prominent elements within the airport context. The range of receptors in these locations would experience **minor or negligible adverse** level of effect during the day and at night, which would not be significant.

8.13.28 Occupiers of vehicles travelling along the A23 would gain near views of the improved road layout including flyovers within a corridor of mature woodland planting, similar in character to the existing situation. Receptors at north facing windows and outdoor spaces of the KFC and McDonalds at South Terminal would gain open views of the new A23 roundabout and flyover. Pedestrians using the roadside pavement at Balcombe Road adjacent to the Pentagon Field decked cap park would gain filtered or largely screened views of a structure within the rural fringe location. Receptors in these locations would experience **minor to moderate adverse** effects in the long term, during the day and at night, which would not be significant.

8.13.29 The level of effect experienced in the long term by all other receptors within the airport or within the surrounding landscapes and townscapes, as a result of the operation of the airport beyond 2038 would be **negligible or minor adverse**, which would not be significant.

Effects on Tranquillity within Nationally Designated Landscapes

8.13.30 An increase of up to 20% in the number of overflying aircraft following the same flight paths at less than 7,000 feet above ground level may be discernible to some observers or barely perceptible to other observers. The magnitude of change to the level of tranquillity within High Weald AONB, Surrey Hills AONB, Kent Downs AONB and South Downs National Park would be negligible leading to **minor adverse** effects on the perception of tranquillity during the day and at night, which would not be significant. Some people within an AONB may be unable to perceive the increase in the number of aircraft and would therefore experience no discernible effect to the level of tranquillity.

Next Steps

8.13.31 Detailed landscape mitigation proposals will emerge from the iterative design and assessment process to ensure adverse effects on landscape and visual receptors are minimised. The development of the Project design will inform the preparation of more detailed photomontages. These next steps will be set out in the ES.

Table 8.13.1: Summary of Effects

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
Initial Construction Phase 2024-2029 (Construction Effects up to first opening of Northern Runway)							
Gatwick Airport Urban Character Area	Low generally, Medium at Pentagon Field.	Loss of Pentagon Field grazing land for spoil placement and construction of decked parking. Construction phase impact on townscape character generally.	Medium term, temporary and long term permanent	Medium to high	Minor adverse to Major adverse	Not significant/ Significant	Effects are only significant at Pentagon Field, which is a green field site and more sensitive to large scale change than other parts of Gatwick.
Low Weald Character Area	Low	Construction phase impact on landscape character	Long term, temporary	Medium (wider character areas) High (locally)	Minor adverse (wider character area) Moderate adverse (locally)	Not significant	Direct effects of South Terminal surface access construction compound.
High Woodland Fringes Character Area	Low	Construction and operational phase impact on	Medium term, temporary and long term permanent	Low	Negligible to Minor adverse	Not significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
Upper Mole Farmlands Character Area, Mole Valley Open Weald		landscape character					
Northgate Crawley Townscape Character Area	Low	Construction/ operational phase impact on townscape character	Long term, temporary	Low	Minor adverse	Not significant	
Horley Townscape Character Area	Low	Construction phase impact on townscape character	Long term, temporary	Low	Negligible adverse	Not significant	
Gatwick staff and visitors	Low	Visual, construction and operational phase	Medium term, temporary and long term permanent	Negligible to medium	Negligible to moderate adverse	Not significant	
Occupiers of Travelodge, Premier Inn and Hilton Hotel	Medium	Visual, construction and operational phases	Medium term, temporary and long term permanent	Low to medium	Minor to moderate adverse	Not significant	
Walkers using Public right of way	High	Visual, construction/	Medium term, temporary and	Medium	Major adverse	Significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
359/Sy at Pentagon Field		operation of decked car park	long term permanent				
Walkers using public right of way 362a Horley	High	Visual, construction phase	Long term, temporary	Medium (day) Low (night)	Moderate adverse (day) Minor adverse (night)	Not significant	
Walkers using public right of way 360/Sy South Terminal	High	Visual, construction and operational phase	Short term temporary and long term permanent	Medium	Minor adverse (day) Negligible adverse (night)	Not significant	Adverse impacts partly offset by beneficial impacts of improved architectural quality.
Cyclists using NCR 21	High	Visual, construction and operational phase	Medium term, temporary and long term permanent	Negligible to Low	Negligible to Minor adverse	Not significant	
Employees at Roband and Meadowcroft House	Low	Visual, construction/ operational phase	Short term temporary and long term permanent	Medium	Minor adverse	Not significant	
Occupiers of vehicles: Lowfield Heath Road,	Low	Visual, construction phase	Short term temporary and long term permanent	Negligible to medium	Negligible to minor adverse	Not significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
Ifield Road, Railway							
Occupiers of vehicles: Balcombe Road	Low	Visual, construction/ operational phase	Medium term, temporary and long term, permanent	High	Moderate adverse	Not significant	
Pedestrians on Balcombe Road	Medium	Visual, construction/ operational phase	Medium term, temporary and long term, permanent	High	Moderate to Major adverse	Not significant to significant	Significance depending on phase of development.
Mid to long distance views including: Users of rights of way at Rowley Farm, Charlwood, Lowfield Heath Road, Norwood Hill, Turners Hill and Tilgate Hill	High to Medium	Visual, construction and operational phases	Medium term, temporary and long term, permanent	Negligible	Negligible to minor adverse	Not significant	
Perception of tranquillity in nationally	High to Very High	No impact in 2024 to 2029	NA	NA	NA	NA	NA

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
designated landscapes.							
2030-2032 (Construction and Operational Effects)							
Gatwick Airport Urban Character Area	Low generally, medium at Pentagon Field	Loss of Pentagon Field grazing land to decked parking. Construction and operational phase impacts on townscape character generally.	Short to Medium term, temporary and long term permanent	Medium (overall) High (Pentagon Field)	Minor adverse (overall) Major adverse (Pentagon Field)	Not significant/ Significant	
High Woodland Fringes Character Area. Upper Mole Farmlands Character Area.	Low	Construction /operational phase impact on landscape character	Medium term, temporary and long term permanent	Low	Negligible to Minor adverse	Not significant	
Low Weald Character Area and Mole Valley Open	Low	Construction phase impact on	Long term, temporary	Low to High	Negligible to moderate adverse	Not significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
Weald Character Area		landscape character					
Northgate Crawley Townscape Character Area	Low	Construction phase impact on townscape character	Long term, temporary	Low	Minor adverse	Not significant	
Horley Townscape Character Area	Low generally, medium at Riverside Garden Park/Church Road conservation area	Construction phase impact on townscape character	Medium term, temporary	Low to medium	Negligible to Moderate adverse	Not significant	
Gatwick staff and visitors	Low to medium	Visual, construction and operational phase	Medium term, temporary and long term permanent	Negligible to medium	Negligible to minor adverse	Not significant	
Occupiers of Hilton Hotel	Medium	Visual, construction phase	Medium term, temporary and long term permanent	High	Moderate to major adverse	Not significant to significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
Occupiers of Travelodge, Premier Inn, KFC and McDonalds	Medium	Visual, construction phase	Medium term, temporary and long term permanent	Low to medium	Minor to moderate adverse	Not significant	
Walkers using Public right of way 359/Sy at Pentagon Field	High	Visual, operation of decked car park	Long term permanent	Medium	Major adverse	Significant	
Walkers using Public right of way 360/Sy at South Terminal	High	Visual, operation of hotel at building compound at car rental location	Long term, permanent	Medium	Minor adverse (day) Negligible adverse (night)	Not significant	
Walkers using Public right of way at 362a Horley and 574 Church Meadows Horley	High	Visual, construction phase	Medium term, temporary	Medium (day) Low (night)	Moderate adverse (day) Minor adverse (night)	Not significant	
Walkers using River Mole public right of way and occupiers of residential properties at Horley	High	Visual, construction phase	Medium term, temporary	Negligible	Minor adverse	Not significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
Cyclists using NCR 21	High	Visual, construction phase	Short/Medium term, temporary	Low to medium	Minor to moderate adverse	Not significant	
Employees at Roband, Meadowcroft House, Amadeus Building and Schlumberger House, occupiers of McDonalds and KFC	Low	Visual, construction/ operational phase	Medium term, temporary, long term permanent	Low (Roband) Medium (Meadowcroft, Amadeus, Schlumberger)	Minor adverse	Not significant	
Occupiers of vehicles using Lowfield Heath Road, Balcombe Road, Ifield Road and A23 and occupiers of trains using railway	Low	Visual, construction phase	Medium term, temporary, long term permanent	Negligible to high	Negligible to moderate adverse	Not significant	
Pedestrians on Balcombe Road	Medium	Visual, construction phase	Long term, permanent	High	Major adverse	Significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
Mid to long distance views including: Users of rights of way at Rowley Farm, Charlwood, Lowfield Heath Road, Norwood Hill, Turners Hill and Tilgate Hill	High to Medium	Visual, construction and operational phase	Medium term, temporary, long term permanent	Negligible	Negligible to minor adverse	Not significant	
Perception of tranquillity in nationally designated landscapes.	High to Very High	Character/Visual perception during operation	Long term, permanent	Negligible	Negligible	Not significant	
2033-2038 (Construction and Operational Effects)							
Gatwick Airport Urban Character Area	Low generally Medium at Pentagon Field	Loss of Pentagon Field grazing land to decked parking. Construction and operation phase impacts on	Short/Medium/ long term, temporary/ permanent	Medium (overall) High (Pentagon Field)	Minor adverse (overall) Major adverse (Pentagon Field)	Not significant/ Significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
		townscape character generally.					
High Woodland Fringes Character Area. Upper Mole Farmlands Character Area. Mole Valley Open Weald Character Area	Low	Construction phase on landscape character	Medium/ long term, temporary/ permanent	Low to High	Negligible adverse to moderate adverse	Not significant	
Low Weald Character Area	Low	Construction phase on landscape character	Long term, temporary	Medium to High	Minor adverse to moderate adverse	Not significant	
Northgate Crawley Townscape Character Area	Low	Construction phase on townscape character	Long term, temporary	Low	Minor adverse	Not significant	
Horley Townscape Character Area	Medium at Riverside Garden Park, low generally	Construction and operational phase impacts on	Long term, temporary and permanent	Low	Negligible adverse urban edge)	Not significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
		townscape character			Minor adverse Riverside Garden Park		
Gatwick staff and visitors	Low to Medium	Visual, construction/ operational phase	Medium/ long term, temporary/ permanent	Negligible to high	Negligible to moderate adverse	Not significant	
Occupiers of Travelodge, Premier Inn, KFC and McDonalds	Medium	Visual, construction/ operational phase	Medium/ long term, temporary/ permanent	Low to medium	Moderate to minor adverse	Not significant	
Occupiers of Hilton Hotel	Medium	Visual, construction of offices and MSCP H and completed hotel	Medium term, temporary and long term permanent	High	Moderate adverse	Not Significant	
Walkers using Public right of way at River Mole, 360/Sy South Terminal and 362a Horley and 359/Sy at Pentagon Field	High	Visual, construction and operational phase	Medium term, temporary and long term permanent	Negligible to medium	Moderate to Minor adverse (negligible at night time for 360/Sy and 362a) when compound restored)	Not significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
Walkers using Public right of way 360/1Sy at Tinsley Green	High	Visual, construction and operation of Gatwick Stream flood compensation area	Short term, temporary and long term permanent	Low	Moderate	Not significant	
Cyclists using National Cycle Route 21, Riverside Garden Park and visitors to park	High	Visual, construction/ operation of North Terminal roundabout improvements	Medium/long term, temporary/ permanent	Low to medium	Minor to moderate adverse	Not significant	
Walkers using Public right of way 574 Church Meadows Horley	High	Visual, operation of Longbridge roundabout and environmental improvements	Long term, permanent	Low	Negligible	Not significant	Combination of adverse and beneficial effects.
Employees at Roband, Meadowcroft House, Amadeus Building and	Low	Visual, construction/ operational phase	Medium/ long term, temporary/ permanent	Negligible to medium	Negligible to Minor adverse	Not significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
Schlumberger House							
Occupiers of vehicles using Lowfield Heath Road, Balcombe Road, Ifield Road and A23 and occupiers of trains using Railway	Low	Visual, construction/ operational phase	Medium/ long term, temporary/ permanent	Negligible to medium	Negligible to minor adverse	Not significant	
Pedestrians using Balcombe Road, Pentagon Field	Medium	Visual, operation of decked car park	Long term, permanent	Medium	Moderate adverse	Not significant	
Horley residents	High	Visual, construction/operation phase	Medium/long term, temporary	Negligible	Minor adverse	Not significant	
Mid to long distance views including: Users of rights of way at Rowley Farm, Charlwood, Lowfield Heath	High to medium	Visual, construction/ operational phase	Medium/ long term, temporary/ permanent	Negligible	Negligible to minor adverse	Not significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
Road, Norwood Hill, Turners Hill and Tilgate Hill							
Perception of tranquillity in nationally designated landscapes.	High to Very High	Character/Visual perception during operation	Long term, permanent	Negligible	Minor adverse	Not significant	
Design Year 2038 and beyond (Operational Effects)							
Gatwick Airport Urban Character Area	Medium at Pentagon Field, Low generally	Loss of Pentagon Field grazing land for decked parking. Operational phase impacts on townscape character generally.	Long term, permanent	Medium (overall) High (Pentagon Field)	Minor adverse (overall) Major adverse (Pentagon Field)	Not significant/ Significant	
Low Weald Character Area. High Woodland Fringes Character Area.	Low	Landscape character operational phase	Long term, permanent	Negligible to Medium	Neutral to Minor adverse	Not significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
. Mole Valley Open Weald Character Area							
Northgate Crawley Townscape Character Area	Low	Townscape character operational phase	No Change	No Change	Neutral	Not significant	
Horley Townscape Character Area	Low to Medium	Townscape character operational phase	Long term, permanent	Negligible	Negligible	Not significant	
Gatwick staff and visitors	Low to Medium	Visual, A23 improvements, hotels, car parks and terminals	Long term, permanent	Negligible to high	Negligible to moderate adverse	Not significant	
Occupiers of KFC and McDonalds	Medium	Visual, A23 improvements	Long term, permanent	Low	Minor adverse	Not significant	
Occupiers of Hilton Hotel	Medium	Visual, South Terminal Hotel, MSCP H and offices	Long term, permanent	Medium	Moderate adverse	Not significant	
Employees at Meadowcroft House, Amadeus Building and	Low	Visual, A23 improvements	Long term, permanent	Low to medium	Negligible to minor adverse	Not significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
Schlumberger House							
Walkers using Public right of way360/1Sy at Tinsley Green, River Mole, Horley and South Terminal and 359/Sy at Pentagon Field and 236a at Horley	High	Visual, A23 improvements, water drainage feature, decked car park or North terminal Hotel	Long term, permanent	Negligible to medium	Minor to moderate adverse	Not significant	
Walkers using Public right of way 574 at Horley	High	Visual, Longbridge roundabout improvements	Long term, permanent	Low	Minor beneficial	Not significant	
Cyclists using National Cycle Route 21, Riverside Garden Park and visitors to park	High	Visual, A23 improvements	Long term, permanent	Low	Moderate adverse (winter) Minor adverse (summer)	Not significant	
Occupiers of vehicles using Lowfield Heath Road,	Low	Visual, A23 improvements or decked car park	Long term, permanent	Negligible to low	Negligible to minor adverse	Not significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
Balcombe Road, Ifield Road and A23 and occupiers of trains using Railway							
Pedestrians using pavement at Balcombe Road	Medium	Visual, decked car park Pentagon Field	Long term, permanent	Low	Minor to Moderate adverse	Not significant	
Horley residents	High	Visual, A23 improvements	Long term, permanent	Negligible	Minor adverse	Not significant	
Mid to long distance views including: Users of rights of way at Rowley Farm, Charlwood, Lowfield Heath Road, Norwood Hill, Turners Hill and Tilgate Hill	High to medium	Visual operational phase	Long term permanent	Negligible	Negligible to minor adverse	Not significant	
Perception of tranquillity in nationally	High to Very High	Character/Visual perception during operation	Long term, permanent	Negligible	Minor adverse	Not significant	

Receptor	Receptor Sensitivity	Description of Impact	Short / medium / long term / permanent	Magnitude of Impact	Significance of Effect	Significant / not significant	Notes
designated landscapes.							

8.14. References

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8.15. Glossary

Table 8.15.1: Glossary of Terms

Term	Description
AOD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
CAP	Civil Aviation Policy
CARE	Central Airfield Maintenance and Recycling Facility
CEA	Cumulative Effects Assessment
CPRE	Campaign for the Protection of Rural England
DMRB	Design Manual for Roads and Bridges
EIA	Environmental Impact Assessment
ES	Environmental Statement
GAL	Gatwick Airport Limited
GLVIA	Guidelines for Landscape and Visual Impact Assessment
IDL	International Departure Lounge
ITTS	Inter-Terminal Transit System
LCT	Landscape Character Type
LVIA	Landscape and Visual Impact Assessment
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NPR	Noise Preferential Route
NPS	National Policy Statement
PEIR	Preliminary Environmental Information Report
RVAA	Residential Visual Amenity Assessment
SPD	Supplementary Planning Document
ZoI	Zone of Influence
ZTV	Zone of Theoretical Visibility