



RiverOak Strategic Partners

7.3

## Design and Access Statement

TR020002/ APP/ 7.3

**Project Name:**

Manston Airport Development Consent Order

**Regulation:**

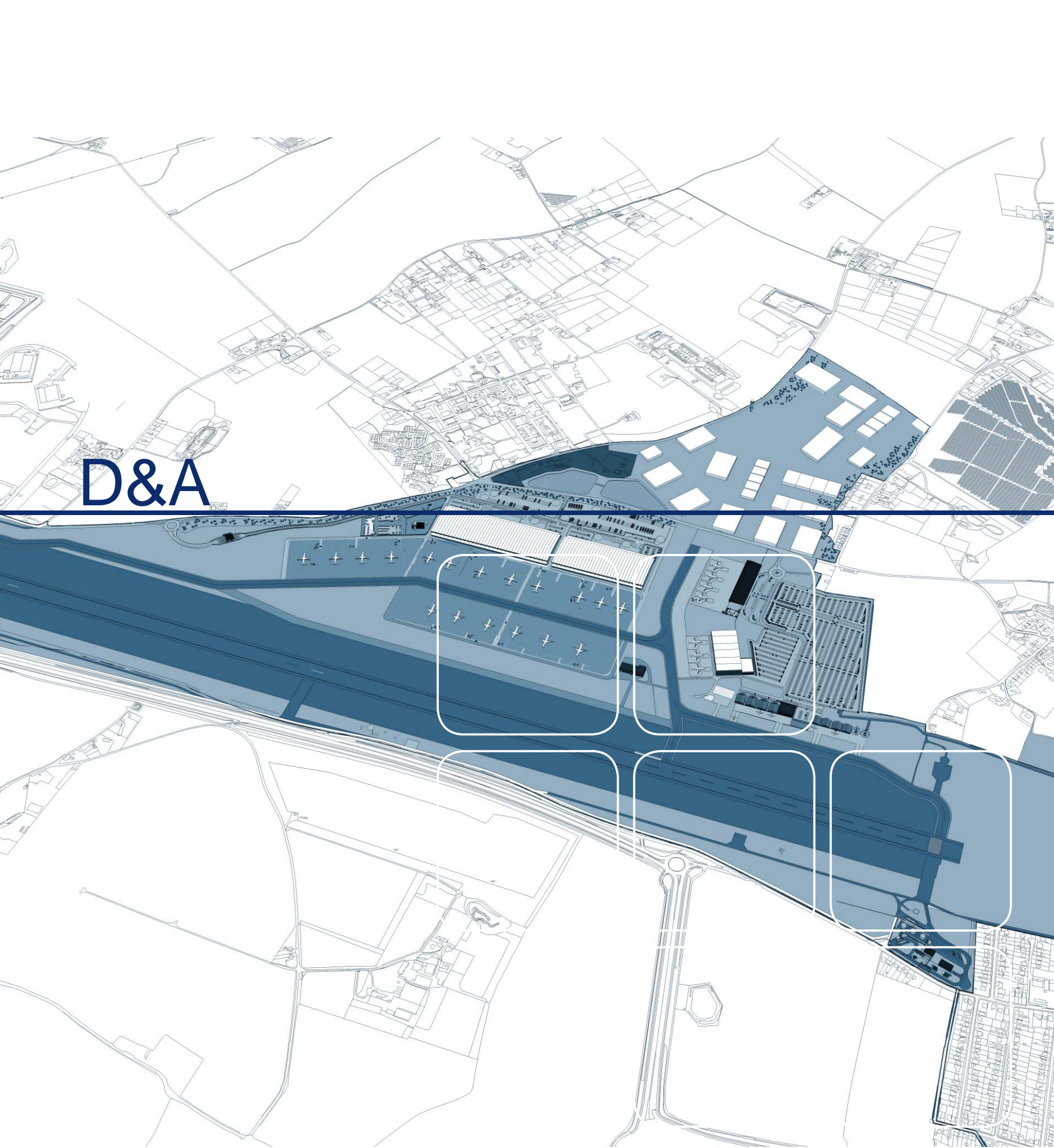
Regulation 5(2)(q) of the Infrastructure Planning  
(Applications: Prescribed Forms and Procedure) Regulations 2009, as amended

**Date:**

July 2018







D&A

# Manston Airport

Development Consent Order

## Design & Access Statement

DCO Application  
Manston Airport Masterplan.

Prepared for:

Prepared by:

RSP

RPS

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# 00 | Contents

1.0	Introduction	4.0	Masterplan	7.0	Design Principles
1.01	Purpose of the Document	4.01	Overview	7.01	Section Introduction
1.02	Scope and Content of the Document	4.02	Development Zones/Layout	7.02	Airport Vision
1.03	Document Structure	4.03	Existing Buildings	7.03	Introduction to Principles
1.04	Site Location	4.04	Demolition	7.04	Aims
1.05	Description of the Proposed Development	4.05	Uses	7.05	Principles
		4.06	Amount	7.06	Planning and Climate Change Principles
2.0	Site Context	4.07	Appearance	7.07	Urban Design Principles
2.01	Site Description	4.08	Heights and Levels	7.08	Character
2.02	Recent Site History	4.09	Density	7.09	Continuity and Enclosure
2.03	Topography	4.10	Scale & Massing	7.10	Quality of the Public Realm
2.04	Views	4.11	Movement	7.11	Ease of Movement
2.05	Landscape Character	4.12	Accessibility	7.12	Legibility
2.06	Surface Water	4.13	Landscape Strategy	7.13	Adaptability
2.07	Flooding	4.14	Ecology	7.14	Diversity
2.08	Contamination	4.15	Sustainability	7.15	Architectural and Landscaping Design Principles
2.09	Utilities	4.16	Safety	7.16	Masterplanning Design Principles
2.10	Heritage	4.17	Lighting	7.17	Design Principles of Each Zone
2.11	Ecology	4.18	Design Related Mitigation		
2.12	Access			8.0	Visualisations
2.13	Constraints and Opportunities	5.0	Illustrative Phasing and Delivery	8.01	Cargo Apron Visualisation 01
2.14	Design Policy	5.01	Illustrative Phasing and Delivery Introduction	8.02	Cargo Apron Visualisation 02
		5.02	Illustrative Phase 1	8.03	Cargo Apron Visualisation 03
3.0	Masterplan Concept	5.03	Illustrative Phase 2	8.04	Cargo Area Visualisation 01
3.01	Concept Introduction and Client Brief	5.04	Illustrative Phase 3	8.05	Cargo Area Visualisation 02
3.02	Optioneering	5.05	Illustrative Phase 4	8.06	Cargo Area Visualisation 03
3.03	Masterplan Evolution			8.07	Air Traffic Control Tower Visualisation
3.04	Design Considerations	6.0	Design Guide	8.08	BAC Visualisation 01
3.05	Layout Strategy	6.01	Purpose of the Guide	8.09	BAC Visualisation 02
3.06	Aerodrome Regulations and Standards	6.02	Zones of Influence	8.10	Fire Station Visualisation
3.07	Consultation Introduction	6.03	Road Typologies	8.11	Passenger Terminal Visualisation 01
3.08	Public Consultation	6.04	Zone-Specific Parameters	8.12	Passenger Terminal Visualisation 02
3.09	Design Evolution Based on Consultation Process	6.05	Typical Building Form and Appearance	8.13	Passenger Terminal Visualisation 03
		6.06	Sustainable Building Design	8.14	Fuel Farm Visualisation
		6.07	Proposed Building Materials	8.15	Gatehouse Visualisation
		6.08	Proposed External Materials	-	Appendix
				A	Glossary
				B	Site Photos





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# 1.0 Introduction

# 1.0|Introduction

## 1.01 Purpose of the Document

This document has been prepared by RPS Group on behalf of RiverOak Strategic Partners, and provides details of the design and access considerations that have informed a Development Consent Order application for development at Manston Airport.

## 1.02 Scope and Content of the Document

The content and structure of this Statement has been informed by NPPF (National Planning Policy Framework) and NPPG (National Planning Practice Guidance). These provide advice on what a Design and Access Statement should include. In essence, there is a need to:

- i) Provide a review of the site's immediate and wider context in terms of its physical, social and economic characteristics and relevant planning policy and guidance.
- ii) Provide a rationale for the scheme's design based on (i).
- iii) Explain and illustrate the design principles in terms of the development's layout, density, scale, landscape and visual appearance.
- iv) Explain how future users of the site will be able to access the development from the existing transport network and why the main access points to the site and the layout of access routes have been chosen.
- v) Explain how the development will meet the local authority's planning and urban design objectives.



# 1.0|Introduction

## 1.03 Document Structure

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This Statement is structured as follows:-

- Section 1 'Introduction' : introduces the Design and Access statement and details its scope and context.
- Section 2 'Site Context' : provides a review of the existing physical, social and economic characteristics of the site and its surroundings in terms of history, land use and transport links.
- Section 3 'Masterplan Concept' : outlines the proposal and its evolution with regards to design considerations, strategy and aerodrome regulations. It also outlines the feedback and guidance provided by consultation on both a statutory and public level and how it informed the scheme.
- Section 4 'Masterplan' : this section describes the approach taken in terms of use, amount, scale, layout, landscaping, appearance and access.
- Section 5 'Phasing and Delivery' : details an illustrative phased timeline of events from the start of construction through to the delivery of the scheme.
- Section 6 'Design Guide' : provides a conceptual framework for the design of buildings, materials, access and landscape in the scheme.
- Section 7 'Design Principles' : provides details of how different principles have affected the design of the scheme and the impact it will have.
- Section 8 'Visualisations' : illustrates the indicative form and scale of the proposed masterplan and building types.



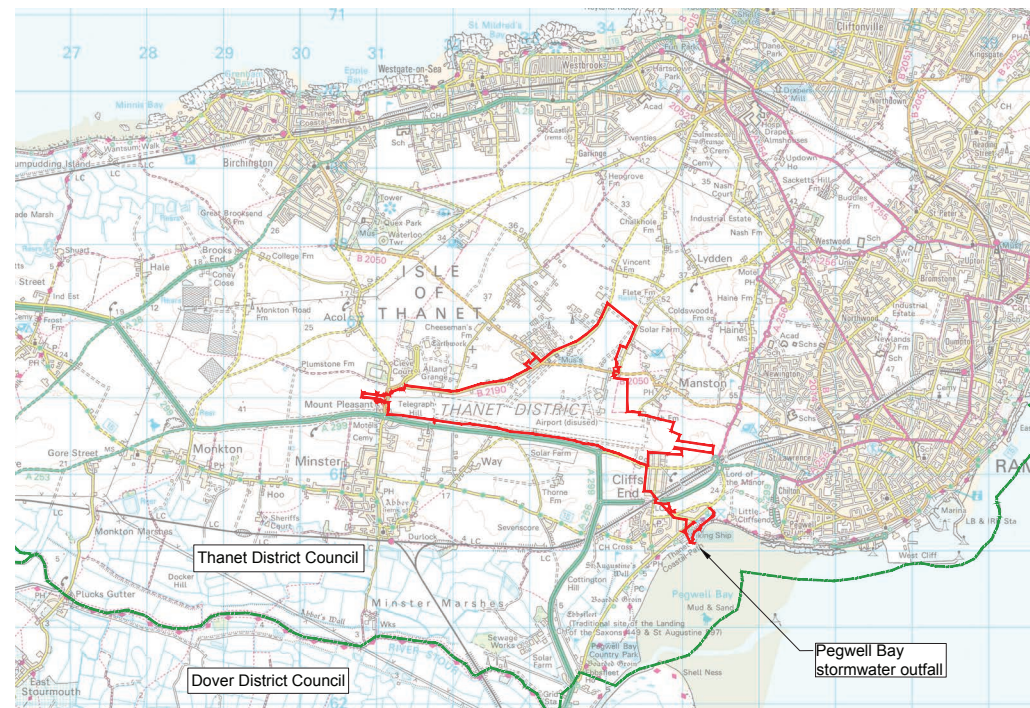
# 1.0|Introduction

## 1.04 Site Location

The application site is on the existing site of Manston Airport, west of the village of Manston and north-east of the village of Minster, in Kent. The town of Margate lies approximately 5km to the north of the site and Ramsgate approximately 4km to the east. Sandwich Bay is located approximately 4-5km to the south-east. The northern part of the site is bisected by the B2050 (Manston Road), and the site is bounded by the A299 dual carriageway to the south and the B2190 (Spitfire Way) to the west. The existing site access is from the junction of the B2050 with the B2190.



National Context



District Context

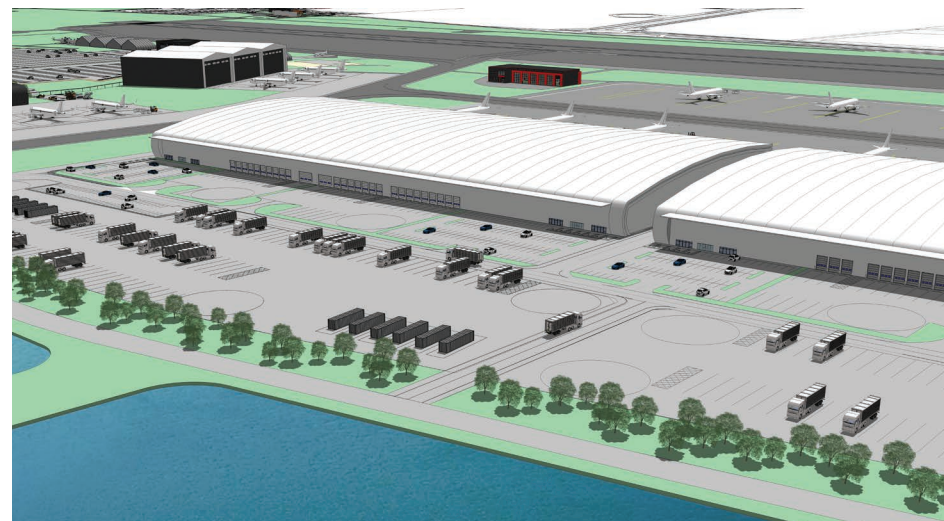
# 1.0|Introduction

## 1.05 Description of the Proposed Development

The aims and purpose of the Proposed Development are to reopen and develop Manston Airport into a dedicated air freight facility, which also offers passenger, executive travel, and aircraft engineering services. The facilities for air freight and cargo operations will be able to handle in excess of 10,000 air freight traffic movements per year, and the airport and facilities at the airport would be compliant with European Aviation Safety Agency (EASA), or other relevant licensing organisation standards.

A summary of the works to be undertaken as part of the Proposed Development are presented below:

- Upgrade of Runways 10 & 28 to allow CAT II/III operations.
- Realignment of the parallel taxiway (Alpha) to provide EASA compliant clearances for runway operations.
- Construction of 19 EASA compliant Code E stands for air freight aircraft with markings capable of handling Code D and F aircraft in different configurations.
- Installation of new high mast lighting for aprons and stands.
- Construction of 65,500m<sup>2</sup> of cargo facilities.
- Construction of a new ATC tower.
- Construction of a new airport fuel farm.
- Construction of a new airport fire station.
- Complete fit-out of airfield navigational aids (nav-aids).
- Construction of new aircraft maintenance/recycling hangars.
- Development of the 'Northern Grass Area' for airport related businesses.
- Demolition of the redundant 'old' ATC Tower.
- Safeguarding of existing facilities for museums on the site.
- Highway improvement works, both on and off site.
- Extension of passenger service facilities including an apron extension to accommodate an additional aircraft stand and increasing of the current terminal size.







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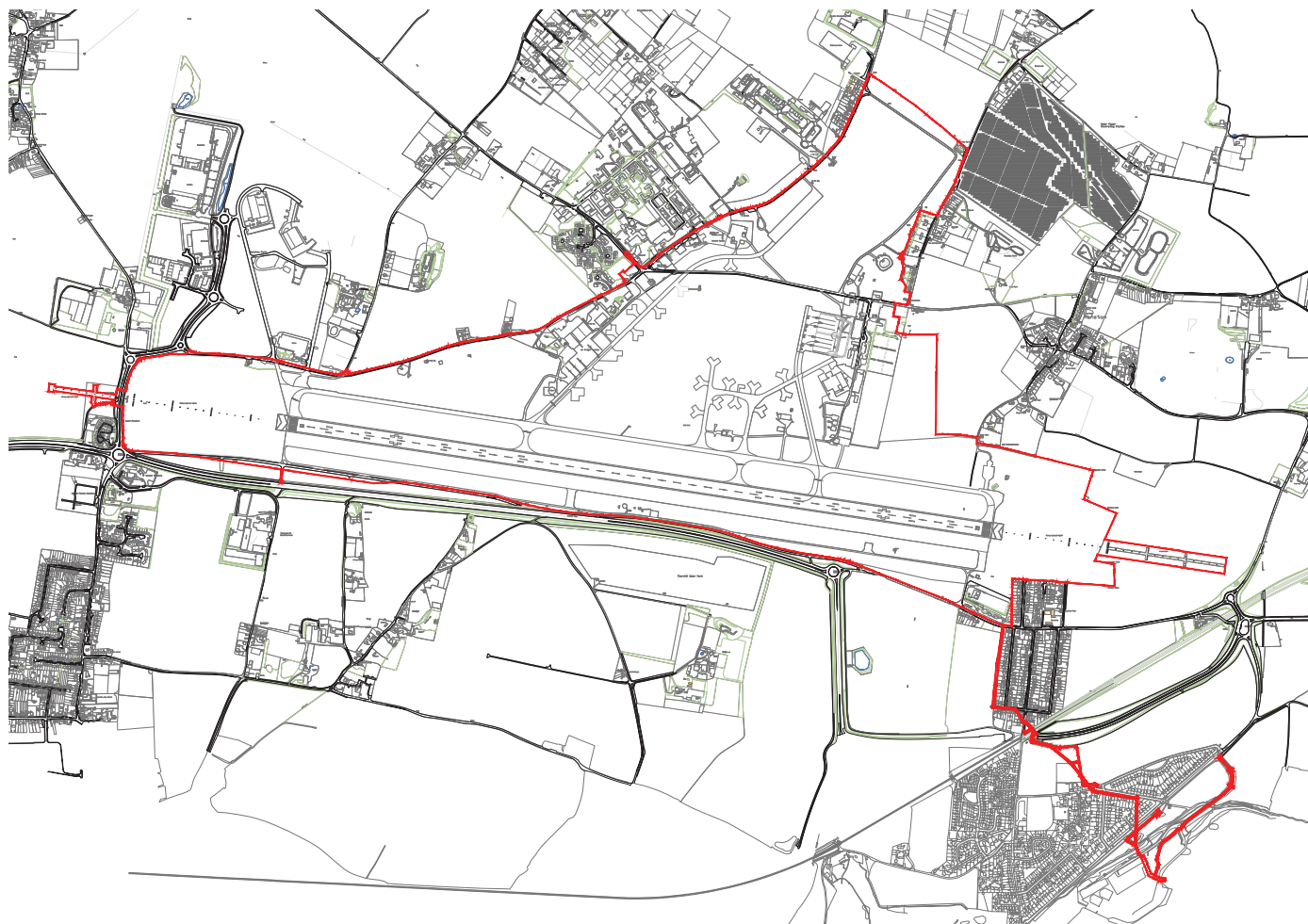
# 2.0

## site context

## 2.0|Site Context

### 2.01 Site Description

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Site Location Plan

## 2.0|Site Context

### 2.01 Site Description

The site covers an area of approximately 303.2 hectares (749 acres) and comprises a combination of existing buildings and hardstanding, large expanses of grassland, and some limited areas of scrub and/or landscaping. This includes the 2748m long, 61m wide runway, which is orientated in an east-west direction across the southern part of the site. The existing buildings are clustered along the east and northwest boundaries of the site include:

- A cargo handling facility comprising two storage warehouses 6 - 8m high, and one hangar 12m high, all finished with metal cladding, on an area of 5,200m<sup>2</sup>, with gated entrances and a security box.
- A 12m high fire station building, constructed of brick and with a corrugated metal roof, on an area of 2,200m<sup>2</sup>.
- A helicopter pilot training facility comprising two 10m high hangars with metal cladding, on an area of 950m<sup>2</sup>.
- Two 5m high museum buildings of brick construction, on an area of 2,000m<sup>2</sup>.
- A 4m high terminal building, on an area of 2,400m<sup>2</sup>.
- A 6m high air traffic control building, including a 9m high viewing tower, on an area of 700m<sup>2</sup>.
- A 12m high aeroplane maintenance hangar, with a taller 16m high movable section to enclose an airplane tail fin, on an area of 4,700m<sup>2</sup>.
- A fuel farm.



Existing Site Facilities (RPS-MSE-XX-DR-C-2002)



## 2.0|Site Context



Aerial Photo 01

## 2.0|Site Context



Aerial Photo 02

## 2.0|Site Context

### 2.02 Recent Site History

The airport provided a variety of airport-related services from 1916 until it ceased operation in May 2014. It operated as RAF Manston until 1998, and was also a base for the United States Air Force for a period in the 1950s. From 1998 it operated as a private commercial airport with a range of services including scheduled passenger flights, charter flights, air freight and cargo, a flight training school, flight crew training and aircraft testing. More recently it operated as a specialist air freight and cargo hub. Much of the airport infrastructure, including the runway, taxiways, aprons, cargo facilities, and a passenger terminal still remains, with a number of the buildings still in use, including a helicopter pilot training centre, and the Spitfire and Hurricane and RAF Manston museums.



Prime Minister Winston Churchill meeting 615 Fighter Squadron at RAF Manston in 1941



View of existing passenger terminal entrance



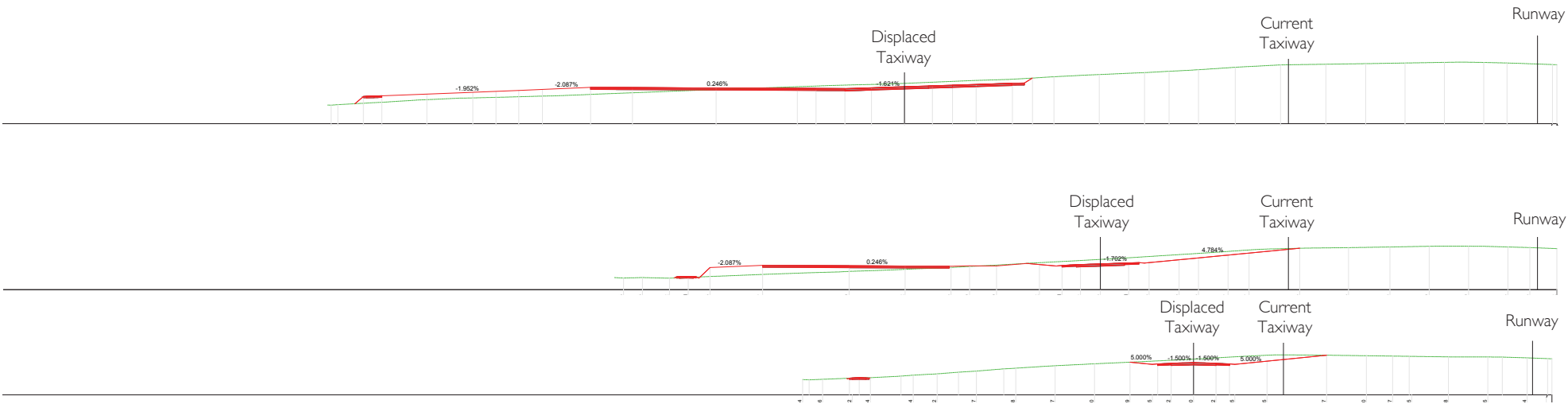
View of existing runway.



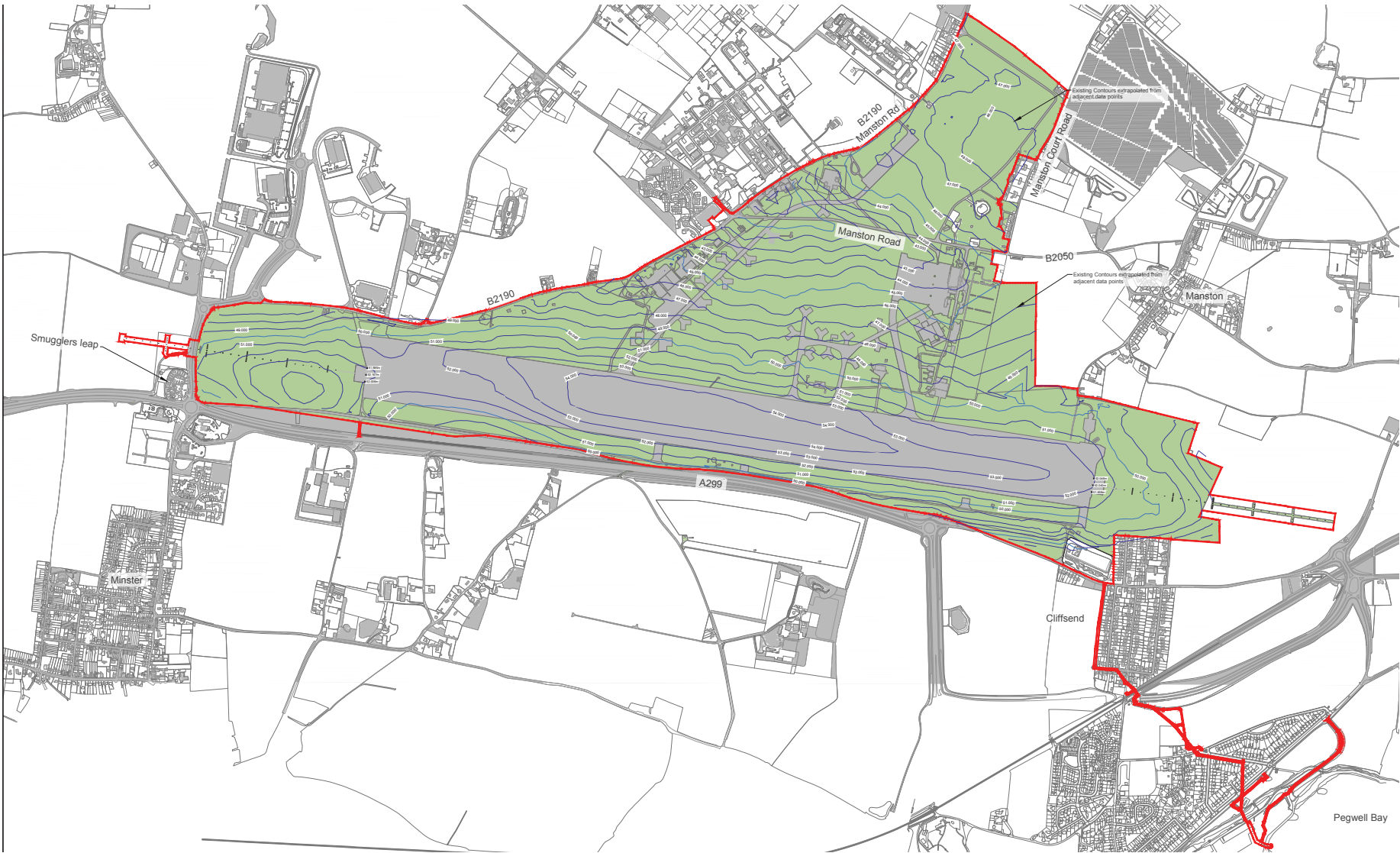
# 2.0|Site Context

## 2.03 Topography

The Manston Airport site is mainly situated at an elevation between 45-50m AOD. The southern portion is located at an elevation of approximately 50m AOD along the length of the existing runway, but rises to approximately 55m AOD in the western most corner of the site. North of the runway the site level falls to approximately 40m AOD, in the west, at the Spitfire Way Junction (crossroads of the Manston Road (B2050) and the Spitfire Way (B2190)), forming the start of the headwater valley for the Brooksend Stream, while remaining at 45-50m AOD in the northern most part of the site.



# 2.0|Site Context



Existing Contours (NK018417-RPS-MSE-X-DR-C-2030)



## 2.0|Site Context

### 2.04 Views



Viewpoint 1 - Manston North



Viewpoint 2 - South of Woodchurch



Viewpoint 3 - Vincent Road



Viewpoint 5 - PRow near pumping station



Viewpoint 6 - South of Garlinge



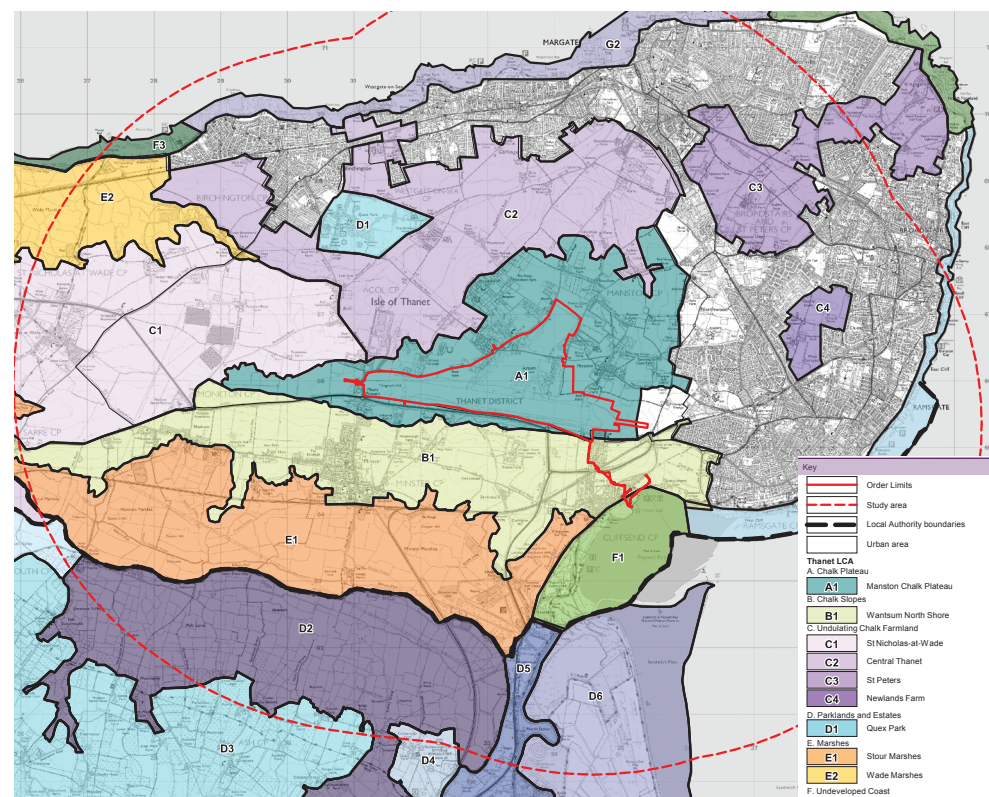
Viewpoint 7 - Minster Road Souther end of Acol

## 2.0|Site Context

### 2.05 Landscape Character

The Project is located entirely within the National Landscape Character Area: North Kent Plain and the Thanet Landscape Character Area: Central Chalk Plateau. Five other Thanet landscape character areas are located within 5km of the site, including Pegwell Bay Landscape Character Area. Dover Landscape Character Areas also lie within 5km of the site.

The principal settlements within 5km of the site comprise the coastal towns of Ramsgate, Broadstairs and Margate. These coastal towns and the Kent Coast are popular tourist destinations which has given rise to numerous campsites, caravan sites and holiday parks in the area. The villages of Minster, Monkton and Cliffsend are located to the south of the site, Nicholas at Wade and Acol to the west and Manston to the east.



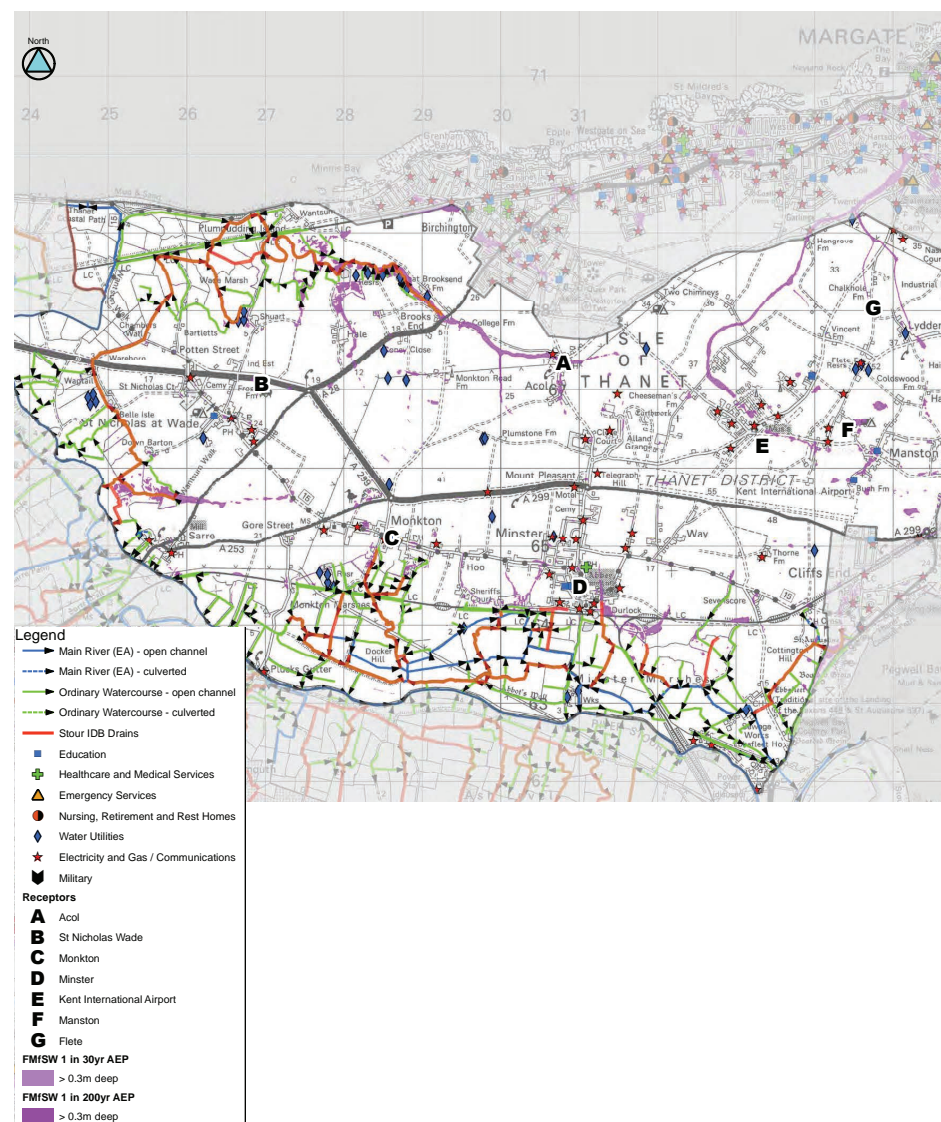
Local Landscape Character Areas (Figure 11.37)



## 2.0|Site Context

### 2.06 Surface Water

There are no river watercourses on or adjacent to the site. A series of water channels and streams that form part of the Minster Marshes are located more than 1km to the south of the site. This marsh drains south into the River Stour, 3km south of the site, which flows east and into Sandwich and Pegwell Bays. Currently runoff from the site infiltrates locally and, due to the highly permeable nature of the underlying geology, is unlikely to reach these surface water systems via overland flow routes.



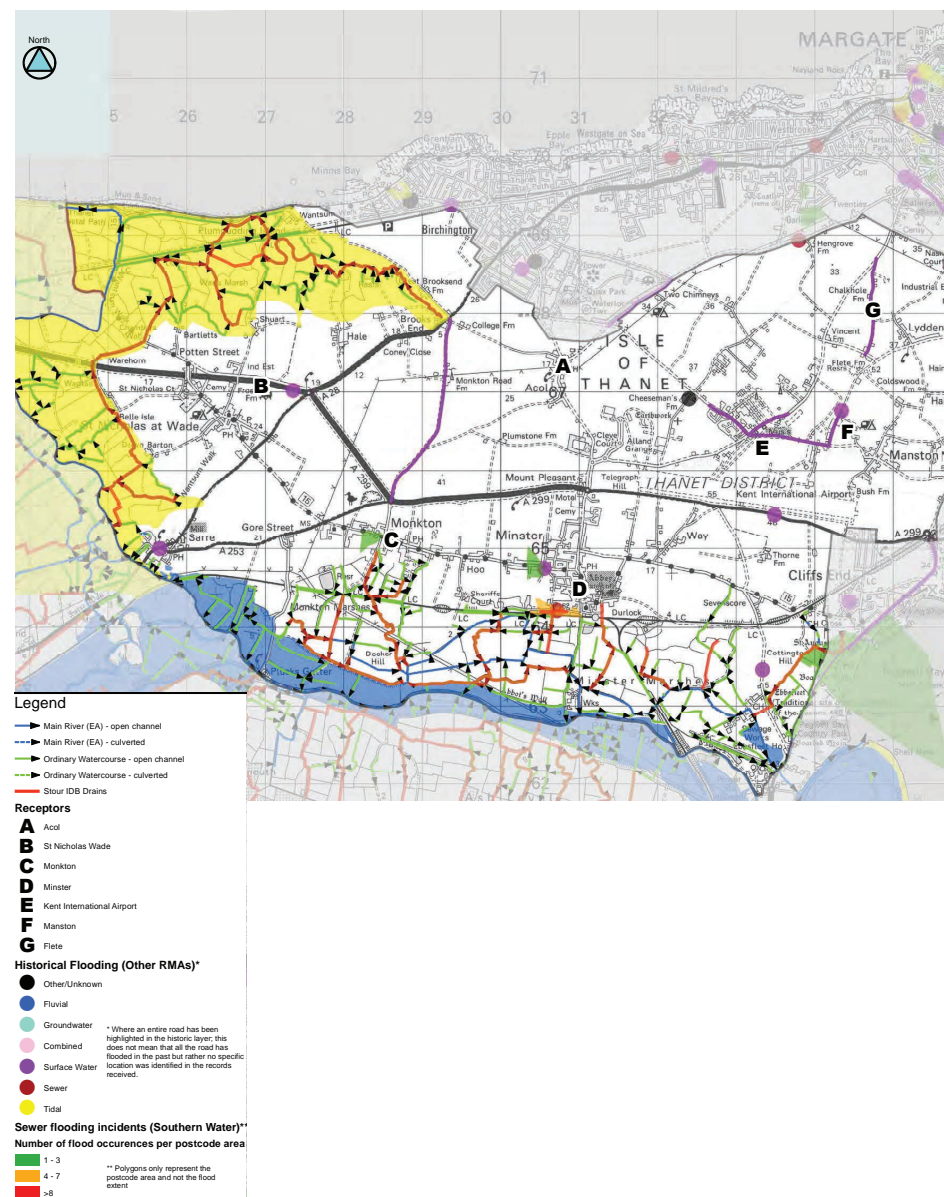
## 2.0|Site Context

### 2.07 Flooding

Environment Agency flood mapping indicates that the site is located within an area where flooding from rivers and the sea is very unlikely. However, a potential risk from sewer flooding has been identified. Currently the only records of flooding are along some of the roads to the north and south of the site.

Environment Agency flood mapping indicates that the whole of the Manston Airport site is located within an area where flooding from rivers and the sea is very unlikely (Flood zone 1 where there is a less than a 0.1 per cent (1 in 1000) chance of flooding occurring each year). The nearest flood risk is coastal flooding associated with Pegwell Bay located approximately 2km southeast of the site. There is no risk of flooding to the site from reservoirs.

For more details refer to Kent County Council's Surface Water Management Plan



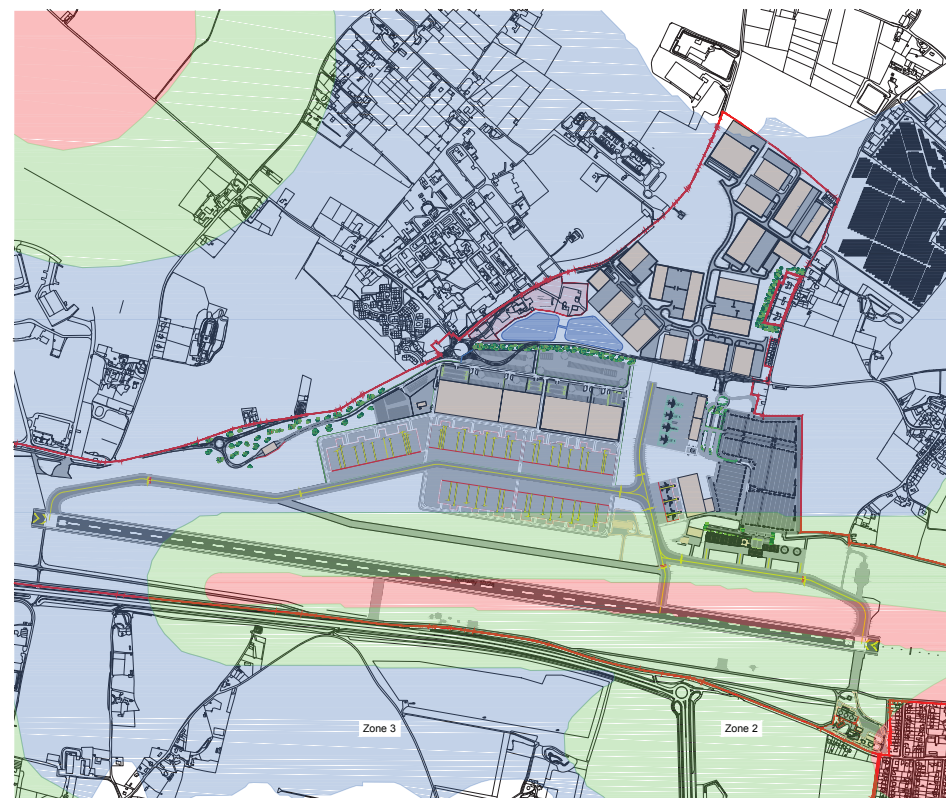
## 2.0|Site Context

### 2.08 Contamination

The Manston Airport site is underlain by a Chalk Aquifer, which typically provides a high level of water storage, and makes a significant contribution to Thanet's public water supply. This aquifer has been acknowledged as strategically important by the Environment Agency and is classified as a Secondary A aquifer; which the Environment Agency considers to be of local importance.

The site is located entirely within an area considered by the Environment Agency to be at risk of groundwater contamination from pollution-causing activities. The area of the site where this risk is greatest is beneath the runway.

The Kent Isle of Thanet Chalk groundwater body that underlies the site is a Drinking Water Protected Area under EU law. The southern part of the site is located within the Monkton and Minster Marshes surface waterbody, which joins the River Stour, and then flows into Sandwich Bay and Pegwell Bay.



#### KEY

Groundwater source protection zones.

- Inner Zone 1
- Outer Zone 2
- Total Catchment Zone 3



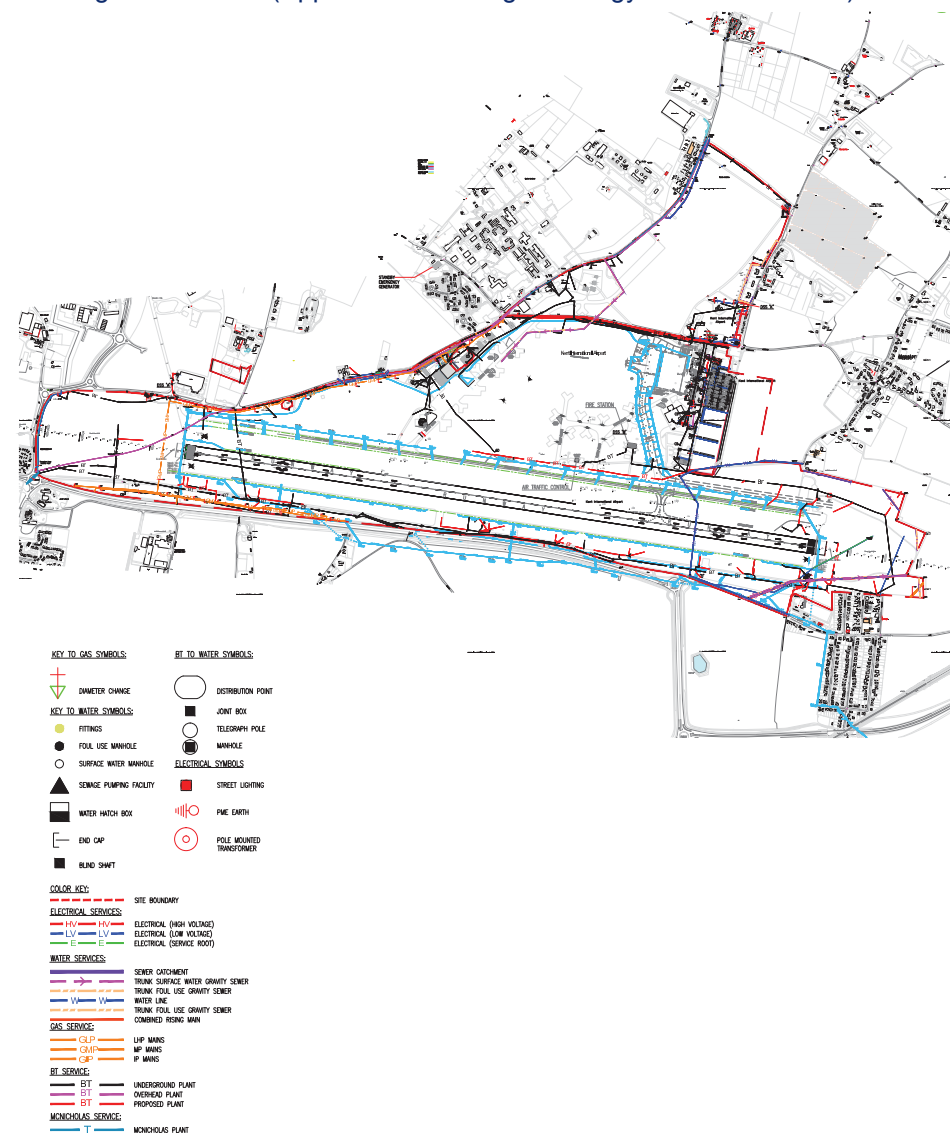
## 2.0|Site Context

### 2.09 Utilities

There is an existing internal electricity network that includes at least four substations. An assessment of the further load requirements is being prepared as part of the utility strategy; an initial assessment indicates that it is unlikely that an increase to the internal or external network will be required.

The proposed requirement for potable water is also being assessed in the utility strategy. This is being undertaken in consultation with Southern Water.

### Existing Utilities Plan (Appendix E Drainage Strategy RCEF54574-004)



## 2.0|Site Context

### 2.10 Heritage

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There are two Scheduled Monuments (an historic building or site of national importance that is included in the Schedule of Monuments kept by the Secretary of State for Culture, Media and Sport), within 1km of the site. There are no listed buildings within the site, however there are 24 listed buildings within 1km of the site.

There are over 800 previously identified non-designated archaeological features within the site and within 1km of the site, including archaeological remains from the prehistoric through to the medieval period onwards, and more recently including the various phases of use as an airport, which are evidence of long-term human activity within the area.

There are no Conservation Areas within 1km of the site, however the conservation areas of Acol and Minster in Thanet are within 2km of the site.



## 2.0|Site Context

### 2.11 Ecology

There are eight internationally designated nature conservation sites within 10km of the Proposed Development, the four closest of which are approximately 925m away to the South East. These comprise two Special Protection Areas (SPAs), three Special Areas of Conservation (SACs), one Site of Community Importance (SCI) and one Ramsar site.

Six nationally designated conservation sites are located within 10km of the Proposed Development, comprising four SSSIs, the closest of which, Sandwich Bay to Hacklinge Marshes, is approximately 925m away to the South East; and two National Nature Reserves: Sandwich and Pegwell Bay, approximately 925m to the south west; and Stodmarsh, approximately 8km to the south west.

The 316 ha Site comprised a number of habitats with open grassland the most extensive habitat (c.190 ha) and hardstanding (former runways, taxiway areas etc.) also extensive (c.105 ha). Arable land extends over 17 ha. Remaining habitats include buildings, bare ground, species-poor hedgerow, ephemeral short-perennial/ tall ruderal mosaics, standing water (two water bodies), scattered broad-leaved trees and scrub.

There is thus a potential for, or records of, species which are legally protected or a priority for nature conservation to be present on or adjacent to the site. These include, but are not limited to:

#### 1. Bats

The Site provides generally low quality foraging and commuting habitat for bats. Bat activity on the Site would likely be concentrated along the margins; such as western and eastern boundaries of B2050 (Manston Road) and the hedgerows to the extreme north of the Site and to the west of the runway.

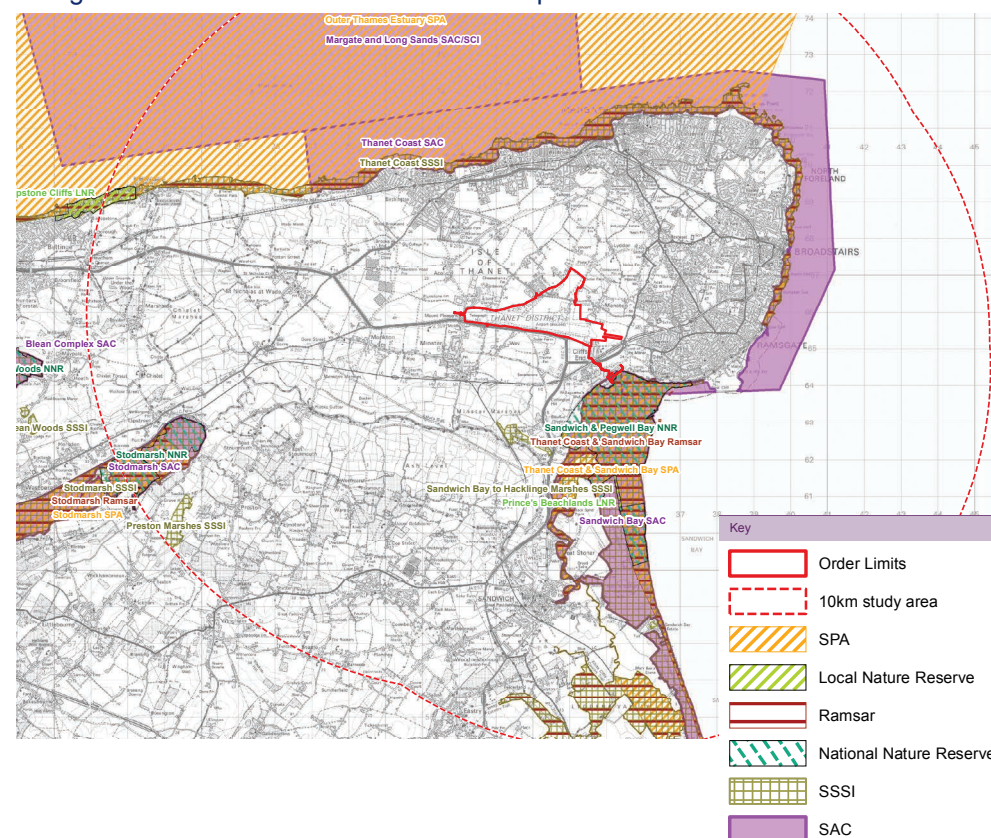
#### 2. Breeding Birds

The site is likely to support breeding bird assemblages associated with farmland and urban habitats including some listed as SPI, BoCC red-list and Schedule 1 of the WCA, such as skylark, house sparrow, grey partridge and barn owl. Over-wintering species may include wading birds and wildfowl.

#### 3. Terrestrial Invertebrates

The Site is uniform in structure; has limited topographical variation; limited areas of bare ground; and, is semi-improved in character. Therefore though invertebrates will be present, the expectation is that this assemblage will not be exceptional.

### Designated Sites of Nature Conservation Importance





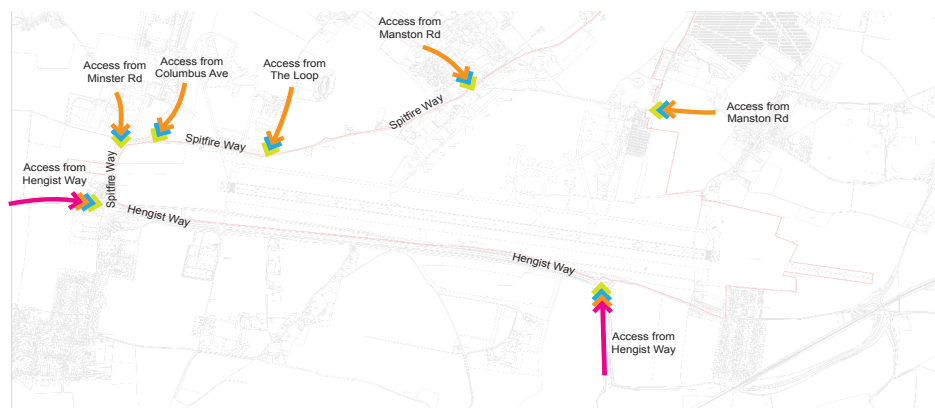
## 2.0|Site Context

### 2.12 Access

The site is located to the west of the conurbation of Ramsgate, Margate and Broadstairs in the District of Thanet and is bound by the A299 Hengist Way to the south, B2190 Spitfire Way to the west, arable farmland to the north and Manston Court Road and further farmland to the east. The site is bisected by the B2050 Manston Road which connects with Spitfire Way in the west and the A256 in the east. Manston Airport is located on the south side of the B2050 and the Northern Grass area is located to the north.

When Manston Airport was previously operating the airfreight facilities used an access from the Spitfire Way (B2190), with all other parts of the airport accessed from Manston Road (B2050). Neither of these were designed to accommodate the volumes of traffic experienced when the airport was previously operational, and are considered insufficient for the traffic forecast for the Proposed Development.

There is a relatively dense network of 'A', 'B' and minor roads within the surroundings of the site. Long distance footpaths within 5km of the site include Saxon Shore Way, Turner and Dickens Walk, Thanet Coastal Path, Stour Valley Walk, Wantsum Walk and the England Coast Path. Cycle routes in the area include Sustrans National Cycle Route 1 and the Viking Coastal Trail.



B1290



A299 - B1290 Roundabout Looking East



## 2.0|Site Context

### 2.13 Constraints and Opportunities

#### Opportunities

##### 1. Re-use Jentex Fuel Farm

An existing Fuel Farm is already located on the south eastern site boundary and offers opportunity to re-use existing facilities. Two existing 1,000,000 litre tanks will be replaced with three modern 700,000l tanks.

##### 2. Re-use Existing Runway

The site includes an existing 2748m runway which is a key strategic asset. The runway will be fully utilised as part of the development.

##### 3. Re-use Existing Passenger Aprons

The site includes 3 code C passenger Aprons. Though initial analysis suggests these are not fully compliant with EASA regulations, there is opportunity to bring these back up to compliance.

##### 4. Maintain access onto Passenger Area

The highways access from Manston Road into the site is being upgraded.

##### 5. Existing pipeline outfall to Pegwell Bay

An existing pipeline runs from the airfield site to Pegwell Bay. This provides an opportunity to utilise an existing drainage asset to provide clean water discharge from the site without increasing load on other local network assets.

##### 6. Provide a new Access on Spitfire way to remove HGV traffic earlier

An opportunity to remove HGV traffic from Spitfire Way through use of a dedicated cargo access was identified early in the optioneering stage.

##### 7. Drainage (ponds)

The site has a significant fall to the north starting with the runway as the site's highest point.

#### Constraints

##### 1.Subsoil Aquifer SPZ I

A groundwater aquifer is located beneath the airport site, as a direct result the site covers EA defined soil protection zones. These are illustrated on drawing Nk018417-RPS-MSE-XX-DR-C-2079 submitted as part of the application. The presence of the aquifer has required additional mitigation measures to be incorporated into the design process, these have included a restriction on the construction methods available in key areas, amendments to the planned AGL and drainage infrastructure, additional mitigation measures planned for the fuel farm and retention of the existing extended pavement to the sides of the runway to provide additional impermeable protection to the aquifer.

##### 2.Maintain Existing Museums

The public consultation process highlighted concerns from the local population that the RAF Manston and Spitfire & Hurricane museums continued operation. To provide for this a 3ha area has been safeguarded for continued operation of the museums.

##### 3.Maintain Existing Memorial Garden

Linked to the museums is a memorial garden. To avoid relocating this important and sensitive asset the safeguarded area for the museums was extended to include the memorial garden. The result is a reduced developable area for the site but provides important safeguards for members of the public.

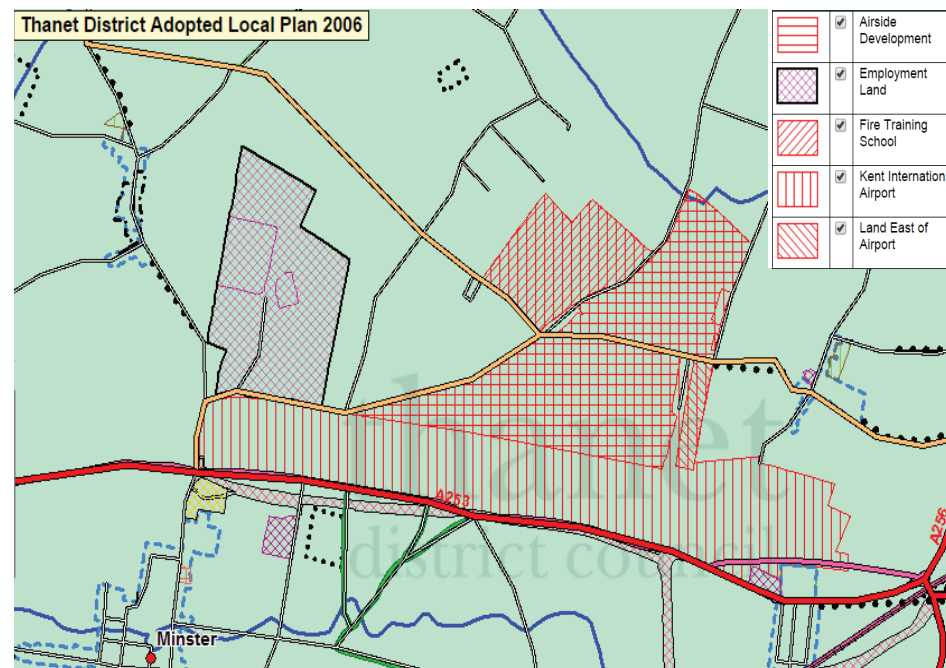


## 2.0|Site Context

### 2.14 Design Policy

#### 2.14.1 Design Objectives

- To ensure that new development is of a high standard of quality and design.
- To enhance environmental quality and sustainability through innovative design solutions.
- To ensure that new development creates places that have their own identity and are safe and attractive.
- To ensure that new developments respect and enhance the local character of existing areas and buildings, especially conservation areas and listed buildings.
- To ensure that the needs of pedestrians and cyclists are given priority over vehicles in new development.
- To safeguard areas and features, including open space and vegetation, which contribute to the quality of the local environment.
- To ensure that the needs of people with mobility or sight difficulties are taken into account in design.



Thanet District Associated Local Plan 2006



## 2.0|Site Context

### 2.14 Design Policy

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#### 2.14.2 Policy EC2 (Thanet Local Plan 2006 Extract)

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Proposals that would support the development, expansion and diversification of Kent international airport will only be permitted subject to the following requirements:

1. Demonstrable compliance with the terms of the current agreement under section 106 of the town and country planning act 1990 or subsequent equivalent legislation.
2. New built development is to be designed to minimise visual impact on the open landscape of the central island. Particular attention must be given to roofscape and to minimising the mass of the buildings at the skyline when viewed from the south.
3. Appropriate landscaping schemes, to be designed and implemented as an integral part of the development.
4. Any application for development for the purpose of increasing aircraft movements in the air or on the ground, auxiliary power or engine testing, must be supported by an assessment of the cumulative noise impact and the effectiveness of mitigation measures to be implemented in order to minimise pollution and disturbance. The acceptability of proposals will be judged in relation to any identified and cumulative noise impact, the effectiveness of mitigation and the social and economic benefits of the proposals.
5. An air quality assessment in compliance with policy ep5, to demonstrate that the development will not lead to a harmful deterioration in air quality. Permission will not be given for development that would result in national air quality objectives being exceeded.
6. Development will not be permitted within the airport complex to the south of the airside development site identified in policy ec4, unless it has been demonstrated that the development is necessary for the purpose of air traffic management.
7. Any new development which would generate significant surface traffic must meet requirements for surface travel demand in compliance with policy ec3.
8. It must be demonstrated that new development cannot contaminate groundwater sources or that appropriate mitigation measures will be incorporated in the development to prevent contamination.

## 2.0|Site Context

### 2.14 Design Policy

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#### 2.14.2 Thanet Local Plan 2006 Policies

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The following policies from the Thanet Local Plan 2006 will be considered in the detailed design for any new development.

Relevant Local Policies:

- CC2- Landscape Character Areas
- EC1- Land Allocated for Economic Development
- EC2- Kent International Airport
- EC4- Airside Development Area
- EC5- Land at, and East of, the Airport Terminal
- EP5- Local Air Quality Monitoring
- EP7- Aircraft Noise
- EPI 3- Ground Water Protection Zones





