




**ABLE MARINE ENERGY PARK
EXAMINERS' REQUIREMENTS FOR FURTHER
OVERCOMPENSATION**

OCTOBER 2013

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	ABLE MARINE ENERGY PARK EXAMINERS' REQUIREMENTS FOR FURTHER OVERCOMPENSATION	OCT 2013
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APPROVAL & REVISION REGISTER

	NAME	SIGNATURE	DATE
Originator:	J Monk		12-09-2013
Checked by:	R Cram		25-09-2013
Approved by:	R Cram		25-09-2013

REVISION	COMMENTS	DATE
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1 INTRODUCTION

- 1.1.1 During the Examination of Able Marine Energy Park (AMEP), Able proposed that a field 38.82ha in extent could be provided as 'further overcompensation' to provide additional feeding resource for the Black-Tailed Godwits for as long as is necessary. Details of the proposals are set out in EX28.3: Part 7. The field proposed is that shown marked as 'Further Overcompensation (EX28.3)' on the attached plan AME-009-00055 A. The land is owned by the applicant, Able Humber Ports Limited, and currently has planning consent for development as part of Able Logistics Park ('ALP', North Lincolnshire Council planning reference PA/2009/0600).
- 1.1.2 The Panel, in their Report to the Secretary of State, address the issue of further overcompensation as follows:
- "10.163 The Panel is of the view that it should be included within the scheme. The adequacy of food-stock for BTG remained contentious throughout the examination, with experts from the RSPB, NE and the applicant in dispute over the basis of calculation of the current ash free dry weight to be found in North Killingholme Marshes and therefore what the replacement value would be. (The applicant's case is at HEA090, paras 41 to 47; RSPB's case is at HEA091 paras 15 to 18; NE's views are at HEA086, paras 9 to 16.)*
- 10.164 There was no resolution of this during the examination, but there was agreement that there should be a further survey. The implications of this are discussed below in relation to adaptive management and the EMMPs. But in the Panel's view in conditions of uncertainty it must be sensible to make as much available potential feeding ground available as possible.(sic)"*
- 1.1.3 Thus the Examiners recommended adoption of the Further Overcompensation Site as a precautionary measure.
- 1.1.4 In seeking to add confidence to the proposals for compensatory habitat through the provision of 'reasonable additional measures', the applicant has sought to improve the ecological functionality the original proposal for pasture land at East Halton. These improvements are detailed in the following sections.

2 ALP PLANNING CONTEXT

2.1.1 The planning consent for ALP requires a total mitigation provision of a 32ha 'core area', with appropriate buffer, the whole to be managed as optimal wet grassland and appropriately screened from public access. The 'core area' is the area that is protected from human disturbance by a suitably managed and controlled buffer strip. The provision of the core area may be by either of two distinct mitigation options, with different programme restrictions on each. An Agreement between Able, NE and RSPB, relating to these options, is set out in a Memorandum of Understanding (MoU) dated 24th February 2011, and included as Annex A to this report. The MoU sets out the phasing requirements and the locations of the proposed mitigation options. It also sets out the requirement that any mitigation provision must include a core of no less than 20ha, as 'cores' smaller than this are deemed to have reduced functionality. The options for mitigation for ALP are summarised shown in plans ALP-08024 A and ALP-08025 A included in Annex A, and for ease of reference are further described below:

Option 1

This alternative involves the provision of mitigation in two distinct cores, one onsite and one offsite. The onsite core would provide 12ha of ALP's total mitigation requirement with the 20 ha balance being provided off site. However, the on-site core would be supplemented by an additional 8ha, making a total onsite core of 20 ha with appropriate buffers. This results in an onsite plot (core area plus buffer) totalling approximately 42ha located in the Halton Marshes as shown on drawing ALP-08024 A in Annex A. The 20ha balance of core area would be provided offsite, also surrounded by appropriate buffer. The MoU makes provision that the onsite core must be delivered as part of the first phase of the works which also includes any works to the south of the dismantled railway line and the works to the sea wall, (Phase 1 on drawing ALP-02004 B in Annex A). In order to undertake works north of the railway line (Phases 2-6 on drawing ALP-02004 B in Annex A), Able must either provide the offsite core area, or extend the mitigation area to create Option 2 below.

Option 2

This involves the provision of mitigation in one plot on the ALP site and comprises a 32ha core area plus buffer, totalling approximately 73ha, located in the Halton Marshes as shown on drawing ALP-08025 A in Annex A. This could be provided from the start of the project, thereby satisfying the mitigation requirements of all phases of ALP, or be provided by extending the 20ha core area established under Option 1 above.

2.1.2 Because ALP's mitigation can be provided in a phased way, and because of the requirement for core areas to be of a minimum size of 20ha, there exists an opportunity to create habitat at ALP which is not in the short term required for ALP. So, in other words, if AMEP is consented, Option 2 above (32 ha core at Halton Marshes) could be implemented with immediate effect (and could lawfully be implemented beforehand). The core area created would initially be used to provide a 12 ha core for ALP mitigation and a 20 ha core as '*further overcompensation*' for AMEP. ALP would then be partially developed to the extent that 12 ha of mitigation would be sufficient concurrently with AMEP, which would have the benefit of the other 20ha, until such time as either:



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- a. An additional 20 ha core area with buffer is provided off site for ALP, in accordance with Option 1 above; or
- b. The AMEP Steering Group, established in accordance with the Deed between AHPL and NE dated 29th April 2013, confirms that the compensatory habitat at Cherry Cobb Sands has achieved its biomass objectives and the 'further overcompensation' at Halton Marshes is no longer required to offset the impact of AMEP on foraging BTGs. In the event that (a) had already been implemented, the 12 ha core no longer required at Halton Marshes could be 'banked' to provide mitigation for other projects on the South Humber Bank, including acting as the balance of the mitigation for ALP.

3 DESIGN STATUS OF HALTON MARSHES WET GRASSLAND

3.1 OUTLINE DESIGN PROCESS

- 3.1.1 Preliminary design work has already been undertaken by Thomson Ecology ('Thomson') in consultation with RSPB, NE, the Environment Agency (EA) and North Lincolnshire Council (NLC), to develop a plot in the same location as ALP's proposed mitigation, as optimally-managed wet grassland in accordance with the MoU (refer to Annex A).
- 3.1.2 The plot was selected to provide the 12ha core area which comprises the first part of ALP Option 1, with an additional 16.7ha core area bringing the total core to 28.7ha (large enough to function independently). Buffers have been proposed as appropriate to the site and its constraints.
- 3.1.3 Thomson prepared an outline proposal for the site, based on retaining water onsite to raise the local water table, and providing wader scrapes, together with management recommendations. This outline was consulted on with the three parties listed in paragraph 3.1.1 above, and their comments received. Thomson then incorporated the consultees' advice and prepared the outline design. This is currently undergoing further consultation, and refinements will take place as necessary on receipt of comments. Notwithstanding that mitigation for ALP is predominantly aimed at golden plover and lapwing, Thomson's design has similar objectives in relation to habitat creation as the wet grassland at Cherry Cobb Sands which is for the benefit of black-tailed godwit. Bird surveys have shown that black-tailed godwits are occasional visitors to Halton Marshes at present, utilising wet grassland in the vicinity of the proposed mitigation site, as shown on drawing no. ALP-009-00003 A.
- 3.1.4 Thomson Ecology has considered its approach to the outline design of the HMWG site, and has identified which elements of the design are suitable for the objectives of further overcompensation provision (instead of mitigation provision), and which elements can be adapted to reflect the revised objectives. Accordingly, a Statement of Design Principles has been prepared which sets out how the design will be developed – this is included as Annex B of this report.


3.2 DESIGN PRINCIPLES

- 3.2.1 Thomson's hydrological calculations indicate that getting the site wet enough to operate as a feeding resource will not present a significant problem. The principal design constraints on functionality are buffering and the flood defence works which must be undertaken as part of the ALP project, and would also be necessary to secure any habitat provided at Halton Marshes if its function were required in the long term.
- 3.2.2 At present, a buffer of 150m width is proposed around two sides of the core area, to separate the core from the proposed industrial development (see drawing no. AME-002-00035 A). Of the remaining two sides, one is adjacent to the flood defence wall, and one is adjacent to the access track to Winters Cottage, beyond which lies Winters Pond. Winters Pond has until recently been used as a wildfowling location; however, NE informed AHPL that if the shooting rights over the Winters Pond were removed, then the buffer to the ponds might be reduced. AHPL has now secured those shooting rights, and now proposes that, since the ponds are no longer subject to significant disturbance, no defined buffer is required.

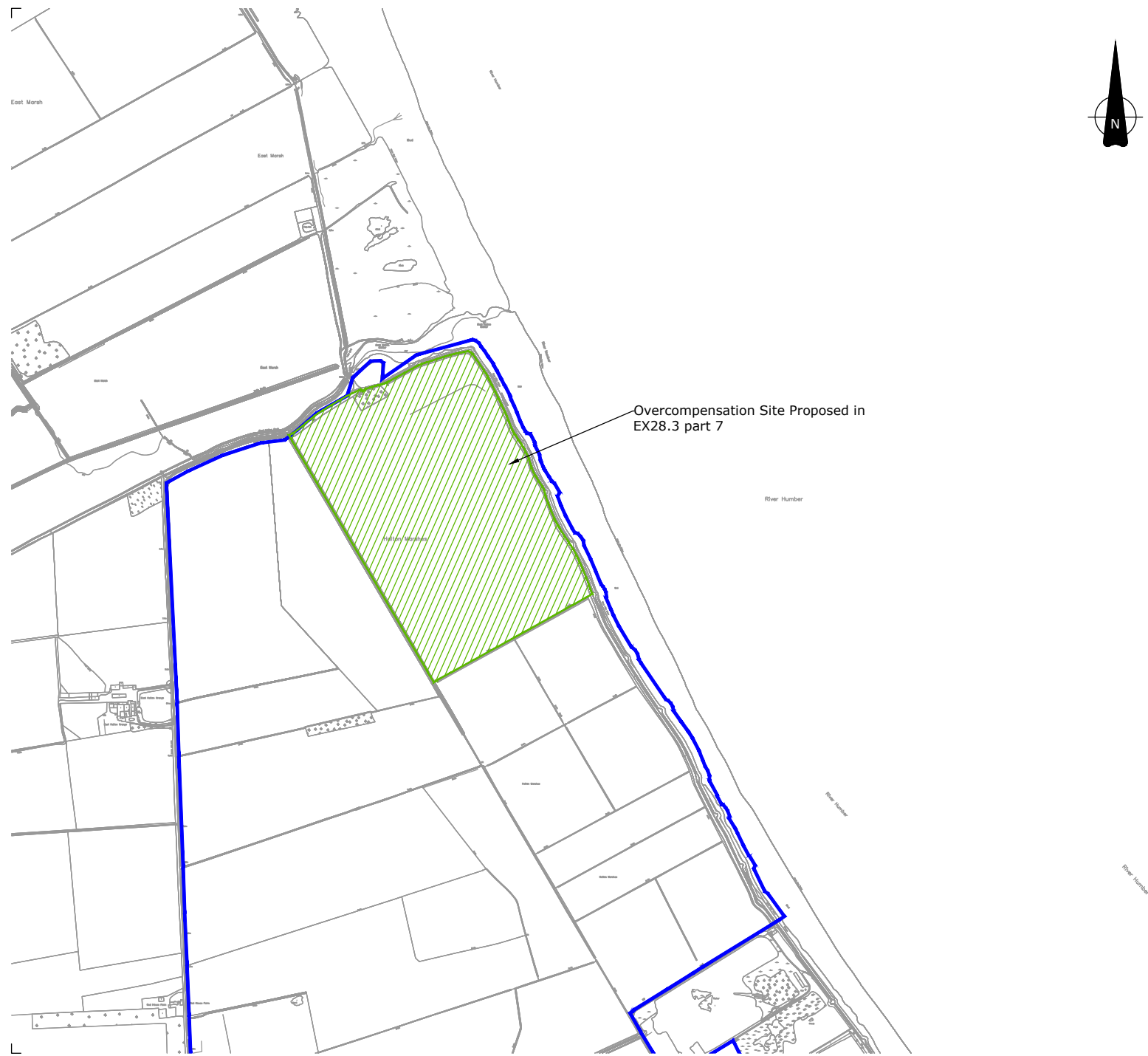
- 3.2.3 Two issues affect the width of the buffer to the flood defence wall: the footpath along its crest, and the construction works necessary to enable the flood defence to continue on its current alignment. The design undertaken by Thomson includes a buffer of 50m to the flood defence, because the footpath constitutes the only potential source of disturbance to that margin of the site, as the estuary is undisturbed beyond. To minimise any disturbance which might arise from use of the footpath, Thomson has proposed a suite of screening measures to break up the interface between the core area and the footpath. These are set out in Annex B, and consultees' comments are awaited.
- 3.2.4 The proposed flood defence works are likely to result in disturbance to the initially defined core area, from construction noise and activity related to flood defence works. Disturbance will be minimised as far as is practicable during the works by the implementation of a construction environment management plan, but it is likely that 50m buffer width will not be sufficient to allow the core to remain undisturbed during the construction period.
- 3.2.5 The programme constraints for ALP as set out in Annex A mean that the flood defence works must be completed before the development of ALP can be progressed north of the railway line but are likely to start in April 2015. As a consequence, the land around the proposed habitat site will be undeveloped, and thus undisturbed, until such time as the works are completed. Bearing this in mind, AHPL proposes that a different part of the wet grassland site be designated temporarily as the core area during the the construction works. So, for example, if the core were moved to the western margin of the wet grassland site, this would leave a buffer of 200m to the flood defence works (see drawing no. AME-002-00036 A, and the core would remain undisturbed to the west as no activity beyond agricultural operations would be being undertaken.
- 3.2.6 The ecological impacts of the flood defence works on the wet grassland would also be further minimised if it were possible to schedule the flood defence works for early in the development of the wet grassland, before it develops its full functionality (which could take 3 years). The RSPB's comment on this proposal was that it was a rational approach and comprised what could reasonably be achieved in the circumstances (see Annex C, para 7.2).
- 3.2.7 The design principles described above can be adapted in relation to the consented 32ha mitigation area for ALP, to ensure that the design more closely reflects the needs of black-tailed godwits which currently inform the objectives set out in the CEMMP, rather than the those of the TEMMP which have been used to date. Drawings AME-002-00035 A and AME-002-00036 A show how the core area would be allocated, and how it would 'move' during flood defence works.

4 FURTHER OVERCOMPENSATION POTENTIAL AT HALTON MARSHES

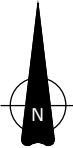
- 4.1.1 The Further Overcompensation Site as proposed in EX28.3 included minimal intervention, or adaptation from arable uses, other than planting with a wildflower and grass seed mix. It is also in a location comparatively distant from the North Killingholme Haven Pits and the current feeding locations for BTG's. However, the site as proposed can be improved by managing for the benefit of black-tailed godwits in addition to golden plover, lapwing and other estuary birds. Suitable improvements include, inter alia:
- Provision of surface water features such as scrapes;
 - Provision of islands in the scrapes to provide secure roosts in winter;
 - Screening from the public footpath;
 - Introduction of management practices such as grazing;
 - Introduction of monitoring protocols.
- 4.1.2 The Statement of Design Principles for Halton Marshes Wet Grassland prepared by Thomson Ecology incorporates these improvements, and as such is likely to provide substantially greater functionality as Further Overcompensation than the proposal set out in EX 28.3. Accordingly, there is greater certainty in relation to the benefit provided.
- 4.1.3 The overall result should be greater confidence in the benefit to be obtained from the further overcompensation element of the compensatory habitat proposed. If it is considered desirable in order to increase confidence in the delivery of the proposals, the Legal Agreement existing between Able and Natural England could be amended accordingly.

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DRAWINGS



Overcompensation Site Proposed in EX28.3 part 7



Key & Notes

— Estates Boundary

Rev.	Date	Comments	Drn	Chk	App
A	25/09/13	Preliminary Issue	FM		

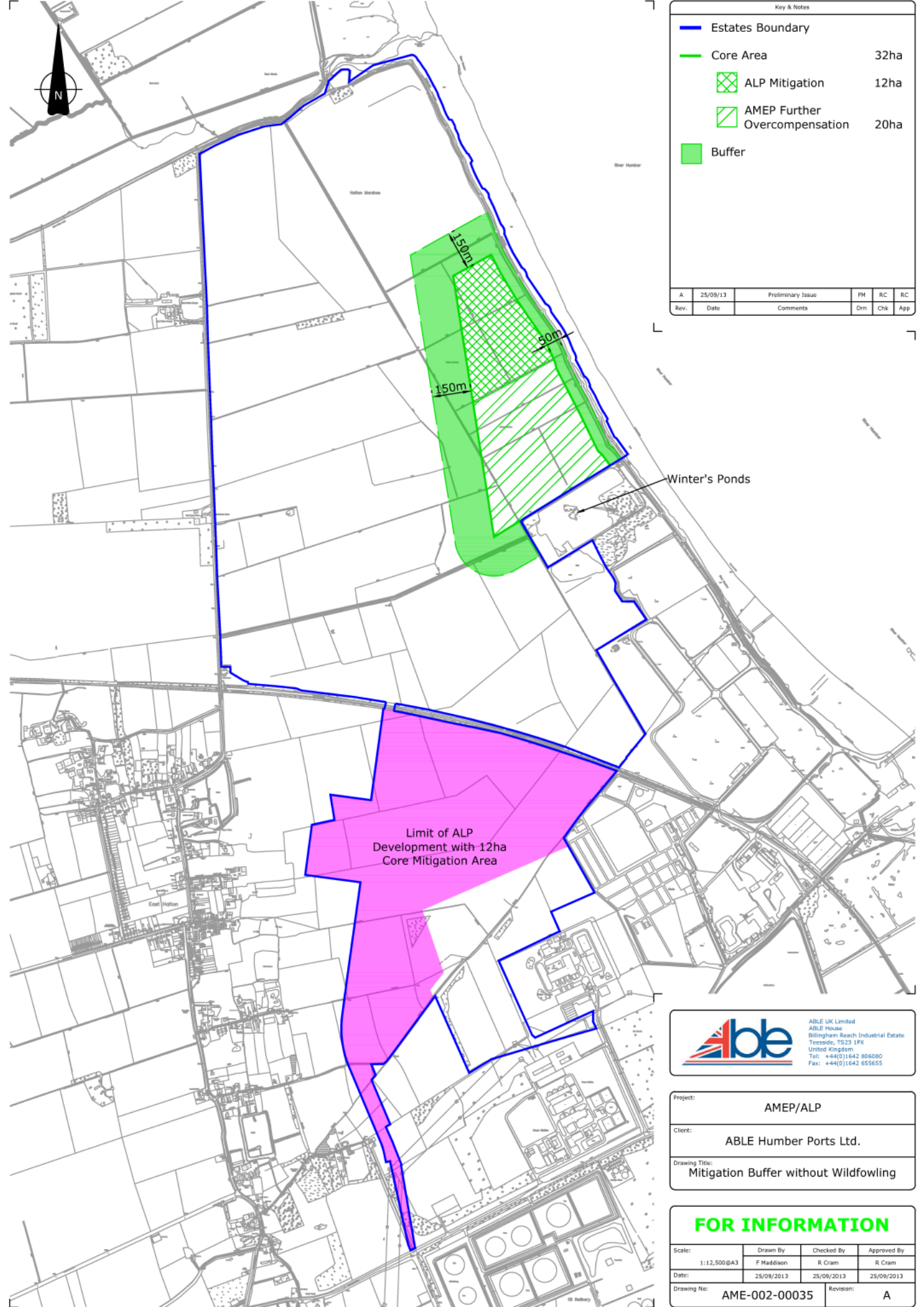


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Project:	AMEP/ALP
Client:	ABLE Humber Ports Ltd.
Drawing Title:	Proposed Overcompensation Site

PRELIMINARY

Scale:	1:10,000@A3	Drawn By:	F Maddison	Checked By:		Approved By:	
Date:	25/09/2013						
Drawing No:	AME-009-00055	Revision:	A				



Key & Notes

	Estates Boundary	
	Core Area	32ha
	ALP Mitigation	12ha
	AMEP Further Overcompensation	20ha
	Buffer	

A	25/09/13	Preliminary Issue	PM	RC	RC
Rev.	Date	Comments	Drn	Chk	App

Limit of ALP Development with 12ha Core Mitigation Area

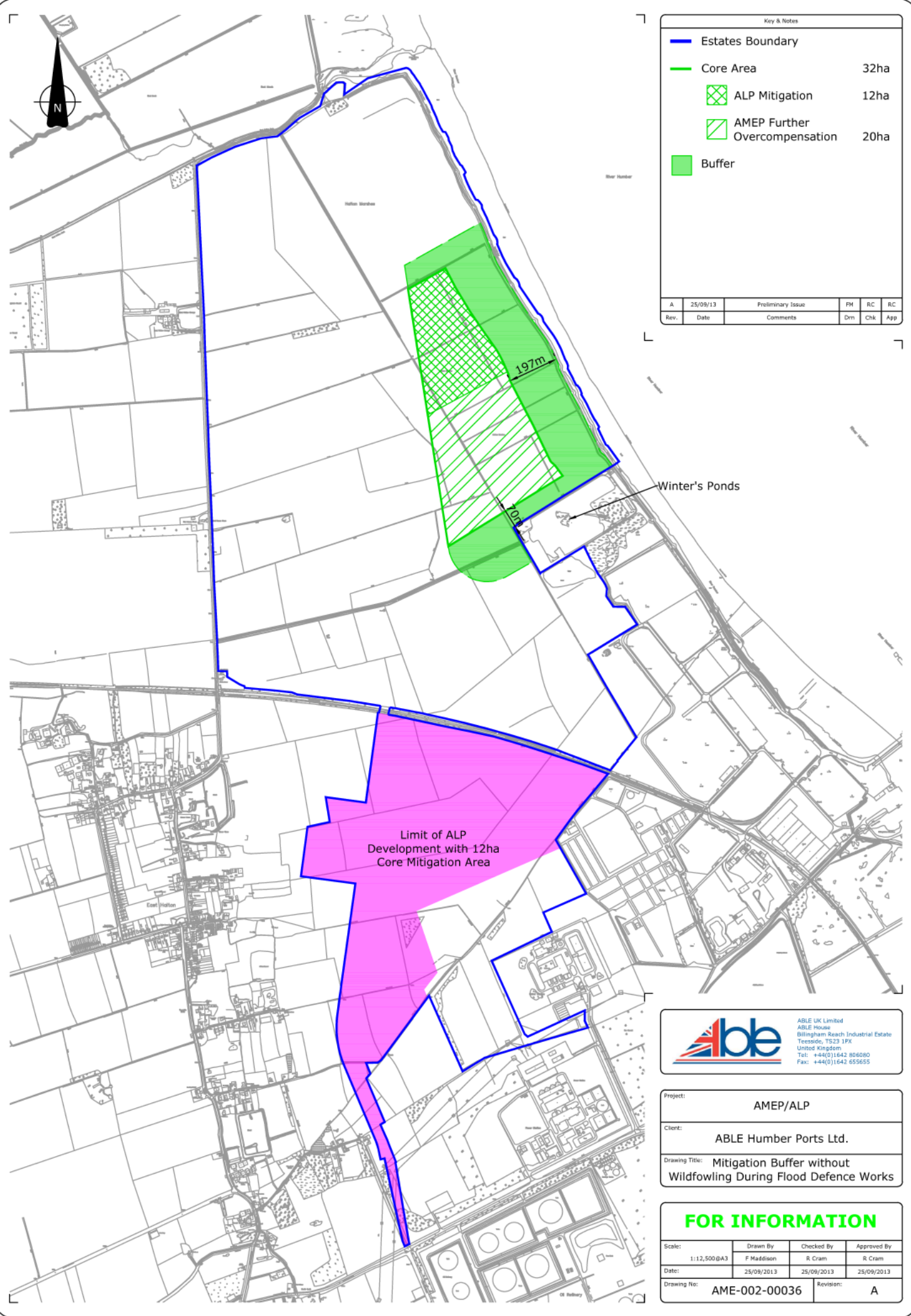


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Project:	AMEP/ALP
Client:	ABLE Humber Ports Ltd.
Drawing Title:	Mitigation Buffer without Wildfowling

FOR INFORMATION

Scale:	1:12,500@A3	Drawn By:	F Maddison	Checked By:	R Cram	Approved By:	R Cram
Date:	25/09/2013		25/09/2013		25/09/2013		
Drawing No:	AME-002-00035	Revision:	A				



Key & Notes

	Estates Boundary	
	Core Area	32ha
	ALP Mitigation	12ha
	AMEP Further Overcompensation	20ha
	Buffer	

A	25/09/13	Preliminary Issue	PM	RC	RC
Rev.	Date	Comments	Drn	Chk	App

Limit of ALP Development with 12ha Core Mitigation Area

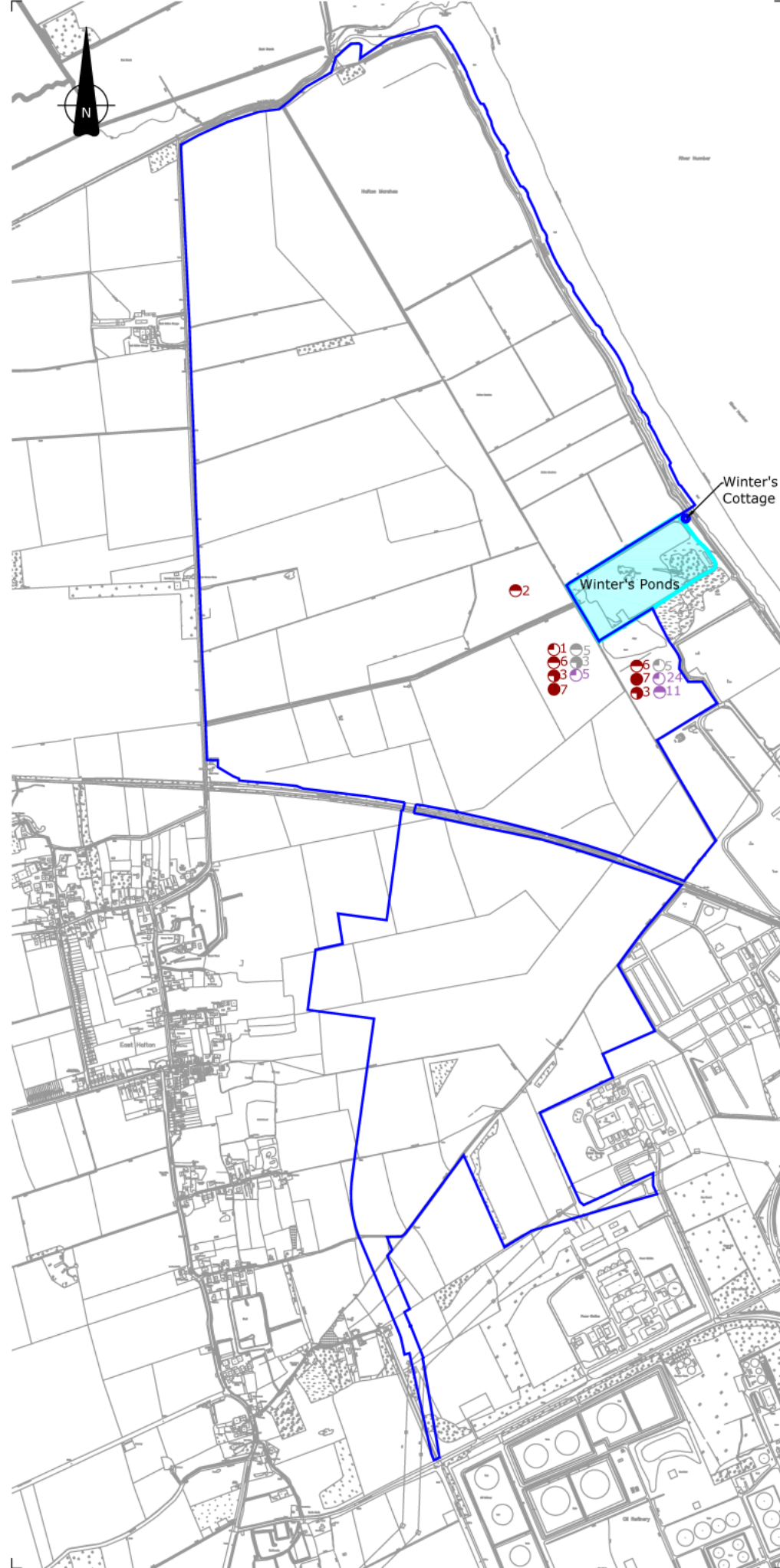


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Project:	AMEP/ALP
Client:	ABLE Humber Ports Ltd.
Drawing Title:	Mitigation Buffer without Wildfowling During Flood Defence Works

FOR INFORMATION

Scale:	1:12,500@A3	Drawn By:	F Maddison	Checked By:	R Cram	Approved By:	R Cram
Date:	25/09/2013		25/09/2013		25/09/2013		
Drawing No:	AME-002-00036	Revision:	A				



- Key & Notes
- 2007 - 2008 Bird Survey
- Jan Week - 1
 - Jan Week - 2
 - Jan Week - 3
 - Jan Week - 4
 - Mar Week - 1
 - Mar Week - 2
 - Mar Week - 3
 - Mar Week - 4
 - July Week - 1
 - July Week - 2
 - July Week - 3
 - July Week - 4
 - Sep Week - 1
 - Sep Week - 2
 - Sep Week - 3
 - Sep Week - 4
 - Nov Week - 1
 - Nov Week - 2
 - Nov Week - 3
 - Nov Week - 4
 - Jan Week - 1
 - Jan Week - 2
 - Jan Week - 3
 - Jan Week - 4
 - Mar Week - 1
 - Mar Week - 2
 - Mar Week - 3
 - Mar Week - 4
 - Feb Week - 1
 - Feb Week - 2
 - Feb Week - 3
 - Feb Week - 4
 - Apr Week - 1
 - Apr Week - 2
 - Apr Week - 3
 - Apr Week - 4
 - Aug Week - 1
 - Aug Week - 2
 - Aug Week - 3
 - Aug Week - 4
 - Oct Week - 1
 - Oct Week - 2
 - Oct Week - 3
 - Oct Week - 4
 - Dec Week - 1
 - Dec Week - 2
 - Dec Week - 3
 - Dec Week - 4

Rev.	Date	Comments	PM	RC	RC
A	24/09/13	Preliminary Issue			




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Project:	ABLE Logistics Park
Client:	ABLE Humber Ports Ltd.
Drawing Title:	Bird Survey - Black Tailed Godwit

FOR INFORMATION

Scale:	1:12,500 @ A3	Drawn By:	F Maddison	Checked By:	R Cram	Approved By:	R Cram
Date:	24/09/2013		24/09/2013		24/09/2013		
Drawing No:	ALP-009-00003	Revision:	A				

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ANNEX A – MEMORANDUM OF UNDERSTANDING DATED 24TH FEBRUARY 2011

Memorandum of Understanding For Able UK East Halton Application, 24th February 2011

This agreement between Natural England, RSPB, and Able UK has been drafted to describe the Humber Estuary SPA and Ramsar waterbird mitigation which Able UK will deliver under Planning Application, PA/2009/0600

1. **AIM**

This Memorandum of Understanding (Agreement) sets out the objectives and mechanisms which would allow Able UK to deliver the mitigation required to ensure compliance with the EU Birds Directive and UK Habitat Regulations¹ in a phased manner. If Government Office for Yorkshire and the Humber are agreeable, planning application PA/2009/0600 will be referred back to North Lincolnshire Planning Committee together with the new mitigation proposals and maps, and new and amended planning conditions.

2. **INTRODUCTION**

2.1 Able UK proposes to develop port related facilities and has submitted a planning application to North Lincolnshire Council reference PA/2009/0600.

2.2 As part of the application, Able UK acknowledge that the development would have an adverse impact on the Humber Estuary SAC, SPA, SSSI and Ramsar Site. However, following extensive consultation with conservation organisations, it has been agreed that the potential impacts of the development as a result of direct loss of waterbird habitat from within the footprint of the development could be mitigated if sufficient and appropriately managed habitat is provided to cater adequately for the affected SPA and Ramsar waterbirds. Able UK also acknowledge that if sufficient mitigation can be provided to protect the birds, none of the actions taken would necessarily resolve the wider issues covered in their Environmental Statement which accompanied the planning application. These would need to be addressed through full consideration of the conclusions of the EIA by the production and implementation of a construction and environment management plan

2.3 In this document it is agreed that all buffer widths will be subject to review should additional scientifically robust information be available. It is also agreed that the size of the buffer could be re-considered should clear evidence be provided and agreed that demonstrates these could be reduced in size.

3. **THE SOUTH HUMBER GATEWAY STRATEGIC MITIGATION**

3.1 This agreement acknowledges that a number of organisations have been working together to prepare a Mitigation Strategy to deliver conservation mitigation for birds cited in the Humber Estuary SPA and Ramsar site and likely to be affected by port related development in the South Humber Gateway (SHG). The organisations signed up to this process recognise that strategic delivery of conservation mitigation would avoid a less useful piecemeal approach to development and would ensure the delivery of a fully ecologically functioning approach to

¹ The Conservation of Habitats and Species Regulations 2010

protecting the well-being of waterbirds for which the Humber Estuary is designated. To this end those organisations have signed a Memorandum of Understanding (ref 1) and have recently prepared a Delivery Plan (ref 2) for the planning and delivery of an agreed strategy.

- 3.2 While some details of the Mitigation Strategy still require clarification and are being addressed in the Delivery Plan, there is a common understanding from all the bodies involved that a successful strategy would comprise four 'stepping stones' of appropriately located mitigation habitat within the SHG and an, as yet unquantified, area outside the SHG. Work on the Mitigation Strategy has also indicated that to provide the right ecological function for the birds, the 'stepping stones' would be optimally managed as wet grassland with a central 'core' of 20 ha, surrounded by a 'buffer'² of 150m to provide clear sightlines for the birds. The 'buffer' can be reduced to 50m where stepping stones are adjacent to the public footpath along the flood defences of the estuary, subject to appropriate screening.

4. **MITIGATION REQUIREMENTS FOR PA/2009/0600**

- 4.1 Following discussions with RSPB, NE and NLC, Able UK agree that mitigation for birds cited in the Humber Estuary SPA and Ramsar site for the Planning Application, PA/2009/0600 shall comprise an area of 32ha of 'core' habitat, surrounded by a buffer of 150m where the edge of the mitigation is adjacent to development and Halton Marsh Clay Pits Local Wildlife Site (LWS) and a buffer of 50m where the mitigation is adjacent to the public footpath along the flood defences of the estuary and appropriately screened from disturbance from public access. The core area and buffer together comprise a 73.96 ha block (ref 3 Drawing ALP-08025 A Option 2 Site Plan), all of which will be optimally managed, retained and maintained as wet grassland, as defined in the final conservation management plan, which will be reasonably agreed between Able UK, NE, RSPB and NLC.
- 4.2 This agreement sets out how Able UK can deliver sufficient mitigation in a phased way linked to the phased commercial development of the site. Able UK also commit to ensuring that, as part of the phased approach, they will deliver sufficient ecologically functioning mitigation prior to the commencement of further stages of development in this planning permission as shown on ref 4 Drawing ALP-02004 B Phasing Plan. The mitigation will be provided in line with the ecological design principles which have been identified as part of the SHG strategic mitigation approach and an agreed conservation management plan.

5. **DELIVERY OF MITIGATION FOR PA/2009/0600**

- 5.1 Planning application PA/2009/0600 will be referred back to North Lincolnshire Planning Committee with an updated committee report, which will mirror this agreement. The new mitigation proposals and maps described in this agreement will accompany the application. Planning conditions will be revised and new ones drafted, where necessary, to

² Buffer is used in this context to describe the managed habitat around the core 20ha. The buffer is considered to function sub-optimally i.e. contributing less ecological function than the core due to exposure to edge effect effects such as disturbance from adjacent activity

ensure that they are sound and appropriately reflect the material changes since the October 14 2010 planning committee resolution (see paragraph 5.3 below). The planning conditions will reflect the two possible options for delivery of the mitigation, and be accompanied by any agreement necessary to secure the legal and financial arrangements for its management. NE, RSPB and Able will be involved in the preparation of these conditions. A revised version of the Appropriate Assessment will also be provided, to reflect the mitigation options described in this agreement, and to reflect resolution of the outstanding flood defence issues.

- 5.2 This agreement acknowledges that the proposed commercial development of the site will take place over a period of two to seven years and that, as a consequence in the early phases significant amounts of land will continue to be available for waterbirds. The phasing of the delivery of mitigation will ensure that there is no net loss of habitat to development before functioning mitigation habitat is delivered (as shown on Map ALP-02004 B Phasing Plan). This agreement also acknowledges that Able UK can mitigate some of the impacts of this development outside the SHG,. This would require Able UK to construct a mitigation area comprising 20 ha of core habitat surrounded by an agreed and appropriate buffer³ outside of the application site in an area to be reasonably agreed with NE, RSPB and NLC. Completion of this mitigation outside the application site would enable Able UK to reduce the mitigation inside the application site to 20 ha of 'core' habitat plus 150 m of buffer adjacent to development and Halton Marsh Clay Pits Local Wildlife Site (SINC) and 50m buffer adjacent to the the public footpath along the flood defences (and subject to appropriate screening). This would comprise 55.06ha in total (Ref 5 Drawing ALP-08024 A Option 1 Site Plan) all of which to be optimally managed as wet grassland, as defined in the final conservation management plan, which will be reasonably agreed between Able UK, NE, RSPB and NLC. This agreement acknowledges that the land released by the reduction in mitigation requirement inside the application site would be available for commercial development.
- 5.3 This agreement also acknowledges that Able UK will develop the site through a phased programme of work and that the first phase of work will comprise a number of elements:
- Flood defence and drainage works along the Halton Marshes frontage as agreed with the Environment Agency.
 - Phase 1 development as shown in drawing ALP 02004 B, including delivery of mitigation as shown in ref 5 Drawing ALP-08024 A Option 1 Site Plan.
 - Establishing the location and commencing delivery of 20 ha core habitat and buffering, as described in 5.2 above, outside the SHG
- 5.4 Able UK acknowledge that details of this agreed approach to mitigation require more detailed planning and therefore through this agreement Able UK will work with NE, RSPB and NLC to determine the following:

³ As detailed in section 3.2 of this document

- The detail of what is required to optimally manage the mitigation areas and the adoption of a final conservation management plan
 - The location of mitigation outside the SHG
 - A full mitigation monitoring programme
- 5.5 This agreement also acknowledges that Able UK may seek to apply for further development in the SHG and that subject to ensuring continued compliance with the Habitats Regulations and all other controls, there may be variation to the development proposals.
- 5.6 As part of the commitment by Able UK to resolve all environmental issues associated with PA/2009/0600, the company recognises that other matters must also be fully addressed in addition to the non-breeding waterbird mitigation. These include:-
- Obtaining a flood defence consent for works to the sea wall.
 - Any revisions to the mitigation for SPA and Ramsar waterbirds is compatible with the necessary provisions for protected species or other features of nature conservation interest as outlined in the EIA accompanying the application.
 - A revised copy of the Appropriate Assessment by NLC is made available to interested parties.



Able UK.....
Peter Stephenson, Chief Executive



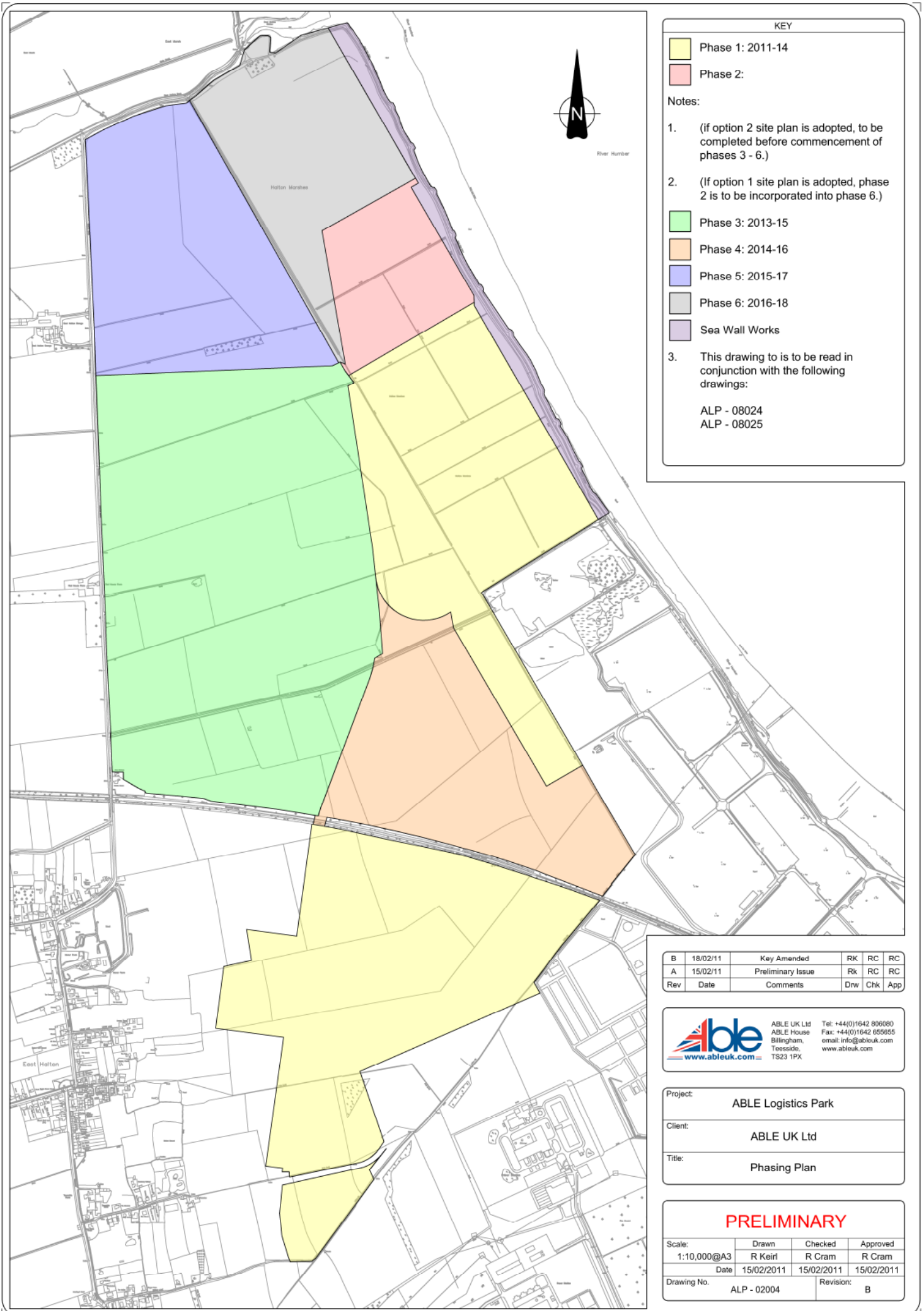
Natural England.....
Peter Nottage, Yorkshire and Humber and East of England Regions, Regional Director



RSPB.....
Peter Robertson, RSPB Northern Region, Regional Director

Reference Documents:

- 1 Memorandum of Understanding, June 2010
- 2 SHG SPA Mitigation Delivery Plan Version 1, August 2010
- 3 Drawing ALP-08025 A Option 2 Site Plan
- 4 Drawing ALP – 02004 B Phasing Plan
- 5 Drawing ALP-08024 A Option 1 Site Plan



KEY

- Phase 1: 2011-14
- Phase 2:
- Phase 3: 2013-15
- Phase 4: 2014-16
- Phase 5: 2015-17
- Phase 6: 2016-18
- Sea Wall Works

Notes:

1. (if option 2 site plan is adopted, to be completed before commencement of phases 3 - 6.)
2. (If option 1 site plan is adopted, phase 2 is to be incorporated into phase 6.)

3. This drawing is to be read in conjunction with the following drawings:

ALP - 08024
ALP - 08025

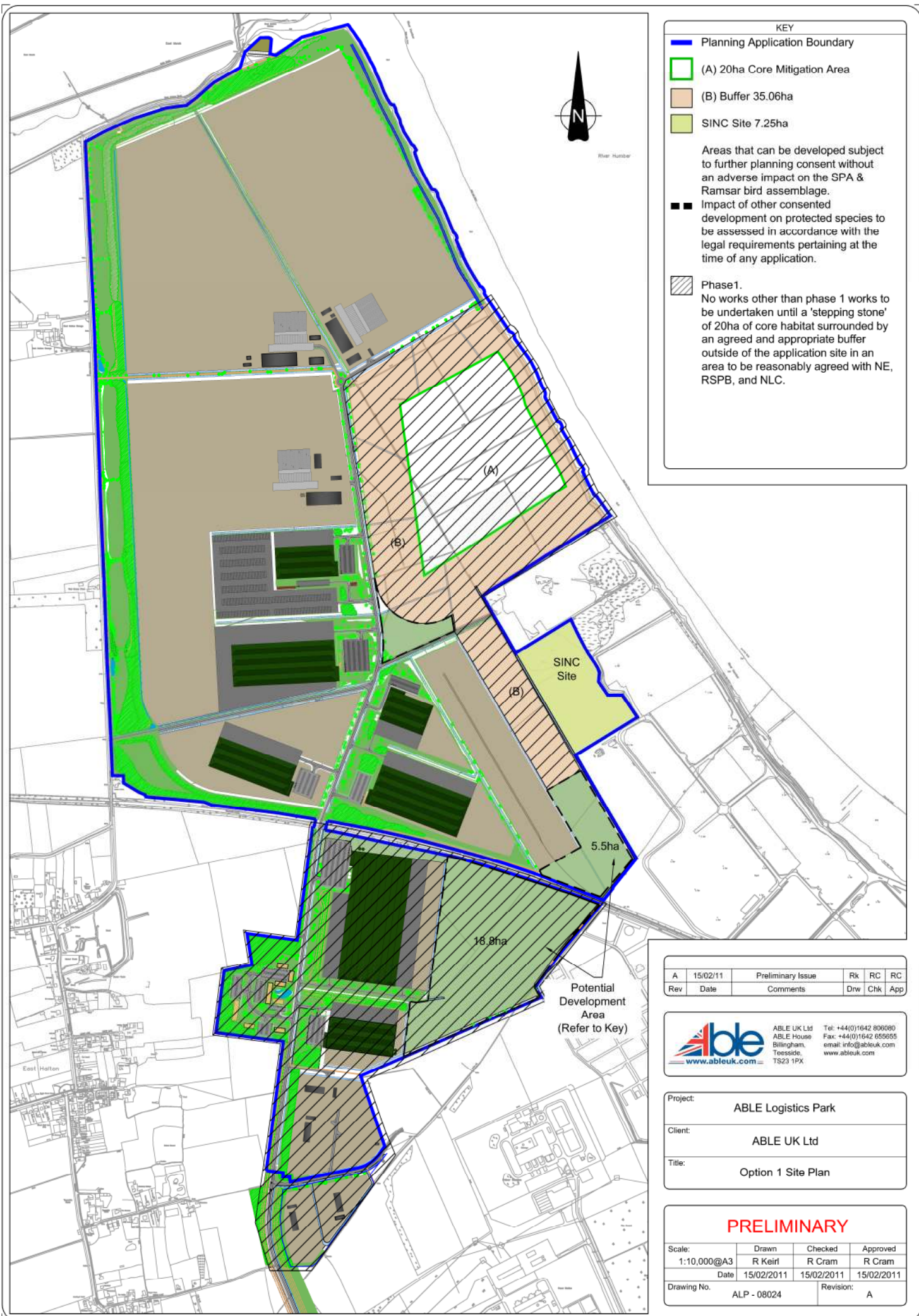
B	18/02/11	Key Amended	RK	RC	RC
A	15/02/11	Preliminary Issue	Rk	RC	RC
Rev	Date	Comments	Drw	Chk	App

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Project:	ABLE Logistics Park
Client:	ABLE UK Ltd
Title:	Phasing Plan

PRELIMINARY

Scale:	Drawn	Checked	Approved
1:10,000@A3	R Keirl	R Cram	R Cram
	Date	15/02/2011	15/02/2011
Drawing No.	ALP - 02004		Revision: B



KEY

- Planning Application Boundary
- (A) 20ha Core Mitigation Area
- (B) Buffer 35.06ha
- SINC Site 7.25ha

Areas that can be developed subject to further planning consent without an adverse impact on the SPA & Ramsar bird assemblage.

- Impact of other consented development on protected species to be assessed in accordance with the legal requirements pertaining at the time of any application.

Phase 1.
No works other than phase 1 works to be undertaken until a 'stepping stone' of 20ha of core habitat surrounded by an agreed and appropriate buffer outside of the application site in an area to be reasonably agreed with NE, RSPB, and NLC.



River Number

(A)

(B)

SINC Site

(B)

5.5ha

18.8ha

Potential Development Area
(Refer to Key)

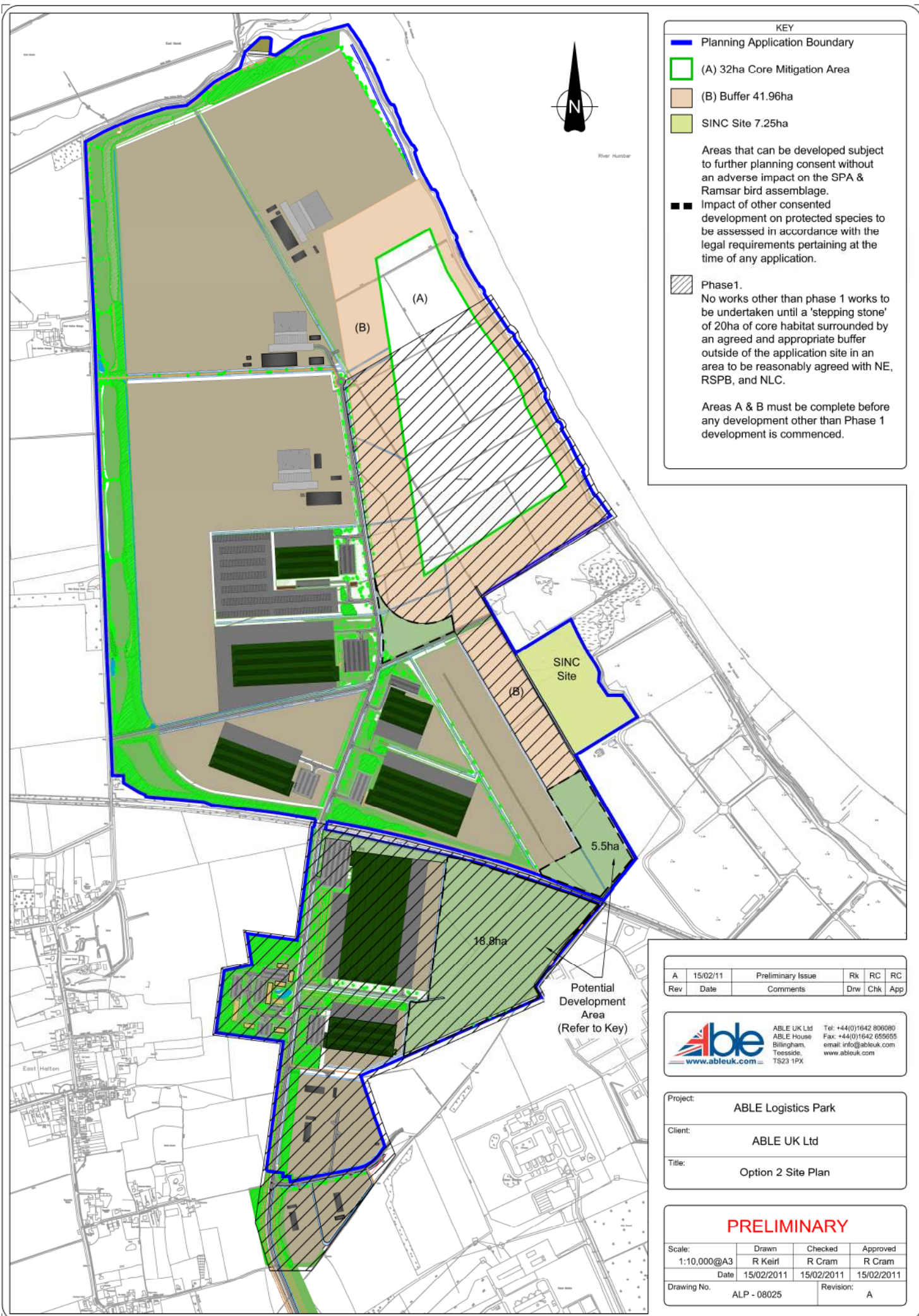
A	15/02/11	Preliminary Issue	Rk	RC	RC
Rev	Date	Comments	Drw	Chk	App

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Project:	ABLE Logistics Park
Client:	ABLE UK Ltd
Title:	Option 1 Site Plan

PRELIMINARY			
Scale:	Drawn	Checked	Approved
1:10,000@A3	R Keirl	R Cram	R Cram
Date	15/02/2011	15/02/2011	15/02/2011
Drawing No.	ALP - 08024		Revision: A



KEY

- Planning Application Boundary
- (A) 32ha Core Mitigation Area
- (B) Buffer 41.96ha
- SINC Site 7.25ha

Areas that can be developed subject to further planning consent without an adverse impact on the SPA & Ramsar bird assemblage.

- Impact of other consented development on protected species to be assessed in accordance with the legal requirements pertaining at the time of any application.
- Phase 1.
No works other than phase 1 works to be undertaken until a 'stepping stone' of 20ha of core habitat surrounded by an agreed and appropriate buffer outside of the application site in an area to be reasonably agreed with NE, RSPB, and NLC.

Areas A & B must be complete before any development other than Phase 1 development is commenced.

A	15/02/11	Preliminary Issue	Rk	RC	RC
Rev	Date	Comments	Drw	Chk	App



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Project: ABLE Logistics Park

Client: ABLE UK Ltd

Title: Option 2 Site Plan

PRELIMINARY

Scale: 1:10,000@A3	Drawn: R Keirl	Checked: R Cram	Approved: R Cram
Date: 15/02/2011	15/02/2011	15/02/2011	15/02/2011
Drawing No. ALP - 08025	Revision: A		

 <p>amep able marine energy park</p>	<p>ABLE MARINE ENERGY PARK EXAMINERS' REQUIREMENTS FOR FURTHER OVERCOMPENSATION</p>	<p>OCT 2013</p>
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**ANNEX B THOMSON ECOLOGY STATEMENT OF DESIGN PRINCIPLES FOR
HALTON MARSHES WET GRASSLAND**



Statement of Design Principles

Halton Marshes Wet Grassland

For

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Project Number	Report No.	Revision No.	Date of Issue
NABL103	004	004	14 th October 2013

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1. Summary

1.1.1 As part of the compensation package for the construction of the Able Marine Energy Park (AMEP), it is proposed to create significant areas of wet grassland. The grasslands are at three sites:

- Mitigation Area A; which is located to the south of the AMEP development site on the south bank of the Humber Estuary (see Figure 1);
- The Cherry Cobb Sands Wet Grassland Site (CCSWGGS); which is adjacent to the Cherry Cobb Sands managed realignment site on the north bank of the Humber Estuary. This wet grassland site is approximately 38.5ha and will accommodate 25ha of wet grassland and a roosting site for black-tailed godwits in a 5ha open water area. This site currently comprises arable farmland on reclaimed saltmarsh (see Figure 1); and
- The Halton Marsh Wet Grassland Site (HMWGS); which is adjacent to the Halton Marshes Local Wildlife Site on the south bank of the Humber Estuary. This wet grassland site is approximately 73ha and currently comprises arable farmland on reclaimed saltmarsh. The HMWGS is to be partially designated as 'further overcompensation' for the AMEP development (see Figure 2).

1.1.2 This document is concerned with the Halton Marshes Wet Grassland and sets out the wet grassland objectives and design principles for site. The key objectives for the site are based on those set out in the Compensation Environmental Management and Monitoring Plan for - Environmental Management and Monitoring Plan: 3. Compensation habitat - Cherry Cobb Sands RTE/managed realignment site and associated wet grassland area, and are as follows:

- Objective 1: The site should contain wide, open expanses of wet grassland habitat with unobscured views of the surrounding area;
- Objective 2: The soil should be moist throughout the months of August to April to concentrate invertebrates at the surface and to ensure that the soil remains soft enough to be probed by waders, particularly black-tailed godwits;
- Objective 3: The site should be largely free of winter flooding to prevent floodwaters from killing soil invertebrates;
- Objective 4: The site should have a high density of macro-invertebrate fauna to provide food for wading birds; and
- Objective 5: The wet grassland should be managed to give a suitable sward for wading birds throughout the months of August to March.

1.1.3 In order to achieve these objectives, it is proposed to incorporate the following elements into the design:

- Removal of the hedgerows from within the site to create the required open area;
- After preparing the soil, sowing the grassland area with an appropriate seed mix;
- Creating a series of scrapes which will be wet throughout the winter period and into the spring or early summer;
- Allowing some existing low spots to flood in winter, creating areas of shallow, winter 'splash-flooding' which dry out in early spring;

- Maintaining existing topographic variation as far as is consistent with preventing excessive winter flooding;
- Installation of water control structures, including blocking of any field drains and installing ditch dams and sluices to prevent the uncontrolled loss of rainwater from the site through the existing drainage system;
- Creation of a water storage area and establishing an irrigation system which will enable the soils to be wetted during July and August;
- Installing spillways to control the extent of flooding in the scrapes and areas of 'splash flooding' and so leaving the majority of the grassland unflooded during the winter;
- Amelioration of the soil including the addition of organic matter to increase the levels of soil biomass, in particular earthworms; and
- Management of the site in accordance with the objectives and targets set out in the agreed Compensation Environmental Management and Monitoring Plan.

1.1.4 The objectives and design elements set out above are the design principles for Halton Marshes Wet Grassland.

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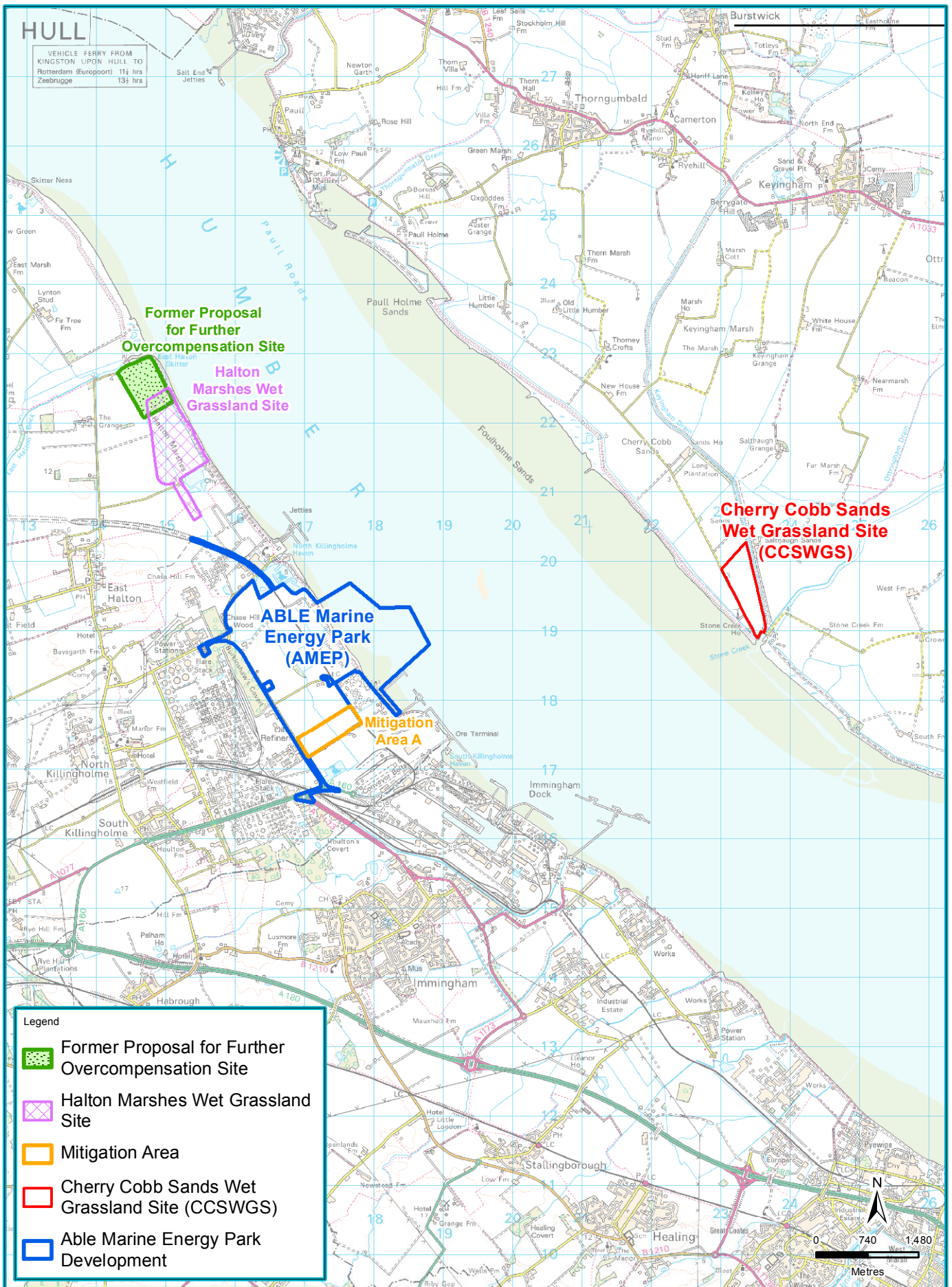


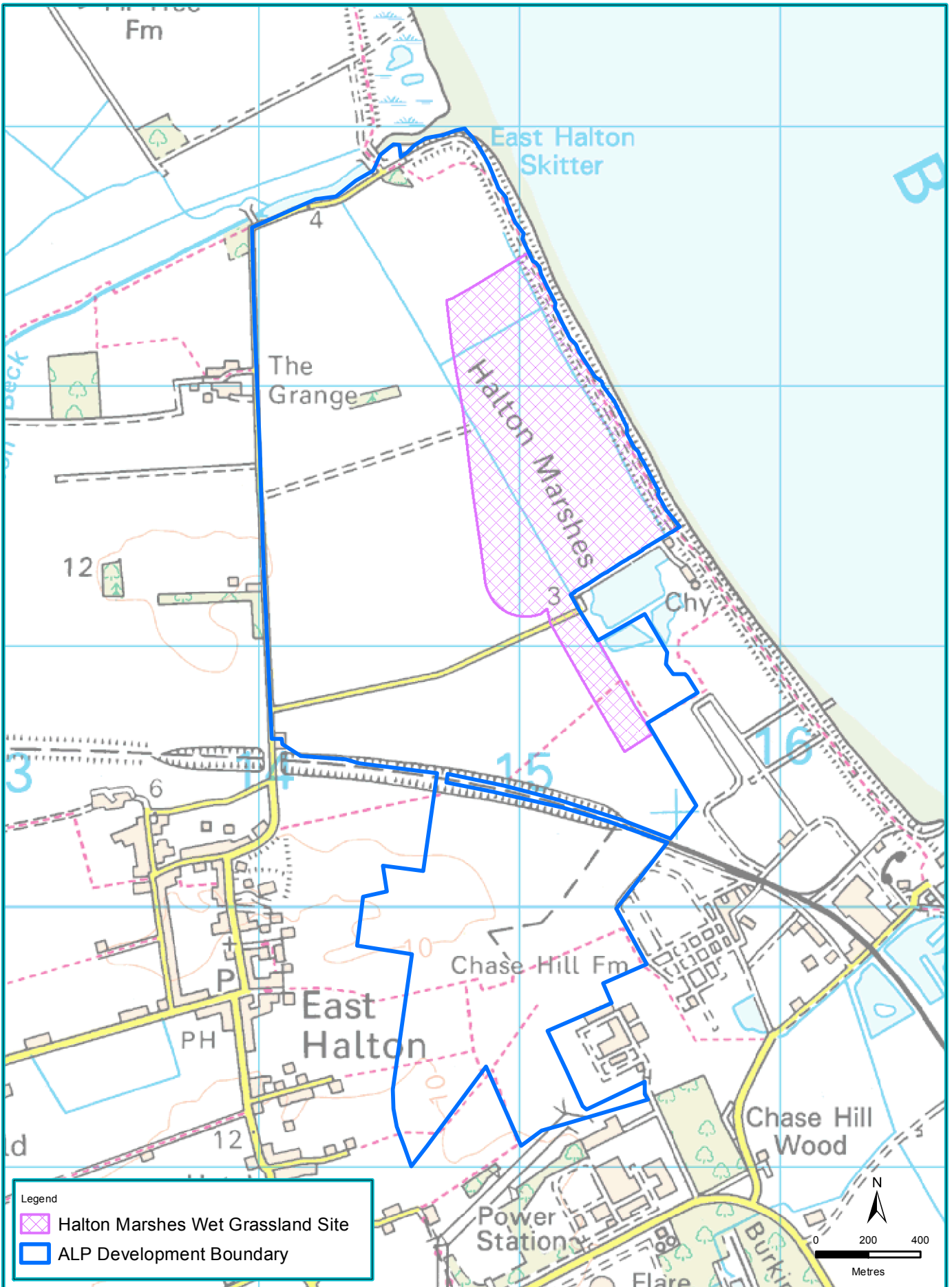
Figure Number	1		Drawing Ref	NABL103/13652/1		
			Scale at A4	1:75,000		
Figure Title	Able Marine Park Development and Associated Mitigation / Compensatory Grassland		Drawn	AC	Checked	NS
			Date	07/10/2013	Date	07/10/2013

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Client	Able UK		Drawing Ref	NABL103/13626/1		
Figure Number	2		Scale at A4	1:20,000		
Figure Title	Proposed Southern Location for Further Overcompensation Site - Halton Marshes Wet Grassland		Drawn	AC	Checked	NS
			Date	02/10/2013	Date	02/10/2013



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Legend

-  Former Proposal for Further Overcompensation Site
-  ALP Development Boundary

Site Grid Reference:514780 421134

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Drawing Ref
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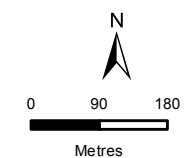
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Client
Able UK

Figure Number
3

Figure Title
Former Proposal For Further Overcompensation Site Humber Estuary (South Bank)



2. Introduction

2.1 Development Background

2.1.1 Able Humber Ports Ltd propose to build the Able Marine Energy Park (AMEP), which will be located on the south bank of the Humber Estuary, (see Figure 1).

2.1.2 As part of the compensation package for AMEP, wet grassland is to be created at Mitigation Area A. The original specification for Mitigation Area A was that it should:

- Provide habitat for principally for wintering waders (especially curlew), but also breeding birds and bats;
- Comprise primarily wet grassland habitats, with shallow wader scrapes and tussocky swards;
- Remove hedgerows from the centre of the area coupled with bolstering and creation of hedgerows and scrub around the margins; and
- Provide 1.7ha of neutral grassland to compensate for the loss of the same habitat at Station Road Local Wildlife Site.

2.1.3 The specification was amended (Supplementary Report EX20.3) to include further features for breeding birds: These additional specifications were to:

- Provide habitat to support breeding waders, such as lapwing;
- Include a tree belt along the western boundary; and
- Include unmanaged grassland strips two to six metres wide alongside hedgerows.

2.1.4 Mitigation Area A, as originally proposed, was 47.8ha plus 4.5ha of land designated as an operational buffer (see Figure 1).

2.1.5 In addition, wet grassland will also be created at the 'Cherry Cobb Sands Wet Grassland Site' or CCSWGS (see Figure 1). The CCSWG is the subject of a separate planning permission, consented by the East Riding of Yorkshire Council, (DC/12/04154/STPLF/STRAT). The planning permission is based on an outline design, as set out in AMEP Final Compensation Proposals: Part 4: Wet Grassland and Roosting Site.

2.1.6 Able Humber Ports Ltd. (AHPL) has further proposed to provide an additional 38.82ha pastureland at the northern end of Halton Marshes as 'further overcompensation'. This proposal is superseded by the scheme discussed in this report.

2.2 Document Scope

2.2.1 Following a consultation process between Able UK and Natural England, Natural England identified a number of risks connected with meeting the objectives of the proposed compensatory measures. The project risks highlighted by Natural England are as follows:

- Risk A: The functional compensatory habitat only develops after the damage occurs (time lag);

- Risk B: The Regulated Tidal Exchange (RTE) fails to deliver sufficient functional habitat for black-tailed godwit and other species;
- Risk C: The Cherry Cobb Sands Wet Grassland fails to deliver the functional habitat for black-tailed godwit and other species; and
- Risk D: The pasture land proposed as 'overcompensation' at East Halton fails to be of benefit to any species affected by AMEP. This is the area of land identified on Figure 3.

2.2.2 In part response to the concerns raised by Natural England (i.e. Risk D), Able UK propose to move the 'further overcompensation' site at East Halton (Figure 3) to the fields south of its current location (to the area identified as the Halton Marshes Wet Grassland Site on Figure 2) and to change its design and management from merely reserved arable land to optimally managed wet grassland. The proposed wet grassland site is currently owned by AHPL and has planning consent (PA/2009/0600) which includes for the construction of a wet grassland site of same scale in the same location as the present proposal for the development of the Able Logistics Park (ALP). The new site is available for immediate habitat creation and would temporarily replace the wet grassland habitat set aside as mitigation for the ALP. Habitat creation at this site in the short term should serve to alleviate Natural England's concerns over the uncertainty of developing functional mudflat, and therefore reduce the risk of there being insufficient functional habitat for black-tailed godwit.

2.2.3 An outline design for Halton Marshes Wet Grassland (see NABL103/003/001) was produced on 15th August 2013. However, this design for Halton Marshes Wet Grassland was driven by the need to address the effects of ALP more than the need to address the effects of AMEP, although it did also incorporate the objectives for wet grassland set out in the Terrestrial Environmental Monitoring and Management Plan (TEMMP) for AMEP.

2.2.4 In order for the Halton Marshes Wet Grassland to meet the requirements for further overcompensation for AMEP, Able Humber Ports Ltd. proposes to adapt the 15th August 2013 design for Halton Marshes Wet Grassland to meet the objectives of the Compensation Environmental Management and Monitoring Plan (CEMMP) for AMEP, thus satisfying the conditions of 'overcompensation habitat'.

2.3 The Brief and Objectives

2.3.1 Able UK Ltd commissioned Thomson Ecology on 30th September 2013 to provide a Statement of Design Principles for wet grassland creation at the Halton Marshes Wet Grassland Site. The scope of works was to incorporate the wet grassland objectives set out in the CEMMP for - Environmental Management and Monitoring Plan: 3. Compensation habitat - Cherry Cobb Sands RTE/managed realignment site and associated wet grassland area.

2.3.2 Details of monitoring and management of similar habitat are set out in the agreed CEMMP.

2.3.3 The design of the Halton Marshes Wet Grassland (HMWG) is to be based on the principles and methods set out in the Wet Grassland Guide (RSPB, 1997). Information gathered during the baseline assessment (see Thomson Ecology Report NABL103/001/001) was also taken into account.

3. Objectives

- 3.1.1** The objectives for HMWG relate to five of the six wet grassland objectives described in the CEMMP for the CCSWGS, dated March 2013. The key principles of the grassland design are therefore based on recommendations made by Natural England and the agreed compensation measures for the AMEP development.
- 3.1.2** The aim is to create wet grassland at the HMWGS that is a suitable feeding resource for black-tailed godwits and other wetland birds. The objectives upon which the design is based are as follows:
- Objective 1: The site should contain wide, open expanses of wet grassland habitat with unobscured views of the surrounding area (ref. AMEP CEMMP Obj. WG1, 2013);
 - Objective 2: The soil should be moist throughout the months of August to April to concentrate invertebrates at the surface and to ensure that the soil remains soft enough to be probed by waders (ref. AMEP CEMMP Obj. WG3, 2013);
 - Objective 3: The site should be largely free of winter flooding to prevent floodwaters from killing soil invertebrates (ref. AMEP CEMMP Obj. WG4, 2013);
 - Objective 4: The site should have a high density of macro-invertebrate fauna to provide food for wading birds (ref. AMEP CEMMP Obj. WG5, 2013); and
 - Objective 5: The wet grassland should be managed to give a suitable sward for wading birds throughout the months of August to March (ref. AMEP CEMMP Obj. WG6, 2013).

4. Wet Grassland Design Principles

4.1 Objective 1 - Open Expanses of Wet Grassland

The site should contain wide, open expanses of wet grassland habitat with unobscured views of the surrounding area.

Hedgerow Removal

- 4.1.1** The HMWGS comprises approximately 73ha of arable/arable-set aside fields (numbering 12), bounded by species-poor hedgerows. Of this, 32ha is the core area of the grassland and the remainder is a buffer around the core area. The core area is divided in purpose, with 20ha forming overcompensation for AMEP and the remaining 12ha forming compensation for the part of ALP that lies to the south of the railway line. There is a maximum variation of approximately 0.75m between the lowest and the highest point of the site.
- 4.1.2** The hedgerows running along the length of the sea wall and on the southern margin of the site bordering the Halton Marshes Clay Pits Local Wildlife Site will be retained; all other hedgerows will be removed. Removal of the hedgerows will have minimal impact on the ecological value of the site and should be easily accommodated during the construction phase.

Grassland Creation

- 4.1.3** Following the removal of the hedgerows, the site will be sown with an appropriate grass seed mix which contains wild flowers and grasses suitable for clay soils. An example seed mix is EM8 - Meadow mixture for wetlands from Emorsgate Seeds. The sowing rate will be approximately 4g/m², or in accordance with the supplier's recommendation. Once the grassland is established, the habitat will be maintained through the installation of water management apparatus (see Objective 2) and the sward height will be controlled by an appropriate management regime (see Objective 5).

Scrapes

- 4.1.4** To further improve foraging habitat of the site, four scrapes of two types would be constructed within the core area of the wet grassland. All of the scrapes would be constructed within existing low spots to minimise earthworks.
- 4.1.5** Type 1 scrapes would be large and relatively deep scrapes with an island and a central low point. The island would be created by piling up earth during the excavation of the scrape. The maximum water level would be maintained during the winter and the scrape allowed to slowly dry out over the spring and early summer, with water retreating to the central low point before the scrape dries out completely. The maximum water levels and extent of water area would be controlled by means of two spillways which connect to adjoining ditches. The Type 1 scrapes would be located within the constraints of the buffering required for the site.
- 4.1.6** Type 2 scrapes would be of smaller and more sinuous in planform. The scrape would be divided into compartments of varying depths, separated by shallower areas. During the winter, water would be allowed to spill out over the edges of the scrape and flood the surrounding low spot. The extent and depth of this flooding would be controlled by spillways which connect the flooded area to the adjoining ditches. As the low spot dries at the end of winter, the outline of the scrape would be exposed. The scrapes would slowly dry during the spring and early summer, with the shallower compartments drying out first and the deeper ones persisting later into the summer.

Winter Splash Flooding

- 4.1.7** There are some existing low spots within the Halton Marshes Wet Grassland Site. The majority of these will be retained and allowed to flood in winter and so provide supplementary and shallow wet areas during the winter when the scrapes are full with water. The extent of flooding within these areas will be controlled by infilling some areas and installing a system of spillways to limit the extent of flooding (see Objective 3).

Topography

- 4.1.8** As far as is consistent with Objective 3, existing topography will be maintained and additional topographic variation will be created during the construction of the scrapes and other earthworks. Any additional mounds or hollows created will be very low, rising no more than around 0.25m above existing ground level, unless it is outside the area designated as wet grassland.

4.2 Objective 2 - Soil Moisture Regime

The soil should be moist throughout the months of August to April to concentrate invertebrates at the surface and to ensure that the soil remains soft enough to be probed by waders.

Water Control Structures

4.2.1 Maintaining wet grassland habitat can, for the most part, be achieved through the retention of rain water on site. The primary aim of curtailing water draw-down and loss through the outfall ditch system can be achieved by infilling and damming the ditches. The ditch dams will not completely block the ditch, but rather allow the water level within the ditches to be controlled through the use of a sluice system.

4.2.2 There is no evidence to suggest an underground field drainage system is in use, however, should one exist, it must also be effectively blocked. As a general concept, where the field drains run into ditches which are to be blocked, the drains themselves do not need to be sealed off; they are effectively blocked by impeded water. Where the field drains run into ditches not to be blocked, each individual field drain will need to be sealed off with a clay plug.

4.2.3 Once this work is complete, the loss of water from the site will be the amount lost through evaporation, plus any additional leakage. Given the soil type on site (a slowly permeable clay) water loss from leakage is expected to be low.

Irrigation System

4.2.4 Once the water control structures have been installed, it will be possible to maintain wet soils in the period from October to April, however, soils are unlikely to be moist in other months of the year. This means that an irrigation system will be required to wet soils in the July to September period.

4.2.5 It is proposed that approximately 20ha of core grassland habitat will be irrigated during the late summer and early autumn months. In an average year, the soil water deficit will peak at about 85mm in July (Smith and Trafford, 1976). This means that there will be an irrigation requirement of approximately 20,000m³ in an average year.

4.2.6 Without accurate hydrological data of the south-north drain, one must assume that it will not be possible to irrigate the grassland directly from this source. Therefore, a water storage area will be essential to ensuring that enough winter rainfall is collected and stored on site for irrigation purposes. In order to fulfil the irrigation requirements, creation of a single open water area measuring 4 - 6 ha, with an average depth of 0.75m when full, is proposed in the fields adjacent to the Halton Marshes Local Wildlife Site. This would ensure a minimum water supply of at least 30,000m³ for summer irrigation. The exact requirements will be refined in the detailed design.

4.2.7 Sources of water for the water storage area would be directly from rainfall (which would not be sufficient on its own), from collecting and channelling excess rainwater from across the site and via abstraction from the south-north drain from March-April. Without a sufficient irrigation system the annual abstraction requirement would be in the order of 15,000 - 20,000m³ per annum. However, an extensive series of waterways and carrier ditches would markedly decrease the

abstraction requirements, to the extent where it would only be necessary in particularly dry years. It is proposed to use one or more wind powered pumps to power the abstraction and abstraction from the drain would be subject to hydrological analysis and Environment Agency (EA) approval.

- 4.2.8** During the irrigation period (July - August (September)), the same windpumps used to extract water from the south-north drain, will deliver water to the required grassland areas via a 100mm pipeline. In each of the open field areas, irrigation channels will be constructed and connected to the delivery pipe. The channel will be sealed at the opposite end and laid with a minor fall away from the feed point. Water delivered via the windpump and pipe system will run down the channel, causing it to fill and then overflow onto the open field, producing a surface irrigation effect.
- 4.2.9** Excess spoil from the excavation of the open water area and the irrigation system could be used to create a bund around the perimeter of the site.
- 4.2.10** One alternative solution to meeting the future irrigation requirements of the grassland would be to direct water flow from the hard standing areas of the forthcoming ALP development. The volume of run-off from the hard standing areas should be significant and might serve as an adequate supplementary source of water, perhaps negating the need to abstract from the south-north drain in future years. Once the ALP development is underway, introducing a permanent industrial, or if necessary, potable supply of water from a piped water source would also be feasible. Introducing a piped water supply from the development would lead to a redundancy in the requirements for abstraction from the south-north drain.

4.3 Objective 3 - Winter Flooding Preventative Measures

The site should be largely free of winter flooding to prevent floodwaters from killing soil invertebrates.

- 4.3.1** The HWMGS is relatively flat with the lowest areas approximately 2.0m AOD and the highest area approximately 2.75m AOD; However, within this topographical variation exist a number of depressions and low spots which may be susceptible to flooding during periods of heavy rainfall. As set out above, these will mostly be retained to provide areas of winter splash-flooding.
- 4.3.2** However, winter flooding would be controlled by some re-landscaping, involving filling in some of the low spots and removing high spots that would retain unwanted floodwater. It would also be controlled by a series of spillways that match the topography of the land. The spillways would be approximately 0.1m above the lowest point of the grassland and link the grassland to the modified drainage ditch network, Once the desired extent of winter flooding has been achieved, excess water would flow through the spillways and into the drainage channels. The ditches would then remove the water from site, via sluices, and discharge into the Humber Estuary.
- 4.3.3** The sluice system, used to control water levels in the ditches, (see Section 4.3.2) in summary, comprises of a length of plastic piping, which is either rigid with a swivel end or flexipipe, laid through an earth dam. The upstream end of the pipe can moved up or down to the desired water level, allowing excess water to be released if required.

4.4 Objective 4 - Macro-invertebrate Biomass

The site should have a high density of macro-invertebrate fauna to provide food for wading birds.

4.4.1 Establishment of invertebrate biomass can be expected to commence as soon as the grassland areas are seeded.

4.4.2 A biomass assessment (see Thomson Ecology report ref: NABL/103/001/001) of the site was conducted in May 2013 and a strategy to improve the biomass content of HMWG has been developed. As part of the earthworks described above, soils across the site will be loosened to a depth of not less than 350mm. The areas outside the scrapes should then be top dressed with organic matter at a minimum rate of 15 tonnes per hectare. This could be untreated silage or crop waste. These steps are required to loosen the compacted soil and provide food sources for soil invertebrates.

4.5 Objective 5 - Grazing Regime

The wet grassland should be managed to give a suitable sward for wading birds throughout the months of August to March.

Grazing Regime

4.5.1 Appropriate management of the grassland is important as black-tailed godwits require an open vista with relatively low level vegetation. Appropriate grazing will provide the necessary sward height and will ensure a varied vegetation structure is maintained (compared to mowing) and will additionally benefit the soil through input of organic matter and an increase in biomass of dung invertebrate fauna on site.

4.5.2 Cattle are the preferred grazing animal for wet grassland sites for the following reasons:

- They are more tolerant of wet conditions than sheep, and generally easier to manage with wet fences (i.e. boundary drainage channels);
- They are relatively unselective in their grazing compared with sheep and are therefore ideal for removing long or rank vegetation;
- They are particularly suited to the management of sites which require summer grazing as they do not graze flowers preferentially;
- They are well suited to the control of taller grasses such as reed sweet grass and reed canary-grass; and
- Being much heavier animals than sheep, cattle cause more poaching which can help create niches for invertebrates, providing the stock density is not too high.

4.5.3 Grazing by horses could also be considered at low stocking densities to avoid problems with poaching, overgrazing and eutrophication.

4.5.4 The grassland should be grazed following a minimum establishment period of three or six months, depending on whether sown in spring or autumn. Introduction of livestock should follow a careful assessment of the readiness of the grassland for grazing. In the first year of grazing,

the stock density should be 0.2 livestock units per hectare per year and occur in the months of March to July or August, inclusive. In the all subsequent years of grazing, the stock density should be increased to 0.3 livestock units per hectare per year, or to the level required to produce the desired sward structure, and again occur in the months of March to July or August. Further information on grazing management and stocking densities can be found in Treweek *et al.* (1997).

- 4.5.5** The HMWGS will need to be stock fenced because the drainage ditches do not provide a sufficient barrier to stock.

Weed Control


- 4.5.6** Agricultural weeds may present a problem in the establishment of the grassland. Problem agricultural weeds and arable crop should be spot-treated with an appropriate herbicide or controlled with a weed wiper if required.
- 4.5.7** Conservation-friendly weed-wipers, such as the 'Ecowipe' and 'Rotawipe' will ensure a targeted application without ground contamination and no spray drift. They also ensure a large proportion of the herbicide is applied to the underside of the plant, protecting it from being washed off by rain.
- 4.5.8** Alternatively, weed control could be achieved through cutting and removal.

Fertilisers/Herbicide

- 4.5.9** No broad herbicides or fertilisers should be used on the grassland. Care should be taken on the adjoining arable land to ensure fertiliser or herbicide does not drift onto the grassland areas during application. Retaining and maintaining the boundary hedgerows where they are present will reduce the likelihood of herbicide or fertiliser drift.

5. References

- 5.1.1 Able Marine Energy Park Compensation Site Environmental Monitoring and Management Plan 2013
- 5.1.2 Smith and Trafford (1976) *Climate and Drainage*. MAFF Technical Series
- 5.1.3 Treweek, J., Drake, M., Mountford, O., Newbold, C., Hawke, C., Jose, P., Self, M. and Benstead, P (Eds) (1997) *The Wet Grassland Guide: Managing floodplain and coastal wet grassland for wildlife*, RSPB, 1997.

 <p>amep able marine energy park</p>	<p>ABLE MARINE ENERGY PARK EXAMINERS' REQUIREMENTS FOR FURTHER OVERCOMPENSATION</p>	<p>OCT 2013</p>
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ANNEX C – MINUTES OF HMWG MEETING DATED 24TH JUNE 2013

Unconfirmed Minutes of the first meeting to discuss the Halton Marsh Wet Grassland, held on 24th June 2013 at Natural England, Leeds.

Group Members: Able UK Ltd, Environment Agency (EA), Natural England (NE), North Lincolnshire Council (NLC), R.S.P.B (RSPB) and Thomson Ecology (TE).

Attendees: Timothy Allen (TA), Richard Arnold (RA), Richard Barnard, Emma Hawthorne (EH), Andrew Hearle (AH), Annette Hewitson (AHew), Jonathan Monk (JM), Sue Manson (SM), Tony Prater (TP), and Andrew Taylor (AT).

1. Welcomes, introductions and meeting purpose

- 1.1 JM opened the meeting by welcoming the group members and initiating round table introductions.
- 1.2 JM explained that the meeting was primarily intended as a design workshop for the Halton Marshes Wet Grassland Site (HMWGS). While Able is aware that several significant issues around the application require discussion, Able wishes the design work to proceed on the assumption that those issues can be resolved to the satisfaction of both Able and the Regulators, so that progress can be made. JM recognised that this design work would be progressed at Able UK's risk.
- 1.3 JM then confirmed that Thomson Ecology have been commissioned by Able UK Ltd. to produce the design works for the HMWGS and that he would like to draw on the expertise around the table to help inform the design. Natural England explained that advice and comments offered during this meeting should be considered to be without prejudice. Natural England also advised that the MOU (dated 24 February 2011) and signed by NE, RSPB and Able UK should be considered. This was agreed.

2. Planning Context of ALP and AMEP Wet Grassland

- 2.1 JM informed the meeting participants that planning consent for the ALP is ready to be issued, subject to agreement being reached on the flood defence wall and drainage works issues. In the context of the planning applications for relocating AMEP's mitigation, it is assumed that an agreement on the flood defence works can be reached with the Environment Agency.
- 2.2 JM informed the group that the Halton Marshes Wet Grassland, as currently proposed, is mitigation for the effect of ALP. However, should Able UK receive a DCO for AMEP, Able UK will seek permission to move Mitigation Area A for AMEP to Halton Marshes Grassland. JM acknowledged that this would require an additional area of wet grassland to be created, at an offsite location, if ALP were to be developed north of the railway line, but noted that under the terms of the Memorandum of Understanding dated 24th Feb 2011, ALP could be developed up to the railway line in advance of that time. NE stated that the drawing referred to in the planning condition clearly shows that phase 1 comprises the land south of

the railway line and part of the mitigation for ALP (20ha core plus buffers). If Mitigation Area A is moved to ALP, this is the mitigation for AMEP only. Therefore, the land south of the railway cannot be developed until the phase 1 mitigation area for ALP has also been delivered.

- 2.3 JM replied that Able UK's understanding is that the conditions laid out in the MOU are not a sequential process. Able UK would like to first build the ALP mitigation area under the ALP consent and then submit a planning application for the relocation of AMEP grassland to this site. Able would then address the requirements for identifying further mitigation areas to be ready for such time as ALP develops north of the railway line. Natural England asked for clarification of how much of the ALP mitigation would actually remain, should the relocation of the grassland occur.
- Action: JM**
- 2.4 JM acknowledged that the proposed planning application to move AMEP's mitigation area reduced the planning options for ALP set out in the MOU from two to one, under Planning Condition 47. NLC noted that an additional planning application would be likely to be required for the offsite mitigation area.
- 2.5 JM and NLC agreed that, at no point, would the legal framework associated with the planning application require use of the 2008 Planning Act. All applications could be submitted through North Lincolnshire Council.
- 2.6 The complete set of Planning Conditions for ALP may be found at http://forms.northlincs.gov.uk/NR/rdonlyres/3FD1A6A1-0650-447E-81D8-CC6678EEB98E/48384/2009_0600.pdf. NLC noted that Able should consult closely with NLC over the application of construction-precedent conditions.

3. Existing ecological, hydrological and soil data

- 3.1 JM asked TE to introduce the agenda item and update the group as to what they had surmised from their site investigations.

Topography

- 3.2 TE reported that the Halton Marsh site is very flat (0.75m variation) and that the low spots have been identified.

Climate

- 3.3 The local climate is relatively dry and warm, receiving 560-600mm of rain/annum.

Soils

- 3.4 The soil is classified as Newchurch 2 (silty clay) and that evidence of brown mottling suggests seasonal water logging of the site. There is also significant evidence of compaction in the top 300mm of soil, contributing to a low level of biomass.

Hydrology

- 3.5 The only source of water on site is resultant from rainfall. The site is efficiently drained and drainage water is discharged into Skitter Beck. This is via a large drain running from South to North. No evidence was found by surveyors to suggest any underground field drains. JM and the RSPB

agreed that it was unlikely there were any underground field drains of note. However, if field drains are found on site, they can be blocked.

Macro-invertebrate biomass

- 3.6 The mean macro-invertebrate biomass for the site has been calculated to be 16.8g/m². The 5 year development target is 65g/m², as set out in the TEMMP.

Ecology

- 3.7 A review of the 2005 ecological survey has confirmed the presence of a number of bird species on site – skylark, yellowhammer, tree sparrow and marsh harrier. There is no evidence of great crested newts or reptiles. Water voles have been recorded in the main south/north drain which passes through the site. Several bat species have been spotted foraging in the hedgerows immediately to the north of the Clay Pits, and foraging is likely to occur throughout the site. Able Conservation Management Plan Nos. 1 & 2, provide a review of species in the area and targets for their enhancement. The proposed wet grassland, once construction had finished, would be unlikely to negatively impact on this.
- 3.8 NLC stated that badgers had established a sett at the Winters' wood shed immediately south-east of the mitigation area, however, TE confirmed that there has been no evidence of badger activity identified on site.
- 3.9 The flora of the site consists of a number of hedgerows, sown grassland and arable fields and there was a reasonable level of flora on the sea wall.

4. Progression of design works

- 4.1 TE introduced the outline design for the Halton Marsh wet grassland. They reminded the group that the wet grassland was designed principally to support winter waders and that it was still very much indicative.

The outline design included:

- Improving macro-invertebrate biomass through soil loosening to 350mm below ground level, and the addition of 15tonne/ha of organic matter.
 - Controlling the water levels through the installation of water control structures in the ditches. The main drain could potentially supply an additional source of water, however, as of this meeting, there were no plans to utilise this resource.
 - Constructing 9 scrapes in the identified low spots of the site to a depth no greater than 0.3m. This would constitute 20% of the site area. Each scrape would have a spillway connected to a ditch in order to prevent flooding in periods of prolonged rainfall. These could be sluice or pipe controlled.
 - Excavated soil would be spread across the surrounding fields, piled around the perimeter or used to infill the ditches.
 - Managing scrapes through grazing or cutting.
- 4.2 After hearing the design layout, the RSPB voiced a concern that maintaining such a large scrape area would require intensive management. They asked Thomson Ecology to produce detailed plans as to how the scrapes would be maintained.

Action: TE

- 4.3 NLC and RSPB stated a preference for managing the vegetation via grazing by cattle.
- 4.4 The RSPB advised fewer, deeper scrapes (two) with islands would be easier to manage and more beneficial for wintering birds.
- 4.5 JM asked whether there were any examples where the RSPB had successfully addressed this problem. The RSPB agreed to make some enquires.
Action: RSPB
- 4.6 NLC stated to the group that producing a wetland that would dry out in the summer might possibly lead to failed breeding attempts. NLC also preferred scrapes with linear features and asked why they were no longer designed as such. TE replied they had not rejected the idea of linear scrapes, however, following the contours of the site resulted in a more naturalistic design.
- 4.7 The RSPB suggested partially connecting the scrapes through a series of spill ways so that there was a gradual drying out of the site during the summer months.
- 4.8 The RPSB also inquired whether there was a soke dyke that ran along the length of the sea wall. TE agreed to look into this.
Action: TE
- 4.9 A full and detailed discussion regarding the influence of the sea wall on the grassland design then ensued. The discussion outcome is as follows:
- It is important to minimise the visibility of people walking along the sea wall;
 - If the footpath along the sea wall is screened, only a 50m buffer zone is necessary, otherwise a 150m buffer zone is required.
 - At no point should woody vegetation be planted on, or next to, the sea wall as it may destabilise the flood defence.
 - One viable option may be to install a wire fence adjacent to the sea wall and plant brambles along its length.
 - Access points along the proposed screening are a necessity. E.A. inspectors must be able to examine the flood defences. The EA agreed to investigate possible screening options.
Action: EA
- The two large scrapes will need to be re-located away from the sea wall (I and F on the design drawing) and the wet grassland should continue up to the base of the sea wall.
 - JM will inform the meeting participants where in relation to the site the new pumping station is going.
Action: JM
- 4.10 Following the discussion, the RSPB asked Able for specific proposals controlling both disturbance and access to the sea wall buffer zone.
Action: JM
- 4.11 NE reminded JM that in the MOU and in the terms of the ALP planning permission, it was necessary to provide a buffer zone to the Clay Pits wildlife site – this is clearly stated in the MOU as 150m. JM responded that Able would like to propose that, subject to Able securing the shooting

rights for the Clay Pits and thus removing the principal source of disturbance, the buffer zone be removed. NE stated that whilst there had been previous discussions about reducing the buffer to the claypits, they had no recollection of discussing removal of the buffer entirely.

5. Context of AMEP Grassland (continued)

- 5.1 NE asked whether the relocation of the AMEP site would affect the TEMMP provisions. JM confirmed that the Halton Marsh Grassland would aim to transfer the objectives of Area A wholesale, and thus would incorporate a block of neutral grassland and breeding bird habitat to accommodate the relocation.
- 5.2 The RSPB NE raised the issue of retaining a buffer zone at the southern margin of what was Area A, should its development be proposed, to ensure Curlew habitat is maintained, to the south of what was Area A. This buffer could incorporate elements of the Area A mitigation (e.g. neutral grassland and some scrub/hedge habitats) but reduce the area of land available for development. NE also advised that Bristol Ports was a good example of incorporating green infrastructure into port developments. JM stated he would look into this.

Action: JM

- 5.3 NE agreed that a buffer zone between the Curlew habitat and AMEP development was necessary. A planning proposal for the buffer zone would be required as part of any application to develop Area A as the land outside the AMEP red line boundary is currently not mitigated for; there is currently a shortfall of 3.3ha of mitigation area for the North Lincs area of the south Humber bank. JM agreed to assess the options for mitigation for different development scenarios.

Action: JM

- 5.4 JM informed the group that all EMMPs are being amplified by Able to improve access to information. If mitigation area A is relocated, the EMMPs will be updated to reflect this change. JM told the group that he did not yet have the authorisation to release the EMMPs and he was unable to say when they would be published. He did, however, commit to ask again whether these could be issued to the RSPB to allow them to fully consider the revised mitigation proposals.

Action: JM

- 5.5 NLC reminded the group that the Logistics Park had its own EMMP requirements. The RSPB asked for the timings of enabling works to be made available. JM confirmed that the aspiration is to commence construction in Autumn 2013.

6. Mitigation Area B update and Cherry Cobb Sands

- 6.1 JM confirmed that Able have written to North Lincolnshire Council to ask if they require planning consent for the construction of ponds at Mitigation Area B. He has not yet received a response.
- 6.2 NLC agreed to follow up the request.

Action: NLC

- 6.3 JM confirmed that Able UK planned to commence construction of Mitigation Area B in August/September. Able expect to have the DCO for AMEP by 24th July, but was exploring whether separate planning consent was necessary in case the authorisation of the DCO is delayed by legal process.
- 6.4 JM stated that planning consent for Cherry Cobb Sands requires Able UK to return the land to arable use in accordance with a timescale and scheme of working to be submitted to and approved in writing by the LPA in consultation with the AMEP environmental Steering Group.

7. Any Other Business

- 7.1 If the EA and Able reach an agreement on the flood defence works, there will be major disturbance to Halton Marsh Wet Grassland.
- 7.2 JM suggested it might be possible to temporarily shift the core area for the Halton Marsh Grassland to the west whilst construction work on the sea wall was ongoing and include a 150m buffer to the seawall – RSPB agreed that this was a practical approach.
- 7.3 The EA confirmed that flood defence works would likely take at least 2 summer seasons.
- 7.4 The RSPB suggested that any works to the sea wall coincide with the development of the grassland, to try to avoid disturbing it when it is at full functionality.
- 7.5 JM confirmed that any flood defence work would be concluded before the ALP is developed north of the Railway line, so that the area surrounding the wet grassland would be undisturbed at the time of shifting the core area.
- 7.6 NLC stated that the conditions in the ALP planning consent need to be examined to confirm whether they cover any works to the sea wall.

Action: JM