London Ashford Airport (Lydd) Supplementary Information

Overview of Applications and Supporting Materials submitted to Shepway District Council in respect of planning applications Y06/1647/SH and Y06/1648/SH to March 2009

Volume 1 of 5

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Volume 1 of 5

March 2009

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1. Overview and Inspection of Documents

- 1.1. In December 2006, London Ashford Airport Limited ("LAA") submitted two planning applications, one for a new terminal building and another for a runway extension at London Ashford Airport (Lydd). These applications were registered by the local planning authority, Shepway District Council ("SDC"), on 22 December 2006 and given reference numbers Y06/1647/SH and Y06/1648/SH respectively (the "Applications").
- 1.2. Following consultation that took place at the beginning of 2007, LAA submitted in October 2007 "Response to Consultation, Supplementary Environmental Information and Statements to Inform" to further support the Applications.
- 1.3. Following further public consultation that took place during Autumn/Winter 2007, SDC requested information for clarification on 5 March 2008. Pursuant to that request, LAA submitted in August 2008 "Supplementary Information and Supplementary Environmental Information" to further support the Applications.
- 1.4. During Autumn/Winter 2008 public consultation took place on the August 2008 Supplementary Information. This March 2009 submission is in response to that consultation and consists of the following reports:-
 - Overview of Applications and Supporting Materials submitted to Shepway District Council
 Volume 1;
 - Non-Technical Summary of Environmental Reports Volume 2;
 - Socio-Economic Update 2009 (Runway Extension and Terminal Building) Volume 3, Appendix 1;
 - Aircraft Crash Risk to Dungeness Nuclear Power Stations (Runway Extension and Terminal Building) – Volume 3, Appendix 2;
 - Community Noise Assessment (Runway Extension) Volume 4, Appendix 3;
 - Community Noise Assessment (Terminal Building) Volume 4, Appendix 4;
 - Surface Water Drainage Strategy (Runway Extension) Volume 5, Appendix 5;
 - Proposed Foul Water Solutions (Terminal Building) Volume 5, Appendix 6
- 1.5. The "Supplementary Information and Supplementary Environmental Information, March 2009", which comprises 5 volumes, will be subject to further public consultation and has been placed on deposit at the following addresses, where it may be examined by members of the public during the hours of 9.00am to 5.00pm Monday to Friday:

Planning Department	London Ashford Airport (Lydd)
Shepway District Council	Lydd
Civic Centre	Kent
Castle Hill Avenue	TN29 9QL
Folkestone	
Kent	
CT20 2QY	

1.6. Hard copies and/or CDs of this document have also been issued direct to the following



bodies:-

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SEEDA Headquarters	CABE
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GU1 1YA	WC2B 4AN
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Spectrum House	Room 2.67
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English Heritage (South East Region)	Richard Moyse
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	Planning Department
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High Street Snodland	Canterbury City Council
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1.7. Members of the public may also wish to review the previous planning application documents to Y06/1647/SH and Y06/1648/SH and their accompanying 2006 Environmental Statements and 2007 and 2008 Supplementary Information (as referred to in paragraphs 1.1, 1.2 and 1.3 above). Copies of these documents can be viewed at the following addresses, where they may be examined by members of the public during the hours of 9.00am to 5.00pm Monday to Friday:-

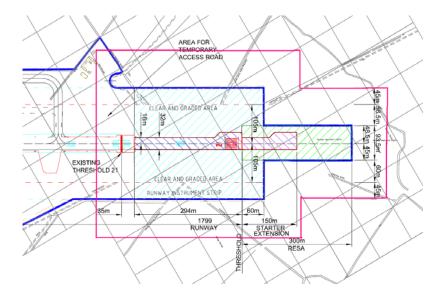
Planning Department Shepway District Council Civic Centre Castle Hill Avenue	London Ashford Airport (Lydd) Lydd Kent TN29 9QL
Folkestone Kent	
CT20 2QY	

- 1.8. Printed copies and CDs of the "Supplementary Information and Supplementary Environmental Information, March 2009" may be obtained by writing to LAA's planning consultants, Indigo Planning, at the following address:-
 - Indigo Planning Swan Court London Worple Road SW19 4JS
- 1.9. A reasonable discretionary charge may be requested for each printed copy or CD of the "Supplementary Information and Supplementary Environmental Information, March 2009".

2. Brief Summary of Planning Applications

Planning Application for Runway Extension (YO6/1648/SH)

- 2.1. In December 2006, LAA submitted to SDC a full planning application for the construction of a runway extension at London Ashford Airport (Lydd). The runway extension includes the following components:
 - An extension of the existing north-south runway (Runway 03/21) of 294 metres of additional pavement to its northern end, taking its length from 1,505m to 1,799 metres.
 - A 150 metre 'starter extension' north east of the threshold of Runway 21. The CAA will
 only recognise the starter extension for departing aircraft, not landing aircraft, as the
 starter extension will not be available for landing aircraft to use. The starter extension
 would provide larger aircraft with an extra stretch of asphalt for take off.
 - Clear and Graded Area of 105m (from the runway centre line) either side of the runway extension; and
 - A Runway End Safety Area ("RESA") in order to comply with CAA recommendations. The RESA is an area of relatively flat land, clear of obstacles, intended to reduce the risk of damage to an aircraft which undershoots or overruns the runway.
- 2.2. Only the runway extension and the starter extension consist of hard paving. The Clear and Graded Area and the RESA are areas of semi-improved grassland. These areas are kept clear of obstacles and may require the control of vegetation.



2.3. The various components of the runway extension are shown below.

- 2.4. The proposed runway extension would not change the size of the aircraft that can currently take off from the airport. At present, aircraft the size of Boeing 737s can land and take off from the airport, but with limited numbers of passengers. The extension, therefore, would enable aircraft the size of Boeing 737s to land and take off with a full payload, thereby increasing the potential capacity of the number of passengers using the airport.
- 2.5. The proposal also includes an increase in the number of car parking spaces from 223 to 510. The additional 287 spaces would be provided on existing hardstand to the north of the



proposed terminal building.

Planning Application for new Terminal Building (YO6/1647/SH)

- 2.6. Also in December 2006, LAA submitted to SDC a full planning application for the erection of a terminal building on an area of existing hardstanding adjacent to Bravo Apron, together with car parking to the north east of the proposed terminal building.
- 2.7. The proposed terminal building consists of two principle 'volumes', and comprises 7,666m2 gross external area, including a check-in area, departure lounge, arrivals lounge, baggage reclaim, ancillary retail, security, ancillary offices and staff area.
- 2.8. The proposed terminal building would be capable of processing up to 500,000 passengers per annum ("ppa") (i.e. 250,000 outbound ppa and 250,000 inbound ppa).
- 2.9. The new car parking area to the north of the new terminal building (pursuant to the runway extension application) would be enlarged by 181 spaces to accommodate a total of 468 cars. New staff parking is also proposed to the north west and south of the new terminal building (71 spaces in total). As the existing terminal building would be decommissioned on occupation of the proposed new terminal, the security requirements applied to parked vehicles in close proximity to a passenger terminal would no longer apply to that area of the airport, which would mean that an additional 100 parking spaces would be accommodated on existing hardstanding between the existing terminal building and the existing hangar to meet the requirement of 862 spaces for the new terminal building.



3. Updated List of Key Planning Application Documents and Supporting Material

- 3.1. In response to consultation comments and requests from planning officers, LAA has now submitted a number of documents to SDC in support of the Applications since lodging the Applications in 2006. The two tables below help clarify which documents form the Applications and the Environmental Statements and which previous application documents, or chapter(s) thereof, have been supplemented by or superseded by, more recent submitted material.
- 3.2. The two tables list the documents that have been formally submitted to SDC in 2006, 2007, 2008 and 2009 in respect of the Runway Extension application and the Terminal Building application respectively. The tables are structured so as to list the Application documents first, followed by the Environmental Impact Assessment topics, any additional documents submitted, the Statements to Inform an Appropriate Assessment and the Schedule of Mitigation Measures.

Key:-

- 1. **Documents that are for consideration in the determination of Application Y06/1648/SH are identified in regular black font, e.g.** "Flood Risk Assessment Report"
- 2. Where a Document has been supplemented by a later document (including where that later document partly supersedes or refines the earlier document) a line and arrow generally identifies that later document
- 3. Where a Document has been superseded in full, the Document is shown in grey italic font, e.g. "Travel Plan"
- 4. This table is for assistance only, the documents that are for consideration should be read in their entirety.

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
	Runwa	y Application (LPA Ref: Y06/16	548/SH)	
	Ар	plication Documents & Drawir	ngs	
Application Documents	Application form and Certificates			
	Covering letter enclosing Application	Covering letter enclosing Supplementary Information	Covering letter enclosing Supplementary Information	Covering letter enclosing Supplementary Information

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
	Drawings (see schedule below)			
	Airport Safety Management Document			
	Transport Assessment	Supplemented by		
	(See also Chapter 14 of ES)	↓ ↓	•	
		Transport Assessment Data	Transport Assessment Additional Analysis (including	
		(Volume 3A, Appendix 10.1)	layout plan for Hammonds Corner Improvements)	
			(Volume 8, Appendix 14)	
		Preliminary Layout Plan for Hammonds Corner Improvements		
		(Volume 3A, Appendix 12)		
		(Superseded by revised layout plan contained within Volume 8, Appendix 14 of 2008 Supplementary Information)		

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
	Travel Plan	Travel Plan (Volume 3A, Appendix 8)	Revised Outline Travel Plan (Volume 8, Appendix 15)	
	Flood Risk Assessment Report (See also Chapter 7 of ES) Planning Statement	Supplemented by		
	(See also Chapter 5 of ES) —	Overview and Policy Context and Update (Chapters 1 & 4 of Volume 1)	Overview and Policy Context and Update (Chapters 1 & 4 of Volume 1)	Overview, Key Planning Policy & Key Planning History (Chapters 1, 5.1 & 5.2 of Volume 1)

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
	Stakeholder Consultation Strategy —	Supplemented by Inspection of Documents, Statutory and Non-Statutory Key Consultees & Public Consultation (Chapters, 2, 5 & 6 of Volume 1)	Inspection of Documents & Response to Requests for Information (Chapters 2 & 5 of Volume 1)	Overview and Inspection of Documents (Chapter 1 of Volume 1)
		Environmental Statement (ES)		
Non-Technical Summary	Non-Technical Summary	Supplemented / part supersede	ed by (refer to each main topic d	ocument) Non-Technical Summary (Volume 2)

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information	Supplementary Information and Environmental Information	Supplementary Information and Environmental Information
		October 2007	August 2008	March 2009
Glossary of Abbreviations and Terms	Glossary of Abbreviations and Terms	Glossary of Abbreviations and Terms	Glossary of Abbreviations and Terms	Glossary of Abbreviations and Terms
		(Chapter 7 of Volume 1)	(Chapter 6 of Volume 1)	(Chapter 7 of Volume 1)
Introduction, EIA Methodology & Lydd Airport	Chapters 1, 2 & 3 of ES			
Project Description	Chapter 4 of ES	Supplemented by		
			•	
		Overview & Summary of Planning Applications	Overview & Summary of Planning Applications	Overview & Brief Summary of Planning Applications
		(Chapters 1 & 3 of Volume 1)	(Chapters 1 & 3 of Volume 1)	(Chapters 1 & 2 of Volume 1)

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
Planning Policy Framework	Chapter 5 of ES	Supplemented by		
	(See also above Planning Statement)	•	↓	•
		Overview and Policy Context and Update	Overview and Policy Context and Update	Overview, Key Planning Policy & Key Planning History
		(Chapters 1 & 4 of Volume 1)	(Chapters 1 & 4 of Volume 1)	(Chapters 1, 5.1 & 5.2 of Volume 1)
Ground Conditions	Chapter 6 of ES	Supplemented by		
		Geomorphological Assessment of the Proposed Runway Extension (on part of the land required)	Geomorphological Assessment of the Proposed Runway Extension (on all of the land required)	
		(Volume 3B, Appendix 14)		

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
Water Resources and Flood Risk	Chapter 7 of ES (See also above Flood Risk Assessment Report)	Supplemented by		
				Surface Water Drainage Strategy (Volume 5, Appendix 5)
Solid Waste Management	Chapter 8 of ES			
Land Use	Chapter 9 of ES			
Ecology and Nature Conservation	Chapter 10 of ES	Supplemented by Invertebrate Surveys of Drainage Ditches and Runway Extension Footprint (Volume 3A, Appendix 5.1)	Invertebrate and Moth Report (Volume 6, Appendix 1)	Surface Water Drainage Strategy (Volume 5, Appendix 5)

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
		See below for Statements to Inform	Extended Phase 1 Habitat Survey and Assessment of Hammonds Corner (Volume 6 , Appendix 2) Impacts on Designated Sites,	
			Drainage Ditches and Great Crested Newts (Volume 6, Appendix 3) (Supplemented by and partly superseded by 2009 Surface	
			Water Drainage Strategy – refer to Volume 5, Appendix 5 of 2009 Supplementary Information) Biodiversity Action Plan	
	0		(Volume 6, Appendix 5)	
Bird Conservation and Hazard Management	Chapter 11 of ES	Supplemented by		
		The Predicted Impacts of a Bird Hazard Control	Ornithology Report	

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
		Programme for 300,000ppa on Bird Species of Conservation Importance near to London Ashford Airport (Lydd) (Volume 3A, Appendix 3.1)	(Volume 6, Appendix 4)	
		Over-wintering Bird Survey Results 2006/07 (Volume 3A, Appendix 5.2)		
		The Predicted Impacts of Aircraft Noise at 300,000ppa on Bird Species of Conservation Importance near to London Ashford Airport (Lydd) (Volume 3A, Appendix 6.1)		
		See below for Statements to Inform		

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information	Supplementary Information and Environmental Information	Supplementary Information and Environmental Information
		October 2007	August 2008	March 2009
Landscape and Visual	Chapter 12 of ES	Supplemented by Landscape and Visual Amenity (Volume 3A, Appendix 1.1) See below for Statements to Inform	Landscape Strategy (Volume 4) Lighting Impact Assessment (Volume 5)	
Cultural Heritage and Historic Environment	Chapter 13 of ES			
Traffic and Transport	Chapter 14 of ES (See also above for Transport Assessment)			

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
Air Quality (Human Health and Eco Systems)	Chapter 15 of ES	Supplemented by Air Quality Impact Assessment: Runway Extension (Volume 3A, Appendix 4.1) Ambient Air Quality Monitoring (Volume 3A, Appendix 4.3) Air Quality Derived Predicted Impacts Table (Volume 3A, Appendix 4.4) See below for Statements to Inform	Air Quality Report (Volume 7, Appendix 10) Nitrogen Deposition (Runway) (Volume 7, Appendix 11)	

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information	Supplementary Information and Environmental Information	Supplementary Information and Environmental Information
		October 2007	August 2008	March 2009
Noise and Vibration	Chapter 16 of ES	Community Noise Impacts at 300,000ppa	Response to Queries Relating to Noise Impacts of the Proposed LAA Runway	Noise and Vibration (Runway Extension)
		(Volume 3B, Appendix 15.1)	Extension	(Volume 4, Appendix 3)
			(Volume 7, Appendix 8)	
		B737 Trial Flight Report		
		(Volume 3A, Appendix 9)		
		See below for Statements to Inform		
Socio-Economic	Chapter 17 of ES	Supplemented by		
	-	↓ ↓		•
		Supplementary Information on Socio-Economic Impacts		Socio-Economic Update 2009
		(Volume 3A, Appendix 2)		(Volume 3, Appendix 1)
Cumulative Impact	Chapter 18 of ES			

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
		Other Documents		
Aircraft Risk				Aircraft Crash Risk to Dungeness Nuclear Power Stations (Volume 3, Appendix 2)
Construction Management Plan			Construction Environmental Management Plan (Runway Extension) (Volume 6, Appendix 6)	
Carbon Management Plan			Carbon Management Plan (Volume 7, Appendix 13)	

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
	Statemen	ts to Inform an Appropriate As	sessment	
Dungeness Special Area of Conservation		Statement to Inform on the Predicted Impacts from the Proposed Runway Extension at LAA on the Dungeness SAC (Supplemented by and partly superseded by 2008 Impacts on Designated Sites, Drainage Ditches and Great Crested Newts, Volume 6, Appendix 3))		
Dungeness to Pett Level Special Protection Area		Statement to Inform on the Predicted Impacts from the Proposed Runway Extension at LAA on the Dungeness to Pett Level SPA		
	S	chedule of Mitigation Measure	es	
Schedule of Mitigation Measures	Chapter 19 of ES	Schedule of Mitigation Measures (Volume 3B, Appendix 13)	Schedule of Mitigation Measures (Volume 2)	Schedule of Mitigation Measures (Volume 1)

Runway Extension (LPA Ref: Y06/1648/SH) Drawing Schedule

- Existing Runway drawing number FSB92590A/204 prepared by Parson Brinckerhoff dated December 2006;
- Site of Proposed Runway Extension Existing Area drawing number FSB92590A/205 prepared by Parson Brinckerhoff dated December 2006;
- Existing Runway with Proposed Extension drawing number FSB92590A/206 prepared by Parson Brinckerhoff dated December 2006;
- Proposed Runway Extension General Arrangements drawing number FSB92590A/207 prepared by Parson Brinckerhoff dated December 2006; and
- Site Plan drawing number FSB92590A/PL0018 revision B prepared by Parson Brinckerhoff dated December 2006.

Key:-

- 1. **Documents that are for consideration in the determination of Application Y06/1647/SH are identified in regular black font, e.g.** "Flood Risk Assessment Report"
- 2. Where a Document has been supplemented by a later document (including where that later document partly supersedes or refines the earlier document) a line and arrow generally identifies that later document
- 3. Where a Document has been superseded in full, the Document is shown in grey italic font, e.g. "Travel Plan"
- 4. This table is for assistance only, the documents that are for consideration should be read in their entirety.

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
	Terminal Bu	ilding Application (LPA Ref: Y	06/1647/SH)	
	Ар	plication Documents & Drawir	ngs	
Application Documents	Application form and Certificates			
	Covering letter enclosing Application	Covering letter enclosing Supplementary Information	Covering letter enclosing Supplementary Information	Covering letter enclosing Supplementary Information

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
	Drawings		Drawings (see schedule below)	
	Airport Safety Management Document	Supplemented by		
	Transport Assessment (See also Chapter 14 of ES)	Supplemented by	•	
		Transport Assessment Data (Volume 3A, Appendix 10.1)	Transport Assessment Additional Analysis (including layout plan for Hammonds Corner Improvements) (Volume 8, Appendix 14)	
		Figure 7.3 from Terminal Building Transport Assessment (Volume 3A, Appendix 10.2)		

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
		Swept Path Analysis Plans – Terminal Building (Volume 3A, Appendix 11) Preliminary Layout Plan for Hammonds Corner Improvements (Volume 3A, Appendix 12) (Superseded by revised		
	Travel Plan	(SupersededbyrevisedlayoutplancontainedwithinVolume8,Appendix14of2008SupplementaryInformation)TravelPlan	Revised Outline Travel Plan	
		(Volume 3A, Appendix 8)	(Volume 8, Appendix 15)	
	Flood Risk Assessment Report (See also Chapter 7 of ES)			

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
	Planning Statement (See also Chapter 5 of ES)	Supplemented by Overview and Policy Context and Update (Chapters 1 & 4 of Volume 1)	Overview and Policy Context and Update (Chapters 1 & 4 of Volume 1)	Overview, Key Planning Policy & Key Planning History (Chapters 1, 5.1 & 5.2 of Volume 1)
	Stakeholder Consultation Strategy	Supplemented by Inspection of Documents, Statutory and Non-Statutory Key Consultees & Public Consultation (Chapters, 2, 5 & 6 of Volume 1)	Inspection of Documents & Response to Requests for Information (Chapters 2 & 5 of Volume 1)	Overview and Inspection of Documents (Chapter 1 of Volume 1)

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
	Design and Access Statement	Design Statement for Terminal Building Roof Design (Volume 3A, Appendix 7.1) Sustainability Initiatives incorporated into Terminal Building (Volume 3A, Appendix 7.2) (Superseded by Design and Access Statement within Volume 3 of 2008 Supplementary Information)	Design and Access Statement (Volume 3)	

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
		Environmental Statement (ES)		
Non-Technical Summary	Non-Technical Summary	Supplemented / part supersede	ed by (refer to each main topic d	ocument)
		•	¥	•
		Non-Technical Summary	Non-Technical Summary	Non-Technical Summary
		(Volume 2)	(Volume 2)	(Volume 2)
Glossary of Abbreviations and Terms	Glossary of Abbreviations and Terms	Glossary of Abbreviations and Terms	Glossary of Abbreviations and Terms	Glossary of Abbreviations and Terms
		(Chapter 7 of Volume 1)	(Chapter 6 of Volume 1)	(Chapter 7 of Volume 1)
Introduction, EIA Methodology & Lydd Airport	Chapters 1, 2 & 3 of ES			

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
Project Description	Chapter 4 of ES	Supplemented by Overview & Summary of Planning Applications (Chapters 1 & 3 of Volume 1)	Overview & Summary of Planning Applications (Chapters 1 & 3 of Volume 1)	Overview & Brief Summary of Planning Applications (Chapters 1 & 2 of Volume 1)
Planning Policy Framework	Chapter 5 of ES (See also above Planning Statement)	Supplemented by Overview and Policy Context and Update (Chapters 1 & 4 of Volume 1)	Overview, Key Planning Policy & Key Planning History (Chapters 1, 5.1 & 5.2 of Volume 1)	Overview and Policy Context and Update (Chapters 1 & 4 of Volume 1)
Ground Conditions	Chapter 6 of ES			

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information	Supplementary Information and Environmental Information	Supplementary Information and Environmental Information
		October 2007	August 2008	March 2009
Water Resources and Flood Risk	Chapter 7 of ES (See also above Flood Risk	Supplemented by		
	Assessment Report)			•
			Sewerage Report	Proposed Foul Water Sewerage Solutions
			(Volume 6, Appendix 7)	(Volume 5, Appendix 6)
Solid Waste Management	Chapter 8 of ES			
Land Use	Chapter 9 of ES			
Ecology and Nature Conservation	Chapter 10 of ES	Supplemented by		
		Ļ	¥	
		See below for Statements to Inform	Invertebrate and Moth Report	

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information	Supplementary Information and Environmental Information	Supplementary Information and Environmental Information
		October 2007	August 2008	March 2009
			(Volume 6, Appendix 1)	
			Extended Phase 1 Habitat Surveys and Assessment of Hammonds Corner	
			(Volume 6 , Appendix 2)	
			Biodiversity Action Plan	
			(Volume 6, Appendix 5)	
Bird Conservation and Hazard Management	Chapter 11 of ES	Supplemented by		
nazara management		↓ ↓	•	
		The Predicted Impacts of a Bird Hazard Control Programme for 500,000ppa on Bird Species of Conservation Importance near to London Ashford Airport (Lydd)	Ornithology Report (Volume 6, Appendix 4)	
		(Volume 3A, Appendix 3.2)		
		Over-wintering Bird Survey Results 2006/07		

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
		(Volume 3A, Appendix 5.2) The Predicted Impacts of Aircraft Noise at 500,000ppa on Bird Species of Conservation Importance near to London Ashford Airport (Lydd) (Volume 3A, Appendix 6.2) See below for Statements to Inform		
Landscape and Visual	Chapter 12 of ES	Supplemented by Landscape and Visual Amenity (Volume 3A, Appendix 1.2) See below for Statements to Inform	Landscape Strategy (Volume 4) Lighting Impact Assessment (Volume 5)	

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
Cultural Heritage and Historic Environment	Chapter 13 of ES			
Traffic and Transport	Chapter 14 of ES (See also above for Transport Assessment)			
Air Quality (Human Health and Eco Systems)	Chapter 15 of ES	Supplemented by Air Quality Impact Assessment: Terminal Building (Volume 3A, Appendix 4.2) Ambient Air Quality Monitoring (Volume 3A, Appendix 4.3) Air Quality Derived Predicted Impacts Table	Air Quality Report (Volume 7, Appendix 10) Nitrogen Deposition (Terminal) (Volume 7, Appendix 12)	

TABLE OF DOCUMENTS SUBMITTED FOR TERMINAL BUILDING APPLICATION (Y06/1647/SH)

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
		(Volume 3A, Appendix 4.4)		
		See below for Statements to Inform		
Noise and Vibration	Chapter 16 of ES	Community Noise Impacts at 500,000ppa (Volume 3B, Appendix 15.2) B737 Trial Flight Report	Response to Queries Relating to Noise Impacts of the Proposed LAA Runway Extension (Volume 7, Appendix 9)	Noise and Vibration (Runway Extension) (Volume 4, Appendix 4)
		(Volume 3A, Appendix 9)		
		See below for Statements to Inform		

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Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	I Environmental and Environmental Information Information		
Socio-Economic	Chapter 17 of ES	Supplemented by			
		 ✓ Supplementary Information on Socio-Economic Impacts (Volume 3A, Appendix 2) 		▼ Socio-Economic Update 2009 (Volume 3, Appendix 1)	
Cumulative Impact	Chapter 18 of ES				
		Other Documents			
Aircraft Risk				Aircraft Crash Risk to Dungeness Nuclear Power Stations (Volume 3, Appendix 2)	

TABLE OF DOCUMENTS SUBMITTED FOR TERMINAL BUILDING APPLICATION (Y06/1647/SH)

Торіс	Technical Documents December 2006	Supplementary Information and Environmental Information October 2007	Supplementary Information and Environmental Information August 2008	Supplementary Information and Environmental Information March 2009
Carbon Management Plan			Carbon Management Plan (Volume 7, Appendix 13)	
	Statemen	ts to Inform an Appropriate As	sessment	
Dungeness Special Area of Conservation		Statement to Inform on the Predicted Impacts from the Proposed Terminal Building at LAA on the Dungeness SAC		
Dungeness to Pett Level Special Protection Area		Statement to Inform on the Predicted Impacts from the Proposed Terminal Building at LAA on the Dungeness to Pett Level SPA		
	S	chedule of Mitigation Measure	9S	
Schedule of Mitigation Measures	Chapter 19 of ES	Schedule of Mitigation Measures (Volume 3B, Appendix 13)	Schedule of Mitigation Measures (Volume 2)	Schedule of Mitigation Measures (Volume 1)



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4. Overview of Key Assumptions in the Environmental Statements

Baselines

4.1. The Environmental Statements for both the runway extension and the new terminal building assessed the impact of the proposals against the existing baseline of 3,000ppa. Additional assessment has also been carried out in the Environmental Statements as follows:-

Runway Extension Application

4.2. The Environmental Statement for the runway extension also looked at the impact on the environment of the proposal when compared against LAA operations reaching 300,000ppa without the runway extension. Such a comparison highlights a benefit of the runway extension, as more aircraft movements would be needed to reach the 300,000ppa target without the runway extension. This is because aircraft would be able to take off or land carrying a greater number of passengers with the longer runway. The runway extension would not change the largest type of aircraft able to use the airport.

Terminal Building Application

4.3. The Environmental Statement for the new terminal building and car park also looked at the impact on the environment of the airport reaching 500,000ppa with the runway extension in place and the new terminal building and car park when compared against LAA operations reaching 300,000ppa with the runway extension. This comparison means that the Environmental Statement identifies the likely significant environmental effects of the proposal against the existing baseline of 3,000ppa and also against a future baseline of 300,000ppa with the runway extension in place.

Passenger Numbers

4.4. With just the runway extension application alone, the airport would not practically be able to exceed 300,000ppa, which is the maximum throughput capacity of the existing terminal building. With a new terminal building and car park constructed, this could be increased to a maximum of 500,000ppa.

Fleet Mix and Aircraft Movements

4.5. The proposed runway extension would neither change the size of the largest aircraft that can currently use the airport, nor would it alter significantly the flight paths available for aircraft landing or taking off. It would, however, enable the larger Boeing 737 and Airbus 319 type aircraft to take off with full payloads. As such, the proposed runway extension would enable LAA to support operations flying to destinations further afield than can currently be accommodated and would also encourage, it is anticipated, the development of a somewhat modified fleet mix, as shown in the table below. The proposed terminal building would allow the airport to accommodate 500,000ppa, which would also, it is anticipated, result in a modified fleet mix, as also shown in the table below.

300,000ppa with Runway Extension (Annual Average)	300,000ppa with Runway Extension (summer average)	500,000ppa with Runway Extension (Annual Average)	500,000ppa with Runway Extension (summer average)
2	4	4	6
	Runway Extension	RunwayRunwayExtensionExtension(Annual Average)(summer average)	Runway Extension (Annual Average)Runway Extension (summer average)Runway Extension (Annual Average)



Aircraft	300,000ppa with Runway Extension (Annual Average)	300,000ppa with Runway Extension (summer average)	500,000ppa with Runway Extension (Annual Average)	500,000ppa with Runway Extension (summer average)
BAe146	2	2	2	2
Dash 8	2	2	2	2
ATR42-500	0	0	4	4
Saab 340/SF340B	4	4	2	2
Learjet 35A	3	3	4	4
Citation II	3	3	3	3
CNA750 Citation X	17	17	18	18
Cessna 152	25	25	25	25
Cessna 172 Piper PA28	20	20	20	20
Cherokee Piper PA-34	15	15	15	15
Seneca	20	20	20	20

4.6. The table above details the predicted daily average fleet mix (annual average and summer (i.e. peak) average) arising from the Applications in order to produce the number of passengers per annum. The aircraft types are similar to those used at other small regional airports throughout the UK.

Flight Paths

- 4.7. Flights paths do not change significantly from current flight paths. The flight paths to and from any airport are largely governed by the runway orientation, and as the proposal is not for a new runway but for an extension of the existing one, the flight paths would not significantly alter. Extending the runway would not significantly alter the current direction of approach and departure.
- 4.8. The Airport Traffic Control Tower operates an Instrument Landing System (ILS) for Runway 21 which became operational in June 2006. The ILS enables qualified pilots to use the signals transmitted from the system to make a correct and safe approach in poor visibility conditions. It is a prerequisite of most commercial and business jet air transport operations that an airport offers an ILS based approach to ensure that safe commercial operations can continue during marginal or poor weather conditions.
- 4.9. All departing aircraft (except for light propeller driven aircraft) that have a take off weight of 5700kg or more would turn right upon departure from Runway 21, thereby remaining clear of Dungeness Power Station. Runway 21 means departing along the runway, heading 210 degrees from magnetic north.
- 4.10. All departing aircraft would on departure climb straight ahead to at least a height of 500 feet before commencing any turn.
- 4.11. Light aircraft below 5700kg may turn left after departing Runway 21, but must remain at least 1.5 nautical miles away from Dungeness Power Station.
- 4.12. The runway extension proposal would mean Runway 21 departure tracks would be slightly further away from Dungeness Power Station (and further outside R063, which is the name of the restricted airspace around the power station) than at present. This is because aircraft would be commencing their take-off run at the beginning of the starter extension; i.e. 444m further to the north east than at present, which is nearly half a kilometre further away from the power station. The point at which aircraft reach 500ft would be sooner, so the right turn could be commenced earlier. Aircraft below 5700kg may turn left (to the south east) or into the visual training circuit sooner too, thus comfortably remaining clear of R063.



Operating Hours

- 4.13. The airport currently has a licence to operate 24hrs.
- 4.14. The airport is not intending to operate any night time flights (23:00 to 07:00) as part of the development proposals and will accept a limitation on such night time flights (excluding any operations required for emergency or military/Government reasons) as a planning condition attached to the planning permissions granted in respect of the Applications.



5. Some Key Material Considerations in Determining Applications Y06/1647/SH and Y06/1648/SH

5.1. This section summarises a number of key material considerations relevant to determining the Applications. The full suite of material accompanying the Applications should be read in conjunction with this overview summary as there is a large amount of relevant material.

Key Planning Policy

5.2. This section provides a summary of the key planning policy considerations for the determination of planning applications Y06/1647/SH and Y06/1648/SH. This section is an overview of the key planning policies and a comprehensive list of the relevant planning policies can be reviewed in the planning statements that accompanied the Planning Applications in December 2006, Volume 1 of the Supplementary Information dated October 2007 and Volume 1 of the Supplementary Information dated August 2008.

National Aviation Policy

The Aviation White Paper 2003

- 5.3. The Government's White Paper, the 'Future of Air Transport' (generally referred to as the Aviation White Paper) provides the strategic framework for the development of air travel over the next 30 years. The Aviation White Paper supports a strategy for a 'balanced approach', which recognises the need to expand existing airports rather than building new ones.
- 5.4. The Aviation White Paper identifies the need for additional runway capacity in the South East region and makes reference to LAA and other small airports as being important to meeting local demand and contributing to regional economic development.

The Future of Air Transport Progress Report, December 2006

- 5.5. A progress report on the Aviation White Paper was published by the Government in December 2006. This report reaffirms the Government's commitment to the long-term strategy for the development of air travel set out in the 2003 Aviation White Paper.
- 5.6. The Government cites continued international competitiveness, trade and freight transport, aviation's direct contribution to economic development and people's aspiration to travel as drivers for the increasing demand. In addition, this report sets out steps that seek to mitigate the environmental impact of an increase in air travel in recognition of the environmental challenges of airport operation, thus reinforcing the balanced approach set out in the Aviation White Paper.

National Planning Policy Guidance

5.7. The Applications have been considered against national planning policy guidance, within either Planning Policy Guidance notes (PPG) or Planning Policy Statements (PPS). A detailed overview of the relevant PPGs and PPSs can be reviewed in the planning statements that accompanied the Planning Applications in December 2006 and the Supplementary Information 2007 and 2008.

Regional and Strategic Planning Policy Guidance

5.8. The Regional Spatial Strategy (RSS) will be contained within the South East Plan (SEP) once adopted following the consultation of the Secretary of State's Proposed Changes later this year.



- 5.9. The Secretary of State's Proposed Changes to the draft Policy T9 (relating to airports) follows the approach taken in the Aviation White Paper whereby 'in principle' support is now given to the expansion of regional airports, subject to environmental considerations. The Secretary of State recognises the role a number of smaller regional airports could play in meeting demand and contributing to regional economic development. LAA will draw passengers from the South East and is therefore seen as a smaller regional airport, in the context of the Secretary of State's proposed modifications.
- 5.10. The policy as amended by the Secretary of State is consistent with National and Local policy, which provides in principle support for the expansion of LAA, subject to environmental considerations. This is a clear re-affirmation of the planning policy support for an in principle expansion at LAA.

Kent and Medway Structure Plan (KMSP), 2006

- 5.11. The KMSP, adopted in July 2006, acknowledges the important role that LAA can play in serving business needs and providing opportunities for recreational flying. It recognises that enhancing LAA's existing facilities would improve LAA's ability to cater for general aviation and passenger traffic and capture scheduled and charter business.
- 5.12. Policy SH1 'Shepway' encourages proposals to strengthen the rural economy of Romney Marsh to be concentrated at New Romney and Lydd. Proposals to retain and strengthen the current uses at LAA should be pursued.
- 5.13. In addition, Policy TP25 states that the expansion of aviation at LAA will also be supported. Proposals related to the development of LAA will be assessed for acceptability against various criteria as listed in the Policy.

Local Planning Policies

Shepway District Local Plan Review, 2006

- 5.14. The Shepway District Local Plan Review, adopted in March 2006, confirms at paragraph 11.41, SDC's support for development that strengthens the airport function and considers that it could support increased aviation activity on a scale of 1 to 2 million passengers per year.
- 5.15. Policy TR15 of the Shepway District Plan states that the District Planning Authority will permit proposals for the expansion of facilities at LAA directly related to commercial and recreational flying use provided that there would be no significant impact upon the internationally important wildlife communities in the Lydd/Dungeness area. Regard will also be given to the likely effect of proposals on other special features in the area, particularly the power station.

Shepway District Council Local Development Framework

5.16. SDC has consulted on their Core Strategy, Issues and Options paper in January and February 2008. The Preferred Options consultation is due to take place in April 2009. Representations were made on behalf of LAA to the effect that the Core Strategy should be consistent with the Aviation White Paper, whereby 'in principle' support is given to further expansion of LAA, subject to relevant environmental considerations to ensure that the economic benefits which LAA could potentially bring are maximised . Failure to do so would create a policy vacuum at the local level.

Compliance with Aviation and Planning Policy

5.17. It is clear from the above that the Applications are, subject to relevant environmental considerations, supported by the Government's Aviation White Paper and in the relevant policies contained in the Kent and Medway Structure Plan 2006 and the Shepway District



Local Plan Review 2006. Further, the Secretary of State's recently proposed changes to the South East Regional Spatial Strategy gives recognition to the role of small airports, of which LAA is one, in meeting local demand and contributing to regional economic development.

Key Planning History

- 5.18. Planning permission was granted (LPA Ref: SH/88/230) by the Secretary of State in 1992 following a 'call in' inquiry for a 296m x 37m concrete extension to the existing runway, in a northern-easterly direction (the same orientation as the proposed extension).
- 5.19. The Secretary of State concluded that the extension to the runway would be permissible as it was in accordance with national and local planning policy at that time and satisfied the policy requirement that the extension would not have a detrimental effect upon the Dungeness SSSI or upon residential amenity.
- 5.20. The Secretary of State considered that the threat to the safety of Dungeness Nuclear Power Station was not a reason for refusal as the Nuclear Installations Inspectorate had confirmed that the risk of an aircraft crashing into the reactors and causing an uncontrolled release of radioactivity was below their published risk criteria.
- 5.21. The decision demonstrates that there has been consistent support at a national and local level for the expansion of LAA, facilitated by the extension of the runway.

Socio-Economic

Labour market conditions

- 5.22. The effects of the current recession are having a significant impact in Kent. Over the last quarter (October to December 2008), unemployment in Kent has increased by 26.7%.
- 5.23. The number of people claiming unemployment-related benefits (Jobseekers Allowance) in Shepway in January 2009 was 3.8%, this is significantly higher than the County average of 2.7%, the South East rate of 2.8%, and the National rate of 3.4%.
- 5.24. Lydd has the fifth highest unemployment rate of the 22 wards in Shepway District the number of people claiming unemployment-related benefits in January 2009, according to the Quarterly Economic Report published by Kent County Council in January 2009, has risen 69.9% since January 2008. Unemployment has also risen in New Romney, increasing 108.7% since January 2008.
- 5.25. The Indices of Multiple Deprivation (IMD) for 2007 indicate that Shepway is ranked 123rd of the 354 local authority Districts in England (where 1 is the most deprived). This indicates that the District is in the most deprived 35% of local authority areas in England and is the third most deprived local authority of the 12 Districts in Kent.
- 5.26. IMD data from 2004 ranked Shepway at 131 out of 354. This is a slip down the IMD scale by 8 places to 123 in 2007 which indicates that Shepway has become more deprived since 2004.
- 5.27. In terms of Lydd itself, the Lydd ward is made up of four lower layer super output areas, one of which is ranked 14th most deprived of the 65 in Shepway District in the IMD for 2007. Indeed, the area around LAA has few large employers, insufficient local job opportunities and access to larger markets is restricted.

Employment

5.28. The proposed runway extension and terminal building and the resulting passenger throughput of 300,000ppa and 500,000ppa respectively, has the potential to bring employment, business and further education opportunities as well as an increase in tourism



to the area.

- 5.29. Assuming direct job creation of 600 per million passengers, at 300,000ppa it is anticipated that LAA would generate a total of 304 jobs (180 direct jobs, 54 indirect jobs and 70 induced jobs).
- 5.30. When LAA is operating at 500,000ppa, it is anticipated that LAA would generate a total of 507 jobs (300 direct jobs, 90 indirect jobs and 117 induced jobs).
- 5.31. In addition, the construction of the terminal building would create approximately 28 full time equivalent jobs and the construction of the runway extension would create approximately 4 full time equivalent jobs.
- 5.32. The expansion of LAA would make a significant contribution to addressing unemployment in the local area. It would also add to the very limited local pool of larger employers. This is a particularly important consideration in the current economic climate as summarised above.

Skills development and training

- 5.33. Skills, development and training are key regeneration and economic development priorities for Shepway, Kent and the South East as a whole. The expansion of LAA has the potential to make a significant local contribution to achieving these priorities.
- 5.34. LAA has a clear commitment to employing local people and a strong track record of working with local secondary schools. LAA has supported both long term placements where work experience students attend the airport one day a week during term time over a period of months and shorter placements where students attend for a few weeks at a time.
- 5.35. LAA is also committed to exploring new programmes and initiatives which will benefit the local community. These may include the following:
 - Construction training this could be based on small cohorts of either young people or long term unemployed people in Lydd and Romney Marsh. The construction of the terminal building in particular would provide a good opportunity to run a training scheme based on construction trades;
 - Recruitment initiative there are very low economic activity rates amongst women in Lydd. There would be scope for the airport to develop a targeted recruitment campaign aimed specifically at local women who need support and assistance in returning to the labour market; and
 - Apprenticeship LAA will investigate the feasibility of running a limited number of engineering apprenticeships in conjunction with local colleges. Such a scheme would involve a mixture of classroom training at a local college and onsite engineering training.

Tourism Income

- 5.36. It is anticipated that at 300,000ppa, LAA would generate an additional 7,500 tourists per annum and at 500,000ppa LAA would generate an additional 12,500 tourists per annum. This would have a positive overall impact on the local economy through a rise in the demand for overnight accommodation and other tourism facilities as well as encouraging direct foreign investment to the region.
- 5.37. Using average spend figures, the total spend generated by overseas visitors using the expanded airport is estimated at £1.815 million per annum (at 2007 figures) when operating at 300,000ppa and £3.025 million per annum (at 2007 figures) when operating at the 500,000ppa. This money would benefit the local and surrounding areas, including Ashford.
- 5.38. Tourism related jobs would also be generated as a result of the additional tourists generated.



Aircraft Crash Risk to Dungeness Nuclear Power Stations

- 5.39. LAA lies approximately 5km north of the nuclear power stations at Dungeness. The older of the two stations, Dungeness A, ceased operation in 2006 and is now being decommissioned. Dungeness B is still operational. The operator (British Energy BE) currently plans to keep it in operation until 2018, after which it will be decommissioned.
- 5.40. The aircraft crash risk following expansion of LAA up to 500,000ppa has already been assessed as part of the power station operators' safety case documentation. On the basis of these assessments and its own studies, the nuclear safety regulator the Nuclear Installations Inspectorate (NII) within the Health and Safety Executive (HSE) has confirmed to SDC that it has no objection to the Applications.
- 5.41. In addition, LAA commissioned an assessment of the nuclear risk posed by the Applications. The objectives of this assessment were to estimate the risk (frequency) of an aircraft crash if permission for the Applications were to be granted; and hence to assess the tolerability of the risk.
- 5.42. The conclusions of the assessment show that when LAA is handling 500,000ppa, there is no unacceptable aircraft crash risk in relation to the proximity of Dungeness power station. Accordingly, this independent assessment supports the NII's conclusion that they should have no grounds of objection based on aircraft crash risk in relation to nuclear safety.

Design – Terminal Building

- 5.43. The design of the proposed terminal building has evolved and been refined since the original submission in December 2006, responding to comments received from various stakeholders, including CABE and SDC. The final design comprises a bespoke, high quality, contemporary design solution which responds positively to its unique landscape setting. The approach taken has been one of integrated design, allowing the landscaping and lighting strategies to inform the design development process, and maximising sustainability.
- 5.44. A BREEAM Bespoke pre-assessment of the proposed terminal building design has been undertaken as a guide to the potential score that could be achieved. At this stage, the proposed terminal building is assessed as having the potential to achieve a BREEAM VERY GOOD assessment result, a strong energy and sustainability performance.

Landscape and Visual Amenity

- 5.45. LAA is at the transition point between shingle and farmland. LAA is just one element in a band of varying land uses, neither shingle nor farmland, that sit at this transition point. From almost anywhere within 4km of LAA, the settlements of Lydd, New Romney and the coastal strip of Greatstone-on-Sea south to Lydd-on-Sea provide a built form skyline for a significant part of the view.
- 5.46. The proposed runway extension would involve a paved area and a runway strip (clear and graded area comprising semi-improved grassland). This change in land use would be of negligible significance. During construction of the proposed runway extension, temporary haul roads and stockpiles of materials would be needed within the LAA boundary, which, due to their temporary nature, would again be of only negligible significance.
- 5.47. The proposed terminal building would be constructed on existing hard standing, with only a small amount of amenity grassland being used for the car park / drop off areas. Therefore, the construction of the terminal building is considered to be of negligible significance. During construction itself, the temporary presence of cranes and other construction machinery required is considered of slight significance, whilst the impact of large vehicles on the road network coming to and from the construction site is likely to be of neutral to slight significance.



- 5.48. During operation, it is considered that the visual impact of the larger aircraft (Boeing 737 and Airbus 319) on the ground and in the air for both 300,000ppa and 500,000ppa is, overall, neutral, given the few movements per day that these throughputs will actually necessitate.
- 5.49. As referred to in the design summary above, emphasis has been placed on the need to ensure that the overall design of the expanded airport is developed within a cohesive landscape framework that responds positively to the distinctive character of the receiving landscape. The Landscape Strategy submitted with the Applications has demonstrated how the development proposals will effectively respond to this receiving landscape, by creating both hard and soft landscapes which are characteristic of the area. The Landscape Strategy would achieve an acceptable balance between the purpose and function of the development and the human intervention and interaction with the locale.

Lighting

- 5.50. The current level of general light pollution in the area surrounding LAA is within the "brighter" category as defined by the CPRE Night Blight Report 2003, reflecting the position that the existing ambient light conditions are relatively high for a semi-rural area, caused predominantly by the local population centres.
- 5.51. There are already significant sources of light in the environs surrounding LAA from adjoining residential areas, such as New Romney, and from the Dungeness Nuclear Power Stations. Against this general context, the lighting assessment carried out has concluded that together with the correct adoption of mitigation measures as set out in the assessment, the impact of the proposed expansion to 300,000ppa and 500,000ppa would not significantly affect the ambient level of light conditions in the surrounding environs.
- 5.52. Furthermore, the existing external lighting associated with the LAA buildings would also be improved as part of the proposed development.
- 5.53. As the airport is not intending to operate any flights during the night time (2300 0700 hrs), so the airport would not be utilising the runway and approach lighting during these hours (except for an emergency or military/Government reasons). In addition, floodlighting would only be used as and when required for security and health and safety purposes.

Traffic and Transport

- 5.54. The impacts of constructing the proposed runway extension and the terminal building are minor and not significant. The increase in HGV movements (which would be for a limited period during construction it is estimated that the runway extension would take 4 months to construct, with the terminal building taking 18 months) does not increase the percentage of HGV traffic to above 10% on any of the affected routes.
- 5.55. In relation to expanding the throughput of LAA to accommodate up to 500,000ppa, the likely passenger trip profiles, staff trip profiles, and modal splits have been inputted into traffic models with sensitivity testing carried out in accordance with the requirements of the Highways Agency and Kent Highways Services. These models and the sensitivity testing demonstrate that, subject to the improvement of Hammonds Corner (the junction formed by the B2075 (Romney Road) and the A259 (Lydd Road) see further below), the highway network has sufficient capacity to accommodate all traffic generated from the Applications.
- 5.56. In terms of Hammonds Corner, it is proposed that a roundabout junction replace the existing T-junction. This proposed layout has also undergone the various assumption and sensitivity testing, which has shown that the layout proposed in the Applications would provide sufficient capacity for all scenarios tested and would therefore accommodate up to 500,000ppa. LAA is committed to ensuring this improvement and will provide the roundabout at the appropriate trigger based on the assessment and sensitivity testing results and on discussions with Kent Highways Services and SDC.



- 5.57. The appropriate number of car parking spaces required for 300,000ppa and 500,000ppa respectively has been calculated based on the likely assumptions for passenger trip profiles, staff trip profiles and modal splits. Overall, it is concluded that, with the proposed mitigation measures, the effects of the Applications on the road network and other transport infrastructure are minor. It should be noted that the Highways Agency does not have an objection to the Applications.
- 5.58. The relevant mitigation measures applicable for the impact on traffic and transport include:-
 - The preparation and implementation of a Travel Plan to encourage sustainable modes of transport for passengers and staff;
 - The introduction of a shuttle bus between LAA and Ashford International Station;
 - The construction of a roundabout at Hammonds Corner before LAA reaches a throughput of a certain number of passengers (this will be agreed with Kent Highways Services and SDC);
 - The monitoring of safety conditions at the junction of the B2075 and LAA's access road;
 - The development of a signage strategy to ensure that LAA is clearly signposted so as to minimise impacts on the nearby "C" and unclassified roads; and
 - The development and implementation of a Car Park Management Plan.

Air Quality – Human Health

- 5.59. The impact of the expansion of LAA to 300,000ppa and 500,000ppa is considered to be of low to negligible significance on human health effects resulting from exposure to nitrogen dioxide in ambient air levels would not rise above the statutory Air Quality Objectives (as set out in the UK's National Air Quality Strategy). Effects of increases in other pollutant concentrations would be negligible in all expansion scenarios.
- 5.60. Air quality impacts associated with ecology are detailed within the ecology section to this summary.
- 5.61. The relevant mitigation measures applicable for air quality impacts include the preparation and implementation of an Air Quality Management Strategy. This Strategy is to include an emphasis on measures such as reducing the use of the Auxiliary Power Unit used by certain groups of aircraft, reducing the time engines are left running, and utilising low emission ground support equipment.

Climate Change and Carbon Management Measures

- 5.62. LAA is clearly committed to taking measures to manage an increase in the airport's carbon usage arising from the development proposals. The airport would implement a Carbon Management Plan, which would ensure that carbon emissions under the airports' direct control are monitored and managed, with the aim of establishing a low carbon airport.
- 5.63. Greenhouse gas emissions from aircraft would be dealt with under wider Government and EU requirements and initiatives such as the EU's Emissions Trading Scheme and the Civil Aviation Act 2006, although the airport operators would seek to engender and influence carbon awareness in any fleet based at the airport.
- 5.64. LAA has worked on key outline principles for its Carbon Management Plan and these are set out in the submitted material. In summary, the key areas of potential management options which LAA is committed to developing are vehicles, surface access journeys, minimising energy use, waste management and aircraft ground operations. It is anticipated that the Carbon Management Plan would be monitored and reviewed by both LAA and SDC, thereby



ensuring that LAA complies with or, where possible, exceeds UK airport best practice as it emerges.

5.65. As an example of LAA's commitment to carbon reduction, a BREEAM bespoke preassessment of the proposed terminal building design has shown that LAA could achieve a VERY GOOD assessment result. This underlines that sustainability will be one of LAA's drivers in developing the airport. Please refer to the details on Design in this summary overview.

Noise – Potential Community Annoyance

- 5.66. The noise assessments for potential community annoyance have assessed three scenarios:-
 - The annual average, which represents the annual average directional distribution of air traffic which is 70% use of Runway 21 and 30% use of Runway 03 for takeoff and landing operations;
 - A day when all aircraft use Runway 21 for takeoff and landing operations (this would occur when the wind is from the south/west) (the "R21 Scenario"); and
 - A day when all aircraft use Runway 03 for takeoff and landing operations (apart from public transport jets such as the Boeing 737 and Airbus 319 which would continue to use Runway 21 to avoid the military and nuclear exclusion zones). Runway 03 would be used when the wind is from the north/east (the "R03 Scenario").
 - A study commissioned by the Civil Aviation Authority (CAA) and the Department for Transport (DfT), suggests that the onset of community annoyance occurs at 57dB(A), moderate community annoyance at 63dB(A) and high community annoyance at 67dB(A).
- 5.67. For daytime (0700 2300 hrs) movements when LAA is operating at the expanded level of 300,000ppa, the following conclusions have been drawn:-
 - For the annual average, no properties would fall within the 57dB(A) contour;
 - For the R21 Scenario, three properties would fall within the 57dB(A) contour;
 - For the R03 Scenario, 36 properties would fall within the 57dB(A) contour.
- 5.68. No properties would be within any contours corresponding to moderate or high community annoyance. Indeed, the 57dB(A) contour is the highest contour which affects properties. In terms of assessment against the existing conditions, this would be a moderate increase. Regarding noise sources from ground operations, it is considered that these operations are unlikely to be significant.
- 5.69. For daytime (0700 2300 hrs) movements when LAA is operating at the expanded level of 500,000ppa, the following conclusions have been drawn:-
 - For the annual average, three properties would fall within the 57dB(A) contour;
 - For the R21 Scenario, three properties would fall within the 57dB(A) contour;
 - For the R03 Scenario, 75 properties would fall within the 57dB(A) contour.
- 5.70. No properties would be within any contours corresponding to moderate or high community annoyance. Indeed, the 57dB(A) contour is the highest contour which affects properties. In terms of assessment against the existing conditions, this would be a moderate increase. Regarding noise sources from ground operations, it is considered that these operations are unlikely to be significant.



- 5.71. The airport is not intending to operate any flights during night time (2300 0700 hrs) and will accept a condition to that effect (subject to the exclusion of operations for emergency or military/Government reasons).
- 5.72. The relevant mitigation measures applicable for noise impacts include:-
 - Fixed Wing scheduled aircraft movement restriction of 40,000 movements per annum;
 - Scheduled Helicopter movement restriction of 2,000 movements per annum (with a complete restriction on night time helicopter movements) together with a preferential noise abatement route for movements;
- 5.73. The preparation and implementation of a Noise Management Plan, to include, for example:-
 - the introduction of noise abatement operating procedures including a penalty system for those pilots of aircraft using excessive thrust when arriving at or departing from LAA. Any fines resulting from the system's operation to be donated to a community fund for the environmental improvement of, and community and recreational projects within a 5 kilometre radius of, LAA;
 - Auxiliary Power Units not to be operated for a period that exceeds 20 minutes during the night time;
 - engine runs for maintenance purposes to be prohibited during the night time except where necessary to permit, in exceptional circumstances, a delayed aircraft to depart;
 - the careful siting of ground operations to ensure sensitive receptors are not subject to unnecessary ground noise;
 - the establishing of clear lines of communication with local residents to facilitate the addressing of any concerns relating to noise emanating from LAA;
 - the providing of permanent noise monitoring stations at locations to be agreed with SDC.

Geomorphology (Ground Conditions)

- 5.74. The proposed runway extension footprint is currently semi-improved grassland and agricultural land. One of the reasons for the designation of the Dungeness, Romney Marsh and Rye Bay Site of Special Scientific Interest (the "SSSI") is the presence of distal limbs of successive gravel recurves at the interface between the barrier and the marshland sediments of Denge Marsh.
- 5.75. The proposed extension would involve a paved area and a runway strip (clear and graded area comprising semi-improved grassland) and would affect 12.85ha of SSSI land, which equates to 0.14% of the total SSSI. In terms of the paved area of the runway extension, this equates to 1.62ha, or 0.018% of the total SSSI.
- 5.76. Geomorphology specialists from Liverpool University have carried out a geomorphology survey, and have concluded that it is unlikely that the buried geomorphology under the proposed runway footprint is of unique quality. Accordingly, it is proposed that during the construction of the proposed runway extension, a watching brief be undertaken to monitor the construction works.
- 5.77. The construction of the proposed terminal building would be on existing hard standing outside the SAC and the SSSI.

Ecology

5.78. LAA understands that the airfield and its environs constitute land of very high ecological and



landscape value, including European and nationally designated sites. A series of studies carried out in association with the Applications have shown that where there is likely to be significant ecological or landscape impact, such impacts can be satisfactorily mitigated. A vast amount of information has been gathered and assessment undertaken which is only briefly summarised below:-

Ecology - Nitrogen Deposition

- 5.79. Airborne nitrogen deposition from human activities, including air and ground traffic, can have negative impacts on plant species of conservation importance. Accordingly, it is important to establish the potential impacts associated with nitrogen deposition arising from the Applications, particularly on the vegetated shingle of the Dungeness Special Area of Conservation (the "SAC") and the SSSI.
- 5.80. The data submitted in support of the Applications can be summarised as follows:-
 - If background nitrogen deposition decreases with time following the "most likely" trend, then the effects of the expansion of LAA to 300,000ppa and 500,000ppa would be negligible. The area of 'perennial vegetation of stony banks' that would experience a change in deposition of more than 1% of the critical load would be less than 0.05% of the total area of shingle within the SAC and 0.2% of the total area of shingle within the SSSI.
 - If background nitrogen deposition is constant in time following a "worst case" trend, then the effects of the expansion of LAA to 300,000ppa and 500,000ppa on the SAC are assessed to be 'minor adverse'. The effects of the expansion of LAA to 500,000ppa on the SSSI are also assessed to be 'minor adverse' in this "worst case" scenario, whilst the effects of 300,000ppa in this "worst case" are assessed to be negligible.
- 5.81. It is concluded that the expansion would only have a negligible impact on nitrogen deposition levels within the SSSI.
- 5.82. In terms of the impact of nitrogen deposition on plant-insect communities within the SAC and SSSI, it is concluded that any impact on such plant-insect communities would also be insignificant, since the impact on host plants is negligible.
- 5.83. The relevant mitigation measures applicable for nitrogen deposition impacts include the preparation of an Air Quality Management Strategy and Biodiversity Action Plan. The latter would include measures to create areas of shingle for natural vegetation away from the runway strip.

Ecology – Change in Land Use, Ditch Network and Great Crested Newts

- 5.84. There would be very little land use change as a result of the proposed runway extension. The proposed runway extension footprint currently comprises semi-improved grassland and agricultural land. The proposed extension would comprise a paved area and a runway strip (clear and graded area comprising semi-improved grassland).
- 5.85. It is concluded that only the change in use to the paved area could give rise to likely significant environmental effects. The extent of this change would be:-
 - 0.23ha of the SAC (equating to 0.007% of the total SAC area) would change from semi-improved grassland to paved area;
 - 1.62ha of the SSSI (equating to 0.018% of the total SSSI area) would change from semi-improved grassland to paved area.
- 5.86. The areas of semi-improved grassland that would be paved are of negligible habitat value for any SAC or SSSI designated species.



- 5.87. Some drainage ditches would be realigned as a result of the runway extension. The total length of the ditches that are proposed for realignment as part of the runway extension is 801m, approximately 250m of which are located within the SAC. The ditch network that would be realigned is currently not suitable habitat for great crested newts and none were found during the surveys undertaken. Accordingly, the realignment of the ditch network would not adversely affect the SAC in terms of its designation for great crested newts. Nevertheless, the ecological value of the ditches would be mitigated by the creation of appropriate wetland features on the east of the airfield.
- 5.88. The potential terrestrial habitats for great crested newts on the footprint of the proposed runway extension are arable land and semi-improved grassland. Currently, this is of low terrestrial habitat value, and this low value would be slightly improved on conversion of the arable land use to semi-improved grassland.
- 5.89. Accordingly, it is concluded that there would be a negligible habitat impact on the SAC and the SSSI as a result of the land use change, and this change would not adversely affect the integrity of the SAC.
- 5.90. The construction of the proposed terminal building would be on existing hard standing outside the SAC and the SSSI.
- 5.91. The relevant mitigation measures applicable for change of land use and any impacts on the ditch network and great crested newts include:-
 - The preparation of a Construction Environmental Management Plan in order to minimise any negative impacts on the surrounding ditches;
 - The provision of new wetland features and refugia within the LAA site boundary;
 - The creation of 1300m new realigned drainage ditches around the proposed runway extension;
 - The creation of a 450m in length ditch solely for key species such as water vole, great crested newt, medicinal leech and a range of other aquatic and terrestrial invertebrates. Additionally, the existing ponds would receive management treatment which would improve the habitat for key species. (It should be noted that as the realignment of the ditches would not adversely affect the integrity of the SAC, this mitigation measure is independent of the construction of the proposed runway extension).

Ecology – Invertebrates

- 5.92. The ditches within the footprint of the proposed runway extension support a range of aquatic and terrestrial invertebrates. The impact on such species would be mitigated by creating new wetland habitat, some specifically for invertebrate habitat. Sediment from the ditches to be lost would to be used to 'seed' new ditches.
- 5.93. The airport locality is a significant moth habitat, including rare species. The lighting design for the proposed new terminal takes into account night-flying moths. Furthermore, as the airport is not intending to operate any flights during the night time (2300 0700 hrs), so the airport would not be utilising the runway and approach lighting during these hours (except for an emergency or military/Government reasons). In addition, floodlighting would only be used as and when required for security and health and safety purposes.
- 5.94. Invertebrates recorded on the grassland and arable land in the proposed runway footprint, were mainly common species, which would continue to be supported by semi-improved grassland. It is considered that the proposed runway extension and the proposed terminal building, which is to be located on existing hard standing, would have an insignificant negative impact on terrestrial invertebrates.



Ecology – Hammonds Corner

- 5.95. Within the submitted documents accompanying the Applications, it has been identified that upgrade works would be required to the junction formed by the B2075 (Romney Road) and the A259 (Lydd Road) and known as "Hammonds Corner" in order to mitigate against the impact of the Applications. Discussions and design with the Highways Authority have concluded that the existing T-junction should be converted into a three-junction roundabout. The final design of the upgrade works would be decided through consultation with the Highways Authority followed by a formal submission of a planning application to SDC.
- 5.96. An ecological survey has been carried out to ascertain the likely significant environmental effects of the proposed roundabout.
- 5.97. The land required for the proposed roundabout is not located within the SSSI and the ecological survey demonstrated that the land is of low ecological value. However, it is considered that the land (i.e. the present T-junction) is in the potential zone of influence for the SSSI. Accordingly, prior to the submission of a planning application for the roundabout, further detailed surveys would be carried out. These surveys, and any mitigation measures identified, would then be submitted in support of the planning application at the relevant time.

Ornithology

5.98. The overall impact on birds, taking into account the proposed mitigation measures, is considered to be low-moderate, with the proposed expansion not adversely affecting the integrity of the Dungeness to Pett Level Special Protection Area (the "SPA"). The key areas of assessment on birds has included:-

Birdstrike Risk

- 5.99. The key impact on local bird populations resulting from the implementation of the proposed runway extension and terminal building (which would give rise to a higher frequency of aircraft movements), is that there would be the potential for a higher risk of birdstrike.
- 5.100. The Bird Strike Risk Assessment concludes that if current best practice is followed, then birdstrike at 500,000ppa can be contained within levels comparable with other UK airports, without affecting surrounding bird conservation habitat.
- 5.101. Using an upper parameter scenario of 46,355 aircraft movements for 500,000ppa, it is forecast that with the introduction of a Bird Control Programme, the annual birdstrike rate would be 13, a rate lower than most UK aerodromes. LAA is proposing to limit the number of annual aircraft movements (fixed -wing) to 40,000, with the annual number of helicopter movements limited to 2,000.
- 5.102. The Bird Control Programme is designed to have a significant, but localised, effect on certain key bird species. It is expected that the requirements of the airport to mitigate the birdstrike hazard would have no overall negative effect on bird populations in the wider area or on the species for which the SPA has been (and any revisions to the SPA will be) designated and therefore no adverse effects on the integrity of the SPA, other designations or bird reserves would occur. In addition, LAA would provide enhanced habitat for a range of bird species, along with other fauna and flora, of conservation concern as part of the Biodiversity Action Plan.

Noise

5.103. Increased aircraft noise would impact to some extent on bird reserves in and around the SPA. It is concluded that there would be increased single event peak noise levels at protected habitats east of LAA of up to 9 dB(A) to a level of 81 dB(A), representing a moderate impact for both the proposed runway extension and terminal building. To the south of LAA, there would be no net increase in peak level noise impact for both the



proposed runway extension and terminal building.

5.104. The impacts to the east of LAA can be adequately mitigated against by noise performance standards being set for aircraft based at LAA, and departure procedures and routes being regularly reviewed for their noise impact, with the aim of minimising departure noise impact on bird communities.

Visual

5.105. It is considered that visual disturbance from aircraft does not in itself constitute a significant environmental impact, above and beyond impacts from aircraft noise.

Water Resources and Drainage

- 5.106. A Water Protection Management Plan and a Water Quality Monitoring Programme would be prepared and implemented to ensure that the construction of the proposed runway extension and terminal building do not impact on the watercourses during the construction phases.
- 5.107. A consequence of the proposed runway extension would be disruption to the existing drainage ditches that form part of the wider drainage network and which would need to be relocated and realigned as part of the scheme. A system of interconnected, open drainage ditches criss-cross the area with flow generally to the west. Two private drains sit on the periphery of the application site but the main affected watercourses, Mockmill Sewer, Paines Field Petty Sewer and School Petty Sewer, fall under the control of the Romney Marshes Area Internal Drainage Board. The Internal Drainage Board has a responsibility for the maintenance of these watercourses.
- 5.108. The length of ditches affected by the runway extension would be 801m. The surface water drainage strategy submitted with the Applications proposes a new ditch network of 1300m, which would mean an increase of 501m to the overall ditch network. The surface water drainage strategy, which has been informed by discussions with the Romney Marshes Area Internal Drainage Board and the Environment Agency, concludes that this new ditch network would be capable of retaining a 1 in 100 year return period storm event including a +30% climate change allowance without any surface flooding.
- 5.109. The ecological impacts of the realignment of part of the existing ditch network and the benefits of the proposed new ditch network are discussed earlier on in this overview summary.

Sewerage (Solid Waste Management)

- 5.110. The existing foul water drainage system at LAA primarily comprises a septic tank sewage treatment system for the main buildings. This system has the capacity to cater for 300,000ppa (including the increase in staff and services that this throughput will entail).
- 5.111. In order to accommodate a throughput of 500,000ppa, an additional sewage capacity for 200,000ppa would be required. A number of viable and workable options are available to meet this extra 200,000ppa demand (together with the associated increase in staff and services). These include the following options:-
 - Pumping of the additional foul water to a Southern Water sewer. A level 1 capacity check has been carried out with Southern Water which has identified that there is capacity to connect to a public sewer; or
 - Establishing cesspools. The additional foul water would flow into the cesspools on site and then be tankered from LAA to a treatment plant within the locality. This option would necessitate 10 tankers per week.
- 5.112. The airport is committed to carrying out the necessary works to allow for these upgrades



when passenger numbers reach the levels where the works are required.



6. Revised Updated Schedule of Mitigation Measures



This schedule supersedes the Schedule of Mitigation Measures set out in the Environmental Statement December 2006, the Schedule of Mitigation Measures submitted in Appendix 13, Volume 3B of the 2007 Supplementary Environmental Information and the Schedule of Mitigation Measures submitted in Volume 2 of the Supplementary Information August 2008. Each individual mitigation measure contained in this schedule should be secured by the appropriate planning mechanism applicable to that measure, such as by Section 106 Obligation, Condition or Informative.

Area	Aspect	Mitigation
General	Management Plans	LAA will develop and implement a Construction Health & Safety Plan (CHSP) and Construction Environmental Management Plan (CEMP) which will include both works method statements and risk tables to manage the key environmental risks outlined in the Environmental Statement (2006) and Supplementary Information (2007, 2008 & 2009). The plans will meet the requirements of all relevant legislation and the requirements of the regulatory authorities and will contain specific information as outlined in this Schedule. The CEMP will be in line with the outline CEMP submitted with the 2008 Supplementary Information.
General	Training	All personnel will have appropriate instruction on the use of the CHSP and CEMP to minimise environmental risks with specific instruction on issues such as spill avoidance, hazard management and special precautions for sensitive areas.
General	Health and Safety	The CEMP will meet the requirements of the Construction (Design and Management) Regulations 2007, the Health and Safety at Work Act 1974, the Management of Health and Safety at Work Regulations 1999, and the Control of Substances Hazardous to Health Regulations 2002. It will specifically require all works to be properly barriered off and adequate signage installed to indicate appropriate Personal Protective Equipment (PPE) required (and to be worn at all times), and all health and safety equipment to be available onsite, including spill kits.
Ground Conditions	Existing Land Contamination	Pre-commencement site investigations will be agreed with the regulatory authorities, targeted to those areas where contamination could be most likely encountered. Should any potentially contaminated land be encountered, it will be analysed for the presence of hazardous materials and an appropriate remediation strategy agreed with the regulators before construction works commence. In addition, should any contaminated 'hot-spots' be identified by onsite contractors, work in that area will stop until the material present has been analysed and appropriate remediation agreed.

Key Mitigation Proposals for Construction Phase Impacts



Area	Aspect	Mitigation			
Ground Conditions	Spill Prevention	 Risks of contamination to the underlying geology and soils of the area will be minimised through implementation of the CEMP, with particular requirements that: Fuel/oil tanks and chemical storage tanks/areas to be provided with locks and placed on compacted areas (within bunds that have a capacity equal to 110% of the storage capacity of the largest tank) to prevent spilled materials from leaking offsite. All valves and couplings to be located within the bunded area; Any excavated material will be placed on hardstanding located at least 20m from the nearest watercourses and covered; All clean material arising from construction works will be spread evenly over the land known as the APPS land (within LAA's ownership) and over the clear and graded area (but not within 20m of watercourses) before grassing. 			
Ground Conditions	Soil handling	All soil and ground arisings will be stripped, handled, stored, managed and re-distributed on site.			
Water Resources	Surface Water Drainage	Stormwater management measures will be developed in consultation with the local planning authority, Environment Agency and the Internal Drainage Board and installed prior to commencement of the runway extension. These will prevent erosion of any exposed substrates and/or sediment laden or contaminated water draining offsite into adjacent controlled waters.			
Water Resources	Water Quality	 Specific water-resource protection measures will be included within the CEMP, such as: Oil interceptors will be provided in any drainage system downstream of possible oil/fuel pollution sources. The oil interceptors will be emptied and cleaned regularly to prevent the release of oils and grease into the stormwater drainage system. Waste materials will be disposed of at an appropriate facility. Any surface water contaminated by hydrocarbons which are used during the construction phase will be passed through these oil/grit interceptor(s) prior to discharge; Measures will be taken to ensure that no leachate or any surface water that has the potential to be contaminated enters directly or indirectly any watercourse, underground strata or adjoining land; Water inflows to excavated areas will be minimised by the use of lining materials, good house keeping techniques and by the control of drainage and construction materials in order to prevent the contamination of groundwater; Refuelling of construction vehicles and equipment will be restricted to a designated area with properly designed fuel tanks and bunds and appropriate operating procedures; 			

Area	Aspect	Mitigation
		• All channels (permanent and temporary) and attenuation ponds will be maintained to prevent flooding and overflowing and protected where necessary against erosion;
		• All temporary hardstanding areas and exposed surfaces or storage areas will be designed to discharge to attenuation ponds, and will not discharge to watercourses or flow offsite in an uncontrolled manner;
		• Portable chemical toilets and sewage holding tanks will be placed onsite to accommodate sewage generated by the construction workforce. A licensed contractor will be responsible for appropriate disposal and maintenance;
		 Handling and storage of any potentially contaminating material will only occur in designated areas to prevent discharge to watercourses, the drainage system, or offsite;
		• No washdown areas will be located near watercourses, or open drains and washdown waters will be collected and directed to appropriate treatment; and
		A spill management plan will be in place at all times.
Water Resources	Water Quality Monitoring	A water quality monitoring programme will be developed for the project in conjunction with the regulatory authorities, to protect water resources during construction.
Solid Waste Management	Management Plans	The CEMP will include a Solid Waste Management Plan, which will contain measures to control waste production.
Solid Waste Management	Spoil Management	An exemption will be sought from the Environment Agency under Paragraph 19A, Schedule 3, to the Waste Management Licensing Regulations 1994 (as amended) for the excavation and reuse of soil as part of the construction works.
Land Use	Connections & Access	Utility connections required will be below ground and routed to avoid impacts on sensitive areas. Subject to LAA's duties as an airport operator, farm access in the surrounding area will be maintained with no restrictions.
Ecology	Habitat Management Plans	The CEMP will include habitat management plans to ensure adequate protection of important habitats from accidental leaks or spills of oil or other petroleum- based products. Areas outside the footprint will be fenced off to prevent unauthorised access by site plant or personnel, and vehicle movement will be confined to existing roads and access tracks.

Area	Aspect	Mitigation
Ecology	Timing of Works	Works scheduling will take account of any seasonal vulnerability of important species. Breeding and behavioural cycles will be considered for mammals, birds, reptiles, amphibians and invertebrates. Any plant material translocation would be similarly subject to seasonal sensitivity.
Ecology	Ditches	Closure of 801m ditches and creation of approximately 1300m ditches in order that both drainage and ecological value are maintained and where possible enhanced. A detailed design and method statement will be agreed with the appropriate authorities.
Cultural Heritage	Watching Brief	An archaeological watching brief will be developed for earthmoving works in accordance with the requirements of PPG 16 and the Local Plan Policy.
Traffic	Construction Traffic	An agreed route and schedule for construction vehicles will be established with the Highways Authority.
Air Quality	Dust Management	The CEMP will contain specific precautionary measures to limit dust.
Air Quality	Site Roads and Haulage	Hardstanding areas for vehicles entering, parking and leaving the site will be provided, with wheel washing facilities at access points. Site roads will be cleaned regularly and damped down if necessary. Site vehicle movements will be kept to a minimum and, where possible, restricted to paved haulage routes. Vehicle speeds will be limited to 20 km/h or less on surfaced roads and 10 km/h on unpaved surfaces. The idling of vehicles will be kept to a minimum.
Air Quality	Mechanical Operations	Static and mobile plant will be well maintained, regularly serviced and located as far away as practicable from sensitive receptors.
Noise & Vibration	Normal working hours	All construction activities will be carried out in accordance with the recommendations of BS 5228. Appropriate practicable working hours and noise limits will be agreed with the local planning authority.
Noise & Vibration	Non-normal working hours	Specific method statements and risk assessments will be required for night working and the contractor will inform and agree any works in advance with the Environmental Health Officer, whilst also informing affected residents of the works to be carried out outside normal hours who would be provided with a point of contact for any queries or complaints.
Noise & Vibration	Plant & vehicle maintenance	All vehicles and mechanical plant used for construction will be fitted with effective exhaust silencers, and regularly maintained and inherently quiet plant will be used where appropriate. All major compressors will be sound-reduced models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use and all ancillary pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers. All ancillary plant such as generators, compressors and pumps will be positioned so as to cause minimum noise disturbance. If necessary, temporary acoustic barriers or enclosures will be provided



Key Mitigation Proposals for Operational Impacts

Area	Aspect	Mitigation
Conoral	Environmental Management	LAA will develop its Environmental Management System (EMS) based on the ISO14001 standards.
General Training		All airport staff (and those of tenant companies including airlines) will undergo appropriate environmental training as set out in the EMS.
Water Resources	Internal Drainage	Drains within the airport boundary owned by LAA will be maintained by LAA (in consultation with the IDB) to ensure that there are no obstructions to drainage or reduced storage volumes which could cause localised flooding, and that adequate water storage is present throughout the system. LAA will monitor these facilities to ensure they remain effective and will provide access to the IDB as required but subject to operational safety.
Water Resources	External Drainage	Drains outside the airport boundary are owned by the IDB which undertakes annual maintenance of these drains to ensure they maintain their drainage capacity and efficiency. LAA will assist the IDB in this process and provide access when necessary.
Water Resources	Spill Management	The EMS will include spill prevention procedures and risk control measures (for example employment of mechanical rather than chemical runway de- icing) to avoid contaminants entering watercourses. Such measures will be agreed with the Environment Agency, IDB and Natural England.
Solid Waste Management	Management Plans	The EMS will contain a solid waste management strategy, which will identify how individual waste streams are managed, collected, and disposed of (airside and landside).
Land Use	General	A forum will be established to include local landowners to control bird strike whilst retaining and improving ecological and/or agricultural value of surrounding land.
		A habitat and biodiversity action plan (BAP) will be developed for the airport in collaboration with appropriate stakeholders. The BAP will be in line with the outline BAP submitted with the 2008 Supplementary Information and include:-
Ecology	Biodiversity Action Plan	 habitat suitability for reptiles, invertebrates and small mammals to be encouraged in locations away from operational areas of the site; habitat management of waterbodies and drainage ditches within the site to be undertaken in agreement with the Environment Agency, IDB and Natural England; measures to reduce the risk of siltation and contamination of watercourses; appropriate methods to ensure that the ornithological value of the area is retained and, where possible, enhanced. methods to ensure a balance is met between recognising the importance of the wetland habitat around the airport for bird conservation and the need to minimise bird strike hazard.

Area	Aspect	Mitigation
Ecology	Ecological Monitoring	LAA will carry out the following monitoring:- the monitoring of bird populations in and around the airfield; the monitoring of any habitat creation on or off the airfield; the monitoring of lichens and other plants on shingle habitat. All monitoring regimes will be agreed in so far as is possible with appropriate stakeholders.
Ecology	Ditches and Ponds	A habitat creation proposal for a new ditch of approximately 450m linking two existing ditches. A habitat creation proposal for new waterbodies to enhance the site for great crested newts and other species. A monitoring programme, including a six monthly chemical analysis, of Pond A.
Ecology	Bird Conservation and Designated Areas	It is proposed that bird control using cartridge and flare equipment is used only when considered necessary; only then in the vicinity of the runway, and that the volume is minimised (whilst allowing efficacy of use).
Bird Conservation & Hazard Management	Bird Conservation and Designated Areas	LAA will set noise performance standards for aircraft and will review departure procedures and routes specifically in terms of ornithology. LAA will also ensure that its noise monitoring system is adapted for the protected bird species.
Bird Conservation & Hazard Management	Bird Hazard	LAA will continue to develop and implement its Bird Control Plan (BCP), which will be in line with the outline BCP submitted with the 2008 Supplementary Information. LAA will also develop and implement a mechanism to monitor the BCP.
Traffic & Transport	Travel Plan	LAA will develop and implement a Travel Plan, which will be in line with the outline Travel Plan submitted with the 2008 Supplementary Information.
Traffic & Transport	Travel Plan	LAA will develop and implement a car park management scheme, which will monitor the number of spaces at LAA; safety, security, cleaning and other operational arrangements; car parking charges; and signage.
Traffic & Transport	Hammonds Corner	LAA will construct a new roundabout at Hammonds Corner. The specific trigger point will be agreed with the local planning authority. Prior to such construction, LAA will carry out a series of surveys for protected species to compliment the Phase 1 Survey submitted with the 2008 Supplementary Information.
Traffic & Transport	Signage	LAA will develop and implement a signage strategy to ensure that traffic is directed along the most appropriate route to the airport.
Traffic & Transport	Access Road	LAA will develop and implement an access monitoring survey which will assess the road traffic safety conditions at the junction of the B2075 and the airport access road.

Area	Aspect	Mitigation
Traffic & Transport	Shuttle Bus	LAA will operate a shuttle bus service between the Airport and Ashford International Train Station.
Air	Air Quality Management	LAA will develop an air quality strategy together with an air quality monitoring strategy.
Noise & Vibration	Noise Management	LAA will develop a noise management plan, which will include measures such as controlling ground noise; establishing noise performance standards for aircraft based at LAA; and managing flight path, departure, arrival and taxiing procedures. A noise monitoring strategy will also be developed.
Noise & Vibration	Noise Management	LAA will restrict the number of helicopter movements to 2,000 movements per annum (excluding emergency and military/Government activities and the air show) and have a complete embargo on helicopter movements at night time (again excluding emergency and military/Government activities). LAA will also establish a noise preferential route for helicopter movements.
Noise & Vibration	Noise Management	LAA will restrict the number of fixed wing aircraft movements to 40,000 movements per annum (excluding emergency and military/Government activities and the air show) and have a complete embargo on fixed wing aircraft movements at night time (again excluding emergency activities and military/Government activities).
Noise & Vibration	Noise Management	LAA will provide secondary glazing for Greatstone Primary School at an appropriate trigger to be agreed with the planning authority.
Climate change	Carbon Management	LAA will commit to minimising its own carbon footprint by establishing a carbon management plan (in line with the framework submitted with the 2008 Supplementary Information) which will include examining airfield buildings, ground operations, aircraft fleet, flight paths and landing/take-off operations. LAA will also become a signatory to the UK Sustainable Aviation Strategy. In terms of cleaner aircraft, aviation fuel tax and emissions trading, these are all initiatives which the Government is targeting primarily towards airline operators. LAA will review the environmental practices of airline operators wishing to use the developed facilities
Socio-Economic	Employment	LAA will develop and implement a Jobs and Business Strategy to ensure that the local community benefits from operational jobs that will arise.
Lighting	Light Management	LAA will develop and submit to the local planning authority for approval a lighting strategy which will be in line with the outline strategy submitted with the 2008 Supplementary Information. LAA will then light the external areas of the terminal building in accordance with the approved strategy and monitor the performance of the strategy.
Landscape	Landscape works	LAA will develop and submit to the local planning authority for approval a landscape strategy which will be in line with the outline strategy submitted with the 2008 Supplementary Information. LAA will then landscape the external areas of the terminal building in accordance with the approved strategy and monitor the performance of the strategy.

This schedule supersedes the Schedule of Mitigation Measures set out in the Environmental Statement December 2006, the Schedule of Mitigation Measures submitted in Appendix 13, Volume 3B of the 2007 Supplementary Environmental Information and the Schedule of Mitigation Measures submitted in Volume 2 of the Supplementary Information August 2008. Each individual mitigation measure contained in this schedule should be secured by the appropriate planning mechanism applicable to that measure, such as by Section 106 Obligation, Condition or Informative.

Area	Aspect	Mitigation
General	Management Plans	LAA will develop and implement a Construction Health & Safety Plan (CHSP) and Construction Environmental Management Plan (CEMP) which will include both works method statements and risk tables to manage the key environmental risks outlined in the Environmental Statement (2006) and Supplementary Information (2007, 2008 & 2009). The plans will meet the requirements of all relevant legislation and the requirements of the regulatory authorities and will contain specific information as outlined in this Schedule.
General	Training	All personnel will have appropriate instruction on the use of the CHSP and CEMP to minimise environmental risks with specific instruction on issues such as spill avoidance, hazard management and special precautions for sensitive areas.
General	Health and Safety	The CEMP will meet the requirements of the Construction (Design and Management) Regulations 2007, the Health and Safety at Work Act 1974, the Management of Health and Safety at Work Regulations 1999, and the Control of Substances Hazardous to Health Regulations 2002. It will specifically require all works to be properly barriered off and adequate signage installed to indicate appropriate Personal Protective Equipment (PPE) required (and to be worn at all times), and all health and safety equipment to be available onsite, including spill kits.
Ground Conditions	Existing Land Contamination	Pre-commencement site investigations will be agreed with the regulatory authorities, targeted to those areas where contamination could be most likely encountered. Should any potentially contaminated land be encountered, it will be analysed for the presence of hazardous materials and an appropriate remediation strategy agreed with the regulators before construction works commence. In addition, should any contaminated 'hot-spots' be identified by onsite contractors, work in that area will stop until the material present has been analysed and appropriate remediation agreed.

Key Mitigation Proposals for Construction Phase Impacts



Area	Aspect	Mitigation
Ground Conditions	Spill Prevention	 Risks of contamination to the underlying geology and soils of the area will be minimised through implementation of the CEMP, with particular requirements that: Fuel/oil tanks and chemical storage tanks/areas to be provided with locks and placed on compacted areas (within bunds that have a capacity equal to 110% of the storage capacity of the largest tank) to prevent spilled materials from leaking offsite. All valves and couplings to be located within the bunded area; Any excavated material will be placed on hardstanding located at least 20m from the nearest watercourses and covered; All clean material arising from construction works will be spread evenly over the land known as the APPS land (within LAA's ownership) and over the clear and graded area (but not within 20m of watercourses) before grassing.
Ground Conditions	Soil handling	All soil and ground arisings will be stripped, handled, stored, managed and re-distributed on site.
Water Resources	Surface Water Drainage	Stormwater management measures will be developed in consultation with the local planning authority, Environment Agency and the Internal Drainage Board (IDB) and installed prior to commencement of the terminal building. These will prevent erosion of any exposed substrates and/or sediment laden or contaminated water draining offsite into adjacent controlled waters.
Water Resources	Water Quality	 Specific water-resource protection measures will be included within the CEMP, such as: Oil interceptors will be provided in any drainage system downstream of possible oil/fuel pollution sources. The oil interceptors will be emptied and cleaned regularly to prevent the release of oils and grease into the stormwater drainage system. Waste materials will be disposed of at an appropriate facility. Any surface water contaminated by hydrocarbons which are used during the construction phase will be passed through these oil/grit interceptor(s) prior to discharge; Measures will be taken to ensure that no leachate or any surface water that has the potential to be contaminated enters directly or indirectly any watercourse, underground strata or adjoining land; Water inflows to excavated areas will be minimised by the use of lining materials, good house keeping techniques and by the control of drainage and construction materials in order to prevent the contamination of groundwater; Refuelling of construction vehicles and equipment will be restricted to a designated area with properly designed fuel tanks and bunds and appropriate operating procedures;

Area	Aspect	Mitigation
		• All channels (permanent and temporary) and attenuation ponds will be maintained to prevent flooding and overflowing and protected where necessary against erosion;
		• All temporary hardstanding areas and exposed surfaces or storage areas will be designed to discharge to attenuation ponds, and will not discharge to watercourses or flow offsite in an uncontrolled manner;
		• Portable chemical toilets and sewage holding tanks will be placed onsite to accommodate sewage generated by the construction workforce. A licensed contractor will be responsible for appropriate disposal and maintenance;
		 Handling and storage of any potentially contaminating material will only occur in designated areas to prevent discharge to watercourses, the drainage system, or offsite;
		• No washdown areas will be located near watercourses, or open drains and washdown waters will be collected and directed to appropriate treatment; and
		A spill management plan will be in place at all times.
Water Resources	Water Quality Monitoring	A water quality monitoring programme will be developed for the project in conjunction with the regulatory authorities, to protect water resources during construction.
Solid Waste Management	Management Plans	The CEMP will include a Solid Waste Management Plan, which will contain measures to control waste production.
Solid Waste Management	Spoil Management	An exemption will be sought from the Environment Agency under Paragraph 19A, Schedule 3, to the Waste Management Licensing Regulations 1994 (as amended) for the excavation and reuse of soil as part of the construction works.
Land Use	Connections & Access	Utility connections required will be below ground and routed to avoid impacts on sensitive areas. Subject to LAA's duties as an airport operator, farm access in the surrounding area will be maintained with no restrictions.
Ecology	Habitat Management Plans	The CEMP will include habitat management plans to ensure adequate protection of important habitats from accidental leaks or spills of oil or other petroleum- based products. Areas outside the footprint will be fenced off to prevent unauthorised access by site plant or personnel, and vehicle movement will be confined to existing roads and access tracks.



Area	Aspect	Mitigation
Ecology	Timing of Works	Works scheduling will take account of any seasonal vulnerability of important species. Breeding and behavioural cycles will be considered for mammals, birds, reptiles, amphibians and invertebrates. Any plant material translocation would be similarly subject to seasonal sensitivity.
Cultural Heritage	Watching Brief	An archaeological watching brief will be developed for earthmoving works in accordance with the requirements of PPG 16 and the Local Plan Policy.
Traffic	Construction Traffic	An agreed route and schedule for construction vehicles will be established with the Highways Authority.
Air Quality	Dust Management	The CEMP will contain specific precautionary measures to limit dust.
Air Quality	Site Roads and Haulage	Hardstanding areas for vehicles entering, parking and leaving the site will be provided, with wheel washing facilities at access points. Site roads will be cleaned regularly and damped down if necessary. Site vehicle movements will be kept to a minimum and, where possible, restricted to paved haulage routes. Vehicle speeds will be limited to 20 km/h or less on surfaced roads and 10 km/h on unpaved surfaces. The idling of vehicles will be kept to a minimum.
Air Quality	Mechanical Operations	Static and mobile plant will be well maintained, regularly serviced and located as far away as practicable from sensitive receptors.
Noise & Vibration	Normal working hours	All construction activities will be carried out in accordance with the recommendations of BS 5228. Appropriate practicable working hours and noise limits will be agreed with the local planning authority.
Noise & Vibration	Non-normal working hours	Specific method statements and risk assessments will be required for night working and the contractor will inform and agree any works in advance with the Environmental Health Officer, whilst also informing affected residents of the works to be carried out outside normal hours who would be provided with a point of contact for any queries or complaints.
Noise & Vibration	Plant & vehicle maintenance	All vehicles and mechanical plant used for construction will be fitted with effective exhaust silencers, and regularly maintained and inherently quiet plant will be used where appropriate. All major compressors will be sound-reduced models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use and all ancillary pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers. All ancillary plant such as generators, compressors and pumps will be positioned so as to cause minimum noise disturbance. If necessary, temporary acoustic barriers or enclosures will be provided
Socio-Economic	Employment	LAA will develop and implement a Jobs and Business Strategy to ensure that the local community benefits from the construction jobs that will arise.



Key Mitigation Proposals for Operational Impacts

Area	Aspect	Mitigation
General	Environmental Management	LAA will develop its Environmental Management System (EMS) based on the ISO14001 standards.
	Training	All airport staff (and those of tenant companies including airlines) will undergo appropriate environmental training as set out in the EMS.
Water Resources	Internal Drainage	Drains within the airport boundary owned by LAA will be maintained by LAA (in consultation with the IDB) to ensure that there are no obstructions to drainage or reduced storage volumes which could cause localised flooding, and that adequate water storage is present throughout the system. LAA will monitor these facilities to ensure they remain effective and will provide access to the IDB as required but subject to operational safety.
Water Resources	External Drainage	Drains outside the airport boundary are owned by the IDB which undertakes annual maintenance of these drains to ensure they maintain their drainage capacity and efficiency. LAA will assist the IDB in this process as required and will provide access when necessary.
Water Resources	Spill Management	The EMS will include spill prevention procedures and risk control measures to avoid contaminants entering watercourses. Such measures will be agreed with the Environment Agency, IDB and Natural England.
Solid Waste Management	Management Plans	The EMS will contain a solid waste management strategy, which will identify how individual waste streams are managed, collected, and disposed of (airside and landside).
Solid Waste Management	Sewerage	At 300,000ppa LAA will investigate the options to deal with the foul water disposal for the additional 200,000ppa and the suitable option to be agreed with the local planning authority.
Land Use	General	A forum will be established to include local landowners to control bird strike whilst retaining and improving ecological and/or agricultural value of surrounding land.
Ecology	Biodiversity Action Plan	 A habitat and biodiversity action plan (BAP) will be developed for the airport in collaboration with appropriate stakeholders. The BAP will be in line with the outline BAP submitted with the 2008 Supplementary Information and include:- 1. habitat suitability for reptiles, invertebrates and small mammals to be encouraged in locations away from operational areas of the site; 2. habitat management of waterbodies and drainage ditches within the site to be undertaken in agreement with the Environment Agency, IDB and Natural England; 3. measures to reduce the risk of siltation and contamination of watercourses; 4. appropriate methods to ensure that the ornithological value of the area is retained and, where possible, enhanced. 5. methods to ensure a balance is met between recognising the importance of the wetland habitat around the airport for bird conservation and the need to minimise bird strike hazard. LAA will also implement a mechanism by which it, and the appropriate authorities, will monitor the BAP.



Area	Aspect	Mitigation
Ecology	Ecological Monitoring	LAA will carry out the following monitoring:- the monitoring of bird populations in and around the airfield; the monitoring of any habitat creation on or off the airfield; the monitoring of lichens and other plants on shingle habitat. All monitoring regimes will be agreed in so far as is possible with appropriate stakeholders.
Ecology	Ditches and Ponds	A monitoring programme, including a six monthly chemical analysis, of Pond A.
Ecology	Bird Conservation and Designated Areas	It is proposed that bird control using cartridge and flare equipment is used only when considered necessary; only then in the vicinity of the runway, and that the volume is minimised (whilst allowing efficacy of use).
Bird Conservation & Hazard Management	Bird Conservation and Designated Areas	LAA will set noise performance standards for aircraft and will review departure procedures and routes specifically in terms of ornithology. LAA will also ensure that its noise monitoring system is adapted for the protected bird species.
Bird Conservation & Hazard Management	Bird Hazard	LAA will continue to develop and implement its Bird Control Plan (BCP), which will be in line with the outline BCP submitted with the 2008 Supplementary Information. LAA will also develop and implement a mechanism to monitor the BCP.
Traffic & Transport	Travel Plan	LAA will develop and implement a Travel Plan which will be in line with the outline Travel Plan submitted with the 2008 Supplementary Information.
Traffic & Transport	Travel Plan	LAA will develop and implement a car park management scheme, which will monitor the number of spaces at LAA; safety, security, cleaning and other operational arrangements; car parking charges; and signage.
Traffic & Transport	Shuttle Bus	LAA will operate a shuttle bus service between the Airport and Ashford International Train Station.
Traffic & Transport	Hammonds Corner	LAA will construct a new roundabout at Hammonds Corner. The specific trigger point will be agreed with the local planning authority. Prior to such construction, LAA will carry out a series of surveys for protected species to compliment the Phase 1 Survey submitted with the 2008 Supplementary Information.
Traffic & Transport	Signage	LAA will develop and implement a signage strategy to ensure that traffic is directed along the most appropriate route to the airport.



Area	Aspect	Mitigation
Traffic & Transport	Access Road	LAA will develop and implement an access monitoring survey which will assess the road traffic safety conditions at the junction of the B2075 and the airport access road.
Air	Air Quality Management	LAA will develop an air quality strategy together with an air quality monitoring strategy.
Noise & Vibration	Noise Management	LAA will develop a noise management plan, which will include measures such as controlling ground noise; establishing noise performance standards for aircraft based at LAA; and managing flight path, departure, arrival and taxiing procedures. A noise monitoring strategy will also be developed.
Noise & Vibration	Noise Management	LAA will restrict the number of helicopter movements to 2,000 movements per annum (excluding emergency and military/Government activities and the air show) and have a complete embargo on helicopter movements at night time (again excluding emergency and military/Government activities) LAA will also establish a noise preferential route for helicopter movements.
Noise & Vibration	Noise Management	LAA will restrict the number of fixed wing aircraft movements to 40,000 movements per annum (excluding emergency and military/Government activities and the air show) and have a complete embargo on fixed wing aircraft movements at night time (again excluding emergency and military/Government activities)
Noise & Vibration	Noise Management	LAA will provide secondary glazing for Greatstone Primary School at an appropriate trigger to be agreed with the planning authority.
Climate change	Carbon Management	LAA will commit to minimising its own carbon footprint by establishing a carbon management plan (in line with the framework submitted with the 2008 Supplementary Information) which will include examining airfield buildings, ground operations, aircraft fleet, flight paths and landing/take-off operations. LAA will also become a signatory to the UK Sustainable Aviation Strategy. In terms of cleaner aircraft, aviation fuel tax and emissions trading, these are all initiatives which the Government is targeting primarily towards airline operators. LAA will review the environmental practices of airline operators wishing to use the developed facilities.
Climate change	Carbon Management	LAA will use its reasonable endeavours to reach a bespoke BREEAM assessment rating of Very Good for the terminal building.
Socio-Economic	Employment	LAA will develop and implement a Jobs and Business Strategy to ensure that the local community benefits from operational jobs that will arise.
Lighting	Light Management	LAA will develop and submit to the local planning authority for approval a lighting strategy which will be in line with the outline strategy submitted with the 2008 Supplementary Information. LAA will then light the external areas of the terminal building in accordance with the approved strategy and monitor the performance of the strategy.
Landscape	Landscape works	LAA will develop and submit to the local planning authority for approval a landscape strategy which will be in line with the outline strategy submitted with the 2008 Supplementary Information. LAA will then landscape the external areas of the terminal building in accordance with the approved strategy and monitor the performance of the strategy.



7. Glossary

CUMULATIVE GLOSSARY OF ABBREVIATIONS

%	Percent
<	Less than
>	Greater than
μg	Microgram
AADT	Annual Average Daily Traffic
ACI	Airport Council International
ACN	Aircraft Classification Number
AFFF-LF	Aqueous Film Forming Foam – Low Freeze
AGL	Aeronautical Ground Lighting
AIEEM	Associate Member of the Institute of Ecology and Environmental Management
ALC	Agricultural Land Classification
AONB	Area of Outstanding Natural Beauty
APIS	Air Pollution Information System
APU	Auxiliary Power Unit
AQ	Air Quality
AQS	Air Quality Strategy
ATC	Air Traffic Control
ATC	Automated Traffic Counts
AVGAS	Aviation Fuel
BAP	Biodiversity Action Plan
BATNEEC	Best Available Technology Not Entailing Excessive Cost
BCT	Bird Control Team
BPM	Best Practicable Means
BCMP	Bird Control Management Plan
BSc	Bachelor of Science
CAA	Civil Aviation Authority
CDM	Construction Design and Management Regulations
CEMP	Construction Environmental Management Plan
CLEA	Contaminated Land Exposure Assessment
COFAR	Common Options for Airport Regions
CSM	Conceptual Site Model
dB	Decibel
DEFRA	Department of the Environment and Rural Affairs
DME	Distance Measuring Equipment
DMRB	Design Manual for Roads and Bridges
DTI	Department of Trade & Industry EA Environment Agency
EIA	Environmental Impact Assessment
EPA 1990	Environment Protection Act 1990
ES	Environmental Statement
EU	European Union
FIS	Flight Information Service
FOE	Friends of the Earth
Ft	Foot/Feet
FTE	Full Time Equivalent

GCNGreat Crested NewtGDPGross Domestic ProductGRGridHaHectareHGBIHerptofauna Groups of Britain and IrelandHGVHeavy Goods VehicleHLCHistoric Landscape CharacterisationHSEHealth & Safety Executive Ibid Ibidem (Latin) as previously citedIDBInternational Civil Aviation OrganisationIEEMInstitute of Ecological & Environmental ManagementIEMAInstitute of Environmental ManagementIKFIntegrated Kent Franchise	
GRGridHaHectareHGBIHerptofauna Groups of Britain and IrelandHGVHeavy Goods VehicleHLCHistoric Landscape CharacterisationHSEHealth & Safety Executive Ibid Ibidem (Latin) as previously citedICAOInternational Civil Aviation OrganisationIDBInternal Drainage BoardIEMAInstitute of Ecological & Environmental ManagementIKFIntegrated Kent Franchise	
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IKF Integrated Kent Franchise	
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ILS Instrument Landing System	
JNCC Joint Nature Conservation Council	
IMD Index of Multiple Deprivation Impact Effect on identified receptor	
K Thousand	
KCC Kent County Council	
Keq Constant (called the equilibrium constant)	
Kg Kilogram	
KM Kilometre	
KMBRC Kent & Medway Biological Records Centre	
kVA Kilo Volt Amps	
KWT Kent Wildlife Trust	
kts Knots	
L _{Amax} Maximum sound level	
LA90 Equivalent Continuous Noise Level – representing the Sound Pressure Level exceeded	t
90% of the time	
L _{eq} Equivalent Continuous Noise	
LAA London Ashford Airport At Lydd	
LAQM Local Air Quality Management	
LATS Landfill Allowance Trading Scheme	
LBAPLocal Biodiversity Action PlanLDDLocal Development documents	
LLA Local Landscape Area	
LNR Local Nature Reserve	
LPA Local Planning Authority	
LTMA London Terminal Manoeuvring Area	
LTO Landing and Take-off	
m Metre	
m ² Square metres	
m ³ Cubic metres	
mm Millimetres	
MSc Master of Science	

Ν	Nitrogen
NAQIA	National Air Quality Information Archive
NAQS	National Air Quality Strategy
NDB	Non-Directional Beacon
NEGTAP	National Expert Group on Transboundary Air Pollution
NH ³	Ammonia
NMR	National Monuments Record
NMVOC	Non-methane Volatile organic Compounds
NNR	National Nature Reserve
NO	Nitric Oxide
NO ₂	Nitrogen Dioxide
NOx	Nitrous Oxides
NTS	Non Technical Summary
NVC	National Vegetation Classification
0	Degrees
O ₂	Oxygen
O ₃	Ozone
ODPM	Office of the Deputy Prime Minister now Department for Communities and Local
	Government
OEF	Oxford Economic Forecasting
OS	Ordinance Survey
OSL	Optically Stimulated Luminescence
РаН	Polycyclic Aromatic Hydrocarbons
PAPI	Precision Approach Path Indicator
PB	Parsons Brinckerhoff Limited
PC	Process Contribution
PCN	Pavement Classification Number
PEC	Predicted Environmental Concentration
PM	Particulate Matter
PPA	Passengers Per Annum
PPB	Parts per billion
PPC	Pollution Prevention Control
PPE	Personal Protective Equipment
PPG	Planning Policy Guidance
PPS	Planning Policy Statement
RA	Risk Assessment
RASCO	Regional Air Services Co-Ordination Study
RDB	Red Data Book
RESA	Runway Extension Safety Area
RFC	Ratio to Flow Capacity
RFFS	Rescue Fire Fighting Services
RPA	Rural Priority Area
RPB	Regional Planning Bodies
RPB	Regional Planning Body
RPG	Regional Planning Guidance

RPG	Regional Planning Guidance
RSPB	Royal Society for the Protection of Birds
RW	Runway
SAC	Special Area of Conservation
SAM	Scheduled Ancient Monument
SCP	Sustainable Consumption and Production
SDC	Shepway District Council
SE	South East
SEEDA	South East England Development Agency
SEERA	South East Regional Assembly
SEERA	South East England Regional Assembly
SEETB	South East England Tourist Board Sewer Local term for drainage ditch
SI	Statutory Instrument
SLA	Special Landscape Area
SMR	Sites and Monuments Record
SO2	Sulphur Dioxide
SOx	Sulphur Oxide Gases
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
SWMP	Site Waste Management Plan
ТА	Transport Assessment
TSE	Tourism South East
UK	United Kingdom
UKBAP	United Kingdom Biodiversity Action Plan
UV	Ultraviolet
VOCs	Volatile Organic Compounds
VOR VHF	Omnidirectional Radio
WCA	Wildlife & Countryside Act 1981
Webs	Wetland Bird Survey
WRAP	Waste Resources Action Plan
Yr ZVI	Year Zone of Visual Influence

GLOSSARY OF TERMS

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Ambient Noise	The totally encompassing sound in a given situation, at a given time, including noises from any source in any direction.
ADMS 3	Industrial Air Pollution Model modelling the impact of existing and proposed industrial installations.
Area source	A real or theoretical source that radiates as a plane. Sound from an area source radiates plane waves rather than spherical waves, particularly if the area source is large relative to the wavelength of the sound produced.
A-Weighting	Generally, the ear is most sensitive to frequencies in the range 1 to 4 kHz. The A- weighting is a filter that can be applied to measured results at varying frequencies, to mimic the frequency response of the human ear, and therefore better represent the likely perceived loudness of the sound. SPL readings with the A-weighting applied are represented in dB(A).
Back-barrier	An area behind a gravel ridge in which quiet-water depositional conditions prevail.
Background Noise	This is defined as the LA90 of the residual noise.
1 Baseline Studies	Studies of existing environmental conditions against which any future changes can be measured or predicted.
Biodiversity Action Plan	The Biodiversity Action Plan is the UK's initiative to maintain and enhance biodiversity. Natural England and other organisations from across all sectors are committed to achieving the Plan's conservation goals over the next 20 years and beyond.
Borehole	Holes drilled by hand to determine the nature of the sediments at depth.
Buffer zone	An area 100m in width defined around the boundary of any proposed development.
Buried gravel	Gravel that had been deposited previously and has been buried by younger marsh sediments.
Chronology	Age sequence of coastal evolution, cf. history of coastal change.
Clay	Finest marsh sediments, less than 0.004 mm in diameter.
Clear Area	This is an area clear of all obstructions to a very low flying aircraft during an aborted landing or in an emergency take off situation.
Clinical waste	Any waste defined in accordance with the Collection and Disposal of Waste Regulations 1998 and the Controlled Waste Regulations 1992 (as amended).
Controlled Waste	A broad category of waste that is subject to Environment Agency regulation. Controlled wastes include inert, hazardous, non-hazardous, and clinical waste sub- categories.
Core	See Borehole. May also be used to refer to the material retrieved from the borehole.
Cumulative Impact	Impacts that result from incremental changes caused by other past, present or reasonably foreseeable future actions together with the project.

Deposition	The process by which sediments are laid down as their weight force exceeds the forces causing transport.
Depositional Energy	Term describing the general energy of the forces available for sediment transport.
Distal limb	Part of a recurved gravel storm beach that is distant from the 'ness' (see ness).
Do Nothing	Predicted future environmental conditions which would exist in the absence of the development.
Ecosystem	Community of interdependent plants and animals interacting in their environment.
Edelman auger	Drilling instrument that is screwed into the ground.
EDM	Electronic distance meter, used to obtain relative elevations between sites.
Eijkelkamp gouge	Drilling instrument that is pushed into soft sediment and rotated to retrieve cores material.
	A process in which information on the environmental effects of a project is
Assessment	collected and taken into account by decision makers.
Environmental Statement ¹	Assessment of the likely effects of a project on the environment. The Statement is submitted by the developer in conjunction with an application for planning permission
Environmental Effects ¹	Consequences for human being in terms of health and well-being, including that of ecosystems and natural systems on which human survival depends resulting from the environmental impacts
Environmental Impacts ¹	The processes whereby a change, which may be adverse, beneficial, or both is brought about in the existing environment as a result of development activities
Equivalent Continuous Level (Leq,T)	The Equivalent Continuous Level represents a theoretical continuous sound, over a stated time period, T, which contains the same amount of energy as a number of sound events occurring within that time, or a source that fluctuates in level.
	For example, a noise source with an SPL of 80 dB(A) operating for two hours during an eight-hour working day, has an equivalent A-weighted continuous level over eight hours of 74 dB, or LAeq,8hrs = 74 dB.
	The time period over which the Leq is calculated should always be stated.
Facies	General term for a sediment type or group of sediment layers.
fauna	All members of the animal kingdom including vertebrates (birds, mammals and fish) and invertebrates (insects)
Feather edges	Term for the thinnest part of a gravel ridge, often on the distal limb, where the gravel may be penetrated by the hand-drilling.
Fining-up	Term referring to a series of sediments that decrease in grain-size up through the core, being indicative of a reduction in depositional energy.
Flora	Members of the plant kingdom including ferns, mosses, and liverworts, algae and phytoplankton, fungi and lichens.

Fossiliferous	Containing fossils that may be used to determine the environment in which the sediments were deposited. These fossils may also be radiocarbon dated.
General Aviation	All civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire.
Geomorphological/ Geomorphic	The shape of landforms. Also used to refer to processes causing sediment erosion, transport and deposition.
Geomorphology	the study of earth surface processes and landforms. Also used as a general to describe the landforms present.
Graded Area	Clear and Graded area is clear of all obstructions to a very low flying aircraft during an aborted landing or an in an emergency take off situation, which is also (Clear and Graded graded to ensure that it can be accessed by emergency vehicles. Area)
Gravel	Coarse-grained sediment particles more than 2 mm in diameter.
Gravel Foreland Complex	Term to describe the landform made up of a series of gravel ridges that change orientation at a 'ness'.
Gravel Ridge	Landform made up of an accumulation of gravel, deposited by high-energy waves.
Hazardous Waste	Defined by the Hazardous Waste (England and Wales) Regulations 2005 (as amended) and the Lists of Wastes (England) Regulations 2005 (as amended) and special measures apply to the management of such wastes.
Holocene	The last 10,000 years.
Inert waste	Chemically inert, non-combustible, non-biodegradable and non-polluting waste as defined by the Landfill (England and Wales) Regulations 2002 (as amended)
Initial Noise	Ambient prevailing noise in an area before any changes to the existing noise climate
In situ	Materials found in the location where they were originally deposited or placed.
Inter-ridge	Environment of low depositional energy between roughly parallel gravel ridges.
Intertidal	Zone between high and low tides, i.e. the beach area exposed at low water.
Lamination/ Laminated	Sediments that are finely layered.
Line Source	A theoretical source of sound, with length only, often used to model long, thin sound sources, such as roads.
Lithostratigraphy	General term for the layering pattern of the sediment.
Loudness	A subjective assessment differing individually. The human ear perceives loudness in a logarithmic fashion. Generally, a perceived doubling or halving of loudness will correspond to an increase or decrease in SPL of 10dB. Note that a doubling of sound energy corresponds to an increase in SPL of only 3dB.
Macrofossils	Fossils that may be seen by the naked eye.
Marsh or	Fine grained sediments, generally muds, laid down in guite water conditions at the

Marsh or Fine grained sediments, generally muds, laid down in quite water conditions at the marshland sediments turn of the tide.

Microfossils	Fossils that may be revealed by microscopic examination.
Minerogenic	Sediments in which mineral matter predominates, i.e. clays, silts, sands, gravel and muds.
¹ Mitigation	Any process, activity or thing designed to avoid, reduce or remedy adverse environmental impacts likely to be caused by a development project.
Mud	General term for fine-grained sediments, i.e. silts and clays.
Ness	Point where the gravel ridge (or ridges) change orientation as a function of wave processes.
Nitrous Oxides	Nitrous Oxides formed during high temperature combustion processes from the oxidation of nitrogen in the air or fuel. The principal source of nitrogen oxides -nitric oxide (NO) and nitrogen dioxide (NO2), collectively known as NOx - is road traffic; other sources being power stations, heating plants and industrial processes.
Noise	A noise can be described as an unwanted sound. Noise can cause nuisance.
Noise Sensitive Receptors (NSR's)	Any identified receptor likely to be affected by noise. These are generally human receptors, which may include residential dwellings, work places, schools, hospitals, and recreational spaces.
Non-hazardous	Any waste which is not hazardous or inert waste
Non-recoverable	Sediments that cannot be retrieved from the gouge or auger due to high water content.
Octave	In reference to the frequency of a sound, an octave describes the difference between a given frequency and that which is double that frequency, e.g. 125Hz to 500Hz, or 4kHz to 8kHz.
Octave/Third Octave Bands	A sound made up of more than one frequency can be described using a frequency spectrum, which shows the relative magnitude of the different frequencies within it. The possible range of frequencies is continuous, but can be split up into discrete bands, often an octave or third-octave in width. Each octave band is referred to by its centre frequency, generally 63Hz, 125Hz, 250Hz, 500Hz, 1kHz etc.
OSL (Optically Stimulated Luminescence) dating	Method for dating minerogenic sediments that determines the time which has elapsed since they were last exposed to sunlight.
Oxidation-mottled	Sediments that contain iron-oxides of various colours, normally orange and yellow, due to periodic wetting and drying.
РаН	Polycyclic Aromatic Hydrocarbons are members of a large group of organic compounds widely distributed in the atmosphere, whose molecular structures contain two or more aromatic rings fused together. Because of their low vapour pressures, some PAHs are present at ambient temperatures in air, both as gases and associated with particles. They are formed naturally in the environment, e.g. thermal geological reactions and natural fires and through human activities in all processes involving incomplete combustion of carbon-based fuels e.g. emitted during burning of common fuels, i.e. coal, oil, wood and gas. Tobacco smoke is an important source in indoor air.
Pathway	The routes by which impacts are transmitted through air, water, soils or plants and organisms to their receptors

Peat	Organic sediment layers.
Point Source	A theoretical source of sound, with zero size and mass, often used as an approximation to model small sources. Sound from a point source radiates spherically in all directions.
Potential Impacts	Impacts which could occur in the absence of appropriate design modifications and preventative measures.
Predicted Impacts	Those impacts which are predicted as a consequence of the development, although the nature and severity of their effect will be conditioned by the scope for mitigation.
Producer	Anyone whose activities produce waste or anyone who carries out preprocessing, mixing or other operations resulting in a change in the nature or composition of this waste.
Progradation	Term to describe the growth of the gravel foreland as a result of deposition.
Public Safety Zone (PSZ)	The bulk of the effort to control risk in aviation has been concentrated at protecting the occupants of aircraft. It is only relatively recently that some governments and aviation authorities as a result of increasing aircraft activity and more accidents taking place near the runway thresholds, that are beginning to consider the risks to the public under flight paths in these areas.
	Within the PSZ's there are safety benefits from preventing any new development or change of use, which would result in a significant increase in the numbers of people within the zone. The PSZ is based on a risk contour using a 15 year period of aviation forecasts, which allows for a reasonable period of stability after their introduction and allows for growth.
	Not all countries have policies on PSZ's as there are no recommendations by the ICAO on the subject. Some countries such the UK the policy on PSZ's is administered by the Department of Transport. In the US Runway Protection Zones are established by the Federal Aviation Administration (FAA) and in Ireland by the Irish Aviation Authority (IAA)
Radiocarbon (¹⁴ C) Dating	Method for dating organic material (peat and/or macrofossils) based on the radioactive decay of carbon.
Ramsar	The Convention on Wetlands of International importance, especially as Waterfowl Habitats, is an intergovernmental treaty that aims to stem the progressive encroachment on and loss of wetlands now and in the future.
Receptor	A component of the natural or man made environment such as water, building, plant affected by impact
Recovery and Recycling	Recovery and recycling means the recovery of waste into products, materials or substances whether for the original or other purposes. It does not include energy recovery. Commonly applied to non-hazardous wastes such as paper, glass, cardboard, plastics and metals. However, hazardous wastes (e.g. solvents) can also be recycled by specialist companies, or by in-house equipment.
Recurved storm beach	Gravel ridge that exhibits changes in orientation along its length, deposited by high energy waves during storms.
Residual Noise	This is the ambient noise minus the specific noise, i.e. the remaining noise when

	the specific noise source is removed.
Restricted Zone	This is the zone at the end of a runway where the Planning Authority may restrict the type of permitted development due to a possible increase in risk.
Reuse	Reuse means any recovery operation by which products or components that have become waste are used again for the same purpose for which they were conceived;
Area)	CAP 168 requires a cleared strip of 300m wide for instrument runways code 3 and 4. of which the first 105m from the centreline are graded and have sufficient bearing strength to support an aircraft without causing major damage to the undercarriage of an aircraft in the event of an coming off the runway during takeoff or landing.
	The ILS being installed to serve runway 22 would require the establishment of the 300m wide strip. This would render unusable all of the existing aircraft parking apron to the southeast of the terminal area and the partial parallel taxiway (see figure 4.5). There are no other major problems associated with the establishment of an instrument runway strip at the airport.
Rhythmites/ Tidal rhythmites.	Laminated sediments, often muds, deposited under the influence of the tide.
Sand	Sediments between 0.062 and 2 mm in diameter.
Saturated sand	Sands that, because of a high water content, cannot be recovered from the borehole using the auger or gouge corers.
Scoping	Initial stage in determining nature and potential scale of environmental impacts arising from the proposed development, and assessing what further studies are required to establish their significance.
Sea-level index point	Sediment association or included fossil material that shows a direct relationship with sea level and, hence, may be used to reconstruct the elevation of past sea level.
Sediments	General term for material that has been deposited.
Shoreface sands/ sand body	Landform that underlies the gravel, dominated by sand that was deposited below the low tide line.
Silt	Sediments between 0.004 and 0.062 mm in diameter.
Sound Power Level (SWL)	The Sound Power Level defines the rate at which sound energy is emitted by a source, and is also expressed in dB. It is defined as follows:
	SWL (dB) = 10 Log10(W/Wref) where W = Sound Power (in Watts)
	Wref = Reference Power 1 picoWatt
Sound Pressure Level (SPL)	The Sound Pressure Level has units of decibels, and compares the level of a sound to the smallest sound pressure generally perceptible by the human ear, or the reference pressure. It is defined as follows:
	SPL (dB) = 20 Log10(P/Pref) where P = Sound Pressure (in Pa)
	Pref = Reference Pressure 2x10-5 Pa
	An SPL of 0dB suggests the Sound Pressure is equal to the reference pressure.

	This is known as the threshold of hearing.
	An SPL of 140dB represents the threshold of pain.
Specific Noise	A component of the ambient noise, associated with the specific source under investigation.
Stratification	See Lamination.
Stratigraphic	See Lithostratigraphy. Also used to refer to the location of sediments and fossils within the lithostratigraphy.
Sulphur Oxide Gases	Sulphur Oxide Gases formed when fuel containing sulfur (mainly coal and oil) is burned and during metal smelting and other industrial processes.
Suspension	Sediments held in the water column when the forces available for transportation exceed the weight force of the sediments.
Tidal flat	Landform between the high and low water marks, often a flat ramp-like beach.
Topographic Survey	Investigation of the changes in height of a given surface.
Topography	Variation in height of a given surface, i.e. relief.
Treatment	Recovery or disposal of waste.
Troels-Smith classification scheme	Method from the Danish Geological Survey for the description and classification of sediments.
UKBAP	United Kingdom Biodiversity Action Plan.
Unconsolidated	Term given to soft sediments, i.e. muds, sands etc., that have not been transformed into rock.
Volatile Organic Carbons	Defined as under the VOC Protocal (Geneva 1991) as "all organic compounds of anthropogenic nature, other than methane, that are capable of producing photochemical oxidants by reations with nitrous oxides in the presence of sunlight". VOCs are involved in formation of ground level ozone and depletion of the ozone layer contributing to the greenhouse effect as methane and photochemical oxidants are greenhouse gases.
Waste	means any substance or object which the holder discards or intends or is required to discard

REFERENCE

Department of the Environment Planning Research Programme: Preparation of Environmental Statements for Planning Projects that require Environmental Assessment, A Good Practice Guide, HMSO 1995

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