

5.2-25 Environmental Statement Volume 25: Transport Assessment, Appendices J (Junction 21B) – O

TR020002/APP/5.2-25

Project Name: Regulation:

Manston Airport Development Consent Order

Regulation 5(2)(q) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure)

Regulations 2009, as amended

Date:

July 2018



RiverOak Strategic Partners

Manston Airport DCO

TA Appendix M - Public Rights of Way Management Strategy (PRoWMS)



Report for

George Yerrall RiverOak Strategic Partners Audley House London W1K 6WF

Main contributors

Aga Jezierska Glyn Price

Issued by

Aga Jezierska

Approved by

Glyn Price

Amec Foster Wheeler

Floor 12 25 Canada Square Canary Wharf London E14 5LB United Kingdom Tel +44 (0) 203 215 1610

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Document revisions

No.	Details	Date
1	First Draft	14/11/2017
2	Second Draft	11/01/2018
3	FINAL DRAFT	12/03/2018
4	Final	27/03/2018

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1. Introduction

1.1 Background

- RiverOak Strategic Partners Limited (RiverOak) is seeking to secure the future of Manston Airport as a valuable regional and national asset by redeveloping the Manston Airport site as a freight airport. The proposals will provide much needed additional air freight capacity to the United Kingdom and also serve to relieve pressure from the other, already heavily congested, London and South East airports.
- Under the Planning Act 2008 (the 2008 Act) the redevelopment of Manston Airport as a freight airport is considered a Nationally Significant Infrastructure Project (NSIP). RiverOak is making an application under the Act for a permission known as a 'Development Consent Order' ('DCO') to construct and operate Manston Airport. The application will be submitted to the Planning Inspectorate which will examine it and make a recommendation to the Secretary of State for Transport, who will then make a decision on whether the Project is granted consent.
- This Public Right of Way Management Strategy (PRoWMS) is one of a suite of documents which have been produced in the support of the DCO application. The PRoWMS will be appended to the Transport Assessment.

1.2 Overview

- The site is located to the west of Ramsgate in the district of Thanet, East Kent and covers an area of approximately 3km.
- There has been an operational airport at the Proposed Development site since 1916. Until 1998 it was operated by the Royal Air Force (RAF) as RAF Manston, and for a period in the 1950s was also a base for the United States Air Force (USAF).
- From 1998 it was operated as a private commercial airport, known as Kent International Airport. The airport offered a range of services including scheduled passenger flights, charter flights, air freight and cargo, a flight training school, flight crew training and aircraft testing. In recent years it was operating as a specialist air freight and cargo hub servicing a range of operators. Although the airport was closed in May 2014 some of the airport infrastructure remains.
- The Proposed Development shall consist of the following principal components, as shown in **Figure 1.1**:
 - Runways and taxiways suitable for the take-off and landing of a broad range of cargo aircraft
 - an area for cargo freight operations able to handle at least 10,000 movements per year and associated infrastructure, including;
 - a new Air Traffic Control (ATC) tower;
 - a fire station;
 - a fuel farm; and
 - facilities for other airport-related development, including:
 - a passenger terminal and associated facilities;
 - an aircraft teardown and recycling facility;
 - a flight training school;
 - a base for at least one passenger carrier;

- a fixed base operation for executive travel; and
- business facilities for airport related organisations.
- As set out in detail in Section 2 of this document, there are two PRoWs that are affected by the Proposed Development, for which a strategy is identified within this document.

1.3 Consultation

- The PRoW Officer for Kent County Council (KCC) has been consulted regarding the affected PRoW and the proposed strategy.
- A joint site visit was undertaken on 31st October 2017 by Amec Foster Wheeler and the KCC East Kent Area Officer for Public Rights of Way & Access Service. This was followed up with a series of email and telephone conversations. The existing PRoW network within the study area was discussed and it was confirmed that the KCC online record of the network is up to date and formed the basis of discussions on the existing conditions and possible proposals.

1.4 Structure of the Public Rights of Way Management Strategy

- 1.4.1 The remainder of this PRoWMS is set out as follows:
 - Chapter 2 identifies all PRoW that are affected by the proposed scheme and sets out in a tabular form the nature of the impact;
 - Chapter 3 discusses any proposed mitigations; and
 - Chapter 4 summarises the proposals and concludes on the impact of the proposed redevelopment.

2. Public Rights of Way Assessment

2.1 Introduction

- A right of way is a path on which the public have a legally protected right to pass and re-pass and are known as a 'public' right of way. There are four types of PRoW:
 - footpaths for use only by pedestrians;
 - bridleways for pedestrians, horse riding and cycling;
 - restricted byways for any transport that does not have a motor; and
 - byways open to all traffic for any kind of transport, including cars, but mainly used by walkers, cyclists and horse riders).
- Definitive maps of PRoW have been compiled for all of England and Wales, as a result of the Countryside and Rights of Way Act 2000. Local highways authorities are required to maintain the definitive map of all PRoW in their areas which are publicly available to view. Changes to a PRoW requires a legal order application to be made to the local highway authority. Public Path Diversion or Extinguishment Orders are dealt with by the Highways Act 1980, or the Town and Country Planning Act 1990 if it is to enable development to take place.

2.2 Study Area

- Figure 2.1 shows the PRoW within and around the red line boundary of the Proposed Development and identifies two PRoW to the east of the site that are affected by the Proposed Development.
- The affected PRoWs are TR8 and TR9, both of which are bridleways. TR8 will be impacted by the proposed extension of the Airport carpark, while TR9 will fall within the red line boundary of land north of the proposed runway extension.
- Figure 2.2 shows the sections of the PRoW which are affected by the proposals. This figure illustrates how each of these PRoW is further split into smaller sub sections, indicated with an orange dot.
- Between Manston Road and Bush Farm TR8 is split into five sub sections in KCCs PRoW identification numbers. The sections start from the point where it exits Manston Road (TR8/1) and then runs south and then east through the remaining sections to TR8/5.
- TR9 is split into two sub sections. The first, TR9/1 is between the public highway and the link TR10. The second, TR9/2 is between the link TR10 and the termination point inside the Airport's existing boundary.
- All affected PRoW in the study area are summarised in **Table 2.1**.

Table 2.1 Summary of PRoW affected by the proposed development

ID No	PRoW No	Type of PRoW	Extent of the impact on PRoW
1	TR8/2	Bridleway	The bridleway falls partially within the proposed redevelopment.
2	TR8/3	Bridleway	The bridleway falls within the proposed redevelopment
3	TR8/4	Bridleway	The bridleway falls within the proposed redevelopment
4	TR8/5	Bridleway	The bridleway falls within the proposed redevelopment

ID No	PRoW No	Type of PRoW	Extent of the impact on PRoW
5	TR9/2	Bridleway	The bridleway falls partially with the existing Airport boundary which is planned to remain as part of the proposed redevelopment

2.3 Description of Affected Public Rights of Way

- In order to gain a thorough understanding of the affected PRoWs, a site visit was undertaken on 31 October 2017 with KCC's East Kent Area Officer for the PRoW & Access Service.
- Follow up conversations with the East Kent Area Officer also established agreement on the widths of the PRoW, while the lengths were obtained from the KCC online mapping for PRoW.
- The characteristics of the local PRoW to the site are described in **Table 2.2**.

Table 2.2 Characteristics of the affected PRoW

	Length [m]	Width [m]	Features
TR8/1	20	2.1-3.0	Field-edge path with a fingerpost/timber- plastic finger (fingerpost) at the start of TR8.
TR8/2	141	2.1-3.0	Field-edge path.
TR8/3	46	2.1-3.0	Field-edge path.
TR8/4	298	2.1-3.0	Path running across a field.
TR8/5	381	2.1-3.0	Path running across a field marked with a fingerpost/metal- metal finger (fingerpost) at the end of TR8.
TR9/1	185	Not on record	A section of tarmacked path followed by a section of bare ground leading towards a farmed land. Last section of TR9/1 is formed by a field-edge path. Fingerpost/metal- metal finger (fingerpost) marks the start of TR9 and is located on the footway, outside 38 High Street.
TR9/2	146	Not on record	Field-edge path consisting a fingerpost/metal- metal finger (fingerpost) marking the start of TR10, located north of the overgrown section of TR9.

- 2.3.4 In addition to the narrative provided in **Table 2.2** a more detailed description of the routes is as follows:
 - ▶ TR8 runs diagonally east to west from a point marked with a metal fingerpost at the eastern end of the PRoW (TR8/5). It then runs north alongside the Airport perimeter fence, continuing north to where it meets the B2050 Manston Road (TR8/1). It was observed during the joint site visit that, the public do not generally follow the link, but walk along the Airport fence instead. During the site meeting, it was agreed that this may be due to the alignment of the existing features such as the field boundary, the alignment of the existing Airport perimeter fence and the fact the existing line of the PRoW across agricultural field is not appropriate at certain times of the year.
 - During the site visit, it was observed that TR9 effectively ends at the point where it meets TR10. South of this point, the section of TR9 which is shown on KCC and Ordinance Survey plans is currently overgrown with dense vegetation. The denseness of the vegetation suggests that this section of route beyond the connection with TR10 has not been used for a prolonged period of time. The short section of TR9 that extends into the existing Airport site is inaccessible due to the perimeter fence.
- During the site visit with the KCC officer, a local resident who identified that he had lived in the area for over 30 years and was a regular dog walker in the locality shared his knowledge of the PRoW network and usage habits in the vicinity of the study area. His comments are summarised below:

- Many dog walkers come to the area from further afield and exercise their dogs along TR8, TR9 and TR10 links;
- Local and visiting dog walkers usually walk a circular route/ loop to bring them back to their starting point to get back to their parked cars; and
- ▶ Route choice greatly depends on the time of the year and what is being grown in the fields, as high crops restrict walking or running along the links along/across the fields. This however was later commented on by Heather from KCC, who confirmed that it is KCC's responsibility to maintain the routes and make them accessible all year round.
- The resident confirmed an observation made by the KCC officer that the TR8 link is not used as designed, but users walk along the Airport fence instead. He also confirmed, that the section of TR9 link between the link TR10 and the Airport fence, is not used at all and is unlikely that is known to any users.
- PRoW width requirements are set out in the Rights of Way Act 1980 which states that:
 - the "minimum width" is as respects a bridleway which is not a field-edge path, 2 metres, or as respects any other highway, 3 metres; and
 - ▶ the "maximum width" is as respects a bridleway, 3 metres.
- Existing TR8 and TR9/2 links are below the recommended width of 3 metres. The width of TR9/2 had not been recorded by KCC. However, the KCC Officer confirmed it to be substandard during the joint site visit.
- The key characteristics of links TR8 and TR9 can be seen in **Figure 2.3**, while **Figures 2.4** and **2.5** set out some photos of these PRoW and comments on their characteristics. **Figure 2.6** identifies the locations where the photographs were taken.

Figure 2.4 Key characteristics of link TR8 observed on site



Figure 2.5 Key characteristics of link TR9 observed on site



2.4 Thanet Parkway Connection Proposals

- The KCC Officer noted that as part of the Thanet Parkway Station proposals, there is a strategy to create a new link between the station and TR9, as shown in **Figure 2.7.**
- 2.4.2 This proposal is considered further in Section 3.4.

2.5 Conclusions

- The analysis of the links affected by the proposed redevelopment indicate the following:
 - ➤ Existing TR8/2 link will partially remain until the point where it links with the proposed development's new perimeter fence. The remaining section of TR8/2 link will need to be diverted around the new proposed boundary fence;
 - Existing links TR8/3, TR8/4 and TR8/5 will need to be diverted around the new proposed boundary fence; and
 - Existing TR9/2 link will remain until the point where it links to the existing Airport fence. The remaining section of the TR9/2 link that currently falls within the Airport boundary will need to be extinguished.

3. Proposed Changes to PRoW

3.1 Introduction

This section sets out proposals for TR8 and TR9 as part of the Proposed Development which have been discussed with KCC.

3.2 Summary of Discussions with KCC

- As set out in Section 1.3, the KCC East Kent Area Officer for PRoW & Access Service has been consulted regarding the Proposed Development. A summary of the key points that were discussed is as follows:
 - Existing TR9 which currently leads into the perimeter fencing of Manston Airport historically led further south, but since the Airport was built most of the route within the Airport boundary was extinguished, however a short section remained, but is inaccessible.
 - Existing links TR8 and TR9 are planned to be widened to a desired minimum width of 3 metres. Similarly, this is suggested in the emerging Thanet Local Plan to be funded through the Section 106 Agreement should an existing Airport (or an alternative development) be granted planning permission; and
 - KCC requested that PRoW are to be created and funded under a Section 106 Agreement and would be maintained by KCC while remaining part of Manston Airport land. It should be noted however, that the power to undertake any mitigation work required would be established under the powers of the DCO. This PRoW Management Strategy will be taken forward post permission and used as a basis for ongoing discussions between KCC and the appointed Contractor prior to commencement of the works so that the details and final plans can be agreed.

3.3 Detailed Mitigation Proposals

Each of the affected PRoW has been considered separately and a permanent mitigation proposal to address the impact is set out in the **Table 3.1**.

Table 3.1 Proposed detailed mitigation measures

	Approximate Length (M)	Proposed Mitigation
TR8	523	TR8 will be rerouted along the edge of the new proposed perimeter fence of the Airport. The route will remain as it is until it forced off line onto a new alignment along the fence. The previous route will be permanently closed and the new route permanently established. This will be done early in the project life cycle so it is established before major works take place. The width of the bridleway will be 3 meters and it is proposed to run alongside a hedgerow planted east of the fence to allow for screening of the car park and the Airport site. Any way marking posts or other PRoW infrastructure will be replaced and moved as appropriate.
TR9	73	TR9 will be extinguished south of the perimeter fence of the Airport so that no PRoW now falls within the redline boundary of the site

The Masterplan has been designed to include a 5m wide corridor between airport fence line and edge of the project order limit to incorporate the diverted TR8 and this can be seen in **Figure 3.1**. This 5m corridor will incorporate the 3m wide bridleway and the appropriate screening.

3.4 Consideration for Thanet Parkway Connection

- In addition to the two proposals above it is worth mentioning that a new link from TR9 to the proposed Thanet Parkway Station across the site or around the edge of the site cannot be provided as part of these development proposals.
- A link across the site would present security and safety risk as it would cross the runway, taxi ways and other infrastructure. It is generally not considered appropriate to have PRoW running through airport sites as for security reasons these are fenced off with only security checks points the access onto the taxi ways and apron of the airport.
- The alternative route would be a very long route around the eastern side of the site following the perimeter fence that would potentially make it unattractive to users as it would take a long time to take this circuitous route.
- Amec Foster Wheeler also consulted with aviation experts Osprey CSL, a specialist technical company offering independent consultancy exclusively on aviation projects who identified the following issues with a PRoW around an Airport perimeter fence:
 - ▶ It attracts spotters who are likely to take up residence close to the fence line. This in turn creates an additional security issue, which the Airport and local police would have to manage and mitigate.
 - Extra patrols, CCTV etc. would be needed to reach the difficult locations where vehicles cannot easily gain access.
 - ▶ There is a risk of infrastructure damage in locations where it is close to any Communication, Navigation & Surveillance (CNS), approach lighting and more.
 - It may infringe on existing private land outside the perimeter fence which could require a double line of fencing.
 - There is the long-term issue of future expansion, or need for infrastructure space, which could be inhibited by PRoW constraints.
- In summary, Osprey's recommendation was to reduce the presence of PRoW near the airfield boundary (and CNS) and avoid providing any PRoW within the licensed boundary of the airfield. For that reason, it was considered, that no new links are to be created around the eastern boundary of the proposed redevelopment
- Furthermore, due to the design of the Airport, Fuel Farm and housing estate off King Arthur Road, creating the link set out in emerging local plan would require third party land outside the redline of the proposed DCO application.
- As a result, this link cannot be progressed within the proposals this document is being prepared to support.
- 3.4.8 It should also be noted that there is no firm commitment for the construction of the Parkway Station. However, if in the future it was likely that the Thanet Parkway Station will be built, there will be bus connectivity between the station and the Airport providing a sustainable north-south link:
- An overview of the proposed mitigations is shown in **Figure 3.2**.

4. Summary and Conclusions

- The proposed Airport redevelopment will require an extension of the existing car parking located south of B2050 Manston Road, near the eastern site boundary. It is also assumed, that the current site boundary between High Street and the existing runway will remain as shown in **Figure 2.1.** As a result, two PRoWs will be affected.
- A joint site visit was undertaken on 31st October 2017 with the KCC East Kent Area Officer for Public Rights of Way & Access Service, which was followed up with a series of email and telephone conversations and confirmation of the KCC online PRoW records. These were used as the basis of the proposed mitigation measures. Feedback from a local resident who regularly uses the PRoW links was also considered.
- Amec Foster Wheeler also consulted with aviation experts Osprey CSL who are a specialist technical company offering independent consultancy exclusively on aviation projects. Their comments and suggestions were noted and accounted for in the PRoWMS.
- The following mitigation measures are proposed to address the impact of the Proposed Development on the affected PRoWs:
 - ▶ TR8 will be diverted along the edge of the new proposed perimeter fence of the Airport. The route will remain as it currently is, until it is diverted onto a new alignment along the fence. The previous route will be permanently extinguished and the new route permanently established. This will be done early in the project life cycle so it is established before major works take place;
 - ▶ The width of the diverted TR8 bridleway will be increased to 3m and it is proposed it will run alongside a hedgerow planted east of the fence to allow for screening of the car park and the Airport site. Any way marker posts or other PRoW infrastructure will be replaced and relocated as appropriate; and
 - ▶ TR9 will be extinguished south of the perimeter fence of the Airport so that no PRoW falls within the red line boundary of the site.
- The proposed mitigations take into account the existing habits of PRoW users as well as maintain the function of the links affected.
- 4.1.6 Creation of a new link around the eastern boundary of the proposed Airport redevelopment will not be progressed. This however could be potentially addressed by a bus service providing a north-south link should the planned Thanet Parkway Station go ahead.
- KCC has requested that the new links are to be created and funded under a Section 106
 Agreement and would be maintained by KCC while remaining part of Manston Airport land. It should be noted however that the power to undertake any mitigation work required would be established under the powers of the DCO. This PRoW Management Strategy will be taken forward post permission and used as a basis for ongoing discussions between KCC and the appointed Contractor prior to commencement of the works so that the details and final plans can be agreed.

Appendix A - Site visit undertaken on 31 of October 2017 - Meeting minutes



Minutes

Date: 31.10.17, 11:00-13:30 **Meeting at:** On site, PRoW TR8, TR9, TR10

Subject / purpose:

Review existing PRoW affected by the Manston Airport Development

Attendees: Apologies:

Heather Waller, The east Kent Area Officer-Public Rights of Way & Access Service, KCC Aga Jezierska, Consultant, Amec Foster Wheeler (Wood)

Minutes: Action by:

- 1 Existing PRoW were discussed briefly and following information was received from Heather:
 - -Existing TR9 which currently leads into the fenced off Manston Airport historically led further south, but since the Airport was built it was extinguished and not used any longer.
 - -Existing TR8 link runs diagonally from a point marked with a Metal Fingerpost at the eastern end of the PRoW and the point several meters away from the corner of the field. It then runs straight north and joins back with the edge of the Airport fence, continuing towards B2050 Manston Road. It is observed, that public doesn't follow the link, but they walk along the Airport fence instead.
 - -Existing TR8 and a section of TR9 which runs through the fields are below the recommended 3m width. Heather Waller will email the information of the width recorded by KCC.
 - -During the inspection of the existing links, it was observed that there is no direct TR9 route which currently terminates at the start of the TR10 link. The area which should be opened for the TR9 to continue running through to the Airport fence is currently very overgrown and the maturity of the bushes suggests that it has been for many years.

Denise Roffey, Project Officer from KCC is currently reviewing the Local Highways Plan. As part of that:

-A creation of the new link, between the existing TR9 and the Thanet Parkway Station

(https://consultations.kent.gov.uk/consult.ti/thanetparkwaystation) is proposed. This is suggested in the Local Highway Plan to be funded through the Section 106 should an existing Airport (or an alternative development) be granted a Planning Application, and

- -Existing TR8 and TR8 are planned to be widened to a desired minimum width of 3m. This is suggested in the Local Highway Plan to be funded through the Section 106 should an existing Airport (or an alternative development) be granted a Planning Application.
- Both PRoW being considered as affected by the development were discussed. From that it transpired that the Lydd Airport (located in South Kent) has been refused a Planning Application to extinguish a PRoW. The Airport originally applied through a DCO route and now re-applied through the Highways Act 1980. Heather from KCC was not able to say on what grounds was the application for the Lydd Airport refused.
- If the Highways Act 1980 route was taken to extinguish a section of TR9 as discussed in previous chapter, the plans would be submitted to Denise Roffey from KCC, who upon approval of the plans, would pass them to Definition Team (DT). The proposal would then move to a Public Consultation stage. Neither Denise nor DT would object the proposal should the PRoW revisions proposed were in line with the Local Highways Plan as discusses during the site meeting; and
- 4 Currently, PRoW applications take about 2,5 years to be looked at by KCC. That timescale is likely to soon reach 3 years. If, however, the submission is classed as Nationally Significant Project, that timeframe may possibly be shorter, but Heather from KCC was not able to confirm that. Laura Wilkins from KCC is the Manager for the DT and would deal with the application.
- During an on-site meeting, we were approached by a local elderly man who turned out to be a regular dog walker living in the area for over 30 years and using local PRoW, including those discussed during the meeting. He made a number of comments about the habits of PRoW' users as well as on the features in the vicinity of TR9 and TR10. These are as follow:
 - -Many dog walkers come to the area from further afield and exercise their dogs along TR8, TR9 and TR10.
 - -Visiting as well as local dog walkers mainly walk routes enabling them to describe a small circle/loop, to enable going back to their starting point (being it a village or their car parked in the vicinity).
 - -Route choice greatly depends on the time of the year and what is being grown in the fields, as high crops impede walking the links running along/through the fields. This however was later commented on by Heather, who confirmed that it is KCC's responsibility to maintain the routes and make them accessible all year round.
 - -The man confirmed the observation made earlier by KCC, that TR8 link is not used as designed, but users walk along the Airport fence instead. He also confirmed, that the section of TR9 between the TR10

and the Airport fence is not used at all and is unlikely that is known to any users.

- -TR8 is popular with joggers, dog walkers, bikers and equestrians who continue to move from the top of the link towards Manston Court Road rather than the east towards the paths meeting at the bend of B2050 Manston Road, opposite of the Wood Farm, as B2050 Manston Road is far too busy to walk along. Users walk along B2050 Manston Road using the informal path running through the field when the crops are low.
- -The man has pointed out some commonly used loop-shaped routes. One of them is a quarry (formerly a chalk pit) which is also used to walk around, although this is not a formal PRoW route either.
- -There used to be a farm building the west of the TR9, close the Airport fence. This however was demolished in 1960s. The existing low fence preventing continuity of the TR9 has been probably put up around that time to protect, then young, freshly planted trees.
- 6 Discussion was held about the proposed amendments to the PRoW affected by the Project. The following was agreed:
 - -Existing TR8/1 link will remain.
 - -Existing TR8/2 link will partially remain until the point where it meets the proposed development. The remaining section of TR8/2 link, links TR8/3, TR8/4 and TR8/5 will be closed/extinguished. The extinguished links will be replaced with a new link created along the boundary of the proposed Airport development and will connect to High Street at the location currently used by the farmer to access the field and located opposite the Bush Farm.
 - -Diversion of the link TR8 will enable path users to continue using the route linking High Street with B2050 Manston Road, while maintaining a direct link to Manston Court Road. It will also follow the route currently taken by PRoW users along the west-east horizontal Airport section of the fence, which at present is not officially dedicated as PRoW. During the discussion, it was agreed that this is due to the alignment of the existing features (field used for farming and utilised to the fence as leaving PRoW as currently designed would not be practical; location of the access to the field; alignment/position of the Airport fence in relation to the field and PRoW).
 - -Existing TR9/1 link will remain.
 - -Existing TR9/2 link will remain until the point where it meets the existing Airport fence. The remaining section of the TR9/2 link, that currently runs within the Airport boundary will be extinguished.
 - -A new link would be investigated to connect the remaining section of the link TR9/2 and the existing development south of the proposed development where the new Thanet Parkway Station is planned. The new link will run along the Airport fence. The exact route along the vertical, most the eastern section of the Airport fence is to be confirmed within Amec Foster Wheeler. This is due to the fact, that during the site meeting it was not clear whether it would be feasible

to cut across in between the existing Airport land and the proposed runway or whether the route leading around the proposed runway would have to be adopted instead. It was however agreed, that the latter would also be acceptable by KCC as this route is likely to be popular with cyclists and/or equestrians, hence the additional distance would not be a problem for these type of PRoW users.

- -Providing a new link will create more challenging infrastructure for cyclists and equestrians and a connection to the new Thanet Parkway Station. It will also respond to the needs and requests of local groups which have been requesting from KCC to restore the former link in that location.
- 7 During the discussion, it was agreed that all proposed PRoW would have a recommended minimum width of 3m. They would be created and funded under the Section 106 Agreement and would be maintained by KCC while remaining a Manston Airport land.
- 8 The newly created link would be dedicated to KCC to enable maintenance and public access.
- 9 The lengths of each link were taken from KCC website. Heather Waller will email Aga (AFW) the widths recorded by KCC in due course.
- 10 KCC will be responsible for opening up and maintaining the connection between the existing links TR9/1 and TR9/2, which currently is not feasible due to the long-overgrown area where both links meet.







RiverOak Strategic Partners

Manston Airport DCO

TA Appendix N - Car Park Management Strategy



Report for

George Yerrall RiverOak Strategic Partners Audley House London W1K 6WF

Main contributors

Glyn Price Liam Garden Bev Coupe

Issued by

PP..... Liam Garden

Approved by

Glyn Price

Amec Foster Wheeler

Floor 12 25 Canada Square Canary Wharf London E14 5LB United Kingdom Tel +44 (0) 203 215 1610

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Document revisions

No.	Details	Date
1	First Draft	February 2018
2	Final Draft	March 2018

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1. Introduction

1.1 Background

- RiverOak Strategic Partners Limited (RiverOak) is seeking to secure the future of Manston Airport as a valuable regional and national asset by redeveloping the Manston Airport site as a freight airport. The proposals will provide much needed additional air freight capacity to the United Kingdom and also serve to relieve pressure from the other, already heavily congested, London and South East airports.
- Under the Planning Act 2008 (the 2008 Act) the redevelopment of Manston Airport as a freight airport is considered a Nationally Significant Infrastructure Project (NSIP). RiverOak is making an application under the Act for a permission known as a 'Development Consent Order' ('DCO') to construct and operate Manston Airport. The application will be submitted to the Planning Inspectorate which will examine it and make a recommendation to the Secretary of State for Transport, who will then make a decision on whether the Project is granted consent.
- This Car Park Management Strategy (CPMS) is one of a suite of documents which have been produced in support of the DCO application. The CPMS will be appended to the Transport Assessment.

1.2 Overview

- The site is located to the west of Ramsgate in the district of Thanet, East Kent and covers an area of approximately 3km.
- There has been an operational airport at the Proposed Development site since 1916. Until 1998 it was operated by the Royal Air Force (RAF) as RAF Manston, and for a period in the 1950s was also a base for the United States Air Force (USAF).
- From 1998 it was operated as a private commercial airport, known as Kent International Airport. The airport offered a range of services including scheduled passenger flights, charter flights, air freight and cargo, a flight training school, flight crew training and aircraft testing. In recent years it was operating as a specialist air freight and cargo hub servicing a range of operators. Although the airport was closed in May 2014, some of the airport infrastructure remains.
- The Proposed Development shall consist of the following principal components, as shown in **Figure 1.1** (shown in in Volume 4 of the Environmental Statement):
 - Runways and taxiways suitable for the take-off and landing of a broad range of cargo aircraft:
 - an area for cargo freight operations able to handle at least 10,000 movements per year and associated infrastructure, including;
 - a new Air Traffic Control (ATC) tower;
 - a fire station;
 - a fuel farm; and
 - facilities for other airport-related development, including:
 - ▶ a passenger terminal and associated facilities;
 - ▶ an aircraft teardown and recycling facility;
 - ▶ a flight training school;
 - ▶ a base for at least one passenger carrier;

- ▶ a fixed base operation for executive travel; and
- business facilities for airport related organisations.
- This CPMS summarises the assumptions and methodology used to understand the car parking requirements required at the proposed Manston airport in Year 20 of operation. This has been derived from flight data received from RiverOak, given the capacity and flights/day for different carriers. Data collected from similar airports has been used to inform the calculations undertaken.

1.3 Structure of the Car Park Management Strategy

- 1.3.1 The remainder of this CPMS is set out as follows:
 - ▶ Chapter 2 Sets out assumptions related for car parking for passengers;
 - Chapter 3 Sets out the assumptions related for car parking for staff;
 - Chapter 4 Sets out the assumptions for car parking for the Northern Grass Area and Cargo Facility; and
 - Chapter 5 Summarises the car parking proposals.

2. Passenger Car Parking

This section of the CPMS sets out the assumptions that have been used to understand the car parking spaces identified to support the proposals at Manston Airport for passengers. To understand this the demand for passengers was required.

Calculations informing this chapter are provided as Appendix A to this report.

2.2 Demand

Overview

- The parking requirement has been designed to meet the forecast Year 20 demand of 1,407,753 passengers passing through the terminal every year. It is anticipated by RiverOak that these will be as follows, broken down per carrier;
 - KLM 75,412 Passengers per year;
 - ▶ Blue Air 23,980 passengers per year;
 - ▶ Charter flights (unknown carrier) 40,286 passengers per year;
 - ► Connection flight to sea/river cruise (unknown carrier) 30,481 passengers per year; and
 - ▶ Ryanair 1,237,294 passengers per year.
- To understand how the total passenger numbers per carrier set out above could lead to a daily flight schedule it has been assumed that flights will be undertaken on all 365 days of the year resulting in 3,857 passenger movements per day. Of these movements they have been split 50/50 between arrivals and departures (1928 arrivals and 1928 departures). It has also been assumed that no passengers would transfer from one aircraft to another internal to the airport.
- The daily departures demand used in the calculation is therefore 1,928 passengers spread across:
 - 2 KLM flights to Amsterdam;
 - ▶ 1 Blue Air (LCC);
 - 1 Charter flight;
 - 1 cruise flight; and
 - 10 Ryanair flights.
- Arrivals passengers are not required in the calculations for short and long stay parking but will have an impact on express and taxi space requirements.

Passenger Profiles

- Data has been obtained from the CAA 2016 survey for the length of stay by user type. This is for departing passengers only, therefore it has been assumed that the pattern will be consistent for arrivals too.
- 2.2.6 Based on this, the passengers on each flight have been split into four categories:
 - Business long stay (BL);
 - Business short stay (BS);
 - Leisure long stay (LL); and

Leisure short stay (LS).

The results for a selection of the surveyed airports are given in the **table 2.1**.

Table 2.1 User Profile - CAA Survey 2016

User Profile	Luton (LTN)	Liverpool (LPL)	E Midlands (EMA)	Stansted (STN)	Heathrow (LHR)
Business Short Stay	3%	3%	2%	4%	7%
Business Long Stay	9%	5%	4%	10%	20%
Leisure Short Stay	1%	2%	1%	2%	1%
Leisure Long Stay	87%	90%	93%	84%	73%
	100%	100%	100%	100%	100%

Manston airport expects to operate a mixture of budget airlines and charter flights. Different passenger splits have therefore been assumed depending on the carrier. For budget airlines, the passenger mix has been assumed to be consistent with Luton airport. For the KLM flights, splits obtained for Heathrow airport have been used. For the purpose of the calculations a short trip has been assumed to be less than 24 hours and a longer trip more than 24 hours.

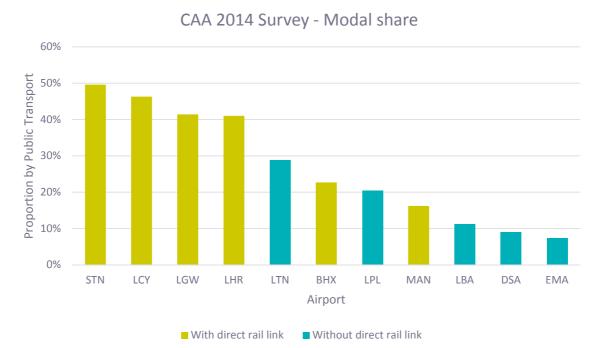
Length of stay

- The CAA survey data gives an average length of stay for each user type. This data has been used to inform the splits between long stay and short stay passengers, and used to calculate the duration that each long stay passenger will occupy one parking space.
- The average length of stay for business passengers is assumed to be 1.9 days. For leisure passengers, the average length of stay is assumed to be 4.5 days. Short stay passengers are assumed to have a trip length of 1 day.

Modal share

Data is available from the CAA, detailing the split between public and private transport at the airports surveyed. **Figure 2.1** shows the public transport split at a selection of UK airports. Airports where there is not a direct rail service to the airport are highlighted.

Figure 2.1 CAA 2014 Survey – Modal Share



*from the Liverpool John Lennon airport surface access plan

As Manston Airport (MAN) will not have a direct rail link, a lower than average number of people are expected to use public transport. As such Leeds-Bradford (LB) airport has therefore been used as a proxy, which gives the following modal shares, set out in **Table 2.2**, which are disaggregated by business and leisure travel.

Table 2.2 Modal Share Assumptions

	Business	Leisure
Car (drop-off)	27%	40%
Car (off-site)	3%	10%
Car (on-site)	29%	20%
Taxi-minicab	34%	23%
Train	-	-
Bus	6%	7%
Other	1%	

Drop-off

A provision of spaces should be set aside as short stay, drop-off spaces (<15 mins). The number required would be dependent on the scheduled flights, and cater for approximately 40% of passengers given the observed data from Leeds Bradford. Where data is available, the number of drop off spaces range from between 186 in Leeds to 287 in Southampton, both of these airports experience greater passenger movements than is expected at Manston. It is recommended that 150 spaces are initially allocated as drop-off spaces. At a 40% drop-off mode share, this would be sufficient to cater for the demand for up to 2 Ryanair flights.

Long Stay Passenger Car Parking Space Calculations

2.2.14 The number of parking spaces required for passengers has been calculated using the formula:

$$(LOS_B * C_B * Y_B) + (LOS_L * C_L * Y_L)$$

Where:

 LOS_B = Average Length of stay (business)

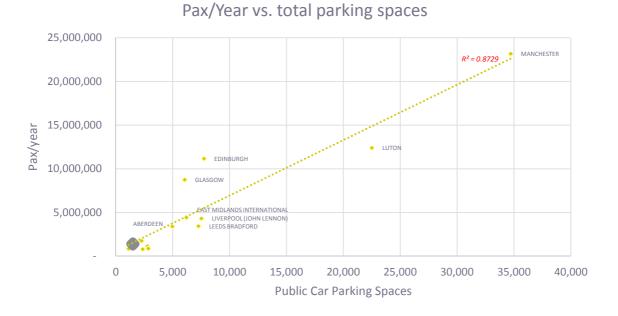
 C_B = Car modal share (business) Y_B = daily demand (business)

 LOS_L = Average Length of stay (leisure)

 C_L = Car modal share (leisure) Y_L = daily demand (leisure)

Based on the assumptions outlined above, the number of on-site parking spaces required at Manston Airport has been calculated as 1,665 spaces – at a ratio of 1 space per 845 passengers. This is similar to the level of provision given at other UK airports, as indicated in the graph below. Manston Airport car park provision is marked in (Dark Grey dot). Also included in this graph are the airports Cardiff, Doncaster-Sheffield, Southampton, Exeter and Southend.

Figure 2.2 Passengers per Year vs Total Parking Space – UK Airports Comparison



Total Manston Airport Parking Calculations – Passengers

The following car parking has been calculated as required based on the above for Manston Airport;

- ▶ 150 Short Stay "drop off" parking spaces;
- 1,665 longer term parking spaces; and
- ▶ 1,815 total parking spaces required.

2.3 Masterplan Passenger Parking Allowance

- The masterplan provided as part of this DCO application sets out the initial car parking layouts for the proposed development based on the information that is present as of early 2018. These layouts are anticipated to change as the development of the airport comes forward but it is worth setting out what this provision is.
- At the passenger terminal 1,815 spaces have been provided as set out with the details above, however the recovered ground from the contractors' compounds is also shown as "overflow parking" which can be used only after the works are complete in phase 4 of the construction programme. This gives an estimated maximum capacity for passengers of 2,966 spaces. Some flexibility is required on the numbers set out in the calculations, hence the need for overflow parking to take into account the following:
 - Final flight schedules and operators are unknown;
 - Car park will experience peaks across the calendar year;
 - Estimated mode share targets might not be fully realised for some time; and
 - Nature of flights (short/long) are not known at this stage.
- An element of the overflow car parking is also anticipated to accommodate some hire car facilities and electric car charging points (larger spaces required).
- Car parking provision for the passenger terminal set out in the site masterplan is set out in **Figure 1.1** (shown in in Volume 4 of the Environmental Statement).

3. Staff Car Parking (Excluding Northern Grass Area)

- To understand the requirements for staff car parking, proposed staffing levels have been provided by RiverOak. resulting in the following:
 - number of employees by role;
 - shift patterns for each role; and
 - proportion of staff required to fulfil each shift.
- This data is set out in the Transport Assessment and is consistent with the data used to inform the calculation of the traffic generation for staff at Manston Airport. In year 20, this provides the following staff and shift patterns for each specific job at the terminal and freight facility's, as set out in **Table 3.1**.

Table 3.1 Staff Number and Shift Patterns – Year 20

Job	Shift Pattern	Staff (Year 20)
Passenger Terminal	Airport operations 6am – 11pm	211
Freight Facility (Airside)	24 hour (weighted)	586
ATS (ATC)	24 hour	25
RFFS	24 hour	57
Operations	24 hour – weighted to normal office hours	38
Maintenance	Daylight focused but some overnight staff	49
MT (Motor Transport)	Airport Operations 6am – 11pm	49
Site and Freight Security	24 hour	57
Administration	Office hours 9-6	15
None Airside Freight	24 hour (weighted)	167
Total		1254

- All jobs other than freight related jobs, ATC, Security and Airfield ops would use the main car park that is proposed to the east of the site near the terminal. The freight, ATC, Security and Airfield Operations would use the car parks off the cargo access.
- Using this data above, the number of staff on site for each hour of the day has been determined by means of trip generation analysis. A modal split has been applied to the proposed year 20 staff numbers and these have been further split down into arrivals and departures by shift time. An additional hour before and after the start and end of each shift has been included as this is when staff would arrive and depart the relevant elements of the site. It should also be noted that with shift patterns across 24 hours a number of staff will be off site on any one particular day. These calculations have been set out in the TA.
- Figure 3.1 sets out the shift patterns and spread across the 24-hour period for terminal staff, which has been used as the basis for a parking accumulation exercise to understand the potential parking requirements.

- Figure 3.2 sets out the shift patterns and spread across the 24-hour period for cargo access staff which has been used as the basis for a parking accumulation exercise to understand the potential parking requirements.
- The parking accumulation assessment for staff, using the main access based on the assumptions set out above, indicates the need for the number of parking spaces required for the demand peak hour (14:00-15:00) is **254 spaces**. An additional 10% of spaces have been added for contingency meaning a total of **279** spaces need to be provided.
- The parking accumulation assessment for staff, using the cargo access based on the assumptions set out above, indicated the need for the number of parking spaces required for the demand peak hours (05:00-06:00) and (06:00-07:00) is **512** spaces. An additional 10% of spaces have been added for contingency meaning a total of **563** spaces need to be provided.

Figure 3.1 Parking accumulation – All staff using the passenger terminal access

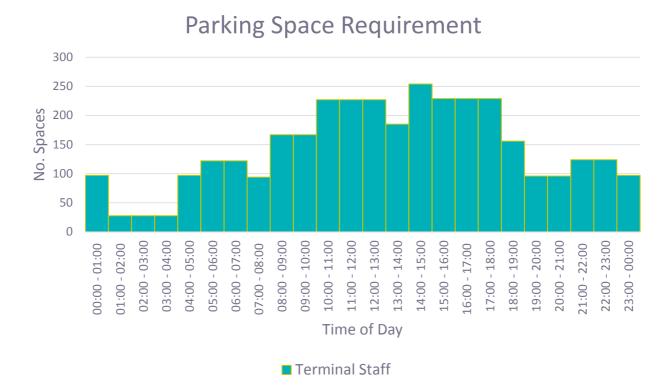
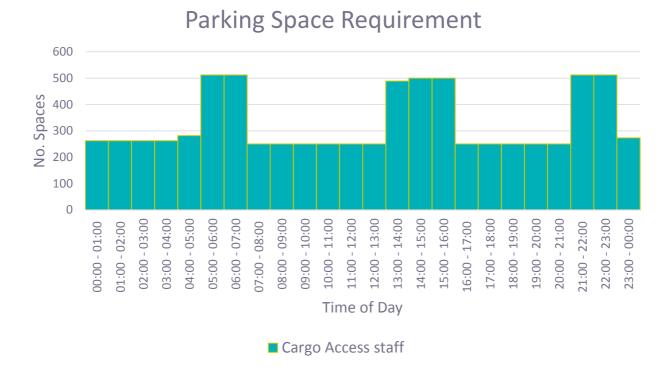


Figure 3.2 Parking accumulation – All staff using the cargo access



3.2 Masterplan Passenger Parking Allowance

The masterplan for the site provided with this development sets out staff car parking for the passenger terminal, associated airport operations and onsite and offsite cargo facility. The provision is as calculated above in section 3.1. Car parking provision for the airport staff set out in the site masterplan is set out in **Figure 1.1** (shown in in Volume 4 of the Environmental Statement).

3.3 HGV Parking at the Cargo Terminal

In addition to the car parking numbers set out above there is a requirement for HGV parking at the cargo terminal and this has also been displayed on the masterplan. The levels of HGV parking have been designed to support the proposed future activities at the cargo facility.

4. Northern Grass Area Car Parking

In 2011 National Parking Standards set out previously in PPG 13 and subsequently adapted or taken as was in local plans across England were abolished. The National Planning Policy Framework set out that

"Local planning authorities should only impose local parking standards for residential and nonresidential development where there is clear and compelling justification that it is necessary to manage their local road network."

It has however been standard practise to use the saved standards from PPG13 or other relevant local documents. In the case of Kent a narrative of the development of local parking standards is set out below.

KCC Parking Standards

Kent County Council's "Making it Happen" design guidance provides a series of technical appendices which provided advice on the design of various developments. The design guidance most appropriate for the proposed Northern Grass Area is "Making it Happen – Highways Design Standards (Residential and Industrial)". This document sets out the following for industrial areas with regards to parking;

"Parking must be in accordance with our latest "Vehicle Parking Standards". Security and convenience are important factors where vehicles or trailers are likely to be left for long periods. Accordingly, each individual unit will require sufficient parking facilities and loading areas, in order to prevent vehicles and trailers being left on the highway.

Indiscriminate parking on footways and roads can lead to problems with accessibility, and cause damage and inconvenience to highways users"

The vehicle parking standards are set out in Supplementary Planning Guidance (SPG) 4 (July 2006) set out the parking standards that should be applied to the proposed development coming forward on the Northern Grass area.

B1 Parking Standards

The KCC standards set out that the B1 classification should be used for office development, research and development and light industrial uses and these are sites which focus on high employment density as might be expected at the developments on the Northern Grass Area.

B1 Car Parking Standards

- The current masterplan for the northern grass area sets out an indicative layout of the proposed development and the associated parking provision.
- The current proposals for the site area as follows;
 - Total of 105,100 sqm gfa of which;
 - ▶ 26% is proposed to be B1 office developments (27,326 sqm); and
 - ▶ 74% is proposed to be B8 Warehousing (77,774 sgm).
- The B1 2006 Kent and Medway parking standards and the parking standard detailed in the emerging Thanet Local Plan are set out in **Table 4.1**.

Table 4.1 B1 Parking Standards from Kent and Medway (2006) and the emerging Thanet Local Plan

B1: Business	Kent and Medway	Thanet Local Plan
Offices up to 500m2	1 space per 20sqm	1 space per 20sqm
Offices 500m2 to 2500m2	1 space per 25sqm	1 space per 25sqm
Offices over 2500m2	1 space per 30sqm	1 space per 30sqm
High Tech/Research/Light industrial	1 Space per 35sqm	1 Space per 35sqm

- The current masterplan has 12 plots of proposed B1 class development. The following units are proposed B1 in the northern grass area site;
 - ▶ Unit 10 2600 sqm
 - ▶ Unit 11 3475 sqm
 - ▶ Unit 12 2520 sqm
 - ▶ Unit 13 1130 sqm
 - ▶ Unit 14 1720 sqm
 - ▶ Unit 15 1790 sqm
 - ▶ Unit 16 2900 sqm
 - ▶ Unit 17 2530 sqm
 - ▶ Unit 18 3,330 sqm
 - ▶ Unit 19 2600 sqm
 - ▶ Unit 20 2400 sqm
 - ▶ Unit 21 1090 sqm
- Table 4.2 sets out the parking provision which is required based on the Kent and Medway and Thanet Local Plan parking standards.

Table 4.2 B1 parking requirements from local authority parking standards

B1 unit	Kent and Medway/ Thanet Local Plan	
Unit 10	87	
Unit 11	116	
Unit 12	84	
Unit 13	45	
Unit 14	44	
Unit 15	72	
Unit 16	97	
Unit 17	84	
Unit 18	111	

Unit 19	87
Unit 20	96
Unit 21	69
Total	990

B8 Parking Standards

- The KCC standards set out that the B8 classification should be used for storage and distribution development and these are sites which focus on high employment density as might be expected at the developments on the Northern Grass Area.
- The current proposal is for 77,774sqm of B8 development in the northern grass area.
- The B8 2006 Kent and Medway and the Thanet Local Plan parking standards are set out in **table 4.3**.

Table 4.3 B8 Parking Standards from Kent and Medway (2006) and the Emerging Thanet Local Plan

B8 Storage and Distribution	Kent and Medway	Thanet Local Plan
Storage and Distribution	110sqm	110sqm
Wholesale Trade Distribution	35sqm	35sqm

- 4.1.14 The current masterplan has nine plots of B8 class development. This includes;
 - ▶ Unit 1 20800 sqm
 - ▶ Unit 2 3560 sqm;
 - ► Unit 3 5050 sqm;
 - ▶ Unit 4 7380 sqm;
 - ▶ Unit 5 8020sqm;
 - ▶ Unit 6 9540 sqm;
 - ▶ Unit 7 18520 sqm;
 - Unit 8 2600 sqm; and
 - ▶ Unit 9 2600 sqm.
- Table 4.4 sets out the parking provision in the number of parking spaces required based on the Kent and Medway and Thanet Local Plan parking standards.

Table 4.4 B8 parking requirements from local authority parking standards

B8 Unit	Kent and Medway/Thanet Local Plan
Unit 1	594
Unit 2	33
Unit 3	46

B8 Unit	Kent and Medway/Thanet Local Plan
Unit 4	67
Unit 5	73
Unit 6	87
Unit 7	168
Unit 8	24
Unit 9	24
Total	1115

Impaired Mobility

Local parking standards set out the requirements of the number of impaired mobility designated parking spaces which should be provided for a new development. These parking spaces are to be provided as part of the overall level of provision rather than an additional requirement. **Table 4.5** sets out the impaired mobility parking standards from the Kent and Medway guidance (2006).

Table 4.5 Impaired Mobility Parking Standards Kent and Medway (2006)

For employees and visitors to business premises (Land use classes A2, B1,B2 and B8)	Kent and Medway
Car parks up to 40 spaces	2 designated spaces + 1 space of sufficient size but not specifically designated.
Car parks with 40 to 200 spaces	4 designated spaces or 5% of the total capacity, whichever is greater
Car parks with Greater than 200 spaces	6 designated spaces + 2% of the total capacity

The standards applied the parking requirements of the northern grass development, as set out in **tables 4.2 and 4.4**, would generate an impaired mobility parking requirement, as set out in **table 4.6**.

Table 4.6 Impaired Mobility Parking Provision From Kent and Medway (2006) Guidance.

Unit	Kent and Medway/Thanet Local Plan	Kent and Medway Impaired Mobility Provision
Unit 1	594	18
Unit 2	33	2
Unit 3	46	4
Unit 4	67	4
Unit 5	73	6
Unit 6	87	4
Unit 7	168	8
Unit 8	24	2

Unit	Kent and Medway/Thanet Local Plan	Kent and Medway Impaired Mobility Provision
Unit 9	24	2
Unit 10	87	4
Unit 11	116	6
Unit 12	84	4
Unit 13	45	4
Unit 14	44	4
Unit 15	72	5
Unit 16	97	4
Unit 17	84	6
Unit 18	111	4
Unit 19	87	5
Unit 20	96	4
Unit 21	69	4

5. Car Park Strategy Summary

- This document has set out the initial estimates of car parking across the proposed development site. The parking provision required is varied and incorporates the needs of staff and passengers.
- 5.1.2 For passengers, the following car parking has been calculated for Manston Airport;
 - ▶ 150 Short Stay "drop off" parking spaces;
 - ▶ 1,665 longer term parking spaces; and
 - 1,815 total parking spaces required.
- 5.1.3 A large overflow car parking area is also proposed for the passenger terminal.
- 5.1.4 For Staff, the following car parking provision has been calculated for Manston Airport;
 - Car park spaces accessed via the Cargo Access 563; and
 - ▶ Car park spaces accessed via the Passenger Terminal Access 279.
- The report has also set out the anticipated car parking provision that would be required in the Northern Grass Area to support the mixed B1 and B8 industrial development provided to support the Airport operations.
- At this stage of the development the arrangements for car park management, particularly of the passenger terminal have not been established. If the airport is approved for construction and agreements made with carriers and flight schedules understood, the internal operations of these car parks will be developed and confirmed with KCC. However, the operation of the car park at the passenger terminal will be based on best practices from airports across the world based on the RSPs experience elsewhere.







RiverOak Strategic Partners

Manston Airport DCO

TA Appendix O - Airport Surface Access Strategy



Report for

George Yerrall RiverOak Strategic Partners Audley House London W1K 6WF

Main contributors

Liam Garden Glyn Price Bev Coupe

Issued by

Glyn Price

Approved by

Bev Coupe

Amec Foster Wheeler

Floor 12 25 Canada Square Canary Wharf London E14 5LB United Kingdom Tel +44 (0) 203 215 1610

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Document revisions

No.	Details	Date
0.1	Draft	November 2017
0.5	Draft for Review	February 2018
1	Final Draft	March 2018

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1. Introduction

1.1 Background

- RiverOak Strategic Partners Limited (RiverOak) is seeking to secure the future of Manston Airport as a valuable regional and national asset by redeveloping the Manston Airport site as a freight airport. The proposals will provide much needed additional air freight capacity to the United Kingdom and also serve to relieve pressure from the other, already heavily congested, London and South East airports.
- Under the Planning Act 2008 (the 2008 Act) the redevelopment of Manston Airport as a freight airport is considered a Nationally Significant Infrastructure Project (NSIP). RiverOak is making an application under the Act for a permission known as a 'Development Consent Order' ('DCO') to construct and operate Manston Airport. The application will be submitted to the Planning Inspectorate which will examine it and make a recommendation to the Secretary of State for Transport, who will then make a decision on whether the Project is granted consent.
- This Airport Surface Access Strategy ('ASAS') is one of a suite of documents which have been produced in the support of the DCO application, which includes a Transport Assessment (TA) and Environmental Statement (ES). Alongside the Travel Plan, the ASAS forms the long-term access and sustainable transport strategy for both staff and passengers. The ASAS takes into consideration the guidance set out in the Department for Transport's (DfT) *Aviation Policy Framework*, 2013.

1.2 Overview

- The site is located to the west of Ramsgate in the district of Thanet, East Kent and covers an area of approximately 3km.
- There has been an operational airport at the Proposed Development site since 1916. Until 1998 it was operated by the Royal Air Force (RAF) as RAF Manston, and for a period in the 1950s was also a base for the United States Air Force (USAF).
- From 1998 it was operated as a private commercial airport, known as Kent International Airport. The airport offered a range of services including scheduled passenger flights, charter flights, air freight and cargo, a flight training school, flight crew training and aircraft testing. In recent years it was operating as a specialist air freight and cargo hub servicing a range of operators. Although the airport was closed in May 2014, much of the airport infrastructure, including the runway, taxiways, aprons, cargo facilities and passenger terminal remain.
- The Proposed Development shall consist of the following principal components, as shown in **Figure 1.1**:
 - Runways and taxiways suitable for the take-off and landing of a broad range of cargo aircraft;
 - an area for cargo freight operations able to handle at least 10,000 movements per year and associated infrastructure, including;
 - a new Air Traffic Control (ATC) tower;
 - a fire station;
 - a fuel farm; and
 - facilities for other airport-related development, including:
 - a passenger terminal and associated facilities;

- an aircraft teardown and recycling facility;
- a flight training school;
- a base for at least one passenger carrier;
- a fixed base operation for executive travel; and
- business facilities for airport related organisations.

1.3 Need for a Surface Access Strategy

- Good surface access and transport connections are crucial to any airport growth strategy, with impacts on: traffic congestion on the local network; the economic and environmental sustainability of the airport; and general customer satisfaction. As passenger numbers grow, sustainable access would therefore require the reduction of reliance in private car use, placing the emphasis on public transport.
- The primary focus of the airport would be on air freight and cargo operations, but as detailed below it is anticipated that there would be passenger services from Year 3 of the airport's operation, culminating in an anticipated 9,298 air transport movements (ATM) per year in Year 20 of operation.
- 1.3.3 In accordance with the DfT Aviation Policy Framework, an ASAS should aim to set out:
 - Targets for increasing the proportion of staff and passengers accessing the airport by sustainable transport.
 - Details of the strategic approach used to achieve these targets
 - A strategy for implementation and monitoring the strategy.
- The focus of the ASAS is on multi-modal access to the airport as a way to reduce the environmental impact of the airport and its impact on the neighbouring communities. An understanding of the catchment area that both passengers and staff are likely to derive from is included in this strategy.

1.4 Structure of the ASAS

- 1.4.1 The ASAS is set out as follows:
 - Chapter 2 Aims and Objectives;
 - Chapter 3 Existing Surface Access Arrangements;
 - Chapter 4 Future Surface Access Arrangements; and
 - Chapter 5 Targets

Aims and Objectives

2.1 Aims

- The ASAS sets out the measures that the airport can take to meet accessibility and sustainability objectives. This will require:
 - integration with the wider transport network;
 - ensuring connectivity to serve the needs of East Kent and the surrounding area;
 - supporting economic growth in the region; and
 - reducing the carbon footprint of the airport.

2.2 Objectives

- 2.2.1 In order to achieve the aims identified above, the ASAS has the following objectives:
 - to minimise the number of trips made by single occupancy vehicles.
 - to facilitate sustainable access to employment opportunities from the surrounding areas by ensuring easy, reliable and efficient access to the airport.
 - to maximise the number of trips being made by public transport, with a target of 25% of all passenger trips and 10% of passenger trips by year 20 of operation.
- This ASAS has been developed as part of the suite of Traffic and Transport documents in support of the DCO submission and identifies suitable embedded measures which should be incorporated into the design of the scheme. The new elements to be constructed as part of this will include:
 - traffic calming on less desirable routes;
 - increased and enhanced facilities for taxis, buses and coaches for passengers and staff;
 - a network of internal footpaths and cycle paths for staff use;
 - upgrade and/or enhancement of existing pedestrian and cycle provisions within the vicinity of the airport site; and
 - additional public service bus stops, and public bus service frequency and route changes (to be agreed with the local authority and bus route operators).

3. Existing Surface Access Arrangements

3.1 Introduction

- 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. 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.
- This section sets out the existing surface access arrangements by all forms of transport and includes information on passenger numbers when the Airport was last operational.

3.2 Previous Airport Passenger Numbers

Between 2000 and 2014, when the airport ceased operation, the number of passengers using the airport fluctuated significantly. Error! Reference source not found. shows the number of passengers per year at Manston/Kent International Airport up until the airports closure in 2014 (CAA). The peak year for passenger movements in this period occurred in 2005 when the Irish low-cost carrier EUJet had its hub at Manston Airport. However, the company went out of business in July 2005, hence the subsequent drop in passenger numbers.

Figure 3.1 Passenger demand at Manston/Kent International Airport 2000-2014



3.3 Road Network

The site has good road access with links to Canterbury to the south west, Ramsgate to the east and Dover to the south. It is in close proximity to two Primary Road Network (PRN) routes: the

A299, which runs along the southern boundary of the site, is a two-lane dual carriageway which links to the M2 in the west; and the A28 to the west of the site which provides a link to Canterbury. Access to the site from the A299 is via the B2190 Spitfire Way and the B2050 Manston Road which runs adjacent to the site and links to the south western side of Ramsgate. The local road network is shown in **Figure 3.2.**

- The main access to the Airport Terminal is currently in the form of a priority T junction off the B2050 Manston Road. Consideration would need to be given as to whether the junction arrangement would need to be upgraded to accommodate an intensification of use, particularly if the focus of the airport is on freight transit.
- The locations which can reach the airport by car within 30, 45 and 60 minutes are highlighted in Error! Reference source not found.**3.3**. Coupling this with mid-term census population estimates (ONS, 2015) gives the following population in each catchment as shown in **Table 4.1**

Table 4.1	Population	within	each	threshold	(ONS,	2015)
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Drive time	Population	Population Centres
Within 30 minutes	411,930	Ramsgate; Margate; Canterbury; Dover; Deal
Within 45 minutes	697,347	Folkstone; Ashford; Sittingbourne
Within 60 minutes	1,350,398	Gillingham; Maidstone

3.4 Public Transport Provision

Bus Services

- Bus services 11, 38 and 38A currently operate along Spitfire Way and Manston Road that bound the site. There are two pairs of bus stops provided along the site boundary, one set on Minster Road to the southwest of the site and one along Spitfire Way at Spitfire Corner. A further bus stop is provided outside of the former terminal building. Facilities at these bus stops are limited with flag poles and timetable information at some stops and a shelter provided on Spitfire Way.
- Bus routes 9 and 9X operate services along Canterbury Road West to the southeast of the site and a pair of bus stops are provided along this road to the south of the eastern extents of the site. These stops feature bus stop flags and timetable information. The frequency of bus services in the vicinity of the site is summarised in **Table 3.2**.

Table 3.2 Bus Services, Frequencies and Routes in the Vicinity of the Site

Service	Destinations	Weekday Frequency Per Day Outbound	Weekday Frequency Per Day Inbound	First/Last Bus Outbound	First/Last Bus Inbound
9	Westwood Cross -Canterbury	11	14	06:18 / 16:42	08:45 / 18:15
11	Canterbury –Westwood Cross	5	5	10:51 /18:41	07:04 / 16:05
38	Ramsgate –Birchington on Sea	13	14	07:46 / 17:36	08:38 / 17:52
38A	Ramsgate – St Nicholas at Ware	4	2	07:11 / 16:13	07:55 / 07:55

The location of bus stops and bus routes are illustrated in **Figure 3.4**.

- The 9 and 9X routes run between Canterbury and Westwood Cross. The services combine to provide approximately one service per hour in either direction during the day. The 9X service provides one AM peak hour service towards Canterbury however there are no AM peak hour services provided in the opposite direction towards Westwood Cross.
- The 38 and 38A routes run between Ramsgate and Birchington and combine to provide a service with a headway of approximately one hour during the day. One AM peak hour service is provided from Birchington to Ramsgate via the site, however there are no AM peak hour services provided in the opposite direction.
- Bus route 11 runs between Canterbury and Westwood Cross and operates with a headway of two to three hours throughout the day with no peak hour services.
- An assessment of the suitability of the destinations served by existing bus routes has been undertaken to understand whether the existing routes would be sufficient to serve the development. An interrogation of Census 2011 Journey to Work data has been undertaken to identify where employees of the site historically have travelled from. The site is located within the Thanet 014A lower-Level Super Output Area and analysis of the journey to work travel patterns for this lower layer indicates distributions as set out in **Table 3.3**.

Table 3.3 Distribution of Census 2011 Journey to Work Trips

Origin	Distribution	Origin	Distribution	Origin	Distribution	Origin	Distribution
Thanet District	70.1%	Dover District	11%	Canterbury District	8.4%	Other	10.1%
Birchington- on-Sea	4.9%	Sandwich	1.1%	Canterbury	1.5%		
Westgate- on-Sea	5.3%	Deal	4.0%	Hernebay	3.1%		
Garlinge	2.5%	Dover	2.1%	Whitstable	1.6%		
Margate	7.1%	Other	16.5%	Other	2.2%		
Northdown	3.4%						
Kingsgate	3.3%						
Broadstairs	7.9%						
Ramsgate	12.9%						
St Lawrence	4.1%						
Newington	5.2%						
Northwood	2.6%						
Cliffsend	2.0%						
Minster	2.9%						
Other	5.9%						

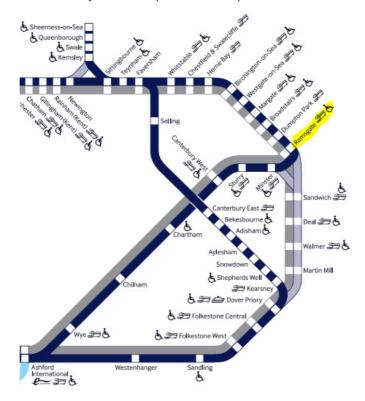
The bus routes available within the vicinity of the site serve Ramsgate, Broadstairs, Westwood Cross (near Northwood), Birchington-on-Sea and Canterbury and may therefore offer an alternative to the private car for 45% of journeys to work subject to appropriate service timing enhancements and assuming that the potential employees originate in similar locations. The bus service coverage is therefore considered to be reasonable and suitable as a starting point to serve the development on the site subject to appropriate re-routing and increases in frequency.

Rail Services

- The closest railway stations to the site are Ramsgate station located approximately 4km to the east and Minster station approximately 2km to the south of the boundary of the site. Ramsgate station is operated by Southeastern and benefits from access to both high speed and standard services. A wide range of destinations across Kent are accessible directly from Ramsgate including Dover, Folkestone, Canterbury, Ashford and the Medway Towns with onwards travel to London St Pancras, Charing Cross and Victoria.
- Access to high speed services from Ramsgate are provided via two routes. The first provides an hourly service to London St Pancras via Canterbury West with a journey time of approximately 80 minutes. A further north Kent loop service travels via Whitstable, Sittingbourne and the Medway Towns and takes approximately 110 minutes to reach London. Combined these services provide trains to/from London on a 30-minute frequency throughout the day. Ramsgate Station is also served by an hourly standard service train to London Charing Cross via Canterbury West, and one train an hour to London Victoria via Sittingbourne and Bromley South. The station is served by bus route 11 and therefore connects the proposed development site to the station.

- Minster Station is located approximately 2km south of the southwest corner of the site and is considered accessible by cycling and bus routes 38A and 11. Minster train station provides one train per hour to London Charing Cross (via Canterbury). However, the station does not offer access to high speed services making this station less attractive for access to rail based public transport.
- 3.4.12 Figure 3.5 shows the rail network in the vicinity of the Proposed Development.

Figure 3.5 Rail network in the vicinity of the Proposed Development



- Error! Reference source not found. shows the locations accessible within an hour from the airport using public transport. This accounts for the frequency of the service, and any interchanges required.
- 122,259 people can access the airport within 60 minutes using public transport, less than 10% of the population which can reach the airport by car
- Future proposals for 'Thanet Parkway Station' to the south of the site, planned for 2020, will provide further enhanced rail connections and access to Kent's high-speed rail services.
- Thanet Parkway station is part of a wider package of improvements on the Ramsgate to Ashford line that aims to reduce journey times to London from Ramsgate to around one hour. This two-phase project is broken down as follows:
 - Phase 1 Ashford to Canterbury West; and
 - Phase 2 Canterbury West to Ramsgate.
- Reduced journey times to London will greatly enhance the accessibility of Thanet as a whole and provide access to London within approximately one hour.
- 3.4.18 It should be noted however that at this stage no firm plans for the delivery of this station are in place and it is purely aspirational.

3.5 Pedestrian Infrastructure

- The Chartered Institute of Highways and Transportation (CIHT) guidelines 'Providing for Journeys on Foot' (2000) provides details on acceptable walking distances. For commuting the guidelines state that a distance of up to 500 metres is considered to be desirable, whilst one kilometre and two kilometres are considered to be acceptable and preferred maximum walking distances. These distances have been used when assessing pedestrian infrastructure in the vicinity of the site.
- There are currently limited facilities for pedestrians on the highway network in the vicinity of the site. The B2050 which intersects the site has no pedestrian footway provision along the site frontage. Where the B2050 Manston Road bisects the village of Manston, a footway is provided on the northern side of the carriageway. The village of Manston is some 800m east of the site access, which is considered to be an acceptable distance to travel on foot or by bicycle. However, it is acknowledged that pedestrian infrastructure in the area is limited.
- There are no pedestrian facilities provided along Spitfire Way which bounds the site in the west with the exception of a short section of shared cycle/footway near the Manston Business Park and a footway between Bell Davies Drive and Spitfire Corner. There is a section of informal shared cycle/footway adjacent to the A299 Hengist Way which bounds the site to the south. This connects the Minster roundabout with the old Canterbury Road West highway with some amenity for pedestrians and cyclists wishing to travel along the southern boundary.
- There are footways in the vicinity of the Minster roundabout and a toucan (pedestrian and cycle) crossing across the A299 Hengist Way linking the southwestern corner of the site to Minster and the Viking Coastal Trail to the south. However, provision is disjointed and overall pedestrian infrastructure is considered limited.
- In addition to the provision of some footways adjacent to highways in the local area, there is a network of Public Rights of Way (PRoW) comprising public bridleways and public footpaths in the vicinity of the site. Most notably the TR8, 9 and 10 which pass through the proposed site and connects the east of the site with Ramsgate.
- Figure 3.7 shows the sections of footway noted above, the crossings and the PRoWs in the vicinity of the site along with walking isochrones for 2km from the centre of the site.
- There will be limited opportunities for walking to the airport for staff and passengers, other than those originating from the village of Manston, or potentially Minster.

3.6 Cycling Infrastructure

- The Department for Transport (DfT) Local Transport Note 2/08 'Cycling Infrastructure Design' states that many utility cycle trips are less than three miles (4.8km), but for commuter journeys a distance of over five miles (8km) is not uncommon. Distances of up to 8km have been used to define the study area for cycle infrastructure.
- No formal cycle facilities are available along Manston Road; however a local on-road route is located along Spratling Street, Haine Road and Stirling Way, providing access to Westwood Cross and Newington. Although there are no cycle facilities provided on Spitfire Way, a shared cycle/footway is provided from the Manston Business Park through to the Minster roundabout. At this junction a toucan crossing is provided to facilitate cycle connections south towards Minster village and west along the A299. A section of shared cycle/footway is provided between the Minster roundabout and the old highway of Canterbury Road West to the immediate south of the site.
- The nearest National Cycle Network (NCN) route identified by Sustrans is Regional Route 15 (RR15), located 800m (crowfly distance) south of the site's southern boundary. Regional Route 15 is also known as the Viking Trail and runs from St Nicholas At Wade and follows the coast north east through Ramsgate, Margate and Broadstairs and southeast to Whitfield and Dover. A plan illustrating the Sustrans cycle routes in the vicinity of the site and cycle isochrone representing an

8km journey from the centre of the site are illustrated in **Figure 3.8**. This plan illustrates that a number of villages and towns are accessible within 8km of the site.

Population data from 2016 shows that approximately 140,000 people live within 8km of the airport, a reasonable distance for cycling to have a comparative advantage over travel by private vehicle.

4. Future Surface Access Arrangements

4.1 Demand Forecast

- Details of the proposed passenger flight schedules for the first twenty years of operation have been used to estimate the combined inbound and outbound demand at the airport.
- The expected passenger growth during this time is illustrated in Error! Reference source not found.**4.1.**

Figure 4.1 Forecast Growth in Passenger Numbers (boarding and terminating passengers)



It is anticipated that by 2038 (Year 20 of operation), the number of passengers will be 1,407,753 accommodated by 9,298 ATM per year. **Table 4.1** gives the estimated breakdown of passengers by flight.

Table 4.1 Annual Demand Forecast by Flight (year 20)

Operator	ATM/Year	Pax/Flight	Pax/Year
KLM	1,456	52	75,712
Charter Market	178	135	23,980
Blue Air	237	170	40,286
Cruise Flights (and Florida)	154	198	30,481
Ryan Air	7,274	170	1,237,294
Total	9,298		1,407,753

By Year 20, this forecast would place the airport at similar passenger levels experienced by Cardiff Airport and Southampton Airport in 2016.

4.2 Catchment Area

Outbound Trips

- Manston Airport will predominately cater for passengers living in Kent, within 60 minutes travel time to the airport. This area includes the towns in Thanet, Dover, Canterbury, Ashford and Maidstone amongst others. There are currently no major airports within 50km of the proposed site. The major London hubs at Heathrow and Gatwick are over 100km away, as shown in Error! Reference source not found..
- Approximately 1.4 million people are within a 60-minute drive to the airport (ONS, 2015). This includes the towns of Ramsgate, Margate, Canterbury, Dover, and Deal (within 30 minutes); Ashford, Folkestone, Sittingbourne (within 45 minutes); Maidstone and Gillingham (within 60 minutes). These locations are likely to be where the majority of staff and passengers originate from.
- The Lower Thames Crossing, to be constructed east of Gravesend, opens up the possibility of expanding the catchment area into Essex and directly competing with Southend airport.

Inbound Trips

The proposed development of a major attraction park in Dartford (formally known as Paramount Studios) creates a potential major trip generator for inbound flights to the airport, although this is 80km away from the airports, and closer to Southend.

4.3 Surface Access Infrastructure

- Additional parking facilities, public transport improvements and cycling/walking infrastructure will be required to meet the surface access demands of the 1,407,753 passengers forecast to use the airport in Year 20. This equates to approximately 3,856 pax/day.
- The physical transportation components, that are a feature of the passenger terminal area of the Proposed Development are as follows:
 - New passenger car park of;
 - ▶ 150 Short Stay "drop off" parking spaces;
 - ▶ 1,665 longer term parking spaces;
 - ▶ 1,815 total parking spaces required; and
 - ▶ Additional "overflow" car park spaces for passengers.
 - New staff car parks at the cargo access and main airport terminal access of;
 - ▶ 279 staff spaces at the main airport terminal access; and
 - ▶ 563 staff spaces at the cargo access;
 - Car parks designed to relevant local car paring standards for the Northern Grass Area B1/B8 business unties;
 - Sufficient disabled parking spaces to meet the relevant design standards;
 - Taxi drop-off and pick-up bays;
 - Two bus stops;
 - ▶ The extension and increase of bus routes, including the introduction of a shuttle service between Ramsgate rail station and a shared taxi scheme; and
 - Associated pedestrian and cycle infrastructure within the site.

4.4 Car Parking Strategy

- One of the main comparative advantages that Manston airport has over the other airports in the south east of England, will be to offer the people of Kent an airport that can be accessed without the need to travel through London or the heavily congested M25 and other radial routes. For drivers, this will lead to improvements in journey time reliability.
- Availability of adequate and well-priced car parking facilities is therefore a vital aspect of the strategy to attract this section of the market. Ensuring easy, reliable access for staff is also important for workforce retention.

Quantity of spaces

- The provision of car parking spaces has been determined by the volume of passengers and staff numbers the airport is expected to accommodate in Year 20. A detailed breakdown of the calculations and assumptions used to inform this methodology is set out in the Car Park Management Strategy. Prepared to support the TA.
- Based on the breakdown of flights, analysis of shift patterns and future calculated traffic generation a total provision of 2,657 spaces is anticipated, with additional space for passenger overflow parking also required. The parking is split as follows;
 - ▶ 1,815 spaces allocated for passengers, a mixture of long stay, short stay and drop-off spaces;
 - 279 staff parking spaces for employees based in the terminal building; and
 - ▶ 563 staff parking spaces for employees working on the cargo sites, situated away from the main terminal building and accessed via the proposed new cargo access.

Location of spaces

Short stay spaces will be located near to the entrance to the terminal, to minimise the walking distance. These will be priced for passengers who park for less than 24 hours at the airport. Long term spaces can be located further away from the terminal in a secure location. Drop off spaces will be located close to the short term parking.

Parking charges

As mentioned above, the main advantage that Manston airport can have over other airports, is the reliable access by car. Parking charges will be set at a level which is competitive with other airports in the South East.

Staff

Two car parks will be assigned for staff use only, one for staff working in the terminal, and one for cargo staff. It is not recommended that parking charges be introduced for staff, as this could have a negative effect in staff retention. The staff car parks, as set out in the masterplan, are located in areas where safe and convenient access to the relevant work areas can be achieved with a focus on disabled spaces being the closest to buildings.

4.5 Road Improvements

- To facilitate safe, convenient and appropriate access to the proposed airport terminal a series of road improvements have been provided for the local highways network as follows;
 - Widening of Spitfire Way between Columbus Avenue and Manston Road to a 7.3m wide carriageway;

- Widening of Manston Road between Spitfire Way and the Airport Terminal Access to a 7.3m wide carriageway;
- A new signalised junction at the junction of Manston Road and Spitfire Way with pedestrian facilities:
- A new signalised junction which links the two close adjacent junctions with Manston Road/Manston Court Road and the Airport Terminal Access; and
- Improvements to pedestrian footways alongside Manston Road and Spitfire Way.
- These improvement schemes are provided on the masterplan to support the DCO, further details of the design and modelling of these improvements are set out in the Transport Assessment.

4.6 Pedestrian and Cycle Access Strategy

- Passengers are unlikely to consider walking or cycling to the airport as a viable option, given the experience from other UK airports.
- There is more potential to encourage staff to commute to the airport using active travel modes. The towns of Ramsgate, Broadstairs and Margate are all within 8km of the airport, which is considered appropriate cycling distance. This area has a population of around 140,000 people.
- To encourage cycling to work, a number of infrastructure developments are recommended, as identified in the Travel Plan. These include:
 - Cycle and walking routes extended to the entrances of the terminal building;
 - On-site provision of showers; changing rooms; and secure parking facilities; and
 - Methods to promote cycling such as: an interest-free bike loan; bicycle hire schemes; and maintenance workshops.

4.7 Public Transport Strategy

Bus Network

- The current operation and capacity of the local bus routes is insufficient to meet the 6% modal share in year 20. It is therefore proposed to enhance the bus service provision by:
 - increasing the frequency of services to the Airport;
 - extending bus operating times; and
 - introducing new routes and extending existing provision to service the airport.
- The existing routes link Manston to Canterbury and Ramsgate. These services will be retained, but to increase their viability as a mode of transport to access the airport, these will have a higher frequency of at least 2 buses per hour. An additional service could also run between Margate and the airport, to accommodate demand generated from there.
- The Proposed Development has an internal road arrangement which will allow buses to route into the site with bus stop facilities outside the passenger terminal as close as can be accommodated with the safety arrangements that are required. For destinations further than Canterbury, rail would be the more likely mode choice and will be supported by the introduction of a high quality bus shuttle service linking Ramsgate station to Manston Airport. Coach services could also replace the bus services for longer distance journeys, as described in the following section. Rail Network
- The proximity of Ramsgate rail station offers the opportunity to connect the airport to the wider Kent area by rail. For this to be viable, a shuttle service will run between Ramsgate station and the

- Airport. This will comprise small, single deck vehicles with a capacity of 20-40 passengers to facilitate a quick turnaround.
- The cost of the service will either be included in the rail ticket or the plane ticket, to avoid passengers having to purchase additional tickets and ensure a smooth transition between the rail services and the shuttle.
- The times and frequency of the shuttle should be closely integrated with the rail services arriving and departing from the station, and the inbound flight timetable. This would avoid excessive waiting at the station and help to create a seamless interchange for passengers. The final timings will need to be developed however nearer the time of the service being installed as train timetables are likely to change from what is currently timetabled.
- Ramsgate station already has a high-quality bus station on Station Approach Road outside the main entrance to the station, and it is proposed that this is used as the terminus for services to and from the airport. There may be the need for some small scale improvements at the station as a result of instigating this service, and discussions with Network Rail will be undertaken to agree the best form of support for the services to all modes for an almost seamless transition between rail and bus.

Coaches

Coach travel is aimed at pre-organised group travel, population centres that are not served by rail. It can also offer a cheaper alternative to rail travel. For a successful strategy to be employed, it is proposed that an infrequent service run from London. The timings of which should be tied into the airline schedule. One or two pickup points along the way, in Maidstone or Canterbury, would help to maximise the viability of this service.

Shared Taxis

- A shared taxi service offers a flexible public transport solution for staff and passengers. This can either be a demand responsive service, with options to book in advance from home, hotel or from the airport, or a walk-up service where passengers wait until the vehicle is full before departing. This would typically accommodate 6-8 passengers per journey.
- This option can help to fill in any gaps in the public transport offering, both spatially and temporally, whilst being cheaper than an individual taxi. Shared taxis would be an inclusive option for staff whose shifts begin or end outside of the window that bus services cater for. It will also provide a public transport option to passengers with restricted mobility who might not otherwise be able to access a bus service.

5. Targets

5.1 Passenger Modal Share

- As the airport is not operational, there is no current modal share data available for passenger flights. Based on observed experience from other UK airports and analysis of the future transport options, assumptions have been made regarding the base case modal shares. This has been used to inform the future year 10 and year 20 targets, as set out in Table **5.1**.
- It is assumed that through travel plan measures and the introduction of new infrastructure developments, the percentage of travel by sustainable modes will increase, as set out in **Table 5.1**.

Table 5.1 Modal Share Assumptions and Targets

Mode of Transport	Base Year	10 Years	20 Years
Bus	3%	6%	9%
taxi	5%	5%	5%
car parked	45%	40%	35%
car drop off	45%	40%	35%
Rail (then bus)	-	5%	10%
Shared taxi (PT)	2%	4%	6%
TOTAL	100%	100%	100%

- The initial mode shares in Table 5.1 are based on those typical for smaller airports (i.e. less than 2mppa) in:
 - Rural locations,
 - Away from major population centres
 - With functional (but not direct) trunk road access (i.e. it is accessible within a few miles on A or B class roads)
 - No proximate rail station making bus and shared taxi modes
 - Mainly outbound, but also with niche tourism opportunity, and
 - Locations where a car parking strategy which seeks to balance the need for the airport to raise revenue with incentives to passengers and staff to use public transport along corridors, offering sufficient demand where it is convenient for them to do so.
- Newquay, Cardiff, Exeter, Inverness, Durham Tees Valley, Norwich and City of Derry are all useful potential benchmarks for the assumed 'base' mode split and future year targets.
- Data available from the CAA details public transport splits observed at a sample of UK airports, as shown in Error! Reference source not found. **Figure 5.1.** Airports where there is not a direct rail service are highlighted.

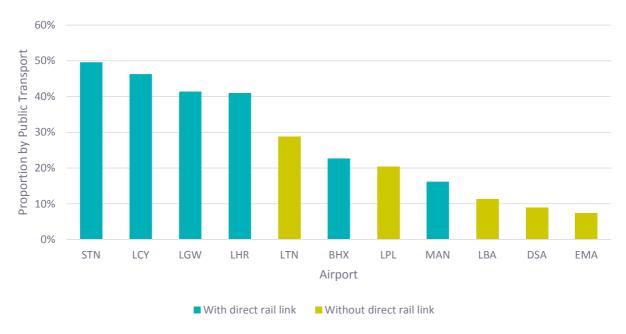


Figure 5.1 Proportion of Passengers Travelling by Public Transport at UK Airports (CAA,2014)

- The initial public transport modal share for Manston, is expected to be relatively low, with a forecast of 5% of passengers likely to use either the bus or shared taxis. The shuttle bus service from Ramsgate station will not be operational during the initial year.
- The Year 20 forecast 25% modal share, would result in Manston Airport having similar level of public transport usage to Luton Airport, the highest level for an airport without a direct rail link. Luton operates a shuttle bus service from the nearby station, similar to what is proposed between Manston airport and Ramsgate.

5.2 Staff Modal Share

- The airport is expected to support 1,250 jobs directly, within the terminal building and air fields.
- 5.2.2 2011 Census data suggests that for travel to work in Thanet, the overall mode split is 71% of passengers using private motorised vehicles or taxis to access their workplace.
- However, in the area that includes Manston airport, the split for travel to work by car is 84%, owing to the rural surroundings the airport is located in. The 2011 travel to work statistics for Thanet and Manston are given in Error! Reference source not found..2.

Table 5.2 Travel to Work Splits

Mode	Thanet District	Manston (MSOA)
Car (driver, passenger, motorcycle, taxi)	71%	85.5%
Public transport	9%	3.5%
Active travel	20%	10.5%

5.2.4

- A base and future targeted modal share has been developed for the proposed Manston development. This has been developed with the following in mind;
 - Mode split for Staff (especially at small airports) is highly dependent on geography, shift patterns and company policy to discourage car access/encourage public transport use. The

- dominant geographical consideration is the extent to which airport employees, or those working for companies based on the airport, live in settlements within easy walking or cycling distance, or along good public transport corridors to large urban areas; there is undoubtedly a decay function with distance, but this is tempered where buses or trains are regular, run early in the morning and late at night, and provide easy and cost-effective point to point journey; and
- ▶ The airport and its tenant companies can influence the underlying geographical and economic dynamics, either by increasing constraints (e.g. staff parking places where parking overall is in short supply) or introducing incentives (changing facilities for those walking or cycling), support for season tickets, allowances for buying cycling equipment or bonuses for non-car use.
- Deals with taxi operators to get staff home at night or to the airport in the morning by co-ordinating the inbound and outbound journeys of airport-based taxis can also be effective.
- The base case modal share and targets for staff travel are given in **Table 5.3** and this sets low initial thresholds. This will allow for initial recruitment of staff, the pattern and distribution of staff journey to work movements to become stablished, and agreements to be reached with operators and employees before company policies are rolled out. But it does set ambitious targets by comparison to other small rural airports in the medium and longer term.

Table 5.3 Base Case and Target Travel to Work Modal Splits

	Initial	10 Years	20 Years
Car	97%	92%	87%
Bus	2%	4%	6%
Walking or cycling	1%	2%	3%
Rail (with bus link)	0%	2%	4%

Based on the forecast modal splits, the average daily demand across the 20 year period accessing the airport by each mode is shown in **Figure 5.2.**

Figure 5.2 Staff Daily Trips by Mode

