

Preliminary Environmental Information Report Chapter 5: Project Description

September 2021



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## 5 Project Description

#### 5.1. Introduction

- 5.1.1 This chapter provides a description of the Project and forms the basis for the environmental assessment provided in this Preliminary Environmental Information Report (PEIR). Further information can be found in the appendices to this chapter provided in Volume 3 of this PEIR.
- The effects of the Project have been assessed throughout the PEIR based on what is likely. Where options remain, the limits of the assessment have been set sufficiently wide to allow a robust assessment to be undertaken of a reasonable worst-case scenario. A number of measures which would reduce or avoid adverse environmental effects arising have been included as part of the Project design. Details of these measures are provided in this chapter and set out in each topic chapter.

## 5.2. Overview of the Project

## Key Components of the Project

- 5.2.1 The Project proposes alterations to the existing northern runway which, along with lifting the current restrictions on its use, would enable dual runway operations. Together with the alterations to the northern runway, the Project would include the development of a range of infrastructure and facilities to allow increased airport passenger numbers and aircraft operations and to allow Gatwick Airport to make best use of its existing runways.
- 5.2.2 The Project would include alterations to the existing northern runway and corresponding enhancements to the taxiway system and parking stands to accommodate an increase in aircraft movements. Other elements of the Project would enable the increased airfield capacity to be accessed by passengers through additional processing capability and improved airport access. Land would be provided to mitigate environmental effects (for example, for habitat creation, flood compensation or provision of recreational routes).
- 5.2.3 The Project includes the following key components:
  - amendments to the existing northern runway including repositioning its centreline 12 metres further north to enable dual runway operations;
  - reconfiguration of taxiways;
  - pier and stand alterations (including a proposed new pier);
  - reconfiguration of other airfield facilities;
  - extensions to the existing airport terminals (north and south);
  - provision of additional hotel and office space;
  - provision of reconfigured car parking, including new car parks;
  - surface access (including highway) improvements;
  - reconfiguration of existing utilities, including surface water, foul drainage and power; and
  - landscape/ecological planting and environmental mitigation.
- 5.2.4 The land subject to the application for development consent extends to approximately 820 hectares, of which approximately 747 hectares lies within the ownership of Gatwick Airport



Limited (GAL). The Project site boundary is shown on Figure 1.2.1. The key elements of the Project are shown on Figure 5.2.1 (sheets a – h) inclusive as follows:

- Figure 5.2.1a: Proposed Airfield/Airport Works;
- Figure 5.2.1b: Proposed Car Parks;
- Figure 5.2.1c: Proposed Hotels and Commercial Elements;
- Figure 5.2.1d: Proposed Surface Access Improvements;
- Figure 5.2.1e: Proposed Surface Water and Foul Water Improvements;
- Figure 5.2.1f: Proposed Principal Construction Compounds;
- Figure 5.2.1g: Potential Environmental Mitigation and Enhancement Areas; and
- Figure 5.2.1h: Existing Facilities to be Demolished or Removed.
- 5.2.5 Further details of the key components are provided below. Indicative details of the proposed highway improvements are provided in Appendix 5.2.1.

## Changes to Enable Dual Runway Operations

- 5.2.6 Once operational, the Project would generally result in:
  - all arriving aircraft using the existing main runway during normal operations;
  - shared departures between the existing main runway and the northern runway (with smaller aircraft using the northern runway); and
  - controlled dependency between the two runways to enable safe operations, including crossing of the northern runway by arriving aircraft<sup>1</sup>.
- 5.2.7 The northern runway may be used for both arrivals and departures in circumstances when the main runway is closed, for example during periods of maintenance, in line with current practice.
- 5.2.8 It is anticipated that by 2038 this could increase Gatwick's passenger throughput to approximately 75.6 million passengers per annum (mppa), compared to a maximum potential passenger throughput based on existing facilities (with future baseline projects) of 62.4 mppa. This represents an anticipated increase in capacity of approximately 13.2 mppa (see Chapter 4: Existing Site and Operation for further details).

## Alterations to the Existing Northern Runway

- 5.2.9 The existing northern runway is designated 08L/26R such that when the wind is from the east, aircraft approaching the runway operate on a heading of 80°, while when the wind is from the west, aircraft operate on a heading of 260° (see Chapter 4: Existing Site and Operation for further details). The runway is currently a non-instrument runway², measuring approximately 2.6 km in length and a minimum of 45 metres in width, plus runway shoulders.
- 5.2.10 The existing northern runway would be adjusted to reposition the centreline 12 metres further north to ensure a separation distance of 210 metres between it and the main runway. This distance is required to meet European Aviation Safety Agency standards for closely spaced

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<sup>&</sup>lt;sup>1</sup> Controlled dependency: to ensure the safety of aircraft operations, an arrival from the main runway would slow or stop short of the northern runway and cross it only after a departure on the northern runway has completed.

<sup>&</sup>lt;sup>2</sup> A non-instrument runway is one where the pilot is reliant on visual cues (approach and runway lighting, approach path indicators, and paint markings) to make a safe approach and landing to the airport. If the visual cues are not visible to the pilot owing, for example, to fog on the runway or a very low cloud base, then the aircraft may have to hold until conditions improve, or divert to an alternate airport. A non-instrument runway is not equipped with an Instrument Landing System.



- parallel runways. The altered northern runway would retain a width of approximately 45 metres, with 7.5 metre wide shoulders.
- 5.2.11 The redundant 12 metre strip to the south of the altered northern runway would be removed. The 33 metre wide section of retained existing runway, together with the new 12 metre strip to the north, would be resurfaced and provided with new markings to form the altered northern runway. There would be no change to the overall length of the runway.

## Reconfiguration of Taxiways

5.2.12 A number of existing taxiways would require amendment and realignment in order to accommodate the altered northern runway, to provide sufficient room for the safe manoeuvre of aircraft associated with both runways and to accommodate increased aircraft numbers.

Redundant areas of hardstanding would be removed.

#### **Taxiway Juliet**

- 5.2.13 The existing Taxiway Juliet would require an increased separation distance from the northern runway in order to allow aircraft to use this taxiway independently of northern runway operations. The western part of Taxiway Juliet (Taxiway Juliet West) would be realigned approximately 27 metres to the north to allow for the movement of large (Code F) aircraft<sup>3</sup>.
- 5.2.14 The eastern part of Taxiway Juliet (Taxiway Juliet East Code E) would be realigned approximately 19.5 metres to the north between Taxiways Uniform and Sierra. This would allow for the movement of Code E aircraft along this section of taxiway independently of northern runway operations.
- 5.2.15 The eastern part of Taxiway Juliet between Taxiways Sierra and Quebec (Taxiway Juliet East Code C) would be realigned by approximately 5 metres northwards to allow for the movement of Code C aircraft independently of northern runway operations.
- 5.2.16 In addition, a new spur (known as the Taxiway Juliet West Spur) would be provided to the north of the taxiway in order to provide a passing lane and allow air traffic control to effectively sequence aircraft for departure on the main and northern runways during easterly operations.
- 5.2.17 The realigned Taxiway Juliet and spur are shown in light blue on Figure 5.2.1a.

#### **Taxiways Lima and Tango**

- 5.2.18 Modifications to the existing Taxiways Lima and Tango are proposed in order to create independence in routing to and from the northern runway for large aircraft, while avoiding the need to move Taxiway Juliet 27 metres further north along its length.
- 5.2.19 Taxiway Lima would require an extension westward, towards the existing Taxiway Uniform, providing a route suitable for larger Code E and Code F aircraft. The extension would be 23 metres in width and approximately 300 metres in length. This would require some work to the pavement of the existing Taxiway Uniform.

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<sup>&</sup>lt;sup>3</sup> Details of aircraft categories are provided in Chapter 4: Existing Site and Operation.



- 5.2.20 An extension to Taxiway Tango would provide a cut-through northwards to meet the extended Taxiway Lima, creating a taxiway for Code E aircraft. The cut-through would be 23 metres in width and approximately 85 metres in length.
- 5.2.21 The amended Taxiways Lima and Tango are shown in light blue on Figure 5.2.1a.

#### Taxiways Whiskey, Victor and Zulu

5.2.22 Taxiways Whiskey, Victor and Zulu would require reconfiguration to accommodate Code E aircraft. This would largely be located within the area occupied by the existing taxiways but would require an additional area to the north of Taxiway Zulu to accommodate wider body aircraft. The amended taxiways are shown in light blue on Figure 5.2.1a.

## **Exit/Entrance Taxiways**

- 5.2.23 Eight new runway exits/entrance taxiway connections would be provided between the northern runway and Taxiway Juliet as part of the Project in order to allow aircraft to move from the main and northern runways to Taxiway Juliet and to access the northern runway for departure. Two existing exit/entrance taxiway connections would be removed and one would be substantially modified.
- 5.2.24 Six new exit/entrance taxiways to/from the main runway would be required as part of the Project in order for aircraft to access and egress the runway, and to allow aircraft to be held before crossing the northern runway, under the direction of air traffic control. Six existing exit/entrances taxiways would be substantially removed and one existing exit/entrance would be retained unchanged. Once amended, seven exit/entrance taxiways would connect the main and northern runways (five would operate when the runway operates as 26R and two would operate when the runway operates as 08L) while an eighth taxiway would provide an exit from the main runway to the western end-around taxiway, described below.
- 5.2.25 On Figure 5.2.1a modified entrance/exit taxiways are shown in dark blue, existing entrance/exit taxiways are shown in black and new entrance/exit taxiways are shown in light green.

#### **End Around Taxiways**

- 5.2.26 Amendments are required to existing infrastructure in order to provide end around taxiways (at the end of both runways) to allow large aircraft to cross the end of the runway, under the direction of air traffic control. In addition, they would provide a resilient route for all aircraft in case of any issue preventing the use of exit taxiways.
- 5.2.27 These proposed end around taxiways would comprise the following:
  - end around taxiway west: a new end around taxiway linking into the existing Taxiway Juliet
    to allow aircraft landing on the main runway to avoid affecting northern runway operations
    when aircraft are operating on a heading of 260°; and
  - end around taxiway east (Yankee): a new exit taxiway would link into the existing Taxiway Yankee to form the end around taxiway east (Yankee). This would allow aircraft landing on the main runway to avoid affecting northern runway operations when aircraft are operating on a heading of 80°.
- 5.2.28 The amended new/amended end around taxiways are shown in dark green on Figure 5.2.1a.



## Aircraft Holding Area

- 5.2.29 Reconfiguration of an existing apron area to the north of Taxiway Juliet is proposed. This would include reconfiguration of the existing stands (known as the 130s/140s stands). This new configuration is known as the Charlie box and would provide aircraft stands and operational aircraft hold points which allow aircraft to be held just prior to accessing the northern runway to optimise runway occupancy efficiency and remove aircraft from busy taxiways. The Charlie box would include new taxiways across the existing apron area, including:
  - four routes for Code E aircraft linking Taxiway Kilo and the northern runway/Taxiway Alpha November:
  - an east-west taxi route for Code C aircraft to allow independent access/egress from all positions; and
  - two routes for Code C aircraft with a Code F taxi lane on Taxiway Kilo to link with taxiways
     Papa and Quebec and provide alternative routing for Code F aircraft to the runway.
- 5.2.30 The aircraft holding area/Charlie box would occupy an area of approximately 15 hectares and is shown in yellow on Figure 5.2.1a.

#### Pier and Stand Amendments

- 5.2.31 Gatwick Airport currently operates six piers (Piers 1, 2 and 3 at the South Terminal and Piers 4, 5 and 6 at the North Terminal). As part of already consented airport improvements, construction work on a western extension to Pier 6 is consented and construction commenced in 2019.
- As part of the Project, a new Pier 7 is proposed to the north west of Pier 6, adjacent to the existing cargo facility. The new Pier 7 building is shown in dark blue on Figure 5.2.1a and would consist of a ground floor plus two levels (arrivals and departures), including inbound and outbound autonomous transport lobbies (at ground level), together with limited commercial facilities at the first floor level. Passengers would access the new pier via autonomous vehicles from new stations provided at the North and South Terminal buildings (see paragraphs 5.2.61 and 5.2.62). The pier would occupy an area of approximately 10.1 hectares (101,000 m²), with a maximum building height of approximately 18 metres. The apron to the south of Pier 7 would provide new aircraft stands (14 Code C/9 Code E).
- 5.2.33 In addition to the new Pier 7, the Project would include the following amendments to stands to allow for increased flexibility in terms of handling of different aircraft types:
  - provision of a new area of remote stands in the existing area to the north of Taxiway Juliet (in an area to be known as Oscar);
  - reconfiguration of existing areas of remote stands to allow for the reconfigured Taxiway Lima while retaining stands suitable for Code C aircraft (stands 150-151);
  - provision of additional intermediate hold stands (particularly within the proposed aircraft holding area/Charlie box);
  - conversion of existing stands located to the west of Pier 3 to Code C fully serviced stands providing overnight aircraft parking/remote stands;
  - provision of one new Code C stand north east of the existing Virgin hangar;
  - removal and reduction of existing stands to allow for relocation of Taxiway Juliet East; and
  - Provision of 14 new stands north of Taxiway Lima.



5.2.34 Table 5.2.1 sets out the number of existing stands, together with the number of stands with the Project in place.

Table 5.2.1: Number of Existing and Proposed Stands

Туре	Number of Stand Centrelines without Project (Future Baseline)	Number of Stand Centrelines with Project
Code C stands (North Terminal)	47	61
Code C stands (South Terminal)	38	38
Code C stands (remote)	45	74
Code E stands (North Terminal)	17	24
Code E stands (South Terminal)	16	16
Code E stands (remote)	27	17
Code F stands (North Terminal)	1	1

Note: Number represents the number of stand centrelines, different configurations are available.

## Reconfiguration of Existing Airport Facilities

- 5.2.35 A number of existing facilities would require reconfiguration or relocation, and additional facilities would be required to accommodate the proposed changes to the airport. This would comprise construction of new facilities and demolition of existing facilities, including:
  - central airfield maintenance and recycling facilities;
  - cargo facilities;
  - fire training ground and satellite airport fire service provision;
  - hangars
  - provision of perimeter boundary treatments to mitigate noise (eg noise walls and bunding);
  - internal access routes and forecourts.
- 5.2.36 These are described further in turn below.

#### **Central Airfield Maintenance and Recycling Facilities**

## Central Area Recycling Enclosure (CARE) Facilities

- 5.2.37 The existing CARE facility is located within an area of the existing airfield to the north of Taxiway Juliet. Facilities include the existing waste processing building, biomass boiler, compound area and bin store. This area would be repurposed to provide new remote stands and therefore the existing CARE facility would require demolition.
- 5.2.38 A replacement CARE facility is proposed in the north western part of the airport. The relocated CARE facility would process the majority of airport waste and is likely to include:
  - a replacement/relocated biomass boiler to manage organic matter;
  - an additional biomass boiler to manage organic matter;
  - a materials recovery facility (MRF) to allow sorting of waste;
  - card baling facilities;
  - vehicle weigh in/weigh out platform;
  - office accommodation and welfare facilities; and



- hard standing area for recycling storage, quarantine area and manoeuvring area for supplier collection vehicles and vehicle movements.
- 5.2.39 The proposed CARE building is likely to be up to 22 metres in height above ground level and could include elements up to 5 metres below ground level. The biomass boiler flue heights are likely to be up to 50 metres above ground level. The building would occupy an area of approximately 17,550 m<sup>2</sup>.
- 5.2.40 Two possible locations for the CARE facility have been identified, both located in the north western part of the airport (shown in orange on Figure 5.2.1a). Option 1 would be located to the north of the cargo hall (north east of Pier 7), while Option 2 would be located to the north west of Pier 7.

#### **Motor Transport Facilities**

- 5.2.41 The existing Motor Transport facilities are also located to the north of Taxiway Juliet and are proposed to be demolished and re-provided to the north western part of the airport (shown in pale green on Figure 5.2.1a adjacent to Option 2 for the CARE facility).
- 5.2.42 The proposed replacement Motor Transport facility is likely to include a parts store, ramps, pits, tyre store, test area, workshop, heavy goods vehicle (HGV) refuelling area and vehicle wash area. The building(s) and compound would occupy an area of approximately 15,600 m², with a maximum building height of 15 metres above ground level and could include elements up to 5 metres below ground level.

#### **Grounds Maintenance Facilities**

5.2.43 The existing grounds maintenance facilities would also be demolished and re-provided in an area of hardstanding in the south eastern part of the airport (shown in pale green on Figure 5.2.1a). New buildings would include an open vehicle storage shed, closed tool shed, hazardous substances unit and a portacabin style office/welfare area. A yard would be required with sufficient space to park and turn vehicles, together with a green waste composting area. The building would be approximately 1,230 m² in area with a maximum height of 8 metres.

#### Airfield Surface Transport Facilities

5.2.44 The existing Surface Transport facility would be demolished and re-provided in an area of hardstanding in the south eastern part of the airport, adjacent to the grounds maintenance facilities. New buildings would include open storage and vehicle sheds and a grit and salt store, together with a parking area. This would be located within an area of approximately 1,440 m² with a maximum building height of 15 metres and could include elements up to 5 metres below ground level.

#### Emergency Air Traffic Control Tower and Rendezvous Point North

- 5.2.45 The emergency air traffic control tower is currently located south of the existing Virgin hangar and to the west of the surface transport and grounds maintenance facility. This tower is proposed for demolition.
- 5.2.46 Due to the reconfiguration of this area, the existing Rendezvous Point North would require relocation in order to re-provide a suitable emergency rendezvous area, to the north of the central



airport area, for off-airport emergency services. The relocated Rendezvous Point North is shown in dark green on Figure 5.2.1a.

#### Cargo

- 5.2.47 The existing cargo facility occupies an area of approximately 10 hectares, including 23,000 m<sup>2</sup> of cargo sheds, with office accommodation and areas for HGV loading, unloading and parking. It currently includes non-cargo activities and is not therefore currently used to its full potential.
- 5.2.48 The cargo facility has capacity to accommodate the existing throughput and the increased cargo throughput that the Project is forecast to generate, although some internal operational changes within the facility are proposed. These would not require changes to the external appearance, height or floor area of any existing buildings or structures, although replacement pavement will be provided.

#### **Aircraft Engine Ground Running**

5.2.49 Aircraft engine ground running for test and maintenance purposes is currently facilitated in a number of locations on existing taxiway infrastructure (see Chapter 4: Existing Site and Operation), some of which would be affected by the reconfigured airfield facilities forming part of the Project. Amended locations for engine ground running are proposed on Taxiway Juliet close to the current areas.

#### **Fire Training Ground**

- 5.2.50 The Project requires the relocation of the existing fire training ground in order to allow for the reconfigured Taxiway Juliet (and spur). The fire training ground currently occupies an area of approximately 13,050 m² in the western part of the airfield, to the north of the existing northern runway, and includes a fire training rig, control centre, compartment fire training complex, road traffic collision mock-up area, classrooms, underground water storage, water tower and deluge system. The facility allows for rescue and firefighting training to ensure maintenance of competency and skills for GAL's own rescue and firefighting service.
- 5.2.51 It is proposed that the fire training ground be re-provided to the north of its existing location (shown in red on Figure 5.2.1a), occupying a consolidated area of approximately 12,000 m². The existing rig would be relocated, the height of which would be no greater than 25 metres, with tank depths of up to 5 metres.

## **Satellite Airport Fire Service Provision**

5.2.52 Dependent on safety case requirements, the Project may require a satellite Airport Fire Service facility to the south of the main runway in order to meet aerodrome certification requirements, including response time to incidents. The facility would be located within an area of up to 8,000 m², with a maximum built height of 15 metres. The location is shown in yellow on Figure 5.2.1a.

#### **Hangars**

5.2.53 A hangar has recently been constructed by Boeing in the north west part of the airport (completed autumn 2019). It is anticipated that one additional hangar, sized for Code E aircraft, would be required as part of the Project. This is also proposed to be located in the north western part of the



- airport, to the north of Larkins Road. The hangar would have a footprint of approximately 12,440 m<sup>2</sup> and would be up to 32 metres high.
- 5.2.54 In addition, the existing Virgin hangar in the north west part of the airport would be converted to an airside operation. This would require relocation of existing infrastructure from the north side of the existing hangar. Like-for-like facilities would be provided. In addition, the extent of the existing pavement on the northern side of the Virgin hangar would be re-provided on the southern side.

#### **Perimeter Boundary Treatments to Mitigate Noise**

5.2.55 The Project would remove an existing bund in the western end of the airfield which attenuates noise from taxiing aircraft to external areas. The functionality of the bund would be re-provided in the proposed design, potentially in the form of a new bund or barrier in this area. The approximate location for this is shown on Figure 5.2.1g.

#### **Internal Access Routes**

- 5.2.56 The existing Larkins Road within the airport boundary would require realignment to accommodate the extension to Taxiway Lima. The realigned route would remain within the existing airport boundary.
- 5.2.57 An airside route for autonomous vehicles would be provided to allow travel between the new Pier 7 and the terminal buildings.
- 5.2.58 A new east-west access track is proposed between the main runway and the altered northern runway, suitable for use by light vehicles in order to allow aerodrome inspections and for other management/maintenance purposes. This would take the form of asphalt pavement or similar.
- 5.2.59 In addition, existing exit lanes from the secure airside area may require reconfiguration to allow vehicular entry, in order to ensure that there are sufficient vehicle entry points from landside to airside.

#### **Extensions to North and South Terminals**

5.2.60 Extensions to the existing North and South Terminals would be required to accommodate passenger growth. In addition, a number of internal changes are proposed within the terminals to allow for changes in technology and innovative approaches to passenger experience and baggage handling, together with changes to the terminal forecourts. The main external extensions are shown in dark blue on Figure 5.2.1a.

## **North Terminal**

- 5.2.61 Works to the North Terminal would include the following.
  - Extensions to the International Departure Lounge (IDL), to both the north and south of the current facility. The northern expansion would occupy a footprint of approximately 3,120 m² and result in additional floorspace of approximately 9,000 m² over Levels 20, 30 and 40 to provide a mix of retail, catering and general circulation space. The extension would be up to approximately 32.5 metres in height (above ground level). The southern extension would occupy a footprint of approximately 3,180 m², resulting in additional floorspace of approximately 10,000 m² over Levels 10, 20 and 30 and provide a mix of catering, retail and



- general circulation space. The extension would be up to approximately 27 metres in height (above ground level).
- An extension to the baggage hall (providing baggage handling facilities), occupying a
  footprint and floorspace of approximately 6,552 m<sup>2</sup>. The extension would be up to
  approximately 12.5 metres in height (above ground level).
- An extension to baggage reclaim with a footprint of approximately 650 m<sup>2</sup>. The extension would be up to approximately 7 metres in height (above ground level).
- Internal reconfiguration works to facilities such as check in zones, baggage systems and security.
- Provision of a two-storey transition space to allow passengers to connect to a new autonomous vehicle facility, providing connections to the new Pier 7.

#### **South Terminal**

- 5.2.62 Works to the South Terminal would include the following.
  - An extension to the IDL, occupying a footprint of approximately 3,780 m² and resulting in additional floorspace of approximately 15,000 m² over Levels 10, 20, 30 and 40 to provide a mix of retail, catering and general circulation space. The extension would be up to approximately 30.5 metres in height (above ground level).
  - Internal reconfiguration works to facilities such as check in zones, baggage systems and security.
  - Provision of a two-storey transition space to allow passengers to connect to a new autonomous vehicle facility, providing connections to the new Pier 7.
  - Coaching gates to service remote stands.

#### **Forecourts**

- 5.2.63 North Terminal Forecourt comprises North Terminal Approach, Furlong Way, Racecourse Way, Arrivals Road, Departures Road, Coach Road and Northway. These links provide access to the terminal frontage, drop off areas, bus and coach stands, car rental facilities, short stay car park entrances and taxi ranks. Departures Road includes a restricted access link to the Upper Forecourt for premium drop off (limited to certain airlines only). Long stay car parking at North Terminal is accessed via Longbridge Way as a separate access off North Terminal roundabout.
- 5.2.64 South Terminal Forecourt comprises Ring Road South, Eastway, Westway, Coach Road, Upper Forecourt, Lower Forecourt and Ring Road North. These links provide access to the terminal frontage, drop off areas, bus and coach stands, car rental facilities, long stay and short stay car park entrances and taxi ranks. Upper Forecourt has restricted access and is used for airport taxis, car park shuttle buses and the electric hire car fleet.
- 5.2.65 The forecourts and approaches to both existing terminals would be enhanced, with routes providing access to the terminal frontage, multi-storey and long stay car parks, hotels and pick-up and drop-off areas for different transport modes. The way in which access is managed for different modes may change in order to optimise the use of available capacity. The broad locations of the forecourt works are shown on Figure 5.2.1d.

## Hotel and Commercial Facilities

5.2.66 An increase in passenger and aircraft operations will require additional office and hotel provision to meet the needs of airport companies and passengers (see Figure 5.2.1c).



#### **Offices**

5.2.67 In recent years passenger growth has occurred without the need for additional office provision. However, it is expected that further operational office provision would be required as the airport grows to meet needs of airport companies. The Project therefore makes provision for new office accommodation in the location of the existing car park H. The space allocated could provide for up to three new office blocks, each office building having a footprint of approximately 1,024 m². These would be up to approximately 27 metres high (above ground level). The new offices would provide approximately 9,000 m² of floor space. The exact configuration, phasing and amount of floorspace would depend on the actual timing of requirements.

#### **Hotels**

- There is significant hotel provision both on and off airport that serves the airport. Hotels on the airport tend to be used substantially (but not exclusively) by airport passengers and staff, whereas hotels further from the airport are supported by airport demand, but also meet other needs, such as tourism, leisure and business stays. Additional hotel provision is proposed on airport as follows:
  - one new South Terminal hotel (up to 400 bedrooms) in the location of existing car park H (up to 27 metres in height);
  - one new North Terminal hotel (up to 400 bedrooms) in the location of existing car park Y (up to 27 metres in height); and
  - one new hotel at the building compound adjacent to the car rental site (200 bedrooms) (up to 16.3 metres in height).
- 5.2.69 In addition to the above, a number of facilities are proposed/consented for implementation in the absence of the Project to serve the projected increase in passenger numbers, including:
  - extension to the existing BLOC hotel (approximately 200 bedrooms); and
  - reconfiguration of the existing Hilton hotel to provide 50 additional bedrooms.

#### Car Parking

- 5.2.70 A range of on-airport car parking is currently provided as set out in Chapter 4: Existing Site and Operation. In addition to the existing provision, three new car parks are proposed for implementation in the absence of the Project to serve the projected increase in passenger numbers. Proposed improvements would take the future baseline car parking provision to 53,451 spaces in the absence of the Project.
- 5.2.71 New car parking would be required on site in order to meet additional demand generated by the proposed increase in passengers due to the Project, and to replace existing parking spaces that would be lost due to development associated with the Project. The plans also take into account an anticipated reduction in the number of spaces currently provided in unauthorised car parking sites away from the airport, which would be replaced by additional provision at the airport in line with Crawley Borough Council local plan policy<sup>4</sup>. Table 5.2.2 sets out the proposed car parking provision as part of the Project (see Figure 5.2.1b).

<sup>&</sup>lt;sup>4</sup> It is anticipated that unauthorised off-airport parking would be reduced to 3,000 spaces



- 5.2.72 In addition, an area in the western part of Crawter's Field may be required for surface parking to replace part of the existing 'Purple Parking' (operated by a third party), which would be lost to make way for the end around taxiway. If required, this would be replacement rather than new parking provision.
- 5.2.73 The overall net increase in passenger car parking spaces would be approximately 18,500 (in addition to the existing parking provision of 53,451).

**Table 5.2.2: Proposed Additional Passenger Car Parking** 

Туре	Footprint (hectares)	Maximum Height (above ground level)	Estimated Spaces
North Terminal Long Stay (decked parking)	13.0	11 metres	4,500
Car park J multi-storey	1.0	27 metres	900
Car park Y multi-storey	1.9	27 metres	3,000
Car park H multi-storey	0.5	27 metres	1,800
Pentagon Field (decked parking)	8.8	8 metres <sup>5</sup>	5,800
Car parks X and V (decked parking)	6.9	7 metres	2,500
Total	32		18,500

5.2.74 No additional car parking for airport staff is proposed. Historically, Gatwick provided around 7,200 spaces for staff. However, as staff car mode share has decreased, GAL has taken steps to reduce this by over 1,000 spaces in the last five years. GAL is currently reviewing the optimum allocation of spaces and location for these staff spaces, taking into account an increase in staff numbers and changing work patterns but alongside promoting use of more sustainable travel to work, including car sharing. Overall, and even allowing for a larger workforce, it is proposed to reduce the total number of spaces provided per 1,000 employees across the airport.

#### Surface Access Improvements

- 5.2.75 In order to accommodate the proposed increase in passenger numbers accessing the airport, and taking into account other known and planned developments in the area, improvements are required to the highways that serve both the South Terminal and North Terminal roundabouts to add capacity. The designs and details of any improvements will be subject to road traffic assessment and detailed engagement with highway authorities, including Highways England. The designs currently under consideration within this PEIR are set out at Appendix 5.2.1.
- 5.2.76 The locations where an increase in road traffic volumes is likely to be greatest are at the South Terminal and North Terminal junctions.
- 5.2.77 In order to accommodate the proposed increase in passenger numbers, the following surface access improvements form part of the Project:
  - South Terminal: new junction, providing full grade separation;
  - North Terminal: new junction layout including some grade-separation, improving traffic flow and removing westbound traffic between Airport Way and the A23 from using the North Terminal roundabout:

<sup>&</sup>lt;sup>5</sup> See section on cut/fill (paragraph 5.3.1085.3.107) – ground height at Pentagon Field will be raised as part of the cut/fill strategy.



- enhancement of the eastbound M23 Gatwick Spur as part of the South Terminal roundabout improvements, should these not be completed in advance of the airport expansion; and
- improvements to Longbridge Roundabout where the A23 meets the A217.
- 5.2.78 There would be continuous operation of the existing roads/junctions during construction of these improvements, although there would be periods where capacity would be reduced (either through narrow lane running or lane closures).

#### **South Terminal Junction Improvements**

- 5.2.79 The South Terminal roundabout (also known as the Welcome Roundabout) is the sole entry point into the South Terminal area and for local access roads, including the terminal forecourt, long stay car parks and commercial premises. It is served by the M23 Gatwick Spur to the east (leading from the M23 Junction 9) and Airport Way from the west (leading from North Terminal roundabout). The majority of Gatwick traffic accesses the airport from the M23 and traffic for both North Terminal and South Terminal must pass through this roundabout.
- 5.2.80 The westbound M23 Spur was upgraded as part of the Highways England M23 Smart Motorway Project, completed in Summer 2020. As part of that work, the hard shoulder of the westbound carriageway became a permanent running lane, providing a total of three lanes approaching the airport. Further local improvements, involving signalisation and minor widening of entries/exits, are proposed in the absence of the Project. The eastbound M23 Gatwick Spur was not widened at the time of the westbound works.
- 5.2.81 A description of the proposed works to the South Terminal roundabout required as part of the Project is provided in the paragraphs below.
- 5.2.82 The M23 Gatwick Spur/Airport Way carriageway would be raised, creating a flyover above the existing roundabout. The elevated M23 Gatwick Spur/Airport Way would provide clear headroom of 5.7 metres above the roundabout meaning that the road surface of the flyover would be approximately 8 metres above the existing ground level after allowing for deck construction and surfacing. The length of the flyover structure would be approximately 130 metres. Earthworks would support the approach to the bridge and reinforced earth-walls or retaining walls would be required between the mainline and slip roads.
- 5.2.83 To the west of the roundabout, the main carriageway would tie into the existing alignment before the bridge over the Brighton-London mainline railway. To the east, the main carriageway and slip roads to/from the roundabout would tie into the existing carriageway approximately 160 metres east of the existing bridge over the B2036 Balcombe Road, raising the existing road over the bridge approximately 2.2 metres as a result. This would require substantial widening and strengthening of this bridge, and possibly a full replacement. If not already undertaken as part of short-term improvements, it would also be necessary to widen the eastbound M23 Gatwick Spur to three lanes, to match the westbound spur road improvements completed as part of the M23 Smart Motorway Project.
- 5.2.84 The adopted Reigate and Banstead Local Plan Development Management Plan (2019) includes a site allocation for Horley Strategic Business Park (Policy HOR9) on 31 hectares of land to the north of Airport Way. This development would require a new dedicated, direct access onto the strategic road network (M23 Gatwick Spur) via an additional link off South Terminal roundabout and would generate additional road traffic that would need to be accommodated. Both the short-



term signalisation improvements and the grade-separation scheme would be capable of accommodating an additional entry/exit link to the roundabout in this location.

- 5.2.85 The M23 Gatwick Spur over the B2036 Balcombe Road would be raised by up to 2.2 metres. Balcombe Road overbridge would require strengthening or replacement, as well as widening to accommodate slip roads.
- 5.2.86 The works at the South Terminal Junction would include the provision of a noise barrier. The barrier (approximately 600 metres in length and up to 1 metre in height) would be located along the elevated section of highway.

#### **North Terminal Junction Improvements**

- 5.2.87 The North Terminal roundabout is the entry point to the North Terminal and local access roads, including the northern and east perimeter roads. The existing layout consists of a circular five-arm at-grade roundabout to the north east of the North Terminal, to the south west of the A23. There is currently no direct entry to the roundabout southbound from Horley and no direct exit from the roundabout on to the A23 southbound towards Crawley. Local improvements are proposed in the absence of the Project (see Chapter 4: Existing Site and Operation).
- 5.2.88 In order to provide for the predicted growth in passengers associated with the Project, a grade-separated junction design is required. The outline concept for this junction is to replace the existing roundabout with a signalised junction arrangement. This would provide extra capacity for movements to and from the airport and would separate airport and non-airport traffic, reducing conflict in peak periods, thereby reducing congestion. As part of this solution, an elevated flyover would be built to carry traffic between Airport Way (from South Terminal and the M23) and the A23 towards Horley. Additional improvements would be made to Gatwick Way to accommodate an increase in traffic flow towards Northgate Road.
- The new junction would include a new signalised intersection on the A23 to facilitate a direct movement from the airport to the southbound A23 towards Crawley, relieving a current constraint. Traffic between Airport Way and Longbridge Way, for access to North Terminal long stay car parks would be re-routed via Gatwick Road to avoid conflicts with traffic accessing or egressing the North Terminal forecourt area and short stay car parks. The permanent layout of the new junction would not require additional land to accommodate running lanes, except in respect of the elevated link from Airport Way to the A23 northbound. Traffic between Horley and the M23 at Junction 9 and between Horley and Crawley along the A23 would not need to pass through the new airport access junction in either direction. The elevated link from Airport Way towards Horley would sit approximately 8 metres above the new junction to provide the required clearances as stipulated by Highways England's safety and design standards.
- 5.2.90 The flyover structure is anticipated to require three separate spans to cross at-grade carriageways and is expected to comprise a typical steel beam superstructure with a concrete slab deck on concrete abutments and piers, with piled foundations. The overall structure would be approximately 200 meters long. Retaining walls would be required to separate adjacent links at different levels or gradients.
- 5.2.91 The works at the North Terminal Junction would include the provision of two noise barriers. The first barrier (approximately 800 metres in length and up to 1 metre in height) would be located along the elevated central section of highway, while the second (approximately 900 metres in



length and up to 2 metres in height) would be located on a section adjacent to Riverside Garden Park.

#### **Longbridge Roundabout Improvements**

- 5.2.92 Works are also required to the Longbridge roundabout, including alterations to the existing layout. Options have been considered in relation to operational capacity, compliance with design standards and impact on surrounding land and property.
- 5.2.93 The proposed solution is to substantially improve the roundabout and provide full-width running lanes throughout the junction, replacing the sub-standard narrow lanes that currently exist. These lanes create a capacity restriction due to goods vehicles needing to straddle two lanes for certain manoeuvres. The new roundabout would have a slightly larger diameter and would extend further west and north to accommodate wider circulating lanes, additional pedestrian crossing facilities and improved capacity on exit and entry lanes, particularly for the A23 arm to and from Horley. Associated drainage works to accommodate any surface water run-off as a result of the highway improvements will be included in the Project.

#### **Rail Improvements**

- 5.2.94 Improvements to Gatwick Station are the subject of a separate consenting process, with a planning application submitted by Network Rail to Crawley Borough Council in April 2018 and consented in March 2019. These improvements commenced in 2020 and will be in place prior to operation of the Project.
- 5.2.95 It is not currently envisaged that any further improvements will be required to the rail station platforms or concourse to accommodate the peak flows generated by the Project. This will be validated within the Environmental Statement to accompany the application for development consent for the Project.

#### **Shuttle Service**

- 5.2.96 The Inter-Terminal Transit System (ITTS) provides a dedicated, elevated people mover system connecting North Terminal and South Terminal (see Figure 5.2.1d). At South Terminal, the station is located adjacent to Gatwick Station. The ITTS comprises a pair of parallel concrete guideways approximately 8 metres above ground level, each operated by a three-car rubbertyred vehicle, which runs throughout the day.
- 5.2.97 The ITTS capacity is governed by the size of vehicle, frequency of service and journey time (including the dwell time at each end station). Further work will determine the scale of intervention necessary to adequately cater for demand, noting that some improvements can be made within the existing operation. This is likely to take the form of increased frequency of service.

#### Water Management

5.2.98 The existing airport drains to local watercourses via balancing ponds and attenuation lagoons. In order to accommodate the alterations to the northern runway, to allow for the areas of new development and to meet current planning requirements (including an allowance for climate change), revisions to the existing surface water drainage strategy are proposed (see Figure 5.2.1e).



- 5.2.99 A flood risk mitigation strategy will be developed for the Project in consultation with the Environment Agency and the Lead Local Flood Authority. The strategy will ensure that no adverse impact on flood risk is likely off site for events up to a 1% (1 in 100) annual exceedance probability event with a 35% allowance for climate change. In addition, a drainage strategy for surface water runoff will be prepared, with a design standard of 1% (1 in 100) annual exceedance probability event with a 20% allowance for climate change. At this stage, measures are anticipated to include the following.
  - Works to realign existing surface water drainage infrastructure along Taxiway Yankee, providing a connection to Pond D.
  - Works to protect the existing Substation L from flooding;
  - Creation of an additional runoff treatment and storage area (including runoff from de-icing areas) to complement the existing capacity provided by Pond D. This new treatment/storage area would take the form of underground storage beneath car park Y and an extension to the existing Dog Kennel Pond.
  - Relocation of Pond A.
  - Diversion of part of the River Mole corridor.
  - Provision of additional floodplain capacity, through provision of the following flood compensation areas within the airport boundary.
    - Museum Field: Lowering of the existing ground levels in an area known as Museum Field along the western boundary of the site, north of the fire training ground.
    - East of Museum Field: Provision of a new flood compensation area to the east of Museum Field.
    - Car park X: Lowering of the existing ground levels in car park X.
    - Gatwick Stream: Provision of a new flood compensation area to the east of Gatwick Stream, south of Crawley Sewage Treatment Works.

#### **Museum Field**

- 5.2.100 Museum Field would be lowered by up to approximately 2.6 metres below ground level. This would provide a new flood compensation area connected to the River Mole through a spillway. The connection to the spillway would require local lowering of the bank of the River Mole.
- 5.2.101 It is anticipated that Museum Field would be returned to grassland following completion of the excavation works, with an access track provided around the perimeter. The field would only be occasionally wet, to provide an allowance for storm events.

#### **East of Museum Field**

- 5.2.102 The works to Taxiway Juliet require the relocation of Pond A to a location north of its existing position, through which the River Mole currently flows. It is proposed to provide a diversion of the River Mole to the north of its current course. The diversion would incorporate a two-stage channel and would take a more sinuous course than the current alignment. The existing syphons and culverts would require extension.
- 5.2.103 In addition, a new flood compensation area is proposed between the River Mole diversion and Museum Field. This would require lowering of ground levels by up to approximately 1.8 metres.



#### Car Park X

- 5.2.104 The existing car park X would be lowered by a depth of up to 2 metres. It is anticipated that the car park would be used for staff car parking (surface level parking plus up to one decked storey) following completion of the excavation works, with restrictions on its use when flooding is anticipated.
- 5.2.105 The car park would be connected to the River Mole via an outfall structure, which may take the form of a flapped culvert or other arrangement to allow fish to pass back into the River Mole following a flood event. A ramp from the existing road network would be provided to allow access to car park X.

#### **Gatwick Stream**

- 5.2.106 A new flood compensation area would be provided to the east of Gatwick Stream. This would require lowering of existing ground levels up to a maximum depth of approximately 3 metres (existing ground levels vary).
- 5.2.107 The flood compensation area would connect to the watercourse via a lowering of the stream bank.

#### **Foul Water**

- 5.2.108 In order to provide for the new and improved facilities, including wastewater from the extended terminals, hotels and Pier 7, changes would be required to the foul drainage system to improve capacity and resilience (see Figure 5.2.1e).
- 5.2.109 A new pumping station (Pumping Station 7a) would be provided near the existing Pumping Station 7, to accommodate flows from the extended North Terminal and Pier 7 and a pipeline connection to Crawley Sewage Treatment Works. The proposed pumping station is likely to require a fenced compound with an area of 260 m² and be approximately 3 metres in height (above ground level) with elements up to 6 metres below ground level. It is estimated to have a capacity of approximately 80 litres/second.
- 5.2.110 A second new pumping station would be provided to decouple the existing sewerage network east of the railway and remove its load from the South Terminal sewerage system. This would include a new pipeline connection between the new pumping station and the Crawley Sewage Treatment Works. The pipeline route would be approximately 1270 metres in length and would run east from the pumping station, before turning south to pass around the eastern side of the woodland and south to the treatment works. The proposed pumping station is likely to require a fenced compound with an area of 190 m² and be approximately 3 metres in height (above ground level) with elements up to 3 metres below ground level. It is estimated to have a capacity of approximately 45 litres/second.
- 5.2.111 A third new pumping station (Pumping Station 2a) is proposed to allow for flows from the existing Pumping Station 3 (affected by Taxiway Juliet) and flows from Pier 6. The proposed pumping station is likely to require an area of 50 m² and be approximately 2 metres in height (above ground level) with elements up to 10 metres below ground level. It is estimated to have a capacity of approximately 40 litres/second.



- 5.2.112 Further improvements would include upgraded capacity to existing pipelines and decommissioning of a number of existing pumping stations.
- 5.2.113 In the event that there is not sufficient capacity within the existing Thames Water Treatment Works or that improvements cannot be made to provide this capacity, an expansion to the existing Crawley Sewage Treatment Works may be required. This would be undertaken separately by Thames Water. However, an area of land has been identified to allow the expansion on land owned by GAL, in case this is required.

## **Power Strategy**

- 5.2.114 In order to ensure sufficient capacity and that power is provided to the required locations, a number of adjustments would be required to the existing facilities, including relocation of a number of existing services, cables and substations. Part of the existing airfield high voltage ring would be repositioned to the north to allow for the alterations to the existing northern runway and Taxiway Juliet.
- 5.2.115 Existing substations A, J, BK, BP and BR would be demolished and re-provided to accommodate the following new facilities.
  - Substation J: a priority substation, forming part of the airfield ring. The new substation is likely to comprise a containerised substation, with an additional transformer to replace Substation BM. The substation would occupy an area of approximately 180 m², with a height of 6 metres above ground level and 3 metres below ground level.
  - Substation BK: to be re-provided within an area of approximately 144 m<sup>2</sup>, with a maximum height of 6 metres above ground level and 3 metres below ground level.
  - Substations BP, BR and A: to be re-provided, each within an area of approximately 25 m<sup>2</sup>, with a maximum height of 5 metres above ground level and 3 metres below ground level.
- 5.2.116 In addition, the following new substations would be required:
  - a new substation to be located to the east of the railway in an area known as the Pentagon Field: and
  - a new substation to facilitate Pier 7, to the north east of Pier 7 and to the north of the cargo facility.
- 5.2.117 It is envisaged that the new substations would each require an area of approximately 25 m<sup>2</sup>, with a maximum height of 5 metres above ground level and 3 metres below ground level.
- 5.2.118 The relocation of substations and provision of additional capacity would allow for additional loads and would ensure that substations are located away from areas required for other purposes or at risk of flooding. The existing Substations BJ and BM would be demolished and not replaced.

## Landscape and Ecological Planting

- 5.2.119 The EIA process is ongoing and the development of the design and mitigation measures is therefore provisional at this stage. Currently, the design of the Project includes the following landscape and ecological planting proposals.
  - Vegetation retention strategy to ensure green infrastructure assets are retained wherever possible, that important features (such as Riverside Garden Park) are protected and that



adverse impacts on the important features and locally distinctive patterns of development at Gatwick Airport are minimised. This would include protection of existing significant vegetation, including hedgerows, woodland, trees, shrubs, wetland and amenity planting or elements of the Project that lies immediately adjacent to construction areas or maintenance activities.

- Provision of public open space and footpaths, including provision of a new area or areas of public open space at Horley and to provide an extension to the River Mole footpath and associated publicly accessible land.
- Creation of new, high value habitats including woodland, tree, scrub, shrub, wetland/pond and grassland.
- 5.2.120 These areas are shown on Figure 5.2.1g. Further details are provided in Chapters 8: Landscape, Townscape and Visual Resources and 9: Ecology and Nature Conservation.

## **Environmental Mitigation Areas**

- 5.2.121 Areas for proposed environmental mitigation are currently under consideration. To date, four areas have been included within the Project. Their locations are shown on Figure 5.2.1g.
  - Approximately 0.6 hectares of land immediately to the west of the London to Brighton railway line, north of the current A23. This area is currently used as staff car parking and may be required to provide replacement open space for the Project.
  - Approximately 0.4 hectares of land immediately to the west of the London to Brighton railway line, south of the current A23. This area is currently used as staff car parking and may be required to provide replacement open space for the Project.
  - Approximately 2 hectares of land to the north east of Longbridge Roundabout. This area would include mitigation required as a result of the Longbridge roundabout highways works and could include surface water drainage measures, landscape and ecological mitigation planting together with any required open space replacement.
  - Approximately 19 hectares of land to the east and north east of the Airfield Museum. This area adjoins the western side of the River Mole and current Gatwick Biodiversity Area that runs along the river corridor. This primary purpose for the inclusion of this area is for ecological habitat creation.

## Appearance and Design

- 5.2.122 Many of the components of the Project are relocated airfield elements and it is anticipated that the appearance of the relocated facilities would be similar to the existing facilities. In some cases, the demolition of ageing facilities and replacement with more modern buildings is likely to result in an overall improvement in terms of appearance.
- 5.2.123 Extensions to the airport terminals are anticipated to be designed to 'tie in' and be in keeping with the design of the existing terminal buildings. Works to be undertaken within the terminals would result in a more modern appearance through reconfiguration and installation of new facilities.
- 5.2.124 The operator of the proposed hotel buildings would inform the external appearance of these buildings, which would be determined prior to construction and in consultation with the local planning authority.



## **Lighting Strategy**

- 5.2.125 A lighting strategy will be prepared to accompany the application for development consent, setting out the principles and parameters within which lighting associated with the Project would be designed. The strategy will identify the type of lighting to be used and measures to be implemented to reduce light spill, taking into account effects on nearby sensitive receptors and the safety of ongoing aircraft operations. The strategy will take into account relevant good practice guidance, where appropriate, including the Guidance Notes for the Reduction of Obtrusive Light (Institution of Lighting Professionals, 2020).
- 5.2.126 The altered northern runway would require new lighting in line with regulatory requirements.
- 5.2.127 In addition, lighting would be required to all external areas to ensure safety of the public and personnel. The new car parking areas would be lit with directional lighting.
- 5.2.128 The new road junctions would also require lighting, including of the flyover structures.

## 5.3. Construction

5.3.1 The details of the proposed construction methods, timing and phasing are necessarily broad at this stage. These details will be refined throughout the EIA process. Accordingly, all dates referred to in this PEIR are indicative and are based on the anticipated programme and timescales described below. Where options remain, the limits of the assessment have been set sufficiently wide to allow a robust assessment to be undertaken of a reasonable worst-case scenario.

## Indicative Phasing of Construction Works

- 5.3.2 The timing of the Project would be dependent on the timing of securing development consent and the discharge of the associated requirements. The indicative construction programme is based on construction commencing in 2024. The programme for the main airfield construction works would be of approximately five years duration enabling the altered northern runway and taxiways to be complete and fully operational in combination with the main runway in 2029. During the construction period the northern runway would not be available as a standby runway for a period of several months.
- 5.3.3 The indicative phases of the Project are described below. Further details of the indicative phasing assumed within this PEIR for each element of the Project are provided in Appendix 5.5.1.

**Table 5.3.1: Indicative Phasing of Construction Works** 

Anticipated Phasing	Component of the Project
2023	Pre-construction activities (including surveys for any unexploded ordnance and any necessary pre-construction surveys)
2024	Early works, including establishment of compounds, fencing, early clearance and diversion works and re-provision of essential replacement services.
2024-2029	Reconfiguration of existing maintenance airfield facilities (Phase 1)  Alterations to the existing northern runway  Airfield works to support use of the realigned northern runway



<b>Anticipated Phasing</b>	Component of the Project
2024-2030	Extensions to North and South Terminals
2024-2032	Hotel and commercial facilities
2024-2035	Car parking
2024-2038	Flood compensation areas
2029-2032	Surface access improvements including:  South Terminal roundabout improvements (2029-2030)  North Terminal roundabout improvements (2029-2032)  Works to Longbridge roundabout (2030-2032)
2029-2034	Ongoing reconfiguration of existing maintenance airfield facilities (to final state) Further improvements to airfield facilities
2030-2034	Pier 7
2035	Reinstatement of final land use at temporary construction compound locations

#### **Pre-construction Activities**

- 5.3.4 Prior to any construction works being undertaken, the presence of any unexploded ordnance (such as World War II bombs dropped by aircraft) would be determined.
- 5.3.5 Some limited pre-construction ecological surveys may be required to confirm the findings of the EIA process and to inform any protected species mitigation licence that may be required.
- A programme of archaeological desk-based assessment and field evaluation will be undertaken as part of the EIA process in order to provide a greater level of understanding of the archaeological potential of such areas. Where appropriate, and following consultation with the relevant advisory bodies, further archaeological evaluation and/or detailed excavation may be undertaken at specific locations in advance of any construction works being allowed to progress in that area.

#### 2024 to 2029

- 5.3.7 A number of activities have been identified that would require construction to commence promptly after the grant of development consent. Early works would include the following.
  - Establishment of the main contractor compound, airfield satellite compound and surface access satellite contractor compounds.
  - Fencing, early clearance and diversion works and re-provision of essential replacement services.

# Alterations to the Existing Northern Runway, Reconfiguration of Taxiways, including Exit/Entrance Taxiways

- 5.3.8 Works to reconfigure the taxiways would commence in 2024 with works at Taxiway Juliet East (Code C), including clearance and paving works. The existing pavement associated with Taxiway Juliet would be removed and the area returned to grass. Works on the runway exit/entrance taxiways between the northern runway and Taxiway Juliet would also commence at this time.
- 5.3.9 Works at Taxiway Juliet East (Code E) would start in 2025, including utility diversions, clearance of existing stands, earthworks and paving. The existing pavement associated with Taxiway Juliet



- would be removed, the area returned to grass, and drainage would be installed. Work on Taxiway Juliet East (Code C) would be completed during 2025.
- 5.3.10 Works to provide the Taxiway Lima extension would commence during 2025. This would require the installation of a new airside fence and relocation or protection of existing services. Existing pavement and buildings would be cleared, together with demolition of an existing underground pumping station/water tanks. Earthworks would be required to allow for provision of new pavement to tie in to existing pavement levels.
- 5.3.11 Works associated with the Taxiway Tango cut-through would also commence during 2025. This would include relocation or protection of existing services, earthworks, provision of new pavement and reconstruction of some existing pavement to tie in to the existing finished pavement levels and the new extension to Taxiway Lima.
- 5.3.12 Works on the runway exit/entrance taxiways between the northern runway and Taxiway Juliet would be completed during 2025.
- 5.3.13 Construction works for the adjustments to the existing northern runway are anticipated to commence in 2026. These works are planned for completion in 2027. The redundant 12 metre strip would be broken out and returned to grass.
- 5.3.14 During 2027, utility diversion works would be carried out to enable the end around taxiways and runway exit/entrance taxiways from/to the main runway to commence.
- 5.3.15 Works at Taxiway Juliet West would commence and be completed in 2026 (following completion of the utility diversion works), including paving works, which would progress as earthworks advance. The existing pavement associated with Taxiway Juliet West would be removed and the area returned to grass. Drainage would be installed to serve the new Taxiway Juliet West and Juliet West Spur. Works on Taxiway Juliet East (Code E) would be completed at this stage. Therefore, by 2026, Taxiway Juliet West and Taxiway Juliet East would be complete and these routes would be open for aircraft operations.
- 5.3.16 Works at Taxiway Lima and the Taxiway Tango cut-through would be completed in 2026 and this route would be open for aircraft operations.
- 5.3.17 Alongside the work on the realignment of the northern runway in 2027, works on the exit/entrance taxiways from the main runway and end around taxiway east would commence.
- 5.3.18 During 2028, the works on the exit/entrance taxiways from the main runway and on end around taxiway east would be complete. Construction of the Taxiway Juliet West Spur and end around taxiway west would commence, with works on end around taxiway west completed in the same year.
- 5.3.19 Construction of Taxiway Juliet West Spur is anticipated to be complete during 2029.

#### Stand Amendments

5.3.20 During 2024, works would commence on the reconfiguration of existing areas of remote stands to allow for the reconfigured Taxiway Lima while retaining stands suitable for Code C aircraft (stands 150-151). This work is anticipated to be completed during 2025.



- 5.3.21 During 2025, it is proposed that existing stands would be removed/reconfigured to allow for relocation of Taxiway Juliet East. At the same time, work would commence on construction of the new stands north of Taxiway Lima. This work is anticipated to be completed during 2026. Works to provide the new stands associated with Pier 7 would commence in 2025, in order to allow these works to be completed by 2029 (prior to construction of Pier 7).
- 5.3.22 During 2026, works to provide new stands are proposed to start, including:
  - provision of a new area of remote stands and taxiway in an existing area to the north of Taxiway Juliet (in an area to be known as Oscar); and
  - provision of one new Code C stand north east of the existing Virgin hangar.
- 5.3.23 In both cases, these works would continue beyond 2029, as are the new stands are not anticipated to be required until 2031.
- 5.3.24 The provision of additional stands in the Oscar area would require diversion of existing services and placement of a new foundation for an above ground waterproof shelter for control equipment. Existing structures would be demolished, and excavation to formation layer and importation of granular fill material carried out. A concrete apron would be installed for additional stands and taxiway.

#### Reconfiguration of Existing Airport Facilities

- 5.3.25 Construction of the grounds maintenance and surface transport facilities would require diversion and relocation of existing utilities within the footprint of the new building and breakout of the existing pavement to allow construction of foundations. A new foundation would also be constructed for the vehicle storage areas, together with metal framed shed structures and temporary pre-fabricated office and welfare buildings. These works are anticipated to start and be completed in 2024.
- 5.3.26 The existing fire training ground would be relocated/consolidated within an area in the northern part of its existing location. This would require clearance of existing soft landscape, excavation to the formation layer and installation of an underground collection tank, granular material and new drainage. A new concrete pad would also be required. The existing fire training equipment and fuel supply would be relocated by HGV and crane. These works are planned to start and be completed during 2024.
- 5.3.27 Phase 1 of the construction of the relocated CARE facility would be commenced during 2024 in order to provide 20% of the eventual capacity required. This would require breakout of the existing pavement, excavation for the proposed biomass boiler (or equivalent) and flue foundations/waste collection skip bay area, and installation of sheet piles for the waste collection skip bay. The building is likely to comprise a steel/portal framed structure, with a biomass boiler installed on concrete plinths, and an above-ground bunded diesel tank. This work is anticipated to be completed in 2025. Phase 2 of the works (to provide the remaining capacity) is anticipated to commence in 2028, for completion after the realigned northern runway becomes operational.
- 5.3.28 Provision of facilities to allow the motor transport operations to continue during construction would include construction of a landside parking area, with a vehicle wash facility and refuelling area within the existing Long Stay Car Park North. This would require breaking out of existing pavement for a new ground slab, excavation of underground retention tanks and installation of a splash screen. Phase 1 of the works to provide replacement motor transport facilities would start



and be completed in 2025. As for the CARE facility, Phase 2 of the works is anticipated to commence in 2028, for completion after the realigned northern runway becomes operational.

- 5.3.29 In addition, during 2025 the existing Rendezvous Point North would require relocation in order to re-provide suitable emergency rendezvous area for off-airport emergency services, to the north of the central airport area. This would require diversion and relocation of services, breaking out of the existing pavement for foundations and placement of a new foundation. The replacement facility would include a prefabricated office and welfare building, together with a new gate in the airside fence. In addition, works undertaken at an early stage of construction would include provision of additional internal vehicular access points to ensure sufficient airfield access. These works would require conversion to existing exits to allow for entrance lanes, including provision of closed-circuit television, steel structures and canopies. These works would be completed during 2025.
- 5.3.30 Works to relocate the existing Virgin infrastructure (such as electrical, communications and water utilities) from the northern side of the Virgin hangar to the southern side would be completed during 2025 in order to ensure continued operation with the extended Taxiway Lima in place.
- 5.3.31 Works to provide the satellite airport fire service facility would be undertaken during 2026. The satellite fire station would require clearance of existing landscaped areas, diversion of utilities and excavation to the formation layer. Granular fill material would be placed and compacted and foundations (pad foundations for single storey building) installed. A concrete ground slab would also be installed, together with a single storey brick building. This facility is anticipated to be completed in 2027.

#### Perimeter Boundary Treatments to Mitigate Noise

5.3.32 Works would commence on the noise mitigation feature in 2024, including clearance and removal of existing bund material, placement and compaction of the piling platform, excavation for foundations, installation of pre-cast sections and ground reinstatement.

#### **Internal Access Routes**

- 5.3.33 The existing Larkins Road would require diversion on a temporary basis to ensure continued access. This work (known as Phase 1) would be undertaken in 2024.
- 5.3.34 The east-west track between the main and northern runways would be constructed during 2028, for completion prior to opening of the realigned northern runway.

## **Extensions to North and South Terminals**

- 5.3.35 The anticipated programme for the terminal extensions to 2029 would be as follows.
  - South Terminal IDL extension: 2025-2027.
  - North Terminal baggage reclaim extension: 2026.
  - North Terminal IDL extension: 2024-2027.
  - North Terminal baggage hall extension: 2027 (to be completed after opening of the realigned northern runway, during 2030).
- 5.3.36 The terminal extensions would require site clearance, diversion of existing utilities and mechanised break out of existing paved surfaces. New piled foundations would be required.



- Internal hoardings would be erected within the existing terminals, with removal of existing façades as required. The new structures would have a structural steel frame.
- 5.3.37 The North Terminal baggage reclaim extension would also require internal floor decking to be installed, with baggage handling equipment.
- 5.3.38 Changes to forecourts at North Terminal and South Terminal are anticipated to be undertaken in 2024-2025 and 2025-2026 respectively.

#### Hotels

- 5.3.39 The timing of construction for the proposed hotel and commercial facilities would be dependent on the commercial need. However, for the purposes of assessment, it is assumed that the following would be completed prior to opening of the realigned northern runway:
  - Hotel at the building compound adjacent to the car rental site: 2024-2025.
  - South Terminal hotel: 2027 2029 (Phase 1)
- 5.3.40 Hotel construction would require mechanised break out of existing paved areas, demolition of existing structures and mechanised excavation down to the formation layer and foundation level.

  Granular sub-base layers would be imported. Piled foundations would be installed. A concrete foundation would support a steel portal frame structure with concrete deck.

#### Car Parking

- An area of Crawter's Field may be required for replacement of the existing 'Purple Parking' that would be removed as part of the Project. Construction of the replacement parking would commence in 2025 (for completion in 2026). Prior to this, permission would be sought to relocate interred ashes located within Crawter's Field to a protected location.
- 5.3.42 Following this, the broad sequence of provision of the remaining parking is anticipated to be as follows.
  - North Terminal Long Stay: 2024-2025 (Phase 1).
  - Car park J multi-storey: 2025-2026 (Phase 1), 2026-2027 (Phase 2).
  - Car park Y multi-storey: 2026-2028 (underground storage works only).
  - Car park H multi-storey: 2027-2028 (Phase 1).
  - Pentagon Field (decked parking): 2028-2029.
- 5.3.43 Multi-storey car park construction would require excavation to the formation layer and foundation level. Granular sub-base layers would then be provided, with installation of piled foundations. Steel portal frame structures with concrete slabs would also be required, together with vehicle barrier fences.

#### Surface Access Improvements

5.3.44 Any changes to the ITTS shuttle capacity would be made at the end of the current system's working life or in line with passenger growth. These are currently assumed to occur in or around 2026-2027.



5.3.45 Lead-in works for the surface access improvements are anticipated to occur during 2028 to 2029. However, most of the works to provide additional junction capacity would be undertaken following opening of the realigned northern runway (from 2029 onwards).

#### Water Management, Foul Water and Substations

- 5.3.46 Works to construct the new Pond A would be commenced immediately following grant of development consent and earthworks would be undertaken at the site of the former Pond A. It is anticipated that this work would commence in 2024.
- 5.3.47 In addition, works to clear vegetation and commence excavation/ground lowering for the flood compensation areas at Museum Field and east of Museum Field would commence at this time. Works on the diversion of the River Mole and on the flood storage facility beneath car park X would also start in 2024.
- 5.3.48 During 2025, work on the relocation of Pond A, diversion of the River Mole and the Museum Field flood compensation area would be completed.
- 5.3.49 Works on the underground storage beneath car park Y would start during 2026 with the extension to the Dog Kennel Pond being undertaken in 2024 2025. Excavation/ground lowering for the flood compensation area at car park X would be completed at this time. Works on the underground storage beneath car park Y are anticipated to be completed in 2028.
- 5.3.50 Works on provision of the new pumping stations (with the exception of Pumping Station 7a) would commence during 2024, for completion in 2025. This would include installation of new buried pipes to form the connection between the new pumping station near South Terminal and the Crawley Sewage Treatment Works.
- 5.3.51 Works on the relocation of substations BP and BR would be undertaken in 2024, for completion in 2025. The relocation of substations J and BK would also be completed during 2025. Work to relocate Substation A would commence in 2025, for completion in 2026. The new substation at Pentagon Field is anticipated to be constructed during the period 2028-2029.

#### 2029 Onwards

#### Reconfiguration of Taxiways

5.3.52 Works to amend Taxiways Whiskey, Victor and Zulu are planned for 2031. These works would involve reconfiguration and reconstruction of pavements to accommodate Code E aircraft. Works would largely be located within the area occupied by the existing taxiways but would require incorporation of an additional area to the north of Taxiway Zulu.

#### Pier and Stand Amendments

5.3.53 Works to provide Pier 7 are anticipated to commence in 2030, for completion in 2034. Works would involve excavation for foundations, placement of a piling platform, piling for foundations and excavation to formation layer. Granular fill would be installed and compacted, with new services provided. A concrete apron would be constructed, together with a steel portal frame superstructure and concrete floor decking. The structure would include passenger areas, screening areas, plant rooms, offices and welfare facilities.



- 5.3.54 As set out above for the period 2024 to 2029, a number of works to provide new stands would remain ongoing in 2029, including:
  - provision of a new area of remote stands in the existing area to the north of Taxiway Juliet (in an area to be known as Oscar); and
  - provision of one new Code C stand north east of the existing Virgin hangar.
- 5.3.55 In both cases, the new stands are anticipated to be completed for use by 2031.
- 5.3.56 In addition, the conversion of existing remote stands located to the west of Pier 3 to Code C fully serviced stands is proposed to be undertaken in 2030, for completion in 2031.

#### Aircraft Holding Area

5.3.57 Clearance works to facilitate the proposed holding area (Charlie box) would be completed during 2029, with construction activities in this area following clearance works. These works require reconfiguration of an existing apron area to provide areas for aircraft stands and aircraft hold points. The Charlie box would include new taxiways across the existing area of buildings and roadways and is planned for completion during 2031.

#### Reconfiguration of Existing Airport Facilities

- 5.3.58 Phase 2 of works to provide the replacement motor transport and CARE facilities would continue through 2029 for completion in 2030.
- 5.3.59 Works on Phase 2 of the motor transport facility would require diversion and relocation of existing utilities, breaking out and removal of existing pavement and excavation for underground tanks and inspection bays. A concrete ground slab would be provided as a base for a steel/aluminium framed vehicle shed structure.
- 5.3.60 Phase 2 of the works to provide the replacement CARE facility would require diversion and relocation of existing utilities, breaking out and removal of existing pavement and excavation for the additional biomass boiler (or equivalent) and flue foundations. Sheet piles would be installed for the waste collection skip bay. The new biomass boiler would be installed on concrete plinths, with an above ground bunded diesel tank.
- 5.3.61 The timing of the construction of the proposed new hangar would be dependent on the commercial need but is anticipated to commence in 2032 and be completed in 2033. Hangar construction would require excavation for foundations, placement of piling platform, piling for foundations and placement of concrete pile caps. Excavation would be carried out to the formation layer, with installation of granular fill and concrete pavement. The structure would be of steel portal frame construction.

#### Internal Access Routes

- 5.3.62 The final diversion of Larkins Road would be undertaken to maintain access to existing and proposed assets (2031-2034).
- 5.3.63 The autonomous vehicle stations would require excavation for foundations (to formation layer) and placement of concrete pad foundations. Granular fill would be imported and compacted. A concrete ground slab would support a steel portal frame structure with concrete floor decking.



Work on the vehicle route would commence in 2030, with works to the stations undertaken during 2030 to 2034, and the vehicle route in place by 2034.

#### Extensions to North and South Terminals

- 5.3.64 By 2029, the extensions to South terminal IDL, North Terminal IDL and the North Terminal baggage reclaim extension would be complete. The anticipated programme for the remaining terminal extensions would be as follows.
  - North Terminal baggage hall extension: Commenced in 2027 anticipated for completion in 2030.
  - Provision of a transition space to connect to a new autonomous vehicle facility (both terminals): 2030-2034.

#### Hotel and Commercial Facilities

- 5.3.65 As explained above, the timing of construction for the proposed hotel and commercial facilities would be dependent on the commercial need. However, for the purposes of assessment, the following has been assumed.
  - Offices: 2030-2031.
  - South Terminal hotel: 2030-2031 (Phase 2).
  - North Terminal hotel: 2031-2032.
- 5.3.66 Hotel and office construction would require mechanised break out of existing paved areas, demolition of existing structures and mechanised excavation down to the formation layer and foundation level. Granular sub-base layers would be imported. Piled foundations would be installed. A concrete foundation would support a steel portal frame structure with concrete slab and beams.

#### Car Parking

- 5.3.67 The broad sequence of provision of the remaining parking is anticipated to be as follows.
  - North Terminal Long Stay: 2031-2032 (Phase 2).
  - Car park Y multi-storey: 2031-2032 (Phase 1), 2034-2035 (Phase 2).
  - Car park H multi-storey: 2030-2031 (Phase 2).

#### Surface Access Improvements

- 5.3.68 Lead-in works for the surface access improvements are anticipated to occur during 2028 to 2029. Works to improve the South Terminal roundabout are anticipated to commence in 2029 and to be complete in 2030. This would be followed by works to the North Terminal roundabout, which would commence in 2029 and be completed in 2032. Compounds associated with the surface access works would be set up ahead of these works (from 2024).
- 5.3.69 Works to the South Terminal roundabout would require standard highways construction for atgrade highways. The flyover is anticipated to consist of a steel beam superstructure with a concrete slab deck on concrete abutments and piers, and piled foundations. Retaining walls would be required close to existing buildings and Pond G and to separate adjacent links at different levels or gradients. The M23 Spur over the B2036 Balcombe Road would be raised by



- up to 2.2 metres. Balcombe Road overbridge would require strengthening or replacement, as well as widening to accommodate slip roads.
- 5.3.70 Works to the North Terminal roundabout would require standard highways construction for atgrade highways. The flyover is anticipated to consist of a steel beam superstructure with a concrete slab deck on concrete abutments and piers, and piled foundations. Retaining walls would be required to separate adjacent links at different levels or gradients.
- 5.3.71 Works would be required to the Longbridge roundabout, including alterations to the existing layout. This would require standard highway construction and alterations to signal equipment. These works are anticipated to occur during the period 2031 to 2032.

#### Water Management, Foul Water and Substations

- 5.3.72 Works to provide Pumping Station 7a would commence in 2030, with completion anticipated for 2031. This would include installation of new buried pipes to form the connection between Pumping Station 7a and the Crawley Sewage Treatment Works.
- 5.3.73 Construction of the Gatwick Stream flood compensation area is anticipated to commence in 2036, for completion by 2038.
- 5.3.74 The new substation proposed north of Pier 7 is anticipated to be constructed during the period 2030 to 2031.

#### **Demolition Activities**

- 5.3.75 In order to allow for the construction of the proposed facilities and reconfiguration of existing facilities, a number of existing facilities would be subject to demolition. These would include the following.
  - Decommissioned airfield operations building, including emergency air traffic control tower (2026-2031).
  - CARE (recycling area) and motor transport, surface transport and ground maintenance facilities (2025).
  - Former TCR Snowbase building (2024).
  - Substations A, BK, J, BP, BR, BJ and BM (2025-2030).
  - Pumping stations 2, 3, 4, 5, 17 and 45 (2024-2031).
  - Part of Purple Parking decked structure (2025-2026).
  - Pond A (removal and infill) (2024-2025).
  - Parts of the existing fire training area (2024).
- 5.3.76 In addition to the above, redundant areas of hardstanding would be removed.

## **Construction Management**

- 5.3.77 It is the applicant's intention that the site would be registered under the Considerate Constructors Scheme or a locally recognised certification scheme.
- 5.3.78 Construction would be undertaken in accordance with a Code of Construction Practice (CoCP).

  The CoCP will set out the key management measures that contractors would be required to adopt and implement. These measures will be developed based on those identified during the EIA process. They include strategies and control measures for managing the potential environmental



- effects of construction and limiting disturbance from construction activities as far as reasonably practicable. An Outline CoCP is provided at Appendix 5.3.1.
- 5.3.79 The Outline CoCP would form the basis for the final CoCP and more detailed plans and method statements to be prepared during the pre-construction period once a Principal Contractor has been appointed.

## **Construction Working Areas**

- 5.3.80 The precise locations of compounds would be determined by the Principal Contractor. However, at this stage, the following main/satellite compounds are anticipated (see Figure 5.2.1f):
  - main contractor compound (known as MA1);
  - airfield satellite compound (and laydown area); and
  - surface access satellite contractor compounds.
- 5.3.81 All construction compounds would be temporary and would be reinstated to their previous use following completion of construction works (in accordance with the indicative phasing set out in Appendix 5.5.1). Further details and the locations are described in turn below.
- 5.3.82 In addition, a number of smaller compounds would be associated with construction of each of the elements of the Project.

## Main Contractor Compound

- 5.3.83 The main contractor compound would be located in the south eastern part of the airport, to the west of the perimeter road. The compound would be securely fenced and is anticipated to accommodate:
  - main office and welfare facility (including meeting room space, canteen/locker rooms and waste processing area);
  - two large or three smaller asphalt and/or concrete batching plants, with associated bulk material storage and handling bays;
  - airside processing facility for people, vehicles and materials;
  - limited areas for material laydown and inspection;
  - parking for contractor, project manager and supply chain vehicles; and
  - contractor bus terminal.
- 5.3.84 The main compound is anticipated to occupy an area of approximately 5 hectares. The tallest elements within the main compound are expected to be components of the batching plants at a maximum of 30 metres above ground level. The location is anticipated to serve the majority of the daily construction workforce and the project management team.
- 5.3.85 It is likely that a new temporary access from the existing Perimeter Road East would be required to enable separation of construction traffic from the existing operational traffic.

## Airfield Satellite Contractor Compound

5.3.86 The satellite compound is anticipated to be to the west of Taxiway Uniform and south of the Boeing hangar. This compound would be securely fenced and is anticipated to accommodate:



- satellite office and welfare facility (including meeting room space, small canteen/locker rooms, waste processing area);
- one concrete batching plant, with associated bulk material storage and handling bays;
- limited areas for material laydown and inspection;
- parking for contractor, project manager and supply chain vehicles; and
- contractor bus terminal.
- 5.3.87 The satellite compound is anticipated to occupy an area of approximately 6 hectares. The tallest elements within the compound are expected to be components of the batching plant at a maximum of 30 metres above ground level. The location is anticipated to serve airfield works, including the provision of a stockpile location for material to be stored and reused on site.

#### Surface Access Satellite Contractor Compounds

- 5.3.88 Satellite compounds for the construction of surface access improvements are anticipated to be required, including:
  - a satellite compound to serve works to the South Terminal roundabout; and
  - a satellite compound serve works to the North Terminal roundabout.

#### South Terminal Roundabout Contractor Compound

- 5.3.89 The compound to serve the works to the South Terminal roundabout would be securely fenced and is anticipated to accommodate:
  - satellite office and welfare facility (including meeting room space, small canteen/locker rooms, waste processing area);
  - bulk material storage and handling bays;
  - limited areas for material laydown and inspection;
  - parking for contractor, project manager and supply chain vehicles; and
  - contractor bus terminal.
- 5.3.90 The South Terminal roundabout surface access satellite compound would be located to the north of the South Terminal roundabout and Airport Way. The compound is anticipated to occupy an area of approximately 2 hectares. The tallest elements within the compound are expected to be up to 15 metres in height.

#### North Terminal Roundabout Contractor Compound

- 5.3.91 The compound to serve the works to the North Terminal roundabout would be securely fenced and is anticipated to accommodate:
  - satellite office and welfare facility (including meeting room space, small canteen/locker rooms, waste processing area);
  - a batching plant;
  - limited areas for short term material laydown and inspection;
  - limited parking for contractor, project manager and supply chain vehicles; and
  - contractor bus terminal.
- 5.3.92 The North Terminal roundabout surface access satellite compound is anticipated to occupy an area of approximately 1.6 hectares. The tallest elements within the compound are expected to be up to 15 metres in height.



#### Longbridge Roundabout Contractor Compound

- 5.3.93 The compound to serve the works to the Longbridge roundabout would be securely fenced and is anticipated to accommodate:
  - satellite office and welfare facility (including meeting room space, small canteen/locker rooms, waste processing area);
  - limited areas for short term material laydown and inspection;
  - limited parking for contractor, project manager and supply chain vehicles; and
  - drop-off/pick-up area for workforce minibus (if used).
- 5.3.94 The Longbridge roundabout satellite compound is anticipated to occupy an area of approximately 0.65 hectares. The tallest elements within the compound are expected to be up to 5 metres in height.

#### **Restoration of Temporary Compounds**

5.3.95 All compounds are anticipated to cease use in 2035. All temporary compounds would be restored to their previous land use following completion of the works.

## Construction Logistics Consolidation Centre

- 5.3.96 A temporary logistics facility may be required in order to allow scheduling of deliveries to the appropriate work sites. This would comprise an existing secure fenced area, including a warehouse type facility with loading/unloading docks, secure airside screening area, material laydown area, HGV parking, electric vehicle charging stations, driver welfare facilities and some limited parking.
- 5.3.97 The use of a logistics facility would allow HGV deliveries to the airport to be consolidated, reducing the overall number of deliveries on the local road network.
- 5.3.98 If such a facility is required, it is likely that the location would be an existing facility or a site with an existing consent for such use. At the current time, traffic modelling has assumed no consolidation centre would be in place, which represents a worst case in terms of total traffic numbers at the site access points. However, if a location is identified, this will be assessed within the EIA process and included within the ES.

#### **Construction Working Hours**

- 5.3.99 In order to maintain safety and minimise disruption to the operation of the airport, any work in close proximity to existing runways and taxiways would require the closure of facilities as operationally necessary and hence are likely to be scheduled to take place overnight.
- 5.3.100 During construction, the airport would continue to operate on a 24 hour, seven days per week basis. This would include use of the construction compounds and construction working areas on a daily 24-hour basis. It is acknowledged that the use of specified construction equipment and construction processes in sensitive locations, in close proximity to residential properties, and at noise sensitive times, may need to be subject to restrictions in relation to operating hours and limits for operating noise levels, or other mitigation measures, as necessary and practicable. Potential restrictions will be discussed with the relevant regulator.



5.3.101 Where necessary, closures and lane restrictions on the highways network would be undertaken outside peak periods (in terms of traffic flow). To ease congestion on the public highways, deliveries of some materials and movement of workforce may need to be outside of standard day time peak hours (eg overnight and at weekends).

#### **Construction Workforce**

5.3.102 It is anticipated that construction would require a workforce of up to approximately 1,300 personnel during peak periods.

#### **Construction Access**

5.3.103 All construction traffic would use Junction 9 of the M23, via the M23 spur and Airport Way and into sites at the airport. Construction traffic would be monitored to ensure compliance with proposed routes, unless disruption causes these to be unavailable, in which case signed diversionary routes would be provided.

#### **Construction Activities**

- 5.3.104 Key construction activities would include the following:
  - demolition;
  - concrete breaking;
  - earthworks:
  - stockpiling of excavated and demolished material for re-use;
  - concrete crushing/screening;
  - concrete/asphalt batching;
  - cutting;
  - excavation;
  - dewatering;
  - installation of utilities, including water, power, drainage and lighting;
  - piling;
  - placement of concrete foundations;
  - installation of precast concrete panels;
  - erection of buildings including portal frames, cladding and roofing;
  - building fit out;
  - internal road construction;
  - paving; and
  - road planing.

## **Construction Vehicles and Traffic Management**

- 5.3.105 Construction works would require the use of the following vehicles and equipment within the working areas:
  - asphalt grooving and asphalt paving machines;
  - bulldozers;
  - combination loader backhoe excavators;
  - concrete mixer trucks;
  - concrete pump;
  - concrete slip form paving machines;



- concrete saw cutters;
- cranes (including mobile cranes);
- elevated working platforms (mobile);
- flat bed trucks (with/without lifting arms);
- front end loaders:
- graders;
- hydraulic arm excavators;
- piling rig;
- roller compactor;
- road milling machines;
- road sweepers;
- steel wheel roller compactors;
- tipper trucks and insulated delivery trucks; and
- water tanker trucks.
- 5.3.106 A traffic management strategy would be put in place during construction to minimise environmental effects. This would include the following.
  - Measures to ensure the transport of construction materials and waste is managed as sustainably as possible noting the impacts of transporting this by road, including the use of rail via facilities close to the airport, where this is appropriate and feasible.
  - Timing of construction material and logistics traffic movements that need to come by road to
    use roads and highways outside of peak periods and to use designated routes into
    construction sites on the airport which are suitable for this type of traffic.
  - Use of Delivery Management Zones, where appropriate, to consolidate materials onto the least number of vehicles and to hold vehicles away from sensitive areas until deliveries are required.
  - Measures to encourage the highest possible public transport use for the construction workforce.
  - Time shift patterns such that those workers who need to come by road would be using roads and highways outside of peak periods.

#### **Cut and Fill Strategy**

- 5.3.107 The objectives of the earthworks strategy are to maximise the re-use of material, to reduce the amount of material taken off site for disposal and to minimise vehicle movements as far as practicable.
- 5.3.108 One area within the Project site boundary has been identified as a spoil receptor site. This area at Pentagon Field is anticipated to accommodate approximately 245,000 m³ of material over the period 2024 to 2031. This would result in the creation of a flatter area with a revised ground level of approximately 63.5 metres above ordnance datum (an increase of up to 4.4 metres above the existing ground level).
- 5.3.109 Concrete arising from demolition would be crushed on site for re-use. All materials excavated on site would be subject to tests to determine suitability for re-use. It is anticipated that approximately 190,000 m³ of cohesive material would require disposal to a licenced landfill site.



## **Drainage during Construction**

5.3.110 Temporary drainage would be required during the construction phase to prevent a temporary increase in flood risk as a result of the works. As far as practicable, these would consist of Sustainable Drainage Systems (SuDS) features, such as swales and attenuation ponds, although some piped drainage and pumps may be required. Temporary drainage would be installed in all construction areas not currently provided with drainage systems, and in areas where the construction works have potential to increase surface water runoff, either due to ground compaction or reduction in surface permeability. The drainage would be designed to attenuate runoff rates in rainfall events up to the 1% (1 in 100) annual exceedance probability event to rates no higher than existing and to ensure any discharge to local watercourses or the existing drainage network is similarly attenuated. Suitable treatment would also be provided to manage the water quality of discharges to watercourses.

#### **Construction Lighting**

- 5.3.111 Lighting of the construction sites would be required to ensure that construction work is able to continue safely and effectively during the night-time works and other periods of insufficient natural light. This would include lighting to the construction working areas, storage and circulation areas and access points.
- 5.3.112 As far as possible, task lighting would be used for specific works to direct light towards the working areas during the night time. Such task lighting would be positioned at low level on posts and directed at the most frequently used areas of work. Lighting is likely to include the following.
  - Trailer mounted, mobile, generator powered light plant.
  - More permanent lighting. For the main/satellite construction compounds, electricity would be provided from the local grid, allowing the use of:
    - mounted floodlights;
    - street lanterns;
    - linear battens; and
    - wall luminaires.
- 5.3.113 Lighting for construction compounds and workforce areas would incorporate restricted upwards light spillage and energy efficient fittings. Checks would be carried out on a regular basis to ensure that lighting has not been repositioned.
- 5.3.114 A lighting strategy for the construction period will be developed to identify the type of lighting to be used and measures to be implemented to reduce light spill, taking into account effects on nearby sensitive receptors and the safety of ongoing aircraft operations.

## **Sustainability during Construction**

5.3.115 A sustainability statement will be prepared for the Project. Gatwick Airport's six sustainability policy goals and ten sustainability objectives will be at the heart of the sustainability framework. In addition, the framework will reflect both the objectives used by the government in the Airports National Policy Statement (Department for Transport, 2018) and the sustainability priorities relevant to the host local authorities within the context of the local natural capital themes/aspects.



5.3.116 Gatwick's ongoing sustainability goals (as set out in their Decade of Change document (GAL, 2021)) are as follows.

#### People and Communities

- Local economy: be a partner and advocate for a thriving resilient economy and contribute to local and regional workforce skills partnerships and initiatives.
- Opportunity and accessibility: increase workforce diversity through recruitment, training and retention practices and partnerships; and ensure accessibility and opportunity for colleagues and passengers with disabilities.
- Workplace safety: be a leading airport for the safety, health and wellbeing of our workforce and passengers, striving to learn and continually improve.
- Local communities: invest resources in programmes and partnerships for those communities most affected by Gatwick's operations.
- Noise: limit and where possible reduce the airport's impact on local communities by working with partners and stakeholders to create the most noise efficient operation possible.

#### Net Zero – continue Gatwick's net zero transition and further improve local air quality by:

- Airport emissions
  - Reducing GAL Scope 1 and 2 emissions<sup>6</sup> by a further 25% by 2030 (ie reach 80% under 1990 baseline) as part of a science-based goal of reaching net zero before 2040;
  - Sourcing 50% of airport network electricity and 50% of heat network from UK renewable sources via onsite generation and direct purchase agreements (PPAs) by 2030;
  - Requiring all GAL and airport duty vehicles, ground support equipment and mobile construction equipment to meet zero or ultra-low emission standards by 2030.
- Aircraft and surface access emissions:
  - Playing our part in UK aviation and ground transport transition to net zero carbon.
  - Working with airlines and fuel providers to implement the Sustainable Aviation decarbonisation roadmap and interim goals; and setting a science-based target for Gatwick.
  - Working with transport partners to increase airport passenger and staff usage of public transport and zero and ultra-low emission journey modes to 60% by 2030.

#### **Local Environment**

- Water: reduce the airport's potable water consumption by 50% on a per passenger basis by 2030 compared to 2019, continue to improve the quality of water leaving the airport and work with partners to promote local water stewardship.
- Zero waste: ensure that by 2030 all materials used at Gatwick in operations, commercial
  activity and construction, are repurposed for beneficial use ie repaired, reused, donated,
  recycled, composted or converted to fuel for heating or transport.

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<sup>&</sup>lt;sup>6</sup> Scope 1 emissions: direct emissions from sources that are owned or controlled by GAL. Scope 2 emissions: indirect emissions from generation of purchased electricity, steam, heating and cooling consumed by GAL.



- Biodiversity: have a sector-leading 'net gain' approach to protecting and enhancing biodiversity and habitats on the airport estate, including zero use of pesticides by 2030; and support biodiversity partnerships in our region.
- 5.3.117 These objectives will also inform the construction elements of the sustainability statement for the Project which will be implemented through the CoCP (where relevant).

#### **Construction Waste**

- 5.3.118 Surveys would be undertaken prior to demolition of buildings and prior to disposal of materials from the construction site to identify any hazardous materials.
- 5.3.119 A waste strategy has been developed, identifying the key measures to be taken to avoid, reduce and manage waste during the construction phase.
- 5.3.120 The purpose of the waste strategy is to demonstrate how waste has been considered in terms of the design of the Project and sets out measures for managing waste during construction and operation. This strategy provides information on the measures for managing waste likely to be generated and details how the wastes would be managed to meet legislative and policy requirements. A draft Waste Strategy is provided at Appendix 5.3.2.

#### Use of Natural Resources

5.3.121 The EIA Regulations refer to the use of soil, land, water and biodiversity resources. Consideration of potential effects on these resources is set out in Chapters 18, 10, 11 and 9 respectively.

#### Residues and Emissions

- 5.3.122 Details of lighting are provided within this chapter and considered within Chapter 8: Landscape, Townscape and Visual Resources and Chapter 9: Ecology and Nature Conservation where relevant. Effects in relation to water, dust and soil are considered in Chapters 11, 13 and 18 respectively.
- 5.3.123 As set out in Chapter 6: Approach to Environmental Assessment, the Project is not likely to give rise to significant effects in relation to heat or radiation emissions during construction.

## Vulnerability to Accidents and Disasters (Construction)

- 5.3.124 The EIA Regulations require consideration of the effects on the environment deriving from the vulnerability of the Project to risks from major accidents and/or disasters, where these are relevant to the project concerned.
- 5.3.125 Appendix 5.3.3 considers the potential accidents and disasters that could affect the Project or the environment. However, it is stressed that such events are not considered likely. The Project would not introduce hazards during the construction phase which could not be effectively managed through the CoCP and existing plans and procedures currently in place at the airport.



## 5.4. Operation and Maintenance

#### Overview

- 5.4.1 GAL is the legal owner and operator of Gatwick Airport. This would remain the case throughout the construction phase and during operation of the airport, with the Project in place. GAL therefore has overall responsibility for the management of Gatwick Airport, excluding aircraft maintenance.
- 5.4.2 A number of specific maintenance areas exist within the airport, including the Hangar 6 and Hangar 7 maintenance areas. These areas are the responsibility of the airlines (BA, Virgin Atlantic, Boeing and easyJet) and it is anticipated that the same would apply to the recently completed Boeing hangar and to the proposed new hangar, once operational.

## **Operating Hours**

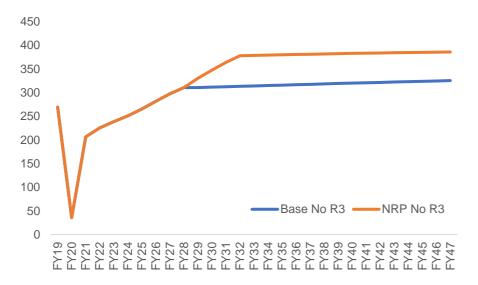
- 5.4.3 As is currently the case, Gatwick Airport would remain operational on a 24-hour, seven days per week basis throughout the construction and operation of the Project. All terminal and hotel buildings and airport car parks are available on this basis.
- 5.4.4 Flights are subject to night time restrictions between 23:00 to 07:00 local time in accordance with a Noise Restrictions Notice published on behalf of the Department for Transport. Within the core hours of 23:30 to 06:00 a limited number of flights are permitted in accordance with noise and movements quotas. This is expected to remain the case with the Project in place with no increase in quota count within core night hours of 23:00 to 06:000.

## Passengers and Operational Workforce

- It is anticipated that the Project could increase airport throughput up to approximately 75.6 mppa by 2038, compared to a maximum potential throughput based on existing/planned facilities of 62.4 mppa. This represents an increase of approximately 13.2 mppa. By 2047, it is anticipated that airport throughout would increase to 80.2 mppa with the Project, compared to 67.2 mppa in the absence of the Project.
- In 2019 approximately 24,000 staff worked at the airport of which approximately 3,300 were employed directly by Gatwick Airport Limited (GAL). In 2020 with the prevailing pandemic conditions, the number of GAL staff fell to approximately 1,900 although this is expected to return to previous levels in line with recovering passenger numbers in the coming years and the total number of employees on site is forecast to increase to over 27,000 by 2029 and then grow towards 28,800 by 2038 in the absence of the Project. The Project is anticipated to result in an increase in approximately 3,200 airport jobs (to approximately 32,000). Modest growth is assumed in the 2038-2047 period with a further 2-3% employees added, taking the total to approximately 29,000 by 2047 without the Project and approximately 32,800 with the Project.
- 5.4.7 The alterations to the northern runway would allow both of Gatwick's runways to be used concurrently. The northern runway would be used for departing Code C (or smaller) aircraft, whilst the main runway would be capable of handling all movements (as it is today). This has the potential to add capacity and to accommodate the ongoing growth in demand for aviation across the wider UK market.

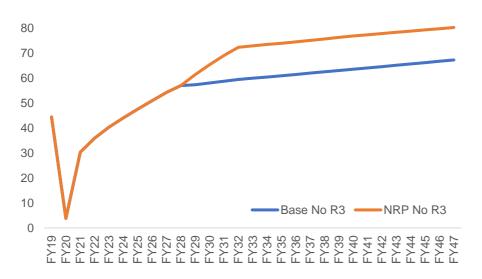
- 5.4.8 With the Project, it is estimated that a further 64,000 air traffic movements would be possible compared to the future baseline scenario (see Chapter 4: Existing Site and Operation) in 2038, resulting in 385,000 annual air traffic movements. This would increase slightly to 389,000 by 2047.
- 5.4.9 Diagram 5.4.1 shows the predicted change in annual air traffic movements with the Project, with the blue line indicating the future baseline scenario and the orange line indicating the situation with the Project.

Diagram 5.4.1: Predicted Annual Air Traffic Movements with the Project (thousands)



5.4.10 Diagram 5.4.2 indicates the predicted changes in annual passenger throughput with (orange line) and without (blue line) the Project.

Diagram 5.4.2: Predicted Annual Passengers with the Project (mppa)





## **Transport Management**

5.4.11 A Travel Plan would be implemented during operation. This will include specific measures to target staff travel and encourage more sustainable travel patterns.

## Airport Operational and Management Procedures

5.4.12 A number of operational and management procedures are currently in place for the management of Gatwick Airport and the existing main runway, as set out in Chapter 4: Existing Site and Operation. These protocols would remain in place with the Project.

## Sustainability

5.4.13 As set out in Section 5.3, a sustainability statement will be produced for the Project, based on GAL's sustainability goals. These objectives will continue to inform the operation of the airport.

#### **Climate Change**

- 5.4.14 In addition to GAL's existing net zero carbon commitments, as set out within their Decade of Change document, GAL are currently developing a detailed Carbon and Climate Change Action Plan, to enable the airport to continue to reduce carbon emissions and to deliver sustainable development. Details of the forecast greenhouse gas emissions are set out in Chapter 15: Climate Change and Carbon. The following factors will be considered further:
  - the scale of aircraft emissions will be reviewed to take into account the likely evolution and
    use of sustainable aviation fuels, and to reflect expected gradual transition to electric / hybrid
    aircraft in use on some domestic and short haul routes;
  - more developed data on the design of buildings and infrastructure, and a more informed estimate of the material requirements and waste arisings from the construction of the Project;
  - improved information from the strategic transport modelling to inform the assessments of surface access emissions:
  - confirmation of the mitigation measures to be implemented and their effect on reducing the emissions arising from the Project including benefits of measures in the Carbon and Climate Change Action Plan currently under preparation; and
  - any changes to UK carbon budgets resulting from the revision to the Climate Change Act.
- 5.4.15 The next steps will include close working with the Project design teams to confirm the adoption of mitigation measures through design of the airport facilities and highways infrastructure, optimisation of material sourcing and recycling of cut/fill materials, management of construction stage emission, and the adoption of the energy strategy to reduce emissions arising from airport operations. The opportunities to mitigate impacts of the Project through both construction and operation will be collated into the draft Carbon and Climate Change Action Plan, to be published as part of the application for development consent.

## **Energy Demand**

5.4.16 GAL aims to continue to reduce operational carbon emissions from energy and fuel consumption associated with the airport's operations in line with its commitment to be net zero before 2040. The energy strategy will continue to evolve and respond to local and national changes to energy infrastructure and to improvements in energy systems' efficiencies over time and GAL will carry



out regular reviews of the strategy (at least every five years) and how it is supporting the airport's carbon trajectory and targets.

- 5.4.17 A draft energy strategy is provided in Appendix 5.4.1. The draft energy strategy is based on the hierarchy as follows.
  - Energy efficiency in design, construction and operation through highly efficient building envelopes, passive design to reduce heat gains and losses, widespread use of heat recovery, efficient plant and systems, LED lighting and smart energy management systems.
  - Efficiency of energy supply through on-site generation and use of power and heat, with low-carbon heat exported to other users, including the potential for district heating initiatives and the use of smart technology in the electricity and heat networks to support demand management and the matching of supply to demand.
  - Renewable energy generated from locally produced biogas from on-site waste and photovoltaic systems, heat pumps and other low and zero carbon sources integrated into the design of the new facilities.

#### Waste

5.4.18 As set out in Section 5.3, a waste strategy has been developed, identifying the key measures to be taken to avoid, reduce and manage waste during the operational phase. A draft Waste Strategy is provided at Appendix 5.3.2.

#### **Use of Natural Resources**

5.4.19 The EIA Regulations refer to the use of soil, land, water and biodiversity resources. The potential for operational phase effects on these resources is set out in Chapters 18, 10, 11 and 9 respectively.

#### **Residues and Emissions**

- 5.4.20 Details of lighting are provided within this chapter and considered within Chapter 8: Landscape, Townscape and Visual Resources and Chapter 9: Ecology and Nature Conservation where relevant. Effects in relation to water, dust and soil are considered in Chapters 11, 13 and 18 respectively.
- 5.4.21 Radiation is used within airports as part of the security screening process, including metal detectors, baggage screening and staff and passenger body screening. Each of these processes is well regulated in order to ensure that receptors are not exposed to any health or environmental risk. The Project would require internal reconfiguration of airport processes but would not introduce any new sources of radiation or include any sources of radiation other than those in use at airports throughout the UK.
- 5.4.22 The Project would include some changes to the provision of power within the site (eg the potential use of additional biomass boilers). These would be operated in line with existing regulatory and permitting procedures and no sources of significant heat emissions to the atmosphere are anticipated.
- 5.4.23 Overall, the Project would not include any new or unusual sources of heat or radiation that could lead to significant effects on the environment. The Project would operate in line with normal good practice, regulatory and permitting requirements as is the case for all other UK airports. It is therefore proposed to scope radiation and heat emissions out of the EIA process.



5.4.24 The effects of heatwaves/weather and of external hazards on the Project are considered within Appendix 5.3.3: Major Accidents and Disasters.

#### **Vulnerability to Accidents and Disasters**

- 5.4.25 The EIA Regulations require consideration of the effects on the environment deriving from the vulnerability of the Project to risks from major accidents and/or disasters, where these are relevant to the project concerned.
- 5.4.26 Appendix 5.3.3. considers the potential accidents and disasters that could affect the Project or the environment. However, it is stressed that such events are not considered likely. Operation of the Project would not result in any significant increase in risk levels.

## 5.5. Summary of Key Parameters

5.5.1 Table 5.5.1 provides a summary of the key aspects of the Project which form the basis for the assessment of effects. Appendix 5.5.1 sets out the Project parameters and dimensions in further detail.

Table 5.5.1: Summary of Key Aspects of the Project

Element of the Project	<b>Key Parameter for Assessment</b>
Changes to Enable Dual Runway Operations	
Development consent application area	820 hectares
Works within existing GAL land ownership	747 hectares
Permanent land take (third party)	68 hectares
Temporary land take (third party)	6 hectares
Passenger throughput	
Future airport throughput (without Project 2038)	62.4 mppa
Project additional throughput (2038)	13.2 mppa
Proposed new airport throughput (with Project 2038)	75.6 mppa
Air traffic movements	
Approx. future commercial air traffic movements (2038 without Project)	318,000
Approx. future non-commercial air traffic movements (2038 without	2,000
Project)	
Approx. future total aircraft movements (2038 without Project)	321,000
Project additional commercial air traffic movements (2038 with Project)	64,000
Approx. future commercial air traffic movements (2038 with Project)	382,000
Approx. future non-commercial air traffic movements (2038 with Project)	3,000
Approx. future total aircraft movements (2038 with Project)	385,000
Cargo throughput	
Future cargo throughput (2038 without Project)	254,000 tonnes
Project additional cargo (2038)	69,000 tonnes



Element of the Project	Key Parameter for Assessment
Proposed cargo (with Project, 2038)	323,000 tonnes
Alterations to the Existing Northern Runway	
Centreline repositioning	12 meters to the north
Phasing	
Commencement of main construction phase	2024
Year of opening	2029
Completion of construction works	2038

## 5.6. Measures Adopted as Part of the Project

- The development of mitigation measures is part of an iterative EIA process. Therefore, measures will be developed throughout the EIA process in response to the findings of initial assessments. The Project that forms the subject of the application for development consent will include a range of measures designed to reduce or prevent significant adverse environmental effects arising, where practicable. In some cases, these measures may result in enhancement of environmental conditions. The assessment of effects within this PEIR takes into account all measures that currently form part of the Project and to which GAL is committed. Figure 5.2.1g indicates potential environmental mitigation and enhancement measures areas outside the Gatwick Airport boundary but within the Project boundary.
- 5.6.2 Details of the measures proposed to be adopted during construction of the Project are provided in Appendix 5.3.1: Outline CoCP. Measures to be adopted during operation will be set out in a series of management plans to be provided, as required, as part of the application for development consent.

## 5.7. Decommissioning Phase

5.7.1 The Project is proposed to form a long-term part of Gatwick Airport, providing an integral part of the improved airport in order to allow an increase in flight and passenger numbers through making best use of Gatwick's existing runways. Although some elements of the Project would have a defined design life, it is proposed that all elements would be subject to continued maintenance/replacement in line with the management of the airport as a whole. Therefore, the Project, once operational, would form part of a permanent airport and no activities are proposed that would require decommissioning or associated decommissioning plans.

## 5.8. References

Department for Transport (2018) Airports National Policy Statement [online] <a href="https://www.gov.uk/government/publications/airports-national-policy-statement">https://www.gov.uk/government/publications/airports-national-policy-statement</a>. Accessed October 2019.

GAL (2021) Second Decade of Change to 2030 [online] <a href="https://www.gatwickairport.com/globalassets/company/sustainability/reports/2021/decade-of-change-policy-to-2030.pdf">https://www.gatwickairport.com/globalassets/company/sustainability/reports/2021/decade-of-change-policy-to-2030.pdf</a>



Institution of Lighting Professionals (2020) Guidance Note for the Reduction of Obtrusive Light (01/20)

Reigate and Banstead Borough Council (2019) Reigate and Banstead Local Plan Development Management Plan

## 5.9. Glossary

**Table 5.9.1: Glossary of Terms** 

Term	Description
CARE	Central Area Recycling Enclosure
CoCP	Code of Construction Practice
GAL	Gatwick Airport Limited
HGV	Heavy Goods Vehicle
IDL	International Departure Lounge
ITTS	Inter-Terminal Transit System
MRF	Materials Recovery Facility
mppa	million passengers per annum
PEIR	Preliminary Environmental Information Report
SuDS	Sustainable Drainage Systems