

Able Marine Energy Park

Material Change 2

Statement of Common Ground with C.RO







ABLE MARINE ENERGY PARK DCO 2014 MATERIAL CHANGE 2

Planning Inspectorate Reference: TR030006

Statement of Common Ground

Between

ABLE HUMBER PORTS LIMITED

and

C.RO PORTS KILLINGHOLME LIMITED



		Docume	nt control							
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			and							
			C.RO Ports Killingholme Limited							
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TABLE OF CONTENTS

1	Introduction and Purpose	4
2	Summary of Consultation	6
3	Matters which are fully agreed between the parties	6
4	Matters not yet agreed between the parties	10

1 Introduction and Purpose

1.1 Purpose of Statement of Common Ground

- 1.1.1 This Statement of Common Ground ('SoCG') is between Able Humber Ports Limited ('the Applicant') and C.RO Ports Killingholme Limited ('C.RO') in relation to an application ('the Application') for a material change to the Able Marine Energy Park Development Consent Order 2014 (the 'DCO'). The Application was made pursuant to section 153 and paragraphs 3 and 4 of Schedule 6 of the Planning Act 2008, and Regulation 16 of the Infrastructure Planning (Changes to, and Revocation of, Development Consent Orders) Regulations 2011.
- 1.1.2 The Planning Inspectorate allocated the Application the reference number TR030006, and published documents relating to the Application on its website under the title "Material Change 2". The Applicant submitted the Application to the Planning Inspectorate on 25 June 2021.
- 1.1.3 The Applicant and C.RO are collectively referred to in this SoCG as 'the parties'. The parties have been, and continue to be, in direct communication in respect of the interface between the application and the interests of C.RO.
- 1.1.4 The purpose and possible content of SoCGs is set out in paragraphs 58 65 of the Department for Communities and Local Government's guidance entitled "Planning Act 2008: examination of applications for development consent" (26 March 2015). Paragraph 58 of that guidance explains the basic function of SoCGs:
 - "A statement of common ground is a written statement prepared jointly by the applicant and another party or parties, setting out any matters on which they agree. As well as identifying matters which are not in real dispute, it is also useful if a statement identifies those areas where agreement has not been reached. The statement should include references to show where those matters are dealt with in the written representations or other documentary evidence."
- 1.1.5 SoCGs are therefore a useful and established means of ensuring that the evidence at the examination focuses on the material differences between the main parties, and so aim to help facilitate a more efficient examination process.
- 1.1.6 The purpose of this SoCG is to set out agreed factual information about the Application. It is intended that this SoCG should provide matters on which the Parties agree. As well as identifying matters which are not in dispute, the SoCG may also identify areas where agreement has not been reached.
- 1.1.7 This SoCG has been prepared in response to the relevant representation made by C.RO received by the Planning Inspectorate on 7 September 2021. The matters addressed are:
 - The articles of the draft DCO Amendment Order.
 - The assessment of development made under separate extant planning applications.
 - The impact of changes to vessel movements.

- The creation of a barge berth and the types of vessels that would use this.
- The impact of maintenance dredging and additional dredge deposits.
- The Order Limits.
- 1.1.8 It is envisaged that this SoCG will evolve during the examination phase of the DCO material change application.
- 1.1.9 Subsequent drafts will be agreed and issued, with the version numbers clearly recorded in the 'Document Control' table at the beginning of the document.

1.2 Description of the DCO and material change application

- 1.2.1 The Able Marine Energy Park ('AMEP') is a proposed 1288m long quay on the south bank of the Humber Estuary approximately 14 miles south-east of Hull, and north of North Killingholme. It is comprised of a quay, reclaimed estuarine habitat and facilities to allow offshore energy components and parts to be manufactured, assembled, stored and exported to their installation sites and elsewhere. The development is located in the administrative areas of North Lincolnshire Council and East Riding of Yorkshire Council (although the Application relates to part of the development located in the administrative area of North Lincolnshire Council only).
- 1.2.2 The DCO came into force on 29 October 2014. Since this time, construction of the pumping station has commenced.
- 1.2.3 On 25 June 2021 the Applicant submitted the Application which comprised the following proposed changes:
 - (a) a realignment of the proposed quay (within its existing limits of deviation) to remove a berth pocket at the southern end and introduce a setback at the northern end;
 - (b) changes to the construction methodology to allow the relieving slab at the rear of the quay to be at the surface as an alternative to being buried or to be omitted altogether, and the use of anchor piles as an alternative to flap anchors;
 - (c) consequential changes to dredging; and
 - (d) unrelated to the quay changes, the realignment of a footpath diversion to the north west of the site to go round the end of a railway track instead of crossing it.

Further details of the material change can be found in the Application cover letter [APP-001] which accompanies the material change application.

1.3 C.RO

1.3.1 C.RO is the harbour authority and owner and operator of C.RO Ports Killingholme, a six-berth ro-ro ferry port located immediately upstream from the Applicant's site. C.RO operates 24 hours seven days a week servicing scheduled ro-ro ferry sailings

- from the northern continental ferry ports. The Order contains specific recognition of C.RO's status in Article 8 (Jurisdiction of the Harbour Authority).
- 1.3.2 C.RO submitted a relevant representation to the Planning Inspectorate regarding the Application (RR-014), received by the Planning Inspectorate on 7 September 2021.

1.4 Status of the SoCG

1.4.1 This version of the SoCG represents the position between the Applicant and C.RO at 1 March 2022.

2 Summary of Consultation

- 2.1 Consultation carried out by the Applicant and the way in which it has informed the Application is set out in full in the Consultation Report [APP-061] submitted with the Application.
- 2.2 C.RO was included in the pre-application consultation carried out by the Applicant. C.RO and the Applicant have continued direct communication in respect of the Application.

3 Matters which are fully agreed between the parties

3.1 This section of the SoCG describes the 'matters agreed' in detail between the parties.

The impact of additional capital dredge deposits

- 3.2 The Applicant has confirmed to C.RO that additional capital dredging arisings will be deposited at HU082 and that such deposition will not affect existing maintenance dredging deposition, as the capital and maintenance dredging deposit sites are different.
- 3.3 The Applicant has noted that the long-term effects of the deposition of capital dredging have been fully assessed and are reported in the ES, particularly in Chapter 8 (APP-079) and Appendix UES 8-2 (APP-116). In the short to medium term, all the capital dredge arising are expected to erode away.
- 3.4 The parties acknowledge that the draft DCO Amendment Order would not authorise the additional deposition of dredged arisings; this would be permitted by means of a variation to the deemed marine licence, by means of a separate application to the Marine Management Organisation.
- 3.5 On the basis of the above, C.RO is satisfied that its existing protective provisions are sufficient to address any impacts likely to arise from future capital dredge deposition undertaken by the Applicant for purposes authorised by the DCO (and the draft DCO Amendment Order).

The articles of the draft DCO Amendment Order (Construction Sequencing)

3.6 It is acknowledged that the authorised development must be carried out in accordance with the design drawings listed in Paragraph 6(b) of Schedule 11 (*Requirements*) to the DCO. The draft DCO Amendment Order already seeks to substitute and/or remove the majority of these drawings. This reflects the fact that many of these drawings show the quay, and therefore have been amended to reflect the new quay alignment. The substituted drawings also reflect the fact

that works are now proposed to commence at the southern end of the quay and to progress northwards in order to facilitate the early handover of an operational section of quay.

- 3.7 An additional submission has since been made by the Applicant in respect of the draft DCO Amendment Order to further amend two of the construction sequencing design drawings. The Applicant has submitted drawings AME-036-10009 (Rev D) and AME-036-10010 (Rev D) to the Planning Inspectorate, together with an amended draft Amendment Order which would permit the Applicant to follow either the construction sequencing drawings previously submitted (AME-036-10009 (Rev C) and AME-036-10010 (Rev C)) or the amended versions.
- 3.8 The original construction sequence was to build the quay from north to south; the material change proposes reversing this to build the quay from south to north. A variation on both of these has been proposed, namely building the revetment at the north first, and then building the quay from south to north, starting with a revetment at the south. This would mean that the specialist equipment needed to build the revetments would only need to be mobilised and used for one period at the start rather than being re-mobilised to build the northern revetment later.
- 3.9 The parties note that AME-036-10009 (Rev D) and AME-036-10010 (Rev D) have now been published on the Planning Inspectorate website. The Applicant has also discussed the amended drawings with C.Ro and C.Ro has no immediate concerns regarding the proposed changes.
- 3.10 C.RO does not have any specific concerns at this stage regarding the Articles within the draft DCO Amendment Order.

Phasing of the Development of Continuance of Permitted Uses

- 3.11 C.RO expressed concerns regarding the assessment of environmental effects undertaken by the Applicant in light of the interaction between certain extant planning permissions for uses and development wholly unrelated to AMEP and the development authorised by the DCO (as proposed to be amended by the draft DCO Amendment Order and including the associated development comprising the onshore facilities for manufacturing, assembly and storage).
- 3.12 The Applicant has confirmed to C.RO that the operations permitted within the AMEP site by these historic permissions are limited to port related storage operations and car workshops, and in some areas simply to vehicle storage and distribution. By contrast, the alternative operations on the same land permitted by the DCO are much broader in scope. Specifically, the DCO permits the construction and operation of 10 factories within the delineated area in Figure 12.1 in Chapter 12 of the updated Environmental Statement (APP-083).
- 3.13 The parties agree that it is not plausible that the construction and operation of ten additional factories results in less environmental impact than simply storing port related goods in accordance with existing consents.
 - The impact of changes to the construction methodology resulting in additional construction vessel movements (matters resolved)
- 3.14 C.RO has previously sought clarification from the Applicant as to the extent to which the proposed changes to the construction methodology for AMEP would result in changes to construction vessel movements within the Humber Estuary.

- 3.15 The DML requires the licence holder to dispose of 1.1M Tonnes of dredge arisings from the berthing pocket onto land (AMEP DCO Schedule 8 paragraph 11).
- 3.16 The Applicant has explained to C.RO that the initial reference to increased vessel construction vessel movements appeared in the Scoping Report issued to the Planning Inspectorate in December 2020. Specifically, the Scoping Report stated that 'the proposed change to the deposit location of 1.1M Tonnes of clay from the berthing pocket will give rise to additional vessel movements on the river during construction'. This was the reasonable expectation of the Applicant before the Applicant checked the basis of the original assessment of construction vessel movements undertaken in November 2011 ('the 2011 assessment'). The 2011 assessment is provided in Appendix 1 of this document and totals 5,518 movements.
- 3.17 During the EIA period it became evident to the Applicant that the 2011 assessment of construction vessel movements, which was based on the Dredging Strategy at the time, provided for all material dredged from the berthing pocket to be loaded into split hopper barges and deposited at sea, contrary to the provisions of the DML. This is plain from ES Appendix EX 7.8¹ which provides a breakdown of the dredging works at Appendix 2, Section 3.1, abstract below, refer to Activity 7 'Dredge .. berth pocket'. Activity 7 appears in the 2011 assessment as a 5-month dredging period between May and September 2014 and includes 3 split hopper barges working alongside a Backhoe Dredger. Because of this error in the 2011 assessment, there is now no increase in the assessed number of construction vessel movements resulting from the material change. Put simply, the 2011 assessment was wrong and the Applicant only became aware of this after the Scoping Report had been submitted.
- 3.18 C.RO is satisfied with the explanation provided by the Applicant in the foregoing paragraphs and subject also to the matters as set out in Paragraphs 3.19 to 3.21.
 - The impact of changes to the construction methodology resulting in additional construction vessel movements (matters still under discussion)
- 3.19 C.RO's position remains that a management plan must be utilised to ensure construction vessel movements are controlled and that scheduled commercial traffic retains river priority.
- 3.20 The parties acknowledge that the consented DCO provides at Schedules 8 and 9 various protections to ensure that a vessel movement management plan is finalised, following consultation with C.RO. The parties acknowledge in this context that the temporal limitations imposed by Paragraph 14(3) to Schedule 8 of the DCO have been extended through the variations made by the Applicant (see DML variation 2, submitted as appendix 1-2 to the UES (APP-102)).
- 3.21 Based on the information provided by the Applicant, and as matters currently stand, C.RO is satisfied that no further protections are required within the DCO. However, in the event that there is a reasonable prospect of additional construction vessel movements within the Humber Estuary and/or other reasonably foreseeable impacts on vessels accessing the C.RO facility, C.RO will seek to rely on the existing protections as noted above.

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR030001/TR030001-001740 121012 TR030001 Leslie%20Hutchings%20of%20Able%20Humber%20Ports%20Limited.zip

3.1 General plan

The subsequent dredging plan is proposed (draft):

Activity 1	Dredge alluvium from reclamation area	The 1,400m3 trailing suction hopper dredger Sospan Dau (or similar) would dredge this area (if required) prior to the flap anchor trench excavation and filling by rainbowing. The disposal site will be Humber 2 or Humber 3A.
Activity 2	Excavation of flap anchor trench	A large backhoe dredger such as the Nordic Giant will excavate the trench and side cast the sand and gravel or glacial till.
Activity 3	Rainbow of selected fill over the flap anchors	The 8,000m3 trailing suction hopper dredger Barent Zanen (or similar) will dredge suitable material from marine borrow area and discharge on site by rainbowing over the new quay wall.
Activity 4	Hydraulic fill of reclamation area	The Barent Zanen (or similar) and 16,000m3 trailing suction hopper dredger Oranje (or similar) will dredge suitable material from marine borrow area and discharge on site by pumping through a floating pipeline.
Activity 5	Dredge alluvium from berth pocket, turning area and approaches	The Barent Zanen (or similar) will dredge the alluvium and discharge in disposal site Humber 1A, Humber 3 or Humber 3A.
Activity 6	Dredge sands & gravels from berth pocket, turning area and approaches	As Activity 5 above, however if suitable material is available in sufficient quantities it may be possible to discharge by rainbowing or pipeline into the reclamation area.
Activity 7	Dredge glacial till from berth pocket, turning area and approaches	Backhoe dredger Nordic Giant or Wodan (or similar) will dredge and discharge into two or three split hopper barges such as Frigg, Rind, Cork Sand and Long Sand. The split barges will dispose of the dredged material at the Sunk Dredged Channel disposal areas A, B, C or Holme Channel Deep.

Abstract from AMEP Dredging Strategy

Protective provisions

- 3.22 The parties are agreed that the existing protective provisions included at Schedule 9, Part 6 to the consented DCO for which C.RO has the benefit should continue to remain in force, alongside those further protections contained within Schedules 8 and 9 to the consented DCO.
- 3.23 Subject to matters set out elsewhere in this SoCG, C.RO is content that the existing protective provisions do not require further amendment in the context of the development authorised by the DCO and as proposed to be amended by the draft DCO Amendment Order.
 - The creation of a barge berth and the types of vessels that would use this
- 3.24 C.RO has previously requested further information on the types of vessels which would use the revised barge berth.
- 3.25 Whilst information on the types of vessels that could use the barge berth to the north of the quay is contained in Section 2.2.2 of the Navigation Risk Assessment (NRA) submitted as Appendix UES 14-1 (APP-144), both parties agreed that no navigation simulation modelling had been undertaken.
- 3.26 A navigation simulation exercise was therefore carried out at the South Tyneside Marine College on 6 January 2022. The simulations were agreed with C.RO and the Harbourmaster Humber in advance of the exercise, and in the Applicant's opinion demonstrated that the Material Change to the quay will not adversely impact on vessels approaching or departing the C.RO berths.

- 3.27 From C.RO's perspective, the navigation simulation was a helpful and worthwhile exercise, providing clarification on the likely scenarios and effects, and C.RO is grateful for the Applicant's continued cooperation in this matter.
- 3.28 A written report (dated 13 January 2022) summarising the conclusions of the navigation simulation exercise was provided to C.RO by the Applicant on 17 January 2022. C.RO has now had an opportunity to consider the written report in detail. C.RO is satisfied that the contents of the report are an accurate reflection of the conduct and outcomes of the navigation simulation exercise. C.RO does not therefore wish to make any further representations in terms of the report itself.
- 3.29 In any event, the parties are agreed that, as in the consented scheme, vessels approaching and departing the two facilities in the future will continue to need to be managed by the Harbourmaster Humber to avoid conflict. This would include the carrying out by the Applicant (in consultation with C.RO) of further navigation simulation exercises in the event that the frequency of use of the barge berth was to increase, and/or if the type and size of vessels using the barge berth was to change beyond the scope of modelling and navigation simulation undertaken to date.

The Order Limits

- 3.30 The Applicant's position remains that there is no practical need to amend the Order Limits.
- 3.31 Although the Killingholme Branch Line is within the Order limits, it is not generally within the Order Land. In short, save for four discrete parcels of Network Rail land that remained in the Order Land (to enable the Applicant to acquire easements to cross the land at those points) the area was removed from the Order Land following Network Rail's objections to its inclusion in the original application in 2012. Put simply, the Applicant has no control whatsoever over the Network Rail railway that passes through C.RO Port and is not seeking to change the rights already granted by the s127 Certificate issued by the Secretary of State and included in the original decision letter.
- 3.32 C.RO acknowledges the Applicant's position and is grateful for the Applicant's cooperation in demonstrating that the retention of the rail corridor within the Order Limits will not give rise to any material adverse impacts on existing rail operations or capacity which C.RO benefits from. C.RO has no remaining concerns in this regard.
- 3.33 However, as a point of principle, C.RO remains of the view that there is no good reason why the Order Limits could not be amended through the draft DCO Amendment Order so as to exclude the existing rail corridor and, in particular, the section of rail corridor within the Order Limits which projects into the operational land forming part of the C.RO Ports Killingholme site. This is on the basis that the Applicant does not intend to carry out any authorised development within that corridor and also to ensure consistency of approach taking account of the Applicant's recent decision to remove Mitigation Area A from the Order Limits).

4 Matters not yet agreed between the parties

The assessment of development made under separate extant planning applications (matters still under discussion)

- 4.1 However, and although certain alternative use permissions (including PA/2018/114 and PA/2019/497) have recently expired, C.RO is aware that the Applicant has previously taken steps to renew such temporary change of use permissions where they have lapsed. C.RO is of the view that there is no reason to suggest this would not or could not happen again. Indeed, whilst other permissions (including PA/2018/1416) remain extant, C.RO notes the potential future permanence in respect of alternative uses within the Order Limits which are currently authorised for a temporary period only.
- 4.2 The Applicant notes that any change of use will require planning permission (including environmental assessment as appropriate) and C.RO will be entitled to respond to such future applications when they are submitted. The appropriate time for any concerns to be raised by C.RO is when any planning applications are being considered. It is not appropriate for the examination of the proposed material change to include consideration of potential planning applications which may or may not be made in the future, particularly given that the proposed material change does not involve any land-based development.
- 4.3 C.RO currently believes that it is not improbable that the implementation of later stages of the authorised development may be prevented by other permanent uses of areas of land within the Order Limits.
- Taking this into account, C.RO considers that it would have helped the examination if the Applicant could have provided an updated masterplan or series of masterplans covering development across the entirety of the land within the Order Limits during both construction and operational phases. In the first instance, this would have helped give credence to the Applicant's current position (i.e. that an 'interim development scenario' does not give rise to more significant environmental effects than have already been assessed for the AMEP scheme as proposed). C.RO is of the view that publication of a series of updated masterplans would also help C.RO, the Examining Body and other interested parties to consider the AMEP proposals on a holistic basis acknowledging as the Applicant has itself set out in recent correspondence, the rapid pace of change within the renewable energy sector over the last decade.
- 4.5 For the reasons set out in paragraph 4.2, the Applicant considers it would not be appropriate for updated masterplans showing potential future changes to be considered as part of the examination of the proposed material change.

Signed on Behalf of ABLE HUMBER PORTS LIMITED

Signature:	
Name:	Richard Cram
Position:	Engineering Director
Date:	01 March 2022
Signed on Beh	alf of C.RO PORTS KILLINGHOLME LIMITED
Signature:	
Name:	
Position:	
Date:	

APPENDIX 1

ASSESSMENT OF CONSTRUCTION VESSEL MOVEMENTS IN 2011

Total:

5518

equipment essels impo	Application	_										2014														
essels impo		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
	essels importing hydraulic fill																									
TSHD 1	importing fill		3,5	3,5	3,5	3,5	3,5	3,5	3,5	3,5																830
Operating Day	rs/Month		23	30	31	31	30	31	30	31																
TSHD 2	importing fill							3,5	3,5	3,5																270
Operating Day	rs/Month							20	30	27																
MC 1	operating only on site		0	0	0	0	0	0	0	0																
otal Vessel M	Novements per day	0	4	4	4	4	4	7	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Total:
otal Vessel M	Novements per month	0	81	105	109	109	105	179	210	203	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1099
Dredging ves	ssels				•			•		<u> </u>					'											
TSHD 1	dredging / disposal										16,6	9,1														364
TSHD 3	dredging / disposal	15,4	15,4																							739
Operating Day	rs/Month	30	18								17	9														
3H 1	operating only on site	0													0	0	0	0	0							
SB1	transport to disposal														7,5	7,5	7,5	7,5	7,5							990
	transport to disposal														7,5	7,5	7,5	7,5	7,5							990
	transport to disposal														7,5	7,5	7,5	7,5	7,5							990
Operating Day	rs/Month	8													10	30	31	31	30							
otal Vessel M	Novements per day	15	15	0	0	0	0	0	0	0	17	9	0	0	23	23	23	23	23	0	0	0	0	0	0	Total:
otal Vessel M	Novements per month	462	277	0	0	0	0	0	0	0	282	82	0	0	225	675	698	698	675	0	0	0	0	0	0	4073
Supply vesse	els to the installation ri	igs																								
GE1_WR	operating only on site	0	0	0	0	0																				
MP 1 + Tug	transporting material	0,6	1	1	1	1										0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,4	0,4		195
Operating Day	rs/Month	18	31	30	31	9										15	31	31	30	31	30	31	31	28		
GE2_WR	operating only on site	0	0	0	0	0	0																			
MP 2 + Tug	transporting material	0,5	0,5	0,6	0,6	0,8	1,3																			113
Operating Day	rs/Month	30	31	30	31	25	20																			
	operating only on site	0	0	0																						
	transporting material	0,5	0,5	0,6																						37
Operating Day	rs/Month	18	31	21																						-
otal Vessel M	Novements per day	1,6	2,0	2,2	1,6	1,8	1,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,4	0,4	0,0	Total:
otal Vessel M	Novements per month	35	62	61	50	29	26	0	0	0	0	0	0	0	0	5	9	9	9	9	9	9	12	11	0	345
				<u> </u>				•	<u>'</u>	<u> </u>		<u> </u>	<u> </u>						<u> </u>		-					

Legend:

Days/Month

otal Vessel Movements per day

Total Vessel Movements per month

30

497

31 30 31

Code	Equipment	Application	Remark						
Vessels in	porting hydraulic fill								
TSHD 1:	TSHD Barent Zanen (8,000 m3)	Importing and placing of selected and hydraulic fill	Approximate sailing distance to location of fill winning area and back: 60 km						
TSHD 2:	TSHD Oranje (16,000 m3)	Importing and placing hydraulic fill	Approximate sailing distance to location of fill winning area and back: 60 km						
MC 1:	Multicat vessel BKM	Assistance with pipeline connections fo hydraulic fill	O: operating on site within site boundary						
Dredging '	vessels								
TSHD 1:	TSHD Barent Zanen (8,000 m3)	Dredging Alluvium, Sand & Gravel from Berthing pocket, Turning Area and Approaches	Assumed sailing distance to disposal at Humber 2 or 3 and back: 25 km						
TSHD 3:	TSHD Sospan Dau (1,400 m3)	Dredging Alluvium from Reclamation Area	Assumed sailing distance to disposal at Humber 2 or 3 and back: 25 km						
BH 1:	Back hoe Nordic Giant (Tug assisted)	Dredging Glacial Till	O: operating on site within site boundary						
Installatio	n rigs								
Ge1_WR:	Jack-up barge 1	Piling works and anchor installation	O: operating on site within site boundary						
Ge2_WR:	Jack-up barge 2	Piling works	O: operating on site within site boundary						
Ge3_WR:	Jack-up barge 3	Piling works	O: operating on site within site boundary						
Supply ve	ssels to the installation rigs								
SB1:	Split Hopper Barge 1	Transport of dredge material from BH to disposal area	Assumed sailing distance to disposal at Humber 2 or 3 and back: 25 km						
SB2:	Split Hopper Barge 2	Transport of dredge material from BH to disposal area	Assumed sailing distance to disposal at Humber 2 or 3 and back: 25 km						
SB3:	Split Hopper Barge 3	Transport of dredge material from BH to disposal area	Assumed sailing distance to disposal at Humber 2 or 3 and back: 25 km						
MP 1 + Tug	g: Material Pontoon 1 (Tug assisted)	Transport & storage of piling material & quay equipment	Location of transshipment point to be defined						
MP 2 + Tug	g: Material Pontoon 2 (Tug assisted)	Transport & storage of piling material	Location of transshipment point to be defined						
MP 3 + Tug	g: Material Pontoon 3 (Tug assisted)	Transport & storage of piling material	Location of transshipment point to be defined						

282 82

31 28 31 30 31

30

680

0 225

31 31

707 707 684

30 31

9 9 9

30 31

31 28 31

12

31 30 31 30 31

420 166 158 138 131 179 210 203







