Addendum to written representations of Bernard Free 14th April 2014

This document is intended to add additional points to my representations as new fact have emerged since they were written.

Issue 1

i) Is the JAAP consistent with Government policy?

My understanding of a JAAP is that the proposed developments are subject to independent scrutiny before they are carried out not afterwards.

In paragraph 8 of the inspector's role it is stated that if the plan is found to be non-compliant or unsound in any respect the inspector can recommend modifications to make it compliant and sound. As virtually all of the contentious aspects of the development have already been carried out and are therefore no longer a plan but an established fact; it is a classic case of closing the stable door after the horse has bolted. The proposed number of passengers has now been increased from 2 million to 5.5 million, more than double the number the councillors voted for when they gave their consent to the various parts of the plan.

The inspector is not in a position to modify the plan in any meaningful way. He has been out manoeuvred by a disgraceful manipulation and abuse of the planning process by breaking it up into a series of small separate applications divided between the two councils; only being subject to independent scrutiny when it is too late to anything about it. This has amounted to a conspiracy to evade the independent oversight that the planning regulations require. If serious breaches of the planning regulations have been made which now in retrospect cannot be modified to make them lawful then how will the perpetrators be held to account other than by criminal prosecution?

iv) Does the JAAP strike the right balance between economic, social and environmental considerations?

Since representation ID 32661 was written, drawing attention to a lack of consideration given to environmental impacts, a planning application has been made and then withdrawn to construct a pollution lagoon alongside the Eastwood Brook. Such pollution control is necessary to prevent pollutants from the runway being flushed into the brook. For example fire suppressant foam laid on the runway in the event of an aircraft landing with a faulty undercarriage or used to extinguish a fire on the runway. Both of these events have occurred recently. This would result in tainting of oyster and mussel beds in the rivers Roach and Crouch in which new marine conservation zones have now been established. Oysters and mussels are filter feeders. These beds are worth millions of pounds and have export potential that would improve the country's balance of payments unlike the Airport that has the opposite effect. The Airport has now applied for a permit to discharge this runoff, describing it as trade effluent, at up to 360 cubic metres per day into the Eastwood Brook.

Spillage of effluent onto the apron from aircraft toilets has occurred when these are being emptied. This was shown being flushed away during an episode of Stobart Trucks and Trailers on Channel 5. Water samples taken from the Prittle Brook by the Environment Agency have been found to have low oxygen levels consistent with pollution by sewage. This would indicate that these spillages have been flushed into the Prittle Brook.

Residents under the flight path are complaining about oily films on the leaves of plants and the surface of ponds. If they grow their own salad plants this will constitute a health hazard. If residents are getting oily films on their ponds then these films will also be forming on all water courses that pass under the flight path leading to the rivers Roach and Crouch and also the rivers themselves to damage the fisheries. These deposits will be I believe mainly unburned fuel but they will also contain engine lubricating oil and their breakdown products. Gas turbine engines use synthetic lubricating oils the most commonly used being Mobil Jet Oil II (MJO). This breaks

down at high temperatures to produce Tricresyl Phosphate (CP) a potent neural toxin. Two BA pilots have died recently within a few days of one another as a result of inhaling fumes containing this substance. This could prove to be equally damaging to the environment as lead in petrol was found to be.

Attenuation ponds/tanks recommended by consultants and shown on site plans have not been constructed. Such ponds have been constructed behind the Tesco supermarket to control runoff from the developments there. I have since learned that the flow in the Eastwood Brook is described by the Environment Agency as "Flashy" meaning that it is subject to flash flooding and that the agency does not consider that the Brook has sufficient capacity to accommodate the runway runoff.

Planning consent for an extension to the terminal building has been given and the work carried out. This despite the council meeting being told that Anglia Water had stated that the sewer under the Southend Road to which the terminal is connected had insufficient capacity to accommodate the additional discharge. The councillors at the meeting declared so much hospitality received by them from the Airport that the chairman joked that he was running out of paper to write it on.

Since ID 32662 was written I have obtained more details of the Wallasea Island Wild Coast Project; which is under the approach to the 24 runway within the 26 kilometre bird control zone. This shows the scale of the project and the size and type of the birds that it will attract. A single swan can bring down an aircraft. The instrument approach to the 24 runway starts at 1,500 ft above this island and the town of Burnham-on-Crouch.

Issue 2

i) Is the growth of the airport justified and realistic?

Since ID 32673 was written I have obtained the profit and loss accounts for London Southend Airport for 2011 to 2012 and 2012 to 2013 the accounts for 1013 to 2014 are not yet available.

In the financial year ending the 31st March 2013 the Airport made an operating loss of £5,054,897 on a gross turnover of only £9,510,193. This equates to a loss of £13,849 per day. A loss of £10,000 per day at Manston Airport has caused Stagecoach who purchased it for £1 to set in motion the procedures for closure.

I believe that the operating loss for the previous year was £4,433,778, meaning that the Airport has already accumulated operating losses of £9,488,675 in the last two years. This loss has included no costs for interest on the bank loans that have financed the expansion believed to be £100 million. If an interest rate of 5% were charged on this loan it would double the losses, meaning that in two year operations the Airport has lost around £20 million.

iv) Is policy LS6 regarding the public safety zone as shown on the proposal map effective in light of the review by the Civil Aviation Authority?

Review by the CAA has increased the size of the PSZs so that they now include more homes and the Roach Community College is now required to be demolished. This should have been anticipated and weighed in the balance before consent the developments carried out by the JAAP was permitted.

Assurances have bee given by the chief legal officer of the CAA that no breaches of the regulations set out in CAP168 will be permitted at Southend. This does not appear to be the case.

St Laurence Church still remains an obstruction within the Instrument Strip as defined by CAP168 where no non-friable/frangible obstructions are permitted. It also still infringes the Transitional Surface as identified on page 5 of the Airport's safety improvements CAP791 submission – part1 v2 – September 2010. The entrance to number 14 Smallholdings and most of its front garden are also within the Instrument Strip.

There are over 20 headstones in the south east corner of the churchyard which falls within the Cleared and Graded Area as defined by CAP168 where no non-friable/frangible obstruction are permitted down to a depth of 300mm below soil level.

It was a condition of the granting of planning consent for the extension of the runway, the 106 agreement, that an instrument landing system must be established for the 06 approach. This is not an autoland system it only guide the aircraft down to a decision height where the pilot must be able to see the runway with sufficient clarity to carry out a safe visual landing.

On the night of the 27th October 2012, the first foggy night after easyJet commenced operations at the Airport, there were a number of missed landings on the 06 runway before the aircraft diverted to Stanstead. To the best of my knowledge they have not attempted to use this system on that runway since, diverting instead straight to Stanstead. This failure to continue use of the instrument landing system indicates that it's decision height set so high, because it has so many penetrations of the Protected Surfaces, that it is effectively unusable. These penetrations include a 28 hectare area of land that contains St Cedds Church as well as many homes. A change to the approach angle from 3 deg to 3.5 deg does not make this obstruction go away.

An air safety expert is currently challenging the viability of the licence for the instrument system for the 06 runway at Southend. If this licence is revoked the runway will be in clear breach of the planning consent to extend it.

Errors made during servicing cause a significant percentage of air accidents. In a recent incident at Heathrow an Airbus A319 took off with the engine cowlings unlatched. The cowlings detached causing one engine to catch fire and the aircraft takeoff on one engine. A horrifying prospect at Southend especially if the second engine also failed. At Southend an easyJet A319 recently dropped a heavy wrench through the roof of a home on Canvey Island. Also at Southend the crankshaft of a brand new engine fitted to a single engine light aircraft snapped just after takeoff on the 06 runway. The propeller detached and the aircraft forced landed in a field by Stambridge Mills. All this points to the undesirability of carrying out servicing operations at an airfield so close to residential housing.

Passenger buying tickets to fly from or to London Southend Airport buy those tickets in the knowledge of the risks that they are taking, it is their choice. People living around the Airport have that risk imposed on them. It was a failure of the council's duty of care that they failed to commission an independent risk assessment before granting the permissions to expand the Airport in the way that they have.

Issue 3

iii) Are expectations for new job creation realistic?

Since ID 32673 was written it has emerged that the longest route being flown by easyJet Airbus A319s from the Airport is less than half the aircraft's potential range. This prevents popular destinations in Turkey and Greece being reached. The aircraft are unable to takeoff with a full fuel and passenger load (66 tonnes). This was stated by Mr A Welch at a public meeting and indirectly confirmed by Airport management stating to the surveyors Carrick that the A319s are not using the full runway length. As the runway length is not the limiting factor it must be the runway strength.

The runway was constructed 1954/5 by the unorthodox method of soil stabilisation. Its PCN (Pave Compliance Number) of 39/F/B/X/T was established based upon load tests done shortly after construction. To the best of my knowledge there is no other airport runway constructed using this method and therefore no history on which to predict it's durability. The runway is now I believe restricted to a takeoff weight of 62 tonnes indicating that it's strength has deteriorated, after 50 plus years not unexpected. Even restricted to 62 tonnes these Airbus A319s

are the heaviest aircraft that have operated from this runway, in reality it has been lightly loaded in the past. Their use may well accelerate the runway's deterioration.

The Avia Solutions – London Southend Airport traffic forecasts (April 2009) would have been based on a runway with a PCN of 39. This means that the passenger forecasts were based on a false premise. I suggested to both Southend Council and the CAA that the runway strength should be tested before the extension was built. If this had been done a more accurate assessment of future passenger numbers could have been made.

EasyJet the only significant operator from the Airport has now confirmed an order for 150 Airbus A320neo 180 seat Chapter 4 aircraft with options on a further 150. This move to larger heavier more fuel efficient aircraft means the Southend with its short, narrow and weak runway has no chance of creating the job predicted in the future. Chapter 3 aircraft such as the A319s will in the future be banned from flying in Europe as Chapter 2 aircraft now are.

Current Airbus A320 flights to Tenerife from the Airport amount to smoke and mirrors. These 180 seat aircraft fly out with a maximum of 120 passengers and stop off at La coruna Airport in north west Spain on the outward flight.

It is only a comparatively short period since Flyby discontinued seasonal holiday flights, as they did not make money, to concentrate on business flights. One has to wonder what inducements have been given to persuade then to operate holiday flights again from Southend.

Rising ground prevents the runway being extended any further to the south west. To extent it to the north east would require a bridge at least the width of the Instrument Strip (300 metres) over the railway line and the Southend Road similar to that at Leeds Bradford Airport plus the demolition of a large number of buildings.

If the Airport is forced to close the aviation jobs will not be lost. They will relocate to Stanstead as many have in the past, where they will be more secure and better paid. A small local airline BKS like Aviation Traders relocated there and prospered, BKS eventually being bought out by BA. Channel Airways stayed at Southend and went bankrupt. 200 easyJet staff relocated from Stanstead to Southend when their flights there started.

Issue 4

ii) Are the various transport improvements adequately linked to the proposed growth of the airport and the development of the employment areas?

In ID 32665 I drew attention to the lack of investigation into the financial viability of the railway station. The fact that it had to be constructed and operated as a private station indicates that Rail Track shared my doubts. In the financial year ending 31st March 2013 the railway station cost the airport £1,993,059. Even if 20% of the passengers arrived by rail during that period, the Airport's eventual aim, it would have cost the Airport over £10 per rail passenger.

The following documents have been included for reference with this Addendum.

(1) Front page with agenda Development Control Committee Special Meeting and page 44 of this document referring to ILS, (2 pages).
(2) Front page Airport Safety Improvements CAP791 submission – part1 v2 – September 2010 Stobart Air and pages 2,4 and 5, (4 pages).
(3) Turnover and Profit for year ending 31st March 2013 LSA, (4 pages).
(4) Wallasea Island Wild Coast Project rspb leaflet (3 pages)
(5) CAA Instrument Approach Chart – ICAO Southend SRA RTR 2NM RWY 24, (1 page).
(6) CAA Aerodrome Obstacle Chart – ICAO Southend, (1 page).
(7) Front page Stabilised-Soil Pavements at Southend-on-Sea Municipal Airport and Fig 10 of this document (2 pages)

SOUTHEND-ON-SEA BOROUGH COUNCIL

Development Control Committee
Special Meeting

Date: Wednesday, 20th January, 2010
Time: 2.00 p.m.

Place: Council Chamber, Civic Centre, Southend-on-Sea
Contact: Tim Row - Principal Committee Officer
Telephone: (01702) 215154 or email: committeesection@southend.gov.uk

AGENDA

**** **Part I**

1 **Apologies and substitutions.**

2 **Declarations of interest.**

3 **SOS09/01960/FULM**
Land and Buildings Between South West Corner of Southend Airport and Eastwoodbury Lane, Eastwood, Southend-on-Sea

Report of Corporate Director Enterprise, Tourism and the Environment attached

TO: The Chairman & Members of the Development Control Committee:
Councillor B T Kelly (Chairman),
Councillors Mrs D White (Vice-Chairman), M Assenheim, R A H Brown, J R Clinkscales, A Crystall, Mrs E A Day, Mrs M F Evans, M R Grimwade, S J Habermel, Mrs G M Horrigan MBE, G Lewin, D A Norman, Mrs P E Rayner, Mrs A V Robertson, M Royston, M Velmurugan
COPY FOR INFORMATION ONLY to all other Members of the Council

4.9.13 The applicant would be required to maintain the use of runway 06 as the preferred departures runway, and runway 24 as the preferred arrivals runway. No more than 50% of Daytime landings of aircraft would be on runway 06, based on a rolling 12 month period. Aircraft with a weight of more than 5.7 tonnes would be required to follow Noise Preferential Routes at night, and all aircraft using the airport will be made aware of these routes. If this aspect is breached without good reason fines would be levied.

Air Quality

4.9.14 The S106 agreement also includes provision for an Air Quality Monitoring Programme to be agreed by the Local Planning Authority, and reviewed every five years.

Instrument Landing System

4.9.15 The S.106 agreement requires the Instrument Landing System to be set up before the extended runway is used. This would enable aircraft landing at the airport to adopt a steeper angle of decent and so should facilitate noise reduction over residential areas.

Wake Vortex Scheme

4.9.16 The S.106 agreement requires a Wake Vortex Scheme to be approved by the Local Planning Authority and put in place. This would provide for compensation to be payable in the unlikely event properties are damaged by the wake vortex of aircraft carrying out ATMs at the airport.

Employment

4.9.17 The agreement includes for the provision that the applicant makes reasonable endeavours to ensure contractors and airport job vacancies are publicised locally and that the applicant works with the local job centre, and provides training and apprenticeship opportunities for local people and students within the area.

Public Open Space

4.9.18 The applicant would be bound to relocate/replace the St. Laurence Park play facilities prior to commencement of the runway extension, and provide a programme for the proposed replacement habitat to the north of the park and lay out the new parkland. The applicant must also contribute the sum of £14,000 towards the maintenance of the orchard and park and £4,000 towards maintaining the replacement habitat. The runway could not be opened until these measures had been carried out.

London Southend Airport

Safety Improvements

CAP791 Submission – Part 1

v2 - September 2010

Stobart Air

CAP Reference	Requirements.	Compliance Statement	Comments	Person Responsible	Date
3.7	Runway Shoulders	Not required for Code C Runway			
3.8	Blast Pads	N/A			
3.9	Runway Turn pads	Compliant See Drg CS/044190-2230		Barry Carter	
4 Runway Strips					
4.2	Length. Should extend beyond each end of a runway and of any associated stopway for a distance of at least 60m.	Compliant See Drg CS/044190-2105		Barry Carter	
4.3.1	Non Instrument width, 75m each side of centreline	Compliant See Drg CS/044190-2105		Barry Carter	
4.3.3	Instrument Strip width: 150m each side of centreline	See Drg CS/044190-2105 Non – Compliant	Obstacles within instrument strip include church and cottages, however under this proposal they would be outside the new clear & graded area as discussed at the IDM. See also attached CAA letter dated 11th January 2008 (see Appendix B) confirming the Authority's agreement in principle.	Barry Carter	
4.4.1	Cleared and graded for 105m each side of centreline. Reduced to 75m at each strip end.	Compliant See Drg CS/044190-2105	Delethalisation of existing clear obstacles to be included in project scope. See Drg CS/044190-2250 to 2256	Barry Carter	
4.4.4	Where runway is 10% more than minimum width, the runway strip should be cleared and graded to a distance of 60m each side of the runway (78.5m each side CL)	Non - Compliant See Drg CS/044190-2105	Clear and graded narrows to 75m at end due to church – 78.5m not used as discussed at the IDM. See also attached CAA letter dated 11th January 2008 (see Appendix B) confirming the Authority's agreement in principle.	Barry Carter	
4.5	Bearing strength of runway strip	Compliant		Barry Carter	
4.6	Graded area of strip, longitudinal gradient not to exceed 1.75%	Compliant See Drg CS/044190-2200		Barry Carter	
4.7	Cleared area of strip, transverse slope not to exceed 2.5%	Compliant See Drg CS/044190-2200		Barry Carter	

CAP Reference	Requirements.	Compliance Statement	Comments	Person Responsible	Date
CAP168 Chapter 4 The Assessment and Treatment of Obstacles					
1	Assessment of Obstacles	Review carried out (by SLC) of obstacles infringing limiting surfaces. Non - compliant See Drg CS/044190-2106,2107	Known obstacles include church, cottages, RBS car park area, lighting columns and fencing. Under this proposal the RBS car park is to have height restrictions, and lighting columns are to be reduced in height, and fencing relocated. See also attached CAA letter dated 11th January 2008 (see Appendix B) confirming the Authority's agreement in principle.	Barry Carter	
2	Take off and climb surface dimensions to comply with table 4.1	2% TOCS, Dimensions compliant Obstacles Non - compliant See Drg CS/044190-2107	Some obstacles removed from TOCS adjacent to Eastwoodbury lane. Others now infringe surface e.g lighting columns. Lighting columns on Nestuda way to be replaced with shorter columns as part of project scope.	Barry Carter	
3	Approach Surface dimensions to comply with table 4.2	2.87% Approach Dimensions Non – compliant Obstacles Non - compliant See Drg CS/044190-2106	Some obstacles removed from Approach adjacent to Eastwoodbury Lane. Others now infringe surface e.g lighting columns. Lighting columns on Nestuda Way to be replaced with shorter columns as part of project scope.	Barry Carter	
4	Transitional Surface dimensions to comply with table 4.2	Dimensions compliant Obstacles Non-compliant	The extension of the runway pavement will enable runway 06 landing threshold to be moved westward and declared take-off distances for runway 24 to be increased. This will remove the church from the runway 06 approach surface and runway 24 take-off & climb surface, although it would still	Barry Carter	

CAP Reference	Requirements.	Compliance Statement	Comments	Person Responsible	Date
			infringe the transitional surface (ref: RMC Risk Assessment Document, R07-01s) as discussed at the IDM. See also attached CAA letter dated 11th January 2008 (see Appendix B) confirming the Authority's agreement in principle.		
CAP168 Chapter 6 AGL					
Table 6.1	Minimum AGL requirements & layout Scale L2 (Cat I), for take off in RVR < 400m.	**Runway Extension lighting layout** 06 Approach – reduced length 24 Approach – reduced length TBC Runway edge – compliant Runway threshold – compliant Runway end - compliant Turn pad – compliant **Runway Centreline Light layout** Centreline layout – compliant Lead-on/ Lead off lighting to Alpha & Charlie Taxiways compliant.	See Drg CS/044190-2415 See Drg CS/044190-2450 – 2457 See Drg CS/044190-SK245	Barry Carter	
2	Aerodrome Beacon	N/A	Outside scope of current project		
3	Approach Lighting and Circling Guidance Lights	Compliant (Reduced pattern)		Barry Carter	
4	Approach Slope Indicators	Compliant	Port side PAPI's for 06 & 24 runways	Barry Carter	
5	Runway & Stopway Lighting	Compliant		Barry Carter	
6	Taxiway Lighting	New lead-on lights on Alpha and Charlie only.	Taxiways outside scope of current project, other than lead-on lights as noted.	Barry Carter	
7	Apron Lighting & Visual docking	N/A	Outside scope of current project		
8	Obstacle Lighting	Compliant		Barry Carter	
9	Control of AGL Luminous Intensity	Compliant		Barry Carter	

LONDON SOUTHEND AIRPORT COMPANY LIMITED

YEAR ENDED 31 MARCH 2013

TURNOVER

SCHEDULE OF 'MAKE UP' OF FIGURES IN RESPECT OF TURNOVER

	£
1 Fuel margin	
Turnover - refuelling	3,557,540
Purchases and direct costs - refuelling	(2,270,051)
	1,287,489
2 Income received from occupational leases affecting the premises	
Rents receivable	864,663
Less:	
Service charges	(22,362)
Insurance recharges	(15,300)
	827,001
3 Gross turnover	
Turnover	14,825,972
Other income	3,867
Less:	
Bank account interest	(3,867)
Bad debts recovered	0
Refuelling	(3,557,540)
Recharges income	(1,252,796)
Service charges	(22,362)
Insurance recharges	(15,300)
Railway station	(1,993,059)
Add:	
Fuel margin (above)	1,287,489
Electricity recharges (20%)	237,789
	9,510,193
TURNOVER RENT	
Gross turnover @ 3% - base rent for the year	**135,515**
Base rent for the year is:	**149,791**

LONDON SOUTHEND AIRPORT COMPANY LIMITED

YEAR ENDED 31 MARCH 2013

TURNOVER

As required under the terms of the lease dated 30 March 1994 made between Southend Borough Council and London Southend Airport Company Limited, I hereby report the following:

	£
1 Fuel margin	**1,287,489**
2 Income received from occupational leases affecting the premises	**827,001**
3 Gross turnover	**9,510,193**

B Whawell
Director

Dated: 14/11/13

LONDON SOUTHEND AIRPORT COMPANY LIMITED

YEAR ENDED 31 MARCH 2013

NET PROFITS

As required under the terms of the lease dated 30 March 1994 made between Southend Borough Council and London Southend Airport Company Limited, I hereby report the following:

	£
1 Gross turnover	**9,510,193**
2 Net profit before tax	**(5,054,897)**

Director

Dated:

LONDON SOUTHEND AIRPORT COMPANY LIMITED

YEAR ENDED 31 MARCH 2013

NET PROFITS

	£
1 **Net profit before tax**	
Net profit before tax	**(5,054,897)**
NET PROFIT RENT	
Net profit before tax @ 12.5% - base rent for the year	**(781,653)**
Base rent for the year is:	**149,791**

LONDON SOUTHEND AIRPORT COMPANY LIMITED

YEAR ENDED 31 MARCH 2013

NET PROFITS

As required under the terms of the lease dated 30 March 1994 made between Southend Borough Council and London Southend Airport Company Limited, I hereby report the following:	Audited Accounts Year ended 28 February 2013 £	Management Accounts March 2013	Management Accounts March 2012	Year ended 31 March 2012
1 Gross turnover	9,005,831	794,615	290,253	9,510,193
2 Net profits before tax	(4,433,778)	(638,619)	(17,500)	(5,054,897)

LONDON SOUTHEND AIRPORT COMPANY LIMITED

YEAR ENDED 31 MARCH 2013

NET PROFITS

1 Net profits before tax	£			
Net profit before tax	(4,433,778)	(638,619)	(17,500)	(5,054,897)
NET PROFITS RENT				
Net profits before tax @ 12.5% - base rent for the year	(697,617)	(92,327)	(8,292)	(781,653)
Base rent for the year is:	143,395	12,500	6,104	149,791

Top things to do

Spring/summer

A busy time for nature and a great time for you to explore.

1. Look out for noisy oystercatchers, the aerial displays of redshanks, and hunting raptors.
2. Scan the land for a glimpse of one of our rare brown hares nibbling herbs.
3. Experience the marshes ablaze with colour as saltmarsh flowers compete to attract insects.
4. Butterflies are regular visitors on warm days – they like the sea lavender on the marshes.
5. If you're lucky, you may spot a common lizard basking in the sun on the seawall paths.

Autumn/winter

Five things not to miss during the chillier months.

1. Catch the incoming tide in late August/early September to see ringed plovers joined by avocets, dunlins, curlews and greenshanks.
2. Listen for the evocative whistle of the wigeon or the low bark of the brent goose.
3. Witness hundreds of farmland birds eating the wild bird seed we've planted in the fields especially for them.
4. Keep your eyes out to sea, just beyond the shore, for common seals popping up for air.
5. Birds of prey feed here in winter. Look out for peregrines, marsh harriers and merlins.

How to get here

Nearest town: Rochford

From 1 March to 31 October, Crouch Village Link bus service No. 174 from Rochford Station will connect with the ferry to Burnham. The RSPB site is a request stop.

By car from Rochford: Take the Ashingdon Road until you see the brown tourism signs at Bray's Lane.

By ferry from Burnham-on-Crouch: scheduled ferry service Wallasea to Burnham every day (except Wednesday) and on Bank Holiday Mondays April to September. Call 07704 060482 or visit www.burnhamferry.co.uk.

Opening times

The seawall footpath is open at all times.

Admission charges

It's free to enter the site, but donations via the RSPB website help us to continue our work here. For more information, please contact:

RSPB Wallasea Island Wild Coast Project

Grapnell's Farm, Creeksea Ferry Road
Wallasea Island, Rochford, Essex SS4 2HD
Tel: 01268 498620 E-mail: wallasea@rspb.org.uk
rspb.org.uk/wallasea

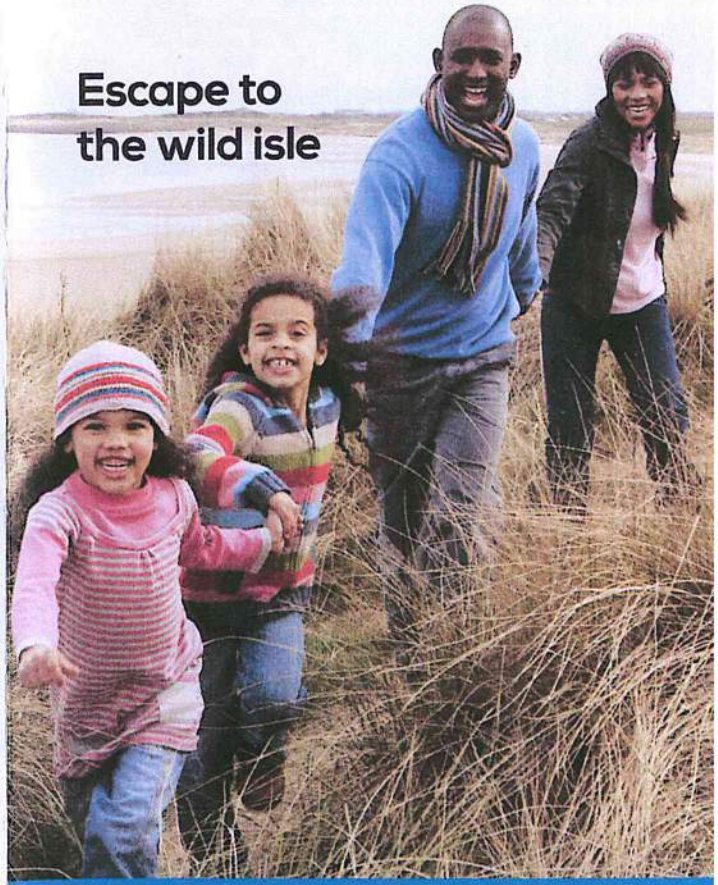
The RSPB is the country's largest nature conservation charity, inspiring everyone to give nature a home.

Helping to give nature a home

rspb giving nature a home

Wallasea Island

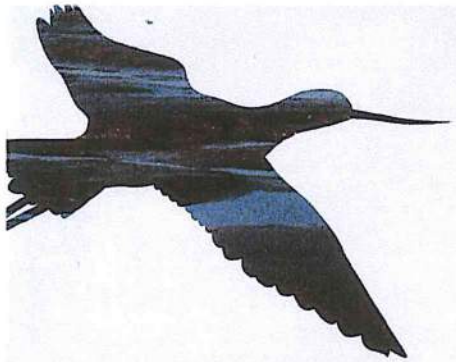
Wild Coast Project



See a nature reserve take shape before your eyes.

Birds and mammals have already moved in!

Stroll along the seawall enjoying big views.



Welcome

For centuries this coast was an important source of food for local people; more recently it has become a place of relaxation.

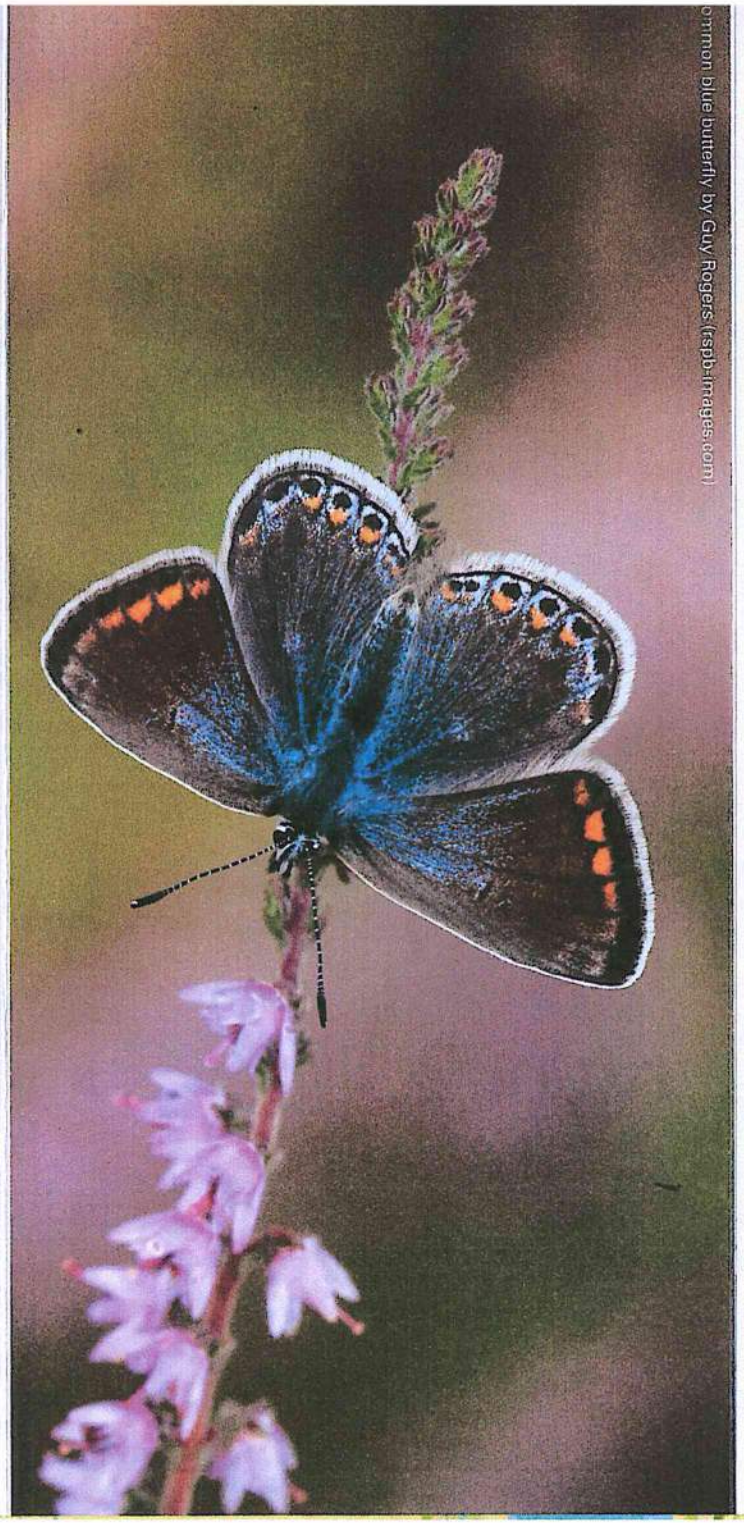
The treeless horizon, the immense space, the sound of birds' voices and the smell of the sea make Wallasea Island a fascinating place to visit.

Around 500 years ago, this was a mosaic of mudflats and saltmarsh, teeming with life. But over the centuries, man tamed the land and left little resemblance to the wilderness it once was.

In 2006, mudflats and saltmarsh were created by moving the seawall to allow the tide to flood in and create Allfleet's Marsh. This was done by Defra to replace habitat lost elsewhere, and the RSPB now manages the marsh on Defra's behalf.

In 2012 Crossrail began to import earth to the island from the new rail route under London. The earth will raise the land level so we can create mudflats, saltmarsh and saline lagoons.

This project is the largest of its type in Europe and is supported by the Environment Agency for its contribution to replacing intertidal habitat.



common blue butterfly by Guy Rogers (rspb-images.com)

Take part with us

Although we're not open as a reserve yet, we still have events that you can join in with to see this wonderful site and how it is evolving. These include family activities and wildlife walks.

We are happy to arrange a group visit or talk – contact us at wallasea@rspb.org.uk.

Another way you can take part is to volunteer. We're always looking for energetic and active people to join our growing team of project helpers You might get involved in events, guided walks or practical work around the developing reserve.

For dates, prices and full details about all our events visit rspb.org.uk/wallasea

In this area...

Other local attractions:

RSPB South Essex Wildlife Garden
Wat Tyler Country Park, Pitsea Hall Lane, Basildon, SS16 4UH (17 miles)
Tel: 01268 498620 rspb.org.uk/southessex
Explore our Wildlife Garden in Wat Tyler Country Park, near Pitsea – the gateway to the largest wetland in Essex. At the Visitor Centre you can fin out about events at other RSPB reserves nearby, and also how to give nature a home in your garde

RSPB Bowers Marsh
Church Road, Bowers Gifford, Basildon.
Tel: 01268 498620 (16 miles)
Look out across restored marshland, as humans have been doing for centuries in this wetland landscape. Choose the hedgerow stroll, perfect fc little legs and pushchairs, or the 5 km wetland trai

Wallasea Island

An artist's impression of the site in 10 years' time

Please remember that this map is an artist's impression of how our site will look in around 10 years' time. The only paths you can walk on at the moment are the ones marked on the key.

Nature trails

For the time being you can only walk along the north seawall and to the marina, as this path will be unaffected by the works. The path continues along the seawall over the footbridge at the construction site.

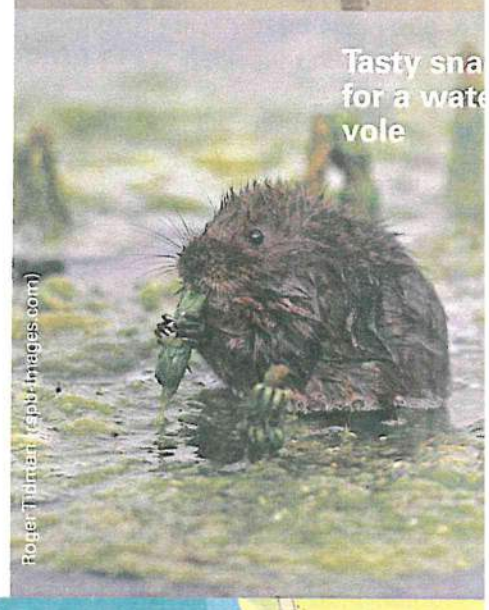
Sorry, the paths aren't suitable for wheelchairs or pushchairs yet. However, as we develop the habitats here, new access routes will be created totalling 15 km.

For more information about the accessibility of Wallasea Island Wild Coast Project, please visit **rspb.org.uk/wallasea**

Facilities

We don't have any facilities yet, but you can visit the nearby Essex Marina bar and restaurant for refreshments.

Corn bunting in full voice

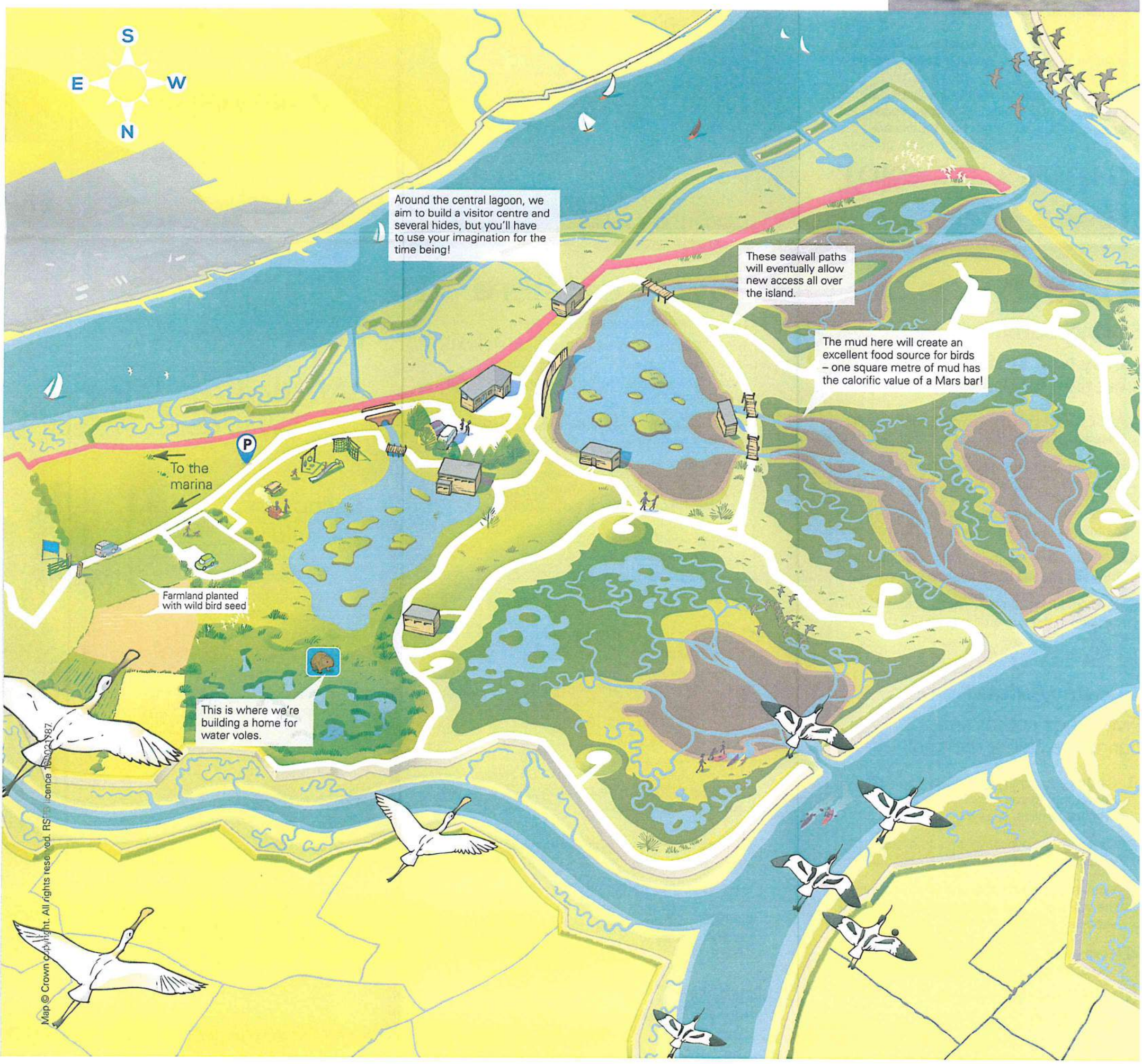


Tasty snack for a water vole

Roger Tidman (rspb-images.com)

Key

- Temporary car park (access through Grapnell's Farm)
- Footpath currently open

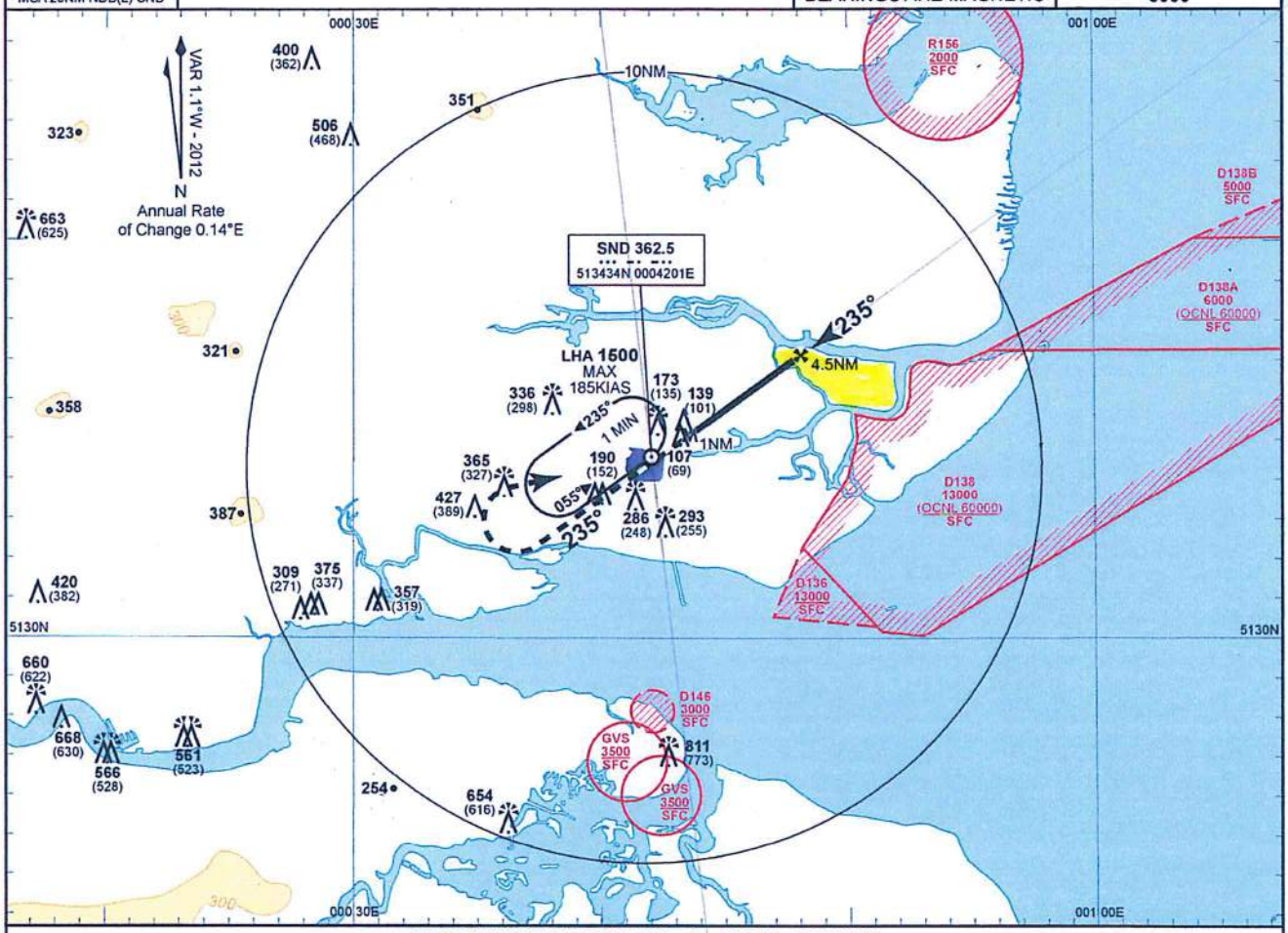


INSTRUMENT APPROACH CHART - ICAO

SOUTHEND SRA RTR 2NM RWY 24

(ACFT CAT A,B,C)

APP	130.775	SOUTHEND APPROACH	AD ELEVATION	55	
TWR	127.725	SOUTHEND TOWER	THR ELEVATION	38	
RAD	130.775, 128.950	SOUTHEND RADAR	OBSTACLE ELEVATION 811 AMSL (773) (ABOVE THR)		
ATIS	136.050	SOUTHEND INFORMATION	BEARINGS ARE MAGNETIC		TRANSITION ALTITUDE 6000



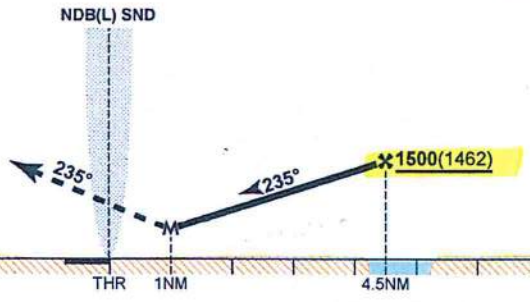
RECOMMENDED PROFILE Gradient 5.24%, 320FT/NM

NM	4.0	3.0	2.0
ALT(HGT)	**1370**(1332)	**1050**(1012)	**730**(692)

Initial and intermediate approach as directed by radar.

MAPt 1NM after RTR

Climb straight ahead to **1500** or 1MIN after passing **NDB(L) SND**, whichever is the later, turn right to **NDB(L) SND** at **1500** or as directed.



Aircraft Category		A	B	C
OCA (OCH)	Procedure	490(452)	490(452)	490(452)
VM(C)OCA (OCH AAL)	Total Area	600(545)	700(645)	900(845)

Rate of descent	G/S KT	160	140	120	100	80
	FT/MIN	850	740	640	530	420
RTR to MAPT	MIN:SEC	0:23	0:26	0:30	0:36	0:45

NOTE Aircraft will be required to hold not lower than **2500**. Lowest altitude to commence procedure from NDB(L) SND following a missed approach is **1500**.

CHANGE: MAG VAR. PROCEDURE. MAP. MSA. MINIMA. REC PROFILE. AD & THR ELEVATION. OBS.

AERO INFO DATE 6 NOV 11

ELEVATIONS IN FEET
ALL OTHER DIMENSIONS IN METRES

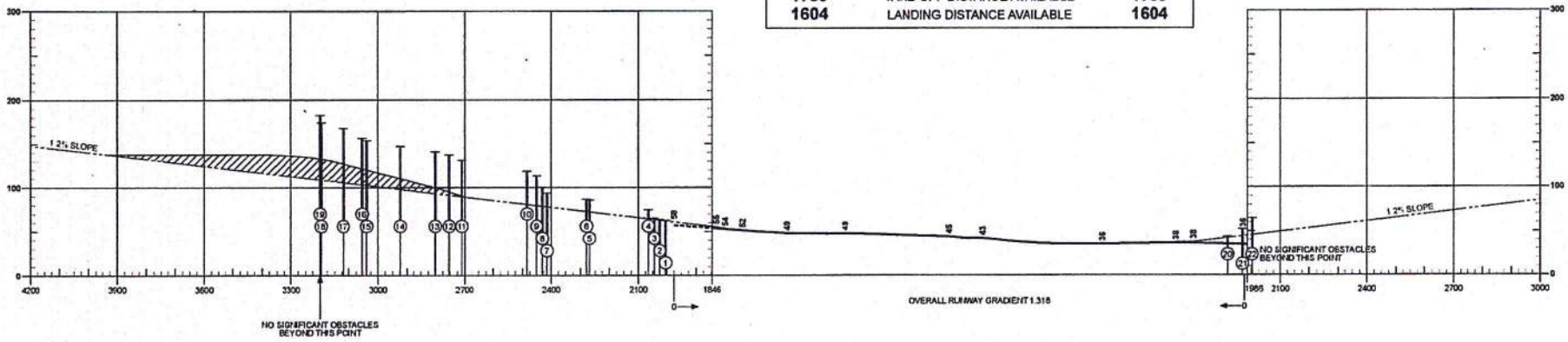
AERODROME OBSTACLE CHART - ICAO
TYPE A OPERATING LIMITATIONS

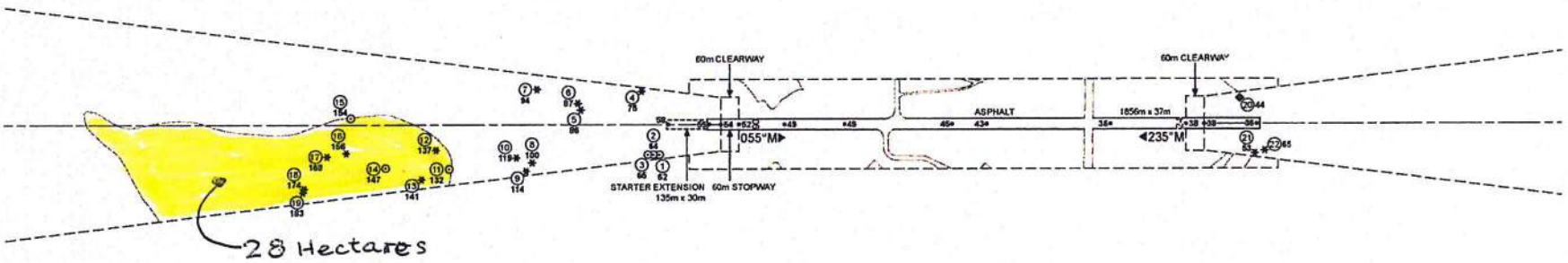
SOUTHEND
UNITED KINGDOM

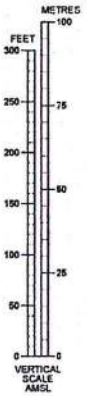
MAGNETIC VARIATION 1°W (2012)

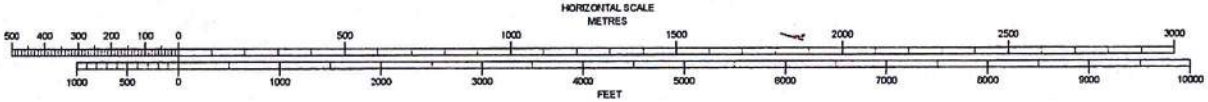
RUNWAY 06-24

DECLARED DISTANCES		
RWY 06		**RWY 24**
1739	TAKE-OFF RUN AVAILABLE	**1739**
1739	ACCELERATE-STOP DISTANCE AVAILABLE	**1799**
1799	TAKE-OFF DISTANCE AVAILABLE	**1799**
1604	LANDING DISTANCE AVAILABLE	**1604**









LEGEND	PLAN	PROFILE
IDENTIFICATION NUMBER	⑧	
HEIGHT AMSL	100	
POLE, TOWER, SPIRE, ANTENNA, ETC.	⊙	
TREE	*	
BUILDING	◆	
TERRAIN PENETRATING OBSTACLE PLANE		

ORDER OF ACCURACY: Horizontal 3m; Vertical 1ft
CHANGE: NEW SURVEY
Aerodrome information current MARCH 2012
Based on survey dated FEBRUARY 2012

NATS
Civil Aviation Authority

SOUTHEND

Airport Paper No. 33

STABILIZED-SOIL PAVEMENTS AT SOUTHEND-ON-SEA MUNICIPAL AIRPORT

by

* Tom Brian Hill, A.M.I.C.E.,

and

Keith Henry Glyn Williams

SYNOPSIS

The Paper describes the construction of pavements which were urgently required by the Corporation of Southend-on-Sea in order to meet increasing and heavier traffic at the Municipal Airport.

Little time was available for design and the methods used are given, together with details of the multi-layer stabilized-soil pavement specified.

Details of field tests taken during the work are included, together with the results achieved, and compared with the specification.

Mention is made of a number of constructional problems encountered during the execution of the work.

INTRODUCTION

General

107. The site of the Municipal Airport at Southend-on-Sea was first used for flying purposes during the 1914–18 war, after which it reverted to agricultural use. In 1934, the first parcel of land was purchased by the Corporation and re-opened as an aerodrome, being requisitioned by the Air Ministry in 1940 and used as a Forward Fighter Base until the end of the second world war. The area now used for flying purposes comprises 255 acres and the Corporation have recently acquired 194 acres of farm land adjoining the western boundary to permit future expansion, if required.

108. The geographical position of the airport, 40 miles due east of London and 2 miles north of the Thames estuary, enables it to cater for residents of the County Borough and the south-eastern counties north of the Thames who had previously no ready access to any scheduled air services. As a result of this favourable position, and especially since 1950 when the Government allowed greater freedom to the independent aircraft operator, there has been a great build-up of the services. This has necessitated the extension of existing facilities and these have been incorporated in modern terminal buildings provided by the Corporation.

109. During the summer months the airport operates almost to its maximum capacity and, for economic reasons, it is obviously desirable to encourage all-the-year-round operation; this presents difficulties with grass strips and heavy aircraft during the winter months. Accordingly, the Council decided to replace the existing

* Mr Hill is Borough Engineer and Surveyor of Southend-on-Sea. Mr Williams is Chief Engineer, Soil Mechanics Division, Gough Cooper & Co. Ltd.

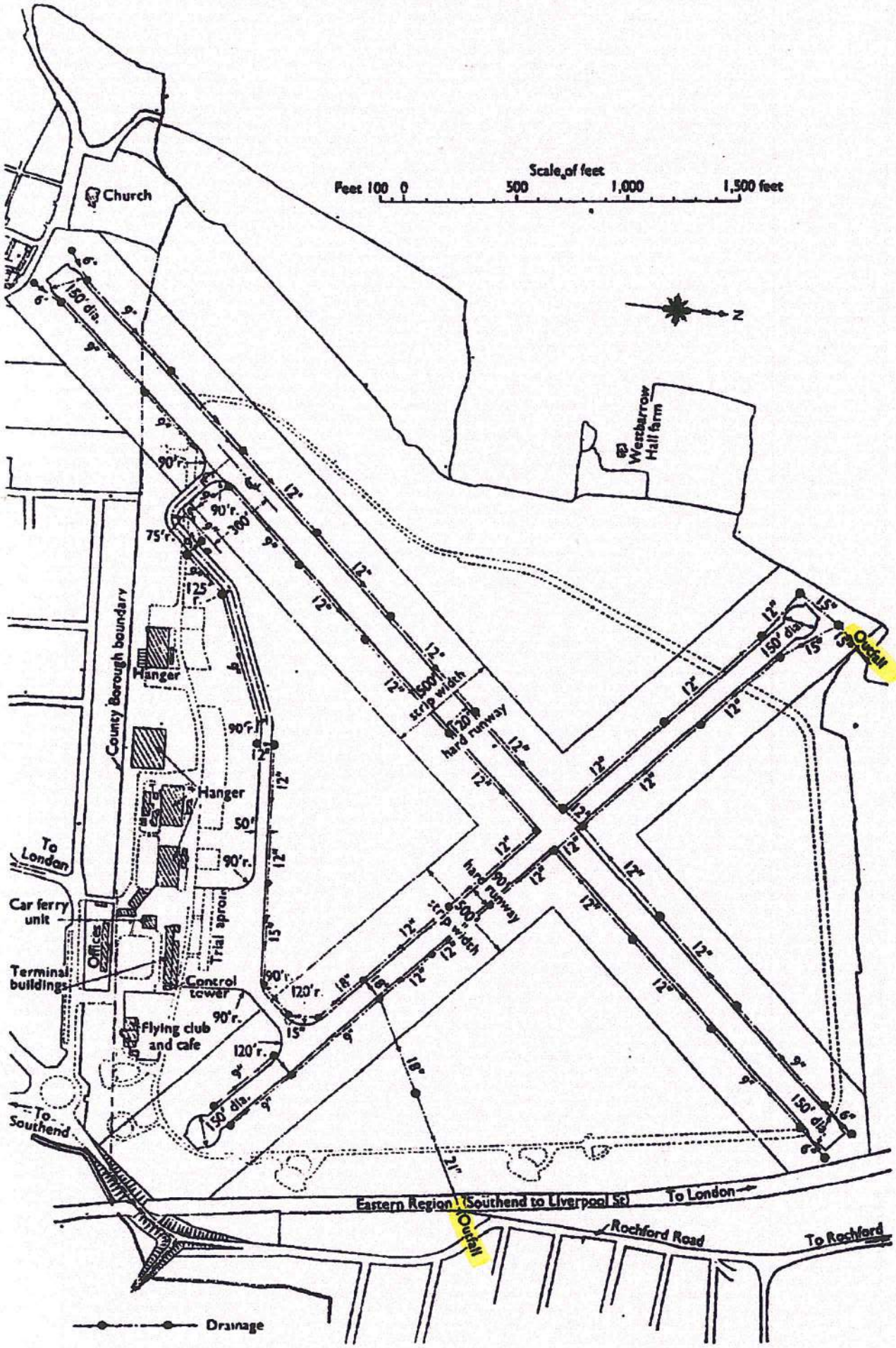


FIG. 10.—GENERAL LAYOUT