

The Lake Lothing (Lowestoft) Third Crossing Order 201[*]



Lake Lothing
**THIRD
CROSSING**

Document SCC/LLTC/EX/201: Closing Submission (ABP)

Planning Act 2008

Infrastructure Planning

The Infrastructure Planning (Examination Procedure) Rules 2010

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1 Introduction

1.1 Purpose of this Document

- 1.1.1 This Closing Submission document brings together the submissions of the Applicant made during the course of the Examination in relation to the impact of the Scheme on the statutory undertaking of ABP, the statutory harbour authority for the Port of Lowestoft. It does not seek to cover new ground, but instead provides the function of a signposting and summary document to enable the Examining Authority to have in one document a key reference point in making its recommendations on these matters.
- 1.1.2 In doing so, the Applicant is seeking to aid the Examining Authority in making an objective assessment of the evidence provided by both the Applicant and ABP. ABP has sought to make out that the Scheme's compulsory acquisition proposals, and the consequences of them, will cause a serious detriment to the carrying on of its statutory undertaking. In seeking to make that claim, ABP has submitted a number of reports and representations in an effort to evidence that the detriment it contends will arise is indeed serious.
- 1.1.3 As noted in its Deadline 10 submission (REP10-080, Appendix A), the Applicant has benefited from relevant technical expert advice throughout the development of the Application and the course of the Examination; and has used this advice to appraise the evidence presented by ABP and, through its Examination submissions, explain why it considers that such evidence does not demonstrate that a serious detriment is caused. In so doing, the Applicant has also sought to set out what it considers is the impact caused by the Scheme, both now and in the future.
- 1.1.4 This Closing Submission re-states the Applicant's positions on the practical, legal and land issues that have been raised by ABP and invites the Examining Authority to consider this in its objective assessment of the question of serious detriment. In addition, the Closing Statement addresses other aspects of the objections raised by ABP which relate to matters separate from the serious detriment test, which is a particular requirement only in relation to compulsory acquisition matters. For convenience, issues raised by ABP which do not relate to compulsory acquisition matters (and so which fall outside of the serious detriment test) are referred to below as 'wider objections'.
- 1.1.5 The Applicant notes that throughout the various representations made by ABP, the tone of those representations frequently includes overtly personalised comments on the Applicant's understanding of Port operations and on the conduct or motives of the Applicant, both in its representations to the Examining Authority and in its discussions and negotiations with ABP. These comments are often expressed in emotive language. The Applicant has chosen not to respond to such remarks because it does not consider that to do so would assist the Examining Authority in

the decision-making process. However, it should not be taken that the absence of response implies any acceptance by the Applicant of the criticisms made by ABP.

- 1.1.6 The Applicant, assisted as appropriate by its technical advisers, has a good understanding of the Port's operations (current and prospective), and in all of its dealings with ABP the Applicant has endeavoured to establish whether issues of concern raised by ABP would warrant any revisions to the Scheme as proposed in the DCO or any mitigation measures to be provided, and where the Applicant has considered that justified concerns have been raised, the Applicant has sought to resolve them. The Applicant remains committed to a continuation of that approach.

1.2 Context of this Document

- 1.2.1 In considering ABP's wider objections, it is important to be reminded of the need for the Scheme and the benefits arising from it, to enable those objections to be seen in context.
- 1.2.2 The Case for the Scheme (APP-091) provides a comprehensive narrative on the need for the Scheme and its evolution, as well as an assessment of its compliance with national and local policy. The report also concludes with an evaluation of the Scheme's anticipated benefits and disbenefits, in light of the basis in which consent for the Scheme will be determined in accordance with s104 of the Planning Act. A brief summary only is provided here.
- 1.2.3 The need for the Scheme is multifaceted. It derives from: congestion (exacerbated by lifting highway bridges) leading to longer and less reliable journeys; severance created by Lake Lothing elongating trips for not only vehicles, but also non-motorised users; and lack of capacity in the highway network to support regeneration of large scale sites, thus stymying redress to issues of multigenerational deprivation.
- 1.2.4 The Scheme significantly improves journey times in Lowestoft, particularly on those strategic routes, including the A47, part of the Strategic Road Network. This is detailed further in chapter 7 of the Transport Assessment (REP3-056). The Scheme adds much needed capacity to the highway network, improving accessibility to major regeneration sites around Lake Lothing (including Enterprise Zones), which thus far, despite benefiting from permission in some cases, are yet to be implemented. The Scheme provides a direct access to the largest redevelopment site by way of the New Access Road. Providing a third crossing of Lake Lothing, not only provides resilience and an alternative route to the existing congested crossings for vehicles but it would significantly shorten journeys for non-motorised users, for example between deprived residential areas to the south of the Lake and centres of employment and education to the north.
- 1.2.5 The Case for the Scheme acknowledges that there will be some disbenefits to the Scheme, especially during construction, where noise and impacts on recreational vessel movements will be experienced. Additionally, there are areas of land that need to be acquired from third parties to deliver the Scheme, including from the Port of Lowestoft. However, for reasons set out in the Statement of Reasons

(REP10-009) and other representations, it is considered that there is a compelling case in the public interest for the acquisition of that land. With specific reference to the port land, this can be acquired without serious detriment to carrying on of the harbour authority's undertaking. This is discussed in more detail later in this report.

- 1.2.6 Importantly, while there has been and remains a compelling case for the Scheme locally, the particular nature of the benefits realised by the Scheme are nationally significant: by providing relief to the A47 Bascule Bridge, a nationally recognised pinch point for some time, and reducing delays and congestion on the Strategic Road Network, the Scheme facilitates the delivery of thousands of jobs associated with Enterprise Zones in the town and assisting the Port of Lowestoft in realising its aspirations as a hub for the offshore energy sector.
- 1.2.7 These benefits significantly outweigh any adverse impacts of the Scheme and set the context within which any wider objections raised by ABP need to be considered.

2 Scheme benefits

2.1 Scheme benefits to the Port of Lowestoft

Previous submissions of relevance by the Applicant	Note
APP-091 – Case for the Scheme	
APP-092 – s35 Direction	Appendix B
APP-106 – Economics Report	
REP8-008 – Port Impact Paper	Section 3.3
REP4-016 – Justification and Traffic Effects of draft Scheme of Operation	Section 2
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	p1

- 2.1.1 In its representations (REP5-023), ABP has intimated that the Scheme yields no benefit to the Port of Lowestoft. The Applicant responded to this matter at length in its REP7-005, p1, but it is reiterated here that that cannot be the case.
- 2.1.2 According to ABP's Written representation (REP3-024, paragraph 3.8), the Port of Lowestoft *"supports 523 direct, indirect and induced full-time equivalent jobs, and it supports £30.9 million to £37.3 million gross value added ("GVA") annually across the local economy"*. It is thus a significant employer in Lowestoft and therefore generates a significant number of vehicular movements of personnel and cargoes on the highway network. The Port also has significant expansion plans, which, according to ABP, could result in those figures increasing up to 1,581 direct, indirect and induced full-time equivalent (FTE) jobs and a contribution in the range of £122.2 million to £177.1 million of GVA annually (in 2017 prices) to the Lowestoft economy by 2036 (*ibid*, paragraph 14.41).
- 2.1.3 Such an increase in growth will inevitably result in an intensification of movements of personnel and cargoes on the highway network gaining access to and from the Port. In the absence of the Scheme those journeys are all susceptible to the existing weaknesses in the highway network, in particular limited capacity to support future growth, and unreliability in journey times, particularly associated with bridge openings (see REP4-016) – which would also increase with a busier Inner Harbour. The Port does not, and cannot, function divorced from the surrounding highway network on which its users, employees, and customers rely for the overwhelming majority of their land-based connections.
- 2.1.4 Consequently, as the Secretary State recognised in affording the scheme nationally significant status (the s35. Direction is included in Appendix B of APP-092), the Scheme has a key role to play in delivering the growth ambitions of the Port of Lowestoft. As explained in REP7-005, the position is also reinforced in East Suffolk's Local Plan, which describes the Scheme as "essential infrastructure", in the Nautilus report submitted by ABP (REP3-024, Annex 7 (see below)) and more generally in government publications (such as the DfT's 2018 study on Port Connectivity), which recognises the reliance of a port's success on adequate terrestrial infrastructure serving it.

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- 2.1.5 The Scheme has a quantifiable benefit on all highway users due to savings in time and vehicle operating costs, as set out in the Economics Report (APP-106), and those working in jobs directly or indirectly attributable to the Port of Lowestoft, both presently and in the future, will be amongst those who will accrue those benefits.

3 Scheme Options

3.1 A Western alternative

Previous submissions of relevance by the Applicant	Note
APP-136 – Environmental Statement	Chapter 3
REP4-014 – Responses to Written Representations and Interested Parties Responses to Written Questions	p5, Appendix B
REP5-007 - Applicant's Responses to Interested Parties' Representations Submitted at Deadline 4	Appendix B
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	p30

- 3.1.1 In its representations, ABP has made it clear that it does not object to the principle of a third crossing (REP3 -024, paragraph 24.2) but argues that in failing to properly assess alternative routes for the Scheme, the Applicant wrongly rejected a western option for a crossing (*ibid*, paragraph 11.7).
- 3.1.2 In responding to ABP in REP4-014, p5, the Applicant has set out how it has undertaken a full and robust options appraisal process, noting that this is set out in detail in Chapter 3 of the Environmental Statement (APP-136). The Applicant, in response to ABP's particular reference to the western crossing, provided as Appendix B to that same Deadline 4 written submission (REP4-014) a report setting out how a western option was considered in the optioneering process, and its relative performance against the central option. The report then reflected on whether any refinements to the Scheme in its central location since the Outline Business Case stage, and/or changes in local circumstances could subsequently cause earlier conclusions to be brought into doubt.
- 3.1.3 The conclusion of this work is that the western option remains less satisfactory in a number of important respects, including that: it would be up to 17% more expensive than the Scheme; it would provide less relief to the A47 Bascule Bridge and its southern landing point was not well related to Tom Crisp Way, increasing traffic on unsuitable residential roads. Consequently, it would offer lower value for money and a lower Cost-Benefit Ratio. In respect of the impact on the Port, it was noted that this western alignment would require a greater land take from the Port due to the width of the port landholding at this location, and this would be land that is understood to be earmarked for a renewable energy hub at Shell Quay.
- 3.1.4 A further response to ABP's commentary on the optioneering process is presented in Appendix B of REP5-007, which considers the concerns raised in relation to the Transport Assessment, with the Applicant explaining how that process was compliant with the relevant WebTag guidance. This was followed up in REP7-005, p30, with additional detail on the costs of the western option.
- 3.1.5 Consequently, the Applicant considers that in the context of paragraph 4.27 of the National Networks NPS, and the information provided in chapter 3 of the Environmental Statement, the Examining Authority can be satisfied that the relevant

requirements as they relate to the consideration of alternatives to the Scheme have been met.

- 3.1.6 Clearly, the consenting of an alternative alignment to that put forward in the Scheme for a third crossing of Lake Lothing is not within the parameters of this application for development consent. Having regard to the conclusions of the optioneering put forward in support of the Scheme, the Applicant is clear that, if the Scheme as proposed was not delivered, a western crossing is simply not a realistic prospect, as such all the benefits that the Scheme would deliver would therefore be lost.

4 Environmental Statement

4.1 Adequacy of the Environmental Statement

Previous submissions of relevance by the Applicant	Note
APP-136 – Environmental Statement	
REP4-014 – Responses to Written Representations and Interested Parties Responses to Written Questions	p5, Appendix C
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	P35

- 4.1.1 In Chapter 21 of its Written Representation (REP3-024), ABP set out that it considered the Environmental Statement (APP-136) was inadequate in respect of its assessment of the impact of the Scheme on the Port of Lowestoft. The Applicant provided a comprehensive response to this matter in Appendix C to written submission REP4-014, confirming that the Environmental Statement is fully compliant with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (the 2009 regulations being the correct regulations as a Scoping Opinion was sought in the transitional period and issued by the Secretary of State pursuant to these regulations).
- 4.1.2 ABP has sought to argue that the Applicant has, through the application of an incorrect methodology, understated the likely significance of environmental effects on the Port, owing to the sensitivity of the Port being under appreciated and the magnitude of impact on the Port being downplayed.
- 4.1.3 In responding, the Applicant explained the expression of the significance of the effect is assessed in the context of the effect of the land take on the continued operation of the Port as a whole and this is evaluated for both the construction and operational phases of the Scheme. Given the extent of areas required for the Scheme in the context of the Port as a whole, and the limited duration of construction works, in particular the proposed three-week closure of the navigation channel, the likely significant effects were judged to be no greater than slight adverse. These conclusions are justified in paragraphs 15.5.5 to 15.5.39 of the Environmental Statement.
- 4.1.4 This matter was revisited at the Issue Specific Hearing on 7 March 2019, and the Applicant's subsequent submissions in document REP7-005, p35 provide a further rebuttal of ABP's criticisms. Again, the Applicant rehearsed that it was at liberty to select and justify an appropriate methodology for the assessment of effects, and thus it was not incumbent upon it to use ABP's favoured methodology (DMRB) to assess the impact of the Scheme upon the Port, particularly in view of the fact that neither DMRB, or indeed any other published guidance, provides a distinct methodology for the assessment of impacts on private assets.
- 4.1.5 Further, the Applicant outlined that the Environmental Statement, as is required, was prepared on the basis of the best available information at the time it was submitted. The Applicant acknowledges that further information, in particular

relating to berth utilisation has been presented since the submission of the Environmental Statement, but having regard to the Applicant's representations on the ABPmer report (REP8-018¹)(which are discussed further below), the Applicant considers the assessment still to be correct in terms of the likely significant effects of the Scheme in relation to navigation and berthing, both during construction and operation.

¹ REP8-018 (ABPmer's Berth Utilisation Report), replaced REP5-026

5 Vessel Survey

5.1 Vessel survey veracity and methodology

Previous submissions of relevance by the Applicant	Note
APP-106 – Economics Report	
APP-208 – Preliminary Navigation Risk Assessment	Appendix B
REP3-056 – Transport Assessment	
REP3-060 - Vessel Survey Report R1 - Clean	
REP4-016 – Justification and Traffic Effects of draft Scheme of Operation	Section 2
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	p9-11
REP8-005 – Summary of the Applicant's Oral Submissions at Issue Specific Hearing on Navigation Matters of 1 April 2019	p4
REP8-008 – Port Impact Paper	Section 3.2

- 5.1.1** The Applicant undertook a vessel movement survey at the Port of Lowestoft, which summarises 9 months of vessel survey data, collected over three phases, within a period spanning just over a year (July 2017 – October 2018). The vessel survey report was appended to the preliminary Navigation Risk Assessment (APP-208), and it was updated with a third tranche of survey data in REP3-060. The objectives of the vessel survey are set out in the vessel survey reports and summarised in the Port Impact Paper (REP8-008).
- 5.1.2** In response to comments made by ABP, the survey methodology was further explained in REP7-005, p9-11 and subsequent discussions with ABP enabled the parties to reconcile (allowing for the vagaries of time keeping) the number of openings of the A47 Bascule Bridge recorded in ABP's log books with those in the vessel survey undertaken by the Applicant, as such the accuracy of the vessel survey has been corroborated by ABP data.
- 5.1.3** ABP has however contended that as the survey only covers a specific timeframe it can only be of limited value in assessing the implications of the Scheme. Furthermore, ABP has also suggested that as the survey period did not contain recent changes to vessel traffic (for example Petersons) that it cannot be considered representative of current vessel movements.
- 5.1.4** While it is evident that any survey can only capture the position during which the survey is undertaken, this does not limit the value of the information produced as a baseline for assessments, against which it is then possible to objectively assess any potential changes and therefore likely significant effects. It evidently also has to be timed to align with preparation of the application. The survey duration was sufficiently extensive to embrace seasonal variations in Port activity levels and to dismiss 9 months of vessel survey data as an unrepresentative 'snapshot' is not warranted. The Applicant notes that if a survey covering a longer period prior to application had been undertaken, it would have reflected the lower berth utilisation in the Inner Harbour reported by ABPmer in 2015 and 2016 (see REP8-018).

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- 5.1.5 The Applicant therefore contends that the survey represents an entirely accurate representation of baseline conditions at the point of its undertaking and while it may omit some new operations, it will also capture historic operations – for example CTV movements associated with Galloper Offshore Windfarm.
- 5.1.6 It is also important to note that in the context of the 2009 EIA Regulations, it is the characterisation of the existing baseline that is required to underpin the EIA process, as such the vessel survey undertaken by the Applicant is an appropriate basis for assessing the effects of the Scheme.
- 5.1.7 The Applicant does however agree with ABP that vessel movements in ports can be variable and cyclical in nature and indeed this was observed in comparing the three individual survey periods undertaken by the Applicant (see paragraphs 3.2.7 to 3.2.10 of REP8-008²).
- 5.1.8 For this reason, the Port Impact Paper (REP8-008, section 5.3) considered an uplift in vessel movements in the Port that may arise with the fruition of the various opportunities for the Port. This was undertaken principally to quantify the number of vessels which (if taking no evasive action, i.e. adjusting transit times (discussed further below)) would potentially be impeded by a peak hour restriction on the Scheme bridge.
- 5.1.9 However, as noted in that same section of the report, with such a realisation of opportunities, the A47 Bascule Bridge would similarly need to open more frequently (and/or some openings would be of longer duration), as such increases in vessel traffic in the Port needs to be considered alongside the traffic implications of both the Scheme and the A47 Bascule Bridge opening more frequently – this was discussed in some detail in REP4-016.
- 5.1.10 It should be noted that in that context that (as explained in REP4-016, section 4.1) to inform the Economics Report for the Scheme and present a robust Cost Benefit Ratio, it was assumed that the Scheme bridge would open to the same frequency as the A47 Bascule Bridge. However, based on the vessel survey, the Scheme bridge was predicted to open 5 times on average per day, compared to 14 times average per day for the A47 Bascule Bridge (see Table 4-1 in REP3-056).
- 5.1.11 REP4-016 explains that for the Economics Report, the Scheme bridge is actually modelled to lift 10 times per day, and likewise the A47 Bascule Bridge; the effect of this is to understate the current impact of the A47 Bascule Bridge openings in the Do Minimum scenario (as it opens more frequently than modelled), and equally to understate the benefit of the Scheme in the Do Something scenario (as it is available more frequently than modelled). Collectively, therefore, the Economics Report provides a conservative estimate of the benefit of the Scheme.

² REP8-008 (Port Impact Paper, revision 0) replaced REP4-015 (Port Impact Paper, revision 0). As a general point, the most recent version of a document is referenced in this paper, unless otherwise stated.

5.1.12 In any event, the Applicant, in REP4-016 produced a 'sensitivity test' on the BCR, doubling the number of Scheme lifts in the Economic Report – and concurrently doubling those of the A47 Bascule Bridge (because clearly the Scheme would not open on an unrelated basis to the A47 Bascule Bridge). The effect of such a scenario had a very limited effect on the BCR and did not alter the Scheme from being High Value for Money.

6 Vessel Simulation

6.1 Adequacy of vessel simulation

Previous submissions of relevance by the Applicant	Note
APP-198 – Environmental Statement Volume 3 Appendix App 15A - Vessel Simulation Report	
APP-208 – Preliminary Navigation Risk Assessment	Appendix B
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	p17
REP8-008 – Port Impact Paper	Para 7.2.7
REP10-080 - Summary of Applicant's Oral Submissions at Hearings on 14 May and Responses to Interested Parties' Deadline 9 Submissions	Appendix A

- 6.1.1** The Vessel Simulation Report (VSR) is included in APP-198. This report details the facility that was used, the three-stage process to the simulation and the involvement of ABP pilots in the simulations. The Applicant was assisted in this process by Mike Nicholson of Shipmove (whose CV was included in REP10-080, Appendix A) who produced an independent report of the second and third simulations, both of which are appended to the VSR. The VSR was used to inform the pNRA (APP-208), which at paragraph 7.1.1 confirms that refinements to the design have been incorporated following the simulations to effectively reduce the risks created by the Scheme's presence.
- 6.1.2** ABP has raised a number of issues that it believes remain outstanding or uncertain which in its opinion renders the works to date of limited value; however the Applicant considers that these items, including wind shear effects and bridge cycle times, are of limited impact to either the Scheme concept or the navigation safety of the Port, should the Scheme be constructed.
- 6.1.3** In respect of wind shear, Mr Nicholson's report at Appendix B to the pNRA considers this matter in some detail at section 4.2, concluding that, *inter alia*, the effect of wind shear is short-acting, given the transit time of the vessel through the structure, and the width of the navigation channel under the Scheme (10m wider than the entrance to the Inner Harbour – where wind shear would be experienced in association with the A47 Bascule Bridge) provides greater space to counteract any different effects, if experienced.
- 6.1.4** Section 4.2 of that same report also provides commentary on bridge cycle times and the interaction between the two bridges – identifying that in adverse weather conditions, where no suitable waiting berths were available, it is possible that a pilot or master would request the second bridge to open before he transited the first. This is relevant to the Emergency Berth arguments, discussed further below.
- 6.1.5** Notwithstanding that the Applicant considers that the vessel simulation undertaken to date is robust and has appropriately informed both the Scheme design and pNRA, in response to ABP's ongoing concerns, the Applicant has

included Requirement 11 in the DCO which requires the final NRA to be submitted to ABP for approval, and for that NRA to be informed by further vessel simulation.

6.1.6 This position was set out in REP7-005, p17.

7 Future prospects

7.1 Future growth benefiting the Port of Lowestoft

Previous submissions of relevance by the Applicant	Note
AS-013 - Applicant's Response to Relevant Representations	EN27
APP-091 - Case for the Scheme	para 4.6.13
APP-208 – Preliminary Navigation Risk Assessment	Appendix B
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	p3-9
REP8-008 – Port Impact Paper	Section 3.3
REP9-010 - Response to ABP's Deadline 8 Submissions	p4

- 7.1.1** As set out in section 3.3 of the Port Impact Paper (REP8-008), the Applicant agrees with ABP that the Port of Lowestoft is well placed to continue to benefit from the development of North Sea resources, and that other opportunities may prevail that allow the Port to expand operations, for example in aggregates handling.
- 7.1.2** The principal points of difference with ABP relate to the scale and certainty of such opportunities and the effect of the Scheme on such opportunities.
- 7.1.3** ABP has submitted a series of reports to the Examination relating to this matter, which are discussed briefly in turn below, by reference to previous submissions by the Applicant on these reports;

Nautilus Report (Annex 7 of ABP's Written Representation, REP3 -024)

- 7.1.4** The Applicant noted in REP8-008 that the Nautilus Report forms part of Waveney District Council's (as was) Local Plan evidence base. It was undertaken to provide an assessment of potential land requirements to support the offshore energy and engineering sectors. The report sets out there is a great deal of potential for the town to benefit from offshore energy, and thus recommended sufficient land be allocated to accommodate this.
- 7.1.5** The report noted that ABP had *"developed an outline vision in partnership with London-based architects Chetwoods to transform the 13-acre [Shell Quay] site with direct quay access. The visuals of the site are at concept only stage and not based on demand and need research, nor informed master-planning"*. It also reported that BVG Associates had been commissioned by ABP. The Applicant does not dispute the general thrust of the Nautilus report, and agrees with its conclusion that the Scheme *"is recognised as a major milestone for the continued growth of Lowestoft's economy and will have an overall positive impact on the mobility of people, goods, and services across the Town"*, i.e. that it complements the potential for exploiting the growth potential in the town.

Edge Economics (Annexes 4A and 4B of ABP's Written Representation, REP3-024)

- 7.1.6** This report sets out the current economic significance of the Port, and the drivers for growth, principally in supporting offshore energy development, and anticipates how that might translate to future economic performance. The report then considers the effect of the Scheme against that future context, arguing the potential for job

creation/support and annual GVA would be approximately halved if the Scheme was implemented.

- 7.1.7 As noted in REP8-008 at paragraph 3.3.41, the Applicant does not agree with the central assumptions applied by Edge Economics in evaluating the effect of the Scheme, namely that CTV operators would be unwilling to berth west of the Scheme; the former Shell Base is no longer seen as being an acceptable construction coordination/O&M facility and that the bridge would sterilise up to 200m of quay which could potentially be used for CTV berthing. These assumptions are said to derive in part from the BVG analysis, which was not available at the time, but is commented upon below so is not repeated here. In light of the discussion below in relation to the BVG report, and in the following section on berthing impacts, the Applicant does not consider that the Edge Economics report is robust insofar as the effect of the Scheme is concerned.

BVG Associates (Annex 2 to ABP's Deadline 5 submission, REP5 -027)

- 7.1.8 ABP commissioned BVG to assess the opportunities for the Port of Lowestoft in terms of the expanding offshore wind energy market, both with and without the Scheme. The report set out general industry trends in respect of turbine design, wind farm vessel strategy, market growth etc, which the Applicant does not take particular issue with. Where the Applicant parts company with BVG is with regard to the amount of future business likely to be attracted to Lowestoft and on the effects that the Scheme may have on those prospects.
- 7.1.9 The report in particular – it focusses on potential CTV demand and how the Port's ability to meet that demand may be compromised by the Scheme, and this is considered further in the next section.

ABPmer Berth Utilisation Report (Annex 1 to ABP's Deadline 5 submissions, REP5-026 & Annex 3 to ABP's Deadline 8 submissions, REP8-018)

- 7.1.10 ABPmer was commissioned to undertake an assessment of the usage and occupancy of berths in the Port of Lowestoft for the period 2015-2017 and assess the effect of the Scheme on berth utilisation both in that context and in a 'future situation' based on the CTV demand set out in the BVG report, prospects in offshore energy more generally and in marine aggregates, in part informed by the Port Masterplan.
- 7.1.11 The Applicant has fundamental concerns with the methodology used in this report and discusses these in a later section of this report, so they are not repeated here, but they should be read alongside the commentary on BVG report, which it relies upon.

Port Masterplan (Annex 1 to ABP's Deadline 9 submissions, REP9-012)

- 7.1.12 The draft Port Masterplan is intended to set out Port's strategic plan from 2018 to 2036. This document reaffirms the Port's ambitions to target the offshore energy sector, and opportunities associated therewith and provides similar contextual information to the BVG report including in relation to the geography of, and programme for the delivery of, southern North Sea windfarms.

7.1.13 The Applicant notes chapter 9 therein entitled “Meeting future challenges”, which summarises ABP’s concerns with the Scheme and the commentary in Chapter 10 reporting on Edge Economics’ analysis in respect of the impact of the Scheme – which has been commented on above.

7.2 Prospects in the CTV market

7.2.1 Recognising that there is uncertainty over prevailing requirements in calculating possible vessel berth demand in Lowestoft, chapter 3 of the BVG report makes assumptions on:

- which windfarms will be serviced
- project timings
- owner commitments to specific ports
- size and number of turbines for each windfarm
- vessel choice for each windfarm
- number of vessels needed per turbine

7.2.2 BVG’s analysis ultimately culminates in a peak demand of up to 50 CTV berths being required at Lowestoft in the 2030s (see Figure 3 therein). Chapter 4 identifies that, with the exception of the Norfolk Boreas and Norfolk Vanguard OWFs, BVG “assumed that all other projects listed in Table 1 and Table 2 create a demand for port space at Lowestoft” (see section 4.1). Chapter 6 of the BVG report goes on to explain that future CTV demand would be met from locations west of where the Scheme is located, but if the Scheme were to be constructed the effective berth supply would be limited to the Outer Harbour (Trawl dock and Hamilton dock only), as no operator would be willing to locate west of the Scheme (see Figures 7 and 8 therein).

7.2.3 Given the significance of BVG’s statements for assessing the impact of the Scheme, the Applicant has tested both BVG’s calculated demand (i.e. the size of the market that Lowestoft might reasonably attract) and BVG’s assessed supply (i.e. the effect of the Scheme on the marketability of berths to the west of the Scheme).

BVG demand

7.2.4 In REP7-005, the Applicant commented it was not obvious how the 50 CTV demand had been derived. It noted that the BVG demand up to the mid-2020s is for between 20 to 30 vessels, relatively consistent with the existing provision of 26 berths in the Outer Harbour. As such the ‘overflow’ to the Shell Quay would only be required at this point, by which time the Scheme would have been operational for several years and as such its operational regime and reliability established. The Port Masterplan at Figure 15 indicates that Shell Quay comes in to play around 2025, based on BVG assumptions on the time frames of windfarms.

7.2.5 The Applicant then suggested that 36 CTVs was a more realistic assessment of maximum future demand for Lowestoft, based on the nearest windfarms and the

calculated CTV demand per turbine, using the ratios set out in section 3.6 of the BVG report (0.08 CTV per 7MW turbine, 0.11CTV per 'larger' wind turbines). The detail of this calculation is set out in REP9-010, p5.³ ABP has criticised the methodology which produced the figure of 36 CTVs in its Deadline 10 submissions (REP10-086), but no clarification as to the breakdown of how the 50 CTV demand for Lowestoft has been calculated has been provided.

- 7.2.6** The use of distance/proximity as a tool to assign CTVs to a particular port has been applied consistently by the Applicant in all cases. Whilst in one sense this is a 'rough and ready' approach because it is acknowledged there are other factors that CTV operators will also consider, the approach taken means that those other factors do not work against any port, so Lowestoft is assumed to 'capture' CTV demand from all windfarms for which it is the closest port, even if other factors might mean that in practice an operator would favour a different port. It also means that Greater Gabbard OWF is assumed to use a different port than Lowestoft because Lowestoft is not the closest port to that windfarm (which is much closer to Harwich as set out in the travel times in REP7-005, p7). This is not a 'fundamental error' as claimed by ABP but is the consequence of applying the methodology consistently in all cases.
- 7.2.7** The 13 CTVs calculated for the Round 4 windfarms (referred to instead as 'New Sites', and thus including Extensions in the BVG report, Table 2) derives from an apportionment of 2100MW of the 2500MW identified in Table 2 being serviced by CTVs (thus recognising a proportion will be SOV-based). The number of 18MW turbines associated with this apportionment is then multiplied by the BVG ratio for CTVs per turbine (0.11 in this case) to generate an overall demand of 13 CTVs.
- 7.2.8** The Applicant did not make any discounts to CTV demand that result from different timings of projects coming forward, or projects not coming forward at all, due to environmental considerations for example (see REP7-005, p4, for discussion on this point). These factors could both affect the profile of, or suppress, CTV demand.

BVG supply

- 7.2.9** The BVG report also indicates that the effective berth supply at Lowestoft is limited by the Scheme due to perceptions of windfarm operations of locations to the west of the Scheme.
- 7.2.10** A number of reasons for these concerns have been put forward, these are identified and discussed as follows;
- 7.2.10.1** Increased transit time – it has been suggested that the Scheme will impose a general increase in the time it would take for a vessel to transit from Shell Quay to the sea and vice versa. As a vessel large enough to require a bridge

³ The Applicant would however note that its calculations were based on the original size of the East Anglia ONE windfarm, which, as BVG note in its Table 2, is now a 714MW, not 1200MW windfarm. As such this would reduce the Applicant's calculation of its CTV requirement down from 14 to 8 (based on the same calculations as shown in REP9-010) and thus to an overall total of 30CTVs.

opening to transit will be required to make advance notice of a bridge opening, it would be capable of timing its arrival to coincide with the bridge lift and thus avoid a 'general delay'.

- 7.2.10.2 Increased restrictions on transits – the draft Scheme of Operation includes for restrictions on openings during peak road traffic hours only; while the Applicant accepts that this restriction has the potential to affect some vessel movements, an analysis of movements from the vessel survey indicates that operators are able to adjust movement schedules to take account of known restrictions and therefore could accommodate bridge restrictions through minor variations to sailing times – this is discussed further below with reference to the Scheme of Operation.
- 7.2.10.3 Increased risk of disruption – it has been indicated that prospective operators would consider the need to pass two opening bridges to access a berth to be too great a risk due to the potential disruption to sailings due to bridge failure or other situations that would prevent operation. As expanded upon below, the Applicant's Contractor has indicated that the Scheme is targeting 99.9% reliability, and thus conversely, may on average be unavailable for only 8 hours per year. Whilst there is no publicly stated reliability rate for the existing A47 Bascule Bridge, which clearly does suffer periodic failures (as identified in APP-091, p27, para 4.6.13), it is ABP's position that the presence of that bridge (and by implication its known reliability issues) is not a deterrent to the CTV business ABP expects to secure to the Inner Harbour (in the absence of the Scheme). In that context, the Applicant finds it difficult to see why the provision of a new bridge, designed and operated to modern standards of performance, would be seen in some way by CTV operators as a 'game changer' when making locational decisions.
- 7.2.11 The conclusion drawn by BVG, while not explicit, is that the Port will be unable to attract CTV operators to the Port beyond what can be accommodated in the Outer Harbour. In a scenario where there is a demand for 50 CTV berths, with the Scheme in place, the ABPmer report (REP8-018, p21) quantifies 14 CTV vessels could not be accommodated in the Port, and therefore this is the scale of lost CTV business.
- 7.2.12 Notwithstanding that prospective operators may have residual concerns associated with the Scheme, particularly in advance of its construction, the corollary of BVG's conclusions is that these operators would therefore be in an overall more advantageous position in locating in another Port – and that decision is precipitated wholly on the basis of the three matters above.
- 7.2.13 The Applicant does not believe that any, or in fact any combination, of these factors would prove the critical driver for an operation choosing not to locate in Lowestoft, factoring in the options available for a vessel operator to make small modifications (either to the craft, or to vessel transit times – both discussed further below) that would ameliorate the potential negative effects that could, in extreme circumstances, occur following construction of the Scheme.

7.2.14 In summary, the Applicant agrees that the Port of Lowestoft is well-positioned to capture business associated with the growing offshore energy sector and thus the background context is not a matter of dispute. However, the Applicant considers:

- 7.2.14.1 that the assessment of the impact of the Scheme should not be presented on the basis that the future growth in the Port is *certain* to happen. It is acknowledged that both the BVG report and the Port Masterplan do frame CTV demand, for example, as being between 30 and 50 CTVs, hence the scale of impact of the Scheme associated with a demand of 50 CTVs should be contemplated in that context. However, the ABPmer Berth Utilisation Report (discussed below) only uses the upper parameter in its analysis. The Applicant considers that to do so gives insufficient regard to the uncertainties of that outcome.
- 7.2.14.2 that the impact of the attractiveness of locating at Shell Quay should be interpreted on the basis that for 22 hours per day there is no impediment caused by the Scheme, rising to 24 hours per day, if the vessel does not require a Scheme lift, and that even for the two hours where the lifting restrictions are in place, the practical consequence is a minor adjustment to vessel transit times.

8 Impact on berthing

8.1 Impact on berthing

Previous submissions of relevance by the Applicant	Note
REP5-007 - Applicant's Responses to Interested Parties' Representations Submitted at Deadline	p18
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	p32, 35
REP8-005 – Summary of the Applicant's Oral Submissions at Issue Specific Hearing on Navigation Matters of 1 April 2019	Chapter 3
REP8-008 – Port Impact Paper	Para 3.2.12 Chapter 6
REP9-010 - Response to ABP's Deadline 8 Submissions	p2, p5-6

- 8.1.1** The Applicant has assessed the impact of the Scheme on berthing in chapter 6 of REP8-008. This is reprised in section 3 of REP8-005 and further considered in REP9-010, p2, in reference to particular berthing scenarios.
- 8.1.2** In summary, the Applicant has consistently evidenced that the direct loss of berthing space associated with the Scheme is that area delineated by the land subject to compulsory acquisition, a total of 62m.
- 8.1.3** The Applicant does not consider the adjacent 'rights strips' of 5m amount to a direct loss, as they remain available for the tying of ropes across. This is explained in REP8-008, paragraph 6.1.5 and REP7-005, p32. It also does not agree that a further 10m either side of the rights strips needs to be added as a 'direct loss', as space for mooring lines would be required with or without the Scheme – see paragraph 6.1.6 in REP8-008.
- 8.1.4** ABP's assumptions would have the effect of adding 30m to the direct loss calculated by the Applicant, thus totalling 92m. It is noted that ABPmer's latest submission (REP10-088), states that ABP's view⁴ is both that: 92m is the total length of mooring quay lost and that North Quay 2 (60m) is lost 'in respect of its original utility' and North Quay 4E (45m) is lost because there is no agreement regarding any accommodation works that would retain its utility. Thus, implying the total loss is in fact 165m, of which the 92m is part.
- 8.1.5** The Applicant does not agree that berth loss should be measured in whole berths. Its position, supported by the empirical evidence provided by the Harbour Master (at the ISH on 7 March 2019), is that measurements in whole berths is irrelevant, as berth numbering simply has a referencing function. Rather, the actual mooring

⁴ABP has regularly criticised the Applicant for the lack of its independent expert advice. The Applicant therefore provided a selection of CVs from those engaged at WSP and its sub-contractors on the project to Deadline 10 (REP10-080, Appendix A). The Applicant notes in that vein ABPmer's critique of the Applicant's comments on the Berth Utilisation Report, that it does not distinguish between ABPmer's independent assessment, and the views of ABP, which are clearly put forward and asserted in this document. Indeed, both ABP staff and Clyde & Co representatives are identified as contributing authors to the original version of the Berth Utilisation Report, page i therein (REP5-026).

positions of vessels varies with their size and are rather dictated by bollard positions, with decisions made dynamically according to berth availability (as explained in REP7-005, p35).

- 8.1.6 REP8-005 therefore considered the effect of the Scheme in respect of bollard positions and demonstrated that the Scheme has the effect of removing access to up to four bollards, over a length of quay of 60.95m, as such this is consistent with the previously stated loss of 62m.
- 8.1.7 With respect to North Quay 4 East, immediately to the west of the Scheme. The Applicant disagrees with the ABP that this berth is lost. As explained in paragraph 6.1.8 *et seq* of REP8-008, and having regard to the distribution of vessel sizes in the Port, the resultant length of quay (34.5m, including the 5m rights strip) remains useful, albeit may require accommodation works (fendering) due to the quay being suspended at this location. Alternatively, as explained in REP8-005, paragraph 3.1.8, the security fence at the western boundary of North Quay 4 East could be relocated, such that North Quay 4 East is amalgamated with North Quay 4 West. Such works could be required of the Applicant under the protective provisions afforded to the harbour authority, or they could be proactively carried out by ABP to mitigate its losses in respect of business disturbance and claim back the reasonable cost of said mitigation from the Applicant under the compensation code (affected parties having a duty to mitigate loss wherever feasible and such works being considered in that context).
- 8.1.8 With respect to North Quay 2, as the Applicant explained in REP8-005, ABP has taken a contradictory position, describing it both as “effectively lost”, but also dedicating it for a marine aggregates operation in assessing berth utilisation (discussed further below). The Applicant does not agree with ABP’s assertion in REP 10-080 that *“The only available option would be to combine its [North Quay 2] operation with North Quay 1 so that larger vessels would extend across both North Quay 1 and 2 berths. This would restrict the combined berth area of North Quays 1 and 2 for use by one large vessel only”*.
- 8.1.9 The Applicant’s position, as confirmed in REP9-010, p2, is that with the Scheme in place there remains at least 120m of usable quay east of the Scheme, and west of the knuckle, comprising North Quay 1 and North Quay 2 and that these berths could accommodate a range of berthing scenarios, including 100m vessels that may be required associated with a dedicated aggregates operation. The Applicant considers that any combination of vessels up to a combined 100m LOA could be accommodated across North Quay 1 and 2. There is therefore no material difference to the situation today to what could be accommodated exclusively on these berths, though the Applicant acknowledges that in the absence of North Quay 3, there is an inherent reduction in the flexibility as that berth would otherwise have been able to be used in combination with North Quay 2.

8.2 Berth utilisation and effect of the Scheme

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- 8.2.1 Throughout the pre-application process, the Applicant consistently sought information on berth utilisation from ABP to complement the data being collected from the vessel survey, but it was not forthcoming from ABP.
- 8.2.2 Consequently, in paragraph 3.2.12 of REP8-008, the Applicant estimated berth utilisation, based on observations from the vessel survey, data obtained via AIS and sight of North Quays 1 to 5, in the Inner Harbour as around 35% with peak utilisation around 80%.
- 8.2.3 ABP ultimately produced information on berth utilisation to Deadline 5 of the Examination (22 February 2019) in the form of a report compiled by ABPmer (REP5-026). In REP8-005, the Applicant set out various concerns with both the assumptions and methodology applied by ABPmer, and that it did not accept the conclusions of this report. Supplementary comments were provided in REP9-010, p6, in response to an updated report from ABPmer (REP8-018), albeit ABPmer's corrections to that report did not address the Applicant's fundamental concerns.
- 8.2.4 In respect of assumptions, the principal inputs relate to the extent of berthing loss attributed to the Scheme, and the potential growth within the Port.
- 8.2.5 Regarding berth loss, the position of the Applicant on this is as above, i.e. North Quay 4 East should remain available (in some form). With respect to North Quay 2, ABPmer has not removed this berth from its calculations with the Scheme in place (see Tables 4 and 6 therein), therefore in this report it is acknowledged that the berth is not lost, albeit its available length was reduced from 60m to 50m, though it is not explained why (section 5.3.1 of the report). Consequently, the Applicant is not in agreement with the extent of berthing available with the Scheme in place.
- 8.2.6 In terms of potential growth within the Port, this is informed by the BVG report and the Port Masterplan – both of which are discussed above, so the Applicant's position on those matters is not repeated here. However, a similar point around the certainty of future growth needs to be made here in respect of how future opportunities are considered. ABPmer assume opportunities are certain in the statistical analysis, but in the narrative acknowledge that they may not prevail (see REP8-005, p10). ABPmer, in REP 10-088, is incorrect in stating that the Applicant assumed North Quay 6 and 7 and Town Quay 2 and 3 were all dedicated for Petersons, the Applicant suggested that they should not be, and an appropriate probability should be afforded to the dedication of *either* North Quay 6 and 7 or Town Quay 2 and 3, because dedication of both pairings is reliant on an as yet unrealised opportunity.
- 8.2.7 The Applicant has a number of concerns with the methodology applied, which is both confusing and misleading. A fundamental factor relates to berth dedication (i.e. affording a 100% utilisation rate to a berth), and as the Applicant explained in REP8-005, this has a significant bearing on berth utilisation in the future. The Applicant does not, as inferred by ABPmer in REP10-088, dispute the principle of dedicating berths on the basis that *"the effect of the Scheme should be based on*

the past situation and scenarios", but rather how that berth dedication is used in the calculations for future forecasts.

- 8.2.8 The Applicant does not consider that an approach whereby six berths are dedicated, afforded a 100% utilisation rate and that figure then used to calculate average berth utilisation in the Inner Harbour is justifiable. Those berths should either be excluded from the analysis, or afforded a more realistic utilisation rate.
- 8.2.9 Including 100% as a berth utilisation figure clearly has the effect of elevating the average figures – albeit ABPmer in REP10-088 suggests this is not the case. For the inclusion of a 100% figure to have no effect, the utilisation of the berth must actually be 100%, which is significantly in excess of the 75% threshold set out in the ABPmer report at which point a berth is considered too busy, leading to declining services and efficiencies of output. As such an actual utilisation of 100% appears very unlikely. It is clear from the figures presented in Table 6 of REP8-018 that without the various individual 100% entries for the 6 dedicated berths and the significant re-assignment of vessels to Talismans, the average utilisation across the Inner Harbour berths would not reach 75%, even with all of the growth assumed in the ABPmer assessment.
- 8.2.10 Additionally, it must be noted that (i) one or more of these berths may not be dedicated (and therefore 100% would be replaced by an actual berth utilisation figure) (ii) that North Quay 4E remains usable (iii) that the full opportunities identified by BVG, and the Port Masterplan, and included by ABPmer, do not prevail (iv) that the Scheme does not dissuade operators being located to the west of the Scheme to the extent that ABPmer has assumed (owing to the limited restrictions imposed by the Scheme of Operation, and/or that their vessels do not require a bridge lift).
- 8.2.11 To indicate the likely effect of a different, in the Applicant's view, more realistic assessment of assumptions, the Applicant produced Table 5 in REP8-005, in which dedicated berths were removed from the calculations, North Quay 4E was afforded a utilisation of 35% and the Scheme reduced further growth to the west of the bridge by 50%. This brings the Inner Harbour berth utilisation average to 58%, indicating a busy, but efficient port.
- 8.2.12 It is noted that ABPmer in REP10-088 has disputed the calculations in this table. The Applicant produced Table 5 on the basis of limited data included in the ABPmer paper, which makes it extremely difficult to interrogate on any level. It is stated by ABPmer that berth utilisation is based on actual time at berth, though this information is not available, so cannot be reinterpreted. Equally, that berthing time was 'copied' from a subset of CTVs in the Outer Harbour to Shell Quay to generate a future utilisation profile, though again the process behind this key assumption, which is not identified in the ABPmer report, is unclear.
- 8.2.13 As the Applicant has access to only the average figures, berthing provision in the Port and numbers of CTV currently using, and predicted to use the Port. The Applicant therefore sought to interrogate the conclusions of the Berth Utilisation

Report by reference to the number of berths and vessels, and present the analysis in a more legible manner. The Applicant notes that ABPmer has suggested the Applicant's conclusions are incorrect, though no further data is provided, nor is it explained that if the Applicant's assumptions were applied (in relation to the removal of dedicated berths from calculations, there was less deflected business, North Quay 4E remained usable) what the effect of that would be.

- 8.2.14 The ABPmer analysis on berth utilisation is also dependent on the view that the Scheme will deter CTV operators from any mooring location to the west of the Scheme, so significantly increasing the utilisation of Talismans from 32.6% utilisation (Table 5) to 165.8% (Table 6). The Applicant does not accept this is a realistic assumption for the reasons indicated above.
- 8.2.15 In summary, the direct loss of quay associated with Scheme is 62m, measured against 2,100m of quay in the Inner Harbour. The Applicant does not consider the functionality of North Quay 1 and 2 are materially affected and can continue to accommodate vessels up to a combined (or individual) LOA of 100m. Nor does it consider that North Quay 4 East should be written off, minor accommodation works will retain the residual length as a functioning quay.
- 8.2.16 The effect of the Scheme on berth utilisation should therefore be approached on that basis, and with due recognition to that fact that the Scheme, based on historic berth utilisation has a very limited effect on average berth occupancy, and even then berth occupancy remains less than 50% in the Inner Harbour. It is only when a series of assumptions relating to future business, a particular berth dedication and reassignment process and pessimistic forecasts relating to the effect of the Scheme are layered into the assessment that berth utilisation exceeds desirable levels.
- 8.2.17 The Applicant therefore suggests that given the significant uncertainty in future forecasts, as opposed to evidence of historic performance, proportionate weight should be given to such assertions of impact based on this analysis.

9 Air Draft

9.1 Scheme air draft to be assumed

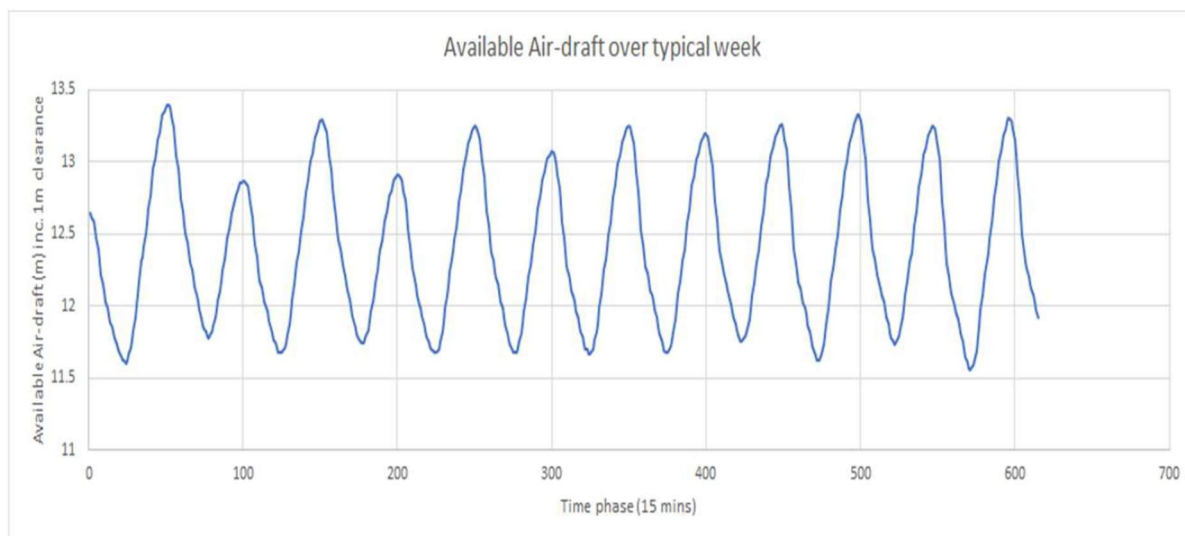
Previous submissions of relevance by the Applicant	Note
REP3-060 - Vessel Survey Report R1 - Clean	Section 4.2
REP5-007 - Applicant's Responses to Interested Parties' Representations Submitted at Deadline	p5-6
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	p5-6
REP8-005 – Summary of the Applicant's Oral Submissions at Issue Specific Hearing on Navigation Matters of 1 April 2019	Section 2.2
REP8-008 – Port Impact Paper	Paras 3.3.37, 5.2.16
REP9-010 - Response to ABP's Deadline 8 Submissions	p8-9

9.1.1 In the vessel survey report, at section 4.2, the Applicant explained that an air draft of 11.5m at HAT was chosen to provide a working safety margin below the structure of the new bridge for vessels transiting without a bridge lift. As noted in REP7-005, p5, the value of 11.5m air draft was used as a cut-off in the vessel survey to establish an anticipated Scheme opening frequency (i.e. was not a definitive statement of what the clearance should be, pursuant to the NRA process), as this assessment of Scheme opening frequency did not account for tidal variations (Neaps - 1.1m, Springs - 1.9m, HAT/LAT - 2.8m).

9.1.2 ABP has contended that the safety margin between the bridge and a vessel would need to be 1m in order to allow sufficient comfort for a passage without a bridge lift. The Applicant does not disagree that 1m is a realistic figure for the safety margin, however this does not materially alter the calculated operations figures as, as explained in paragraph 5.2.16 of REP8-008, tidal water levels within Lake Lothing are more than 0.5m lower than HAT for the vast majority of the time, thereby generally providing 11.5m clearance **with** a safety margin of 1m.

9.1.3 Figure 2-1 of REP5-007 is repeated below for convenience to demonstrate this point:

Figure 1 – Available air draft over a typical week



- 9.1.4 In REP8-005, section 2.2, the Applicant undertook further analysis taking account of actual water levels and maintaining a 1m clearance for vessels passing under the Scheme bridge based on a sample number of days during the survey period. The conclusion of that was the number of Scheme operations calculated using this method was similar to that calculated using a fixed state of tide and an air draft of 11.5m. REP8-005 also assessed the frequency with which HAT and peak hours coincide – as it is only during peak hours that there are restrictions on commercial vessels demanding openings – the vast majority of the time, they do not coincide as such there will generally be greater than the minimum clearance available.
- 9.1.5 With respect to sea level rise, in REP7-005, the Applicant acknowledged that ‘all things being equal’ the Scheme may have to open more often in future years as a result of climate change. However this will occur on a very gradual/incremental basis over an extended period of time so that vessels would be able to take account of such small-scale changes as would be experienced in ‘real time’, for example by making minor adjustments to transit times in the knowledge of the existence of the Scheme and its operating regime.
- 9.1.6 The Applicant considered the relevance of the PIANC guidance on air draft clearance in the context of the type of vessels frequenting Lowestoft in REP7-005, p5. The Applicant notes however, that in REP10-084 ABP sought a safety margin of 1m to be stated in the Scheme of Operation – as such the Applicant has made this addition to the version submitted to this deadline, therefore this matter is now agreed between the parties.
- 9.1.7 With respect to air draft monitors, in REP9-010, p8, the Applicant explained that such equipment that the harbour authority may reasonably require in this regard was secured in the DCO, both through the approval of the NRA (Requirement 11) and the protective provisions for the harbour authority.

9.2 CTV air draft

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- 9.2.1 ABP, in REP8-021, has presented an assessment of current and future windfarm CTV vessels in order to seek to show that the Scheme would have a considerable effect on these vessels in accessing Shell Quay. The Applicant accepts the underlying data contained within the report, however disagrees with the interpretation of that data as presented.
- 9.2.2 The report includes replies from various CTV operators on their ability to lower masts on their vessels in order to reduce air draft should they require and the responses to this varied from “yes - masts are retractable” to “no - impossible”. The report then concludes that generally masts are not retractable, however the Applicant considers that it actually demonstrates that masts can be made retractable, if required, and therefore modifications could be made by operators to reduce potential effects once the Scheme was in place, if the CTVs’ operating schedules were likely to frequently coincide with the proposed peak hour opening restrictions.
- 9.2.3 The report also shows that 50% of identified CTV’s have air drafts less than the minimum clearance of the Scheme (11m HAT, i.e. providing for a 1m safety margin) and would therefore not require a bridge opening to transit at any state of the tide below HAT. It also identified a further 35% of vessels with air drafts between 11.5m and 14m which could pass under the Scheme at certain tidal levels without requiring an opening. The Applicant noted in REP7-005, p6, that 70% of CTV movements recorded in the vessel survey arose from vessels requiring less than an 11.5m air draft.
- 9.2.4 The Applicant set out in REP8-008 (see paragraph 3.3.37 *et seq.*) commentary on the CTV market, including the large range of factors that influence CTV selection by a given operator, and it considers that if the Scheme was *in situ*, the clearance afforded by it (for the two hours per day when it would not open on demand) would be a further relevant consideration in a given operator’s CTV strategy.
- 9.2.5 REP8-008 also set out that larger vessels were not necessarily ‘the future’ owing to in part due to the running costs of such vessels - as such the deregulation in crew sizes permitted on such vessels may not necessarily lead to larger vessels. Similarly, BVG noted in section 2.2 of its report (REP5-027), while the number of crew on a vessel may now be increased beyond 12, that there are potential inefficiencies in having a larger number of crew incurring additional journey time while some crew members are being dropped off.
- 9.2.6 Additionally, as noted in REP9-010, p9, windfarm locations off the coast of the Port of Lowestoft in the southern North Sea are constrained by the limits of territorial waters and therefore they will not be more remote from the coast than those currently in the pipeline. Resultantly, the Applicant considers that there is less potential that these larger CTV’s will be required on these windfarms.
- 9.2.7 Of course, it must be reiterated the issue of available air draft only becomes an impediment to vessel movements during the proposed peak hour restrictions;

outside of these periods the bridge could be opened on demand for all commercial vessels. This is discussed further below.

10 Scheme of Operation

10.1 Peak hour restriction

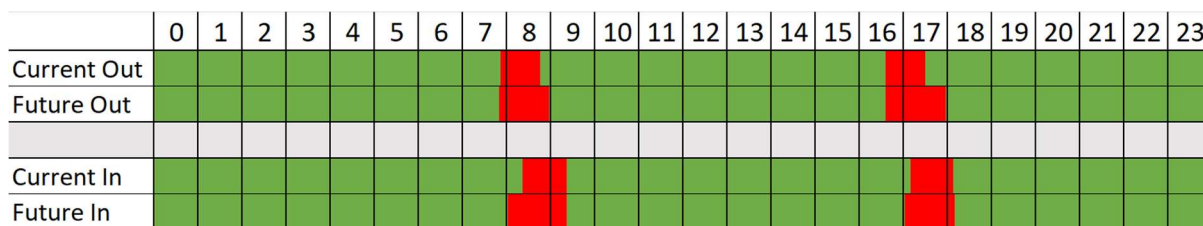
Previous submissions of relevance by the Applicant	Note
REP3-060 - Vessel Survey Report R1 - Clean	Section 4.2
REP4-016 - Justification and Traffic Effects of draft Scheme of Operation Revision	
REP5-007 - Applicant's Responses to Interested Parties' Representations Submitted at Deadline	p5-6
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	p2,6,16,18
REP8-005 – Summary of the Applicant's Oral Submissions at Issue Specific Hearing on Navigation Matters of 1 April 2019	Section 2.1
REP8-008 – Port Impact Paper	Paras 3.3.43, 7.4.9, 11.3.4, section 5.2-5.3
REP9-010 - Response to ABP's Deadline 8 Submissions	p7,9,11
SCC/LLTC/EX/199 – Scheme of Operation	

- 10.1.1** The Applicant has presented a draft Scheme of Operation (SCC/LLTC/EX/199) that includes a prohibition on bridge operations during peak road traffic hours of 08:00 to 09:00 and 17:00 to 18:00. Outside of these periods, commercial operators can request a Scheme bridge lift at any time.
- 10.1.2** ABP has indicated that there are both practical and commercial consequences of such restrictions. In response to these concerns the Applicant has embedded within the draft Scheme of Operation a degree of discretion for the harbour master, to permit vessel movements in the otherwise restricted periods. This is through providing an exception for tidally restricted vessels (which are defined broadly in the Scheme of Operation) and in case of emergency.
- 10.1.3** The Applicant has maintained that a restriction during peak hours is justified by the traffic benefits such a restriction would bring, particularly in terms of journey time reliability. This is explained in REP4-016.
- 10.1.4** Against that context, the Applicant has also set out what it considers would be the likely consequences of including a peak hour restriction on the Scheme bridge.
- 10.1.5** The baseline situation is that the A47 Bascule Bridge bisects the Inner and Outer Harbours and is subject to periods during the day in which the movements of commercial vessels are 'discouraged'. In defending its operation of the A47 Bascule Bridge, ABP presented evidence of the number of bridge openings it undertook during the Applicant's survey period. As documented in section 5.2 of REP8-008, the Applicant is prepared to accept (taking into account the vagaries of time keeping of bridge operatives) that ABP opened the A47 Bascule Bridge ten times in the discouraged periods during the 175 day vessel survey period, and that these

movements could be justified by being related to tidally restricted vessels or for emergencies.

- 10.1.6** The limited number of openings during the discouraged periods, but marked increase in movements either side of those periods (see section 5.2 of REP8-008, and discussion at paragraph 2.1.4 at REP8-005), is indicative of vessels managing their transit times to avoid the discouraged periods and thus avoid the delay (and associated expense) associated with awaiting a bridge opening. In REP7-005, p2, the Applicant noted that the Harbour Master commented on observing CTV operators corraling in advance of a bridge opening, adjacent to the A47 Bascule Bridge.
- 10.1.7** The Applicant has consistently therefore argued that the effect of the Scheme restrictions should be described in terms of journey time ‘adjustment’, not ‘delay’. This is not a matter of semantics as contended by ABP in REP10-086 (p8). An ‘adjustment’ could be to advance a journey time as well as to delay it. It is assumed by ABP that journeys made at a particular time at present can never be brought forward to avoid a restricted period but only ever delayed to after that restricted period. However, there is no evidence that non-tidally restricted vessels (tidally restricted vessels would not be subject to the restriction in any event) are unable to advance their journey times if that is advantageous to them in terms of avoiding the effects of a restricted period. The restricted periods will be well known to vessel operators who require a bridge lift and transit times can be planned accordingly. It is inconceivable, having regard to how vessels currently operate from the Inner Harbour, that the effect of the Scheme would be to create significant delays for vessel operators, who would simply mitigate this hypothetical effect by adjusting their transit times.
- 10.1.8** As the Applicant set out in REP9-010, for vessels based at Shell Quay the anticipated worst-case effect of the Scheme AM restriction would therefore result in 9-minute adjustment being required for outbound vessels, and an 11-minute adjustment for inbound vessels in the PM.
- 10.1.9** In the figure below ‘current’ refers to the duration of the current restrictions and ‘future’, with the Scheme in place. As can be seen, while the Scheme does extend the restricted periods, it should be appreciated that is a small proportion of time within a 24-hour period and further only limited adjustments are required to transits to avoid the restricted periods all together.

Figure 2 - Depiction of current and future restricted periods.



10.1.10 Consequently, the Applicant does not accept that the proposed Scheme peak hour restrictions will have a material, let alone a significant, effect on operations located to the west of the Scheme, given the opportunity to adjust transit times slightly to avoid the limited proposed restrictions in the course of the 24 hour period. In addition, of course, as discussed above, some operators will be able to select craft, which, by virtue of air draft, are completely unaffected by the Scheme operating restrictions.

10.1.11 For the above reasons, the Applicant has not accepted the suggested changes put forward by ABP in REP10-084, which sought to reduce the peak hour restrictions to match the times on the A47 Bascule Bridge, as (i) they do not correlate with peak traffic hours (ii) there is no evidence that the Applicant's proposals would 'delay' vessels in the manner ABP has suggested (iii) they do not take in to account the transit time between the two bridges, which a vessel would still have to account for, and so 'twinning' the restricted periods has a misplaced logic.

10.1.12 Equally, the Applicant has not extended the harbour master's discretion beyond that associated with tidally restricted vessels or emergency situations. A provision that allowed the harbour master to lift the Scheme bridge if he determined 'a commercial demand opening is required' is so broad that it would in effect nullify the peak hour restriction.

10.2 Scheme of Operation (other matters)

10.2.1 The Applicant has considered ABP's suggestions on the Scheme of Operation, received at Deadline 10 in REP10-084, by submitting a further version of the Scheme of Operation for Deadline 11. It is this version of the Scheme that the Applicant submits should be certified under the DCO, if the DCO is made

10.2.2 The changes to paragraph 1 (commercial on demand openings) are substantively accepted.

10.2.3 The changes to paragraph 2 (peak hour restrictions) in respect of amending the duration of the peak hour restrictions and widening the harbour master's discretion are not accepted. The definition of 'tidally restricted' is substantively accepted.

10.2.4 The changes to paragraph 3 (Recreational vessels using commercial openings) are accepted.

10.2.5 The changes to paragraph 4 (Scheduled openings) are generally accepted. Article 41 is the proper medium for amending the 'scheduling'; this paragraph is designed however to provide a degree of discretion on an ongoing basis and the drafting reflects that.

10.2.6 The changes to paragraph 5 (Waiting Pontoon) are accepted.

10.2.7 Reference to a Trinity House Lighthouse Service approved traffic signal system and navigational marks has been added to paragraph 6 (Navigation through the Lake Lothing Third Crossing) (though not duplicated in paragraph 7 (Flotillas)).

10.2.8 The changes to paragraph 8 (Height clearance) are generally accepted, though again the Applicant considers article 41 is the proper medium for amending substantive items, such as the advertised air draft safety clearance.

10.2.9 The changes to paragraph 11 (Risk of vessels becoming trapped in the Inner Harbour) are substantively accepted.

10.2.10 It is noted that paragraphs 9 (Double openings), 10 (Adverse weather conditions) and 12 (Emergency response) are agreed in principle. As such having regard to the above, the principle point of difference remains paragraph 2 and its peak hour restrictions.

10.3 Scheme unavailability

10.3.1 ABP has identified potential Scheme unavailability as a concern of prospective operators. As set out in paragraph 7.4.9 of REP8-008 and reinforced in REP7-005, the industry recognised precedent for measuring reliability is to target a reliability of 99.9%, this amounts to approximately 8 hours of unavailability per year, on average, which might consist of an 8 hour block or two four-hour periods, or permutations thereof.

10.3.2 As explained in REP7-005, p18, unavailability can include a combination of planned and unplanned incidents. REP9-010, p11 explains that in order to mitigate the effects of unplanned availability which may be attributable to behaviours/incidents on the bridge, the Applicant has included a control tower (i.e. a permanent presence on the bridge) and byelaws in the DCO application governing conduct on the bridge. Unplanned availability, is of course also related to the performance of the Scheme itself – as set out in REP7-005, the Applicant's Contractor's professional judgement is that a 1 in 5,000 failure rate for the lifting mechanism could be assumed.

10.3.3 Having regard to the industry targets for reliability on structures such as the Scheme, the mitigation measures inherent within the Scheme and the DCO, and the baseline circumstances, notably the performance of the A47 Bascule Bridge (the Applicant has previously drawn attention to the statistics relating to the A47 Bascule Bridge in this respect – see REP7-005, p6 – it was closed 193 times from 2007 to 2015, on average 20 times per year), the Applicant does not consider the Scheme reliability should be a determining factor on whether an operation would locate to the west of the Scheme. Should the residual risk remain a concern to a prospective operator, in a similar vein to discussed above, that operator may be able to mitigate its exposure through its vessel selection strategy.

11 Navigational Risk

11.1 Navigational Risk Assessment

Previous submissions of relevance by the Applicant	Note
REP3-029 – Responses to the Examining Authority's Written Questions	Q2.24, Q2.36
REP5-007 - Applicant's Responses to Interested Parties' Representations Submitted at Deadline	p12
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	p17-18
REP8-008 – Port Impact Paper	Chapter 7
SCC/LLTC/EX/199 – Scheme of Operation	

- 11.1.1** A preliminary Navigation Risk Assessment (pNRA) is included in the application (APP-208). The submission of a preliminary NRA alongside an application for development consent has precedent with other schemes such as Silvertown Tunnel and Thames Tideway Tunnel. The development of the pNRA is set out in chapter 7 of REP8-008, and reaffirmed in REP5-007, p12.
- 11.1.2** ABP has contended that the pNRA prepared does not provide a sufficient assessment of the effects of the Scheme on navigational safety, that it has not been prepared with sufficient consultation and that there is insufficient source data included.
- 11.1.3** In responding to ABP criticisms, in REP10-080, the Applicant considers that the pNRA has been prepared in accordance with the most appropriate guidance documents, has been prepared allowing wide stakeholder engagement for those that wished to participate and took account of all of the data sources that were available to the Applicant at the time the assessment was undertaken.
- 11.1.4** Recognising that the NRA is preliminary, Requirement 11 of the DCO provides for submission of a final NRA to the harbour authority for its approval. The DCO also recognises that once approved by ABP, the Scheme NRA will in effect become part of the suite of ABP's port risk assessments, for which it is responsible in keeping up to date.
- 11.1.5** The Applicant has accepted ABP's recommendation that that the Applicant's Navigation Working Group does not need to be sustained as a consultative forum, owing to the consultation requirements incumbent upon the harbour authority, pursuant to the Port Marine Safety Code.
- 11.1.6** As such, the Applicant considers that navigational safety has been appropriately considered as part of the application and the DCO adequately safeguards the concerns of the harbour authority, as such these provisions will ensure that navigational safety is not compromised should the Scheme proceed.

11.2 Emergency Berth

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- 11.2.1 ABP has indicated that it believes an Emergency berth is required to mitigate the risk of a large commercial vessel becoming “trapped” between the Scheme and A47 Bascule Bridge.
- 11.2.2 This matter was considered in a dedicated section in REP8-008, where this risk is also presented in the context of existing risks associated with the A47 Bascule Bridge, having regard to the reliability/failure rates associated with the Scheme bridge (as discussed above) and the frequency with which a vessel requiring such an emergency berth may arise.
- 11.2.3 The Applicant’s position is reiterated in the Applicant’s response to Q2.36 of the Examining Authority’s First Written Questions (REP3-029), where it was confirmed that alternative methods of risk mitigation could be employed that would reduce the residual risk from an event of this nature to an acceptable level without the need for provision of a dedicated emergency berth. Specifically, the Applicant proposes that the harbour master would ultimately be able to request that the Scheme be opened in advance of a vessel entering the Inner Harbour, if no alternative safe course of action was available.
- 11.2.4 The Applicant considers that this would mitigate the risk of a vessel being trapped in the Inner Harbour due to a Scheme failure to a sufficient level so as to be acceptable under ALARP protocols and has included for this within the draft Scheme of Operation (SCC/LLTC/EX/199). Owing to the process of revising the draft Scheme of Operation (as set out in article 41), removal of such a provision would be subject to the agreement of the harbour authority.

12 Port Security

12.1 Impact of Scheme on Port security

Previous submissions of relevance by the Applicant	Note
APP-091 – Case for the Scheme	Para 7.3.68
APP-092 – Case for the Scheme Appendices	Appendix F
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	p18-19
REP8-008 – Port Impact Paper	Chapter 8
REP10-080 – Summary of Applicant's Oral Submissions at Hearings on 14 May and Responses to Interested Parties' Deadline 9 Submissions	Appendix B

- 12.1.1** ABP has suggested that the construction of the Scheme would have a significant effect on the Port's ability to comply with the requirements of the ISPS code and would require the imposition of a considerable exclusion zone for the berthing of vessels that would require ISPS compliance.
- 12.1.2** In its Written Representation (REP3-024) at paragraph 19.10 ABP intimated that an exclusion zone of 50m either side of the extremity of the structure was agreed by DfT during on site discussions. ABP goes on to say that this restriction would apply at all Security Levels, and would thus result in a direct loss of 8% (125.5m) of ISPS vessel quay space in the Inner Harbour – with knock on effects on North Quay 1 and North Quay 2 due the limitations on vessel sizes that could be accommodated here with the exclusion zone in place, thus extending the restriction to 15% (223m) of the Inner Harbour (this therefore comprises the entirety of North Quay 1,2,3 and most of North Quay 4E).
- 12.1.3** The Applicant does not agree with ABP's analysis. Chapter 8 of REP8-008 considers the impact of the Scheme on statutory port security. In that paper the Applicant set out that it believed that the physical separation of vessels from the structure enforced by the position of the fenders, combined with provision of CCTV would significantly mitigate the effect on port security, in particular the extent of any geographic restrictions on the setting up of Temporary Restricted Areas (TRA).
- 12.1.4** This matter was subsequently discussed with the Head of Ports Security Policy in the Maritime Directorate at the Department for Transport (DfT). A meeting note, agreed with DfT, is appended to REP10-080, and reflects that the Applicant's consideration of this matter was proportionate. It was concluded that the impact of the Scheme was to limit the ability to set up TRAs in a landward area delineated by the position of the fenders, i.e. corresponding with the 62m of quay that the Applicant has already assessed as being lost to the Scheme.
- 12.1.5** DfT further noted that this impact should be seen in the context of:
- the frequency with which such an area may need to be set up

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- the necessity of setting up a TRA in the vicinity of the Scheme, as opposed to elsewhere in the Port
 - the ability of ABP to accommodate vessels requiring secure areas in other ports in its ownership.
- 12.1.6 Consequently, as acknowledged in REP8-008, the Applicant accepts that the Port Security Plan will need to be updated to reflect the presence of the Scheme, but does not agree that the Scheme has a significant impact on the Port's capabilities to create secure areas owing to the limited geographic restrictions on TRAs that would be introduced.
- 12.1.7 Separately, the National Networks NPS requires consultation, where relevant, with the Centre for the Protection of National Infrastructure (CPNI) and DfT to ensure that physical, procedural and personnel security measures have been adequately considered in the design process and that adequate consideration has been given to the management of security risks.
- 12.1.8 In addition to the consultation with DfT as set out above, the Case for the Scheme (APP-091) at paragraph 7.3.65 *et seq* reports that the Applicant has also engaged with CPNI, in particular in the context of vehicle borne threats, and agreement was reached that the threat was low and thus Hostile Vehicle Mitigation measures were not required. Further detail is provided in Appendix F of the Case for the Scheme (APP-092).

13 Construction

13.1 Temporary possession

Previous submissions of relevance by the Applicant	Note
APP-136- Environmental Statement	
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	p23, Appendix A
REP8-005 - Summary of the Applicant's Oral Submissions at Issue Specific Hearing on Navigation Matters of 1 April 2019	p7
REP8-007 - Response to ABP's Summary of Case at 8 March Hearing and to Second Written Questions 1.11 to 1.13	Appendix A
REP8-008 – Port Impact Paper	Chapter 9
REP9-010 – Response to ABP's Deadline 8 Submissions	p2, p16
REP10-009 – Statement of Reasons	Section 4.4, Appendix A
REP10-078 – Code of Construction Practice	Para 2.4.7

- 13.1.1** As the Environmental Statement (APP-136) explains, construction of the Scheme is anticipated to take approximately two years to complete, and a preliminary construction programme is included in Plate 5-2 of the Environmental Statement. The programme provides an indication of the main phases of construction during that period. The construction programme is indicative as the Scheme has not been subject to detailed design which will inform the construction methodology, including phasing.
- 13.1.2** Land beyond the footprint of the Scheme is required to support its construction and land subject to temporary possession only is identified in Schedule 9 to the DCO and the scope of the associated article is explained in the Statement of Reasons (REP10-009, section 4.4.). Appendix A to the Statement of Reasons sets out the purpose for which temporary possession powers are sought for each plot.
- 13.1.3** In response to a request from the Examining Authority, Appendix A to REP7-005 reinforced the justification for the plots subject to temporary possession in the Port of Lowestoft, setting out additional detail on the nature of construction equipment and considerations that had informed the delineation of these plots.
- 13.1.4** In response to further comments from ABP on the apparent imbalance between the size of water-based temporary possession plots either side of the Scheme, the Applicant explained in REP9-010, p2, the extent of these plots reflects the landside extent of the adjacent temporary possession plots. In any event, as the Applicant noted in REP8-008, suspension of navigation is also subject to article 20 of the DCO, which both requires the consent of the harbour authority, and generally requires the Applicant to limit such closures.
- 13.1.5** The Applicant notes two further overarching points in relation to the exercise of temporary possession plots in the Port of Lowestoft:

13.1.6 First, as set out in REP9-010, p2, article 32(6) provides that the Applicant must compensate affected landowners for any loss or damage arising from the exercise of the temporary possession powers given by that article. This will enable ABP to be compensated for any losses caused by any interruption consequential to the use of these powers.

13.1.7 Secondly, the protective provisions for the harbour authority, at paragraph 54, do not permit the Applicant to exercise powers of temporary possession absent the consent of the harbour authority. In giving consent the harbour authority may also impose reasonable conditions on the exercise of those powers. As the Applicant has explained at some length, this is the longstanding conventional practice afforded to the protection of statutory undertakings.

13.2 Construction effects, including Commercial Road

13.2.1 Notwithstanding the protection afforded to ABP through the protective provisions, ABP has maintained its concerns with respect to the impact of the Scheme during construction on particular operators within the Port, and in particular associated with the potential closure of Commercial Road.

13.2.2 The Applicant has endeavoured to discuss these matters with ABP outside of the examination process and provide an indication of possible mitigation measures, but the Applicant has been consistently clear that these detailed operational matters are more effectively, and accurately, resolved between the appointed contractor and ABP operational staff and, as relevant, ABP tenants.

13.2.3 In an effort to evidence to the Examining Authority proportionate practical consideration is being given to these matters, the Applicant appended an exchange of correspondence to REP8-007.

13.2.4 It can be noted from that correspondence that the level of detail being insisted upon by ABP, bearing in mind the Scheme has not been subject to detailed design, nor therefore has a construction methodology or programme been finalised, is clearly impractical and indeed unreasonable to be provided for at this point in the process.

13.2.5 It is notable that no other statutory undertaker retains substantive outstanding objections⁵, yet neither have they been provided with a detailed design or construction methodology, and as such exactly *how*, in practical terms, their respective statutory undertakings will be protected remains to be determined. By way of analogy, this includes how the span will be erected over the East Suffolk Railway line to Network Rail's satisfaction.

Commercial Road

13.2.6 As set out in Appendix A to REP7-005, the Interim Code of Construction Practice (REP10-078) provides (at paragraph 2.4.7) that the layout of the compounds must ensure that access is maintained for port operations at all times along Commercial

⁵ The Applicant has explained the situation with Network Rail in SCC/LLTC/EX/202

Road (with alternative arrangements being subject to the DCO's protective provisions for the harbour authority); that such access must allow all likely plant and vehicle movements to take place (in that area); and that the orientation of the compound activities must, as far as reasonably practicable, be arranged to reduce environmental effects on the users (or occupiers) of land adjacent to the compounds.

- 13.2.7 As such the Applicant has no unilateral discretion over the closure of Commercial Road, as it cannot implement this closure without agreement to a diversion route approved by the harbour authority. The equivalent position persists under article 11 of the Order, under which the Applicant would seek to implement the diversion route, given that this relates to, as the article envisages, land outside of the Order limits.
- 13.2.8 Annex 5 of ABP's Written Representation identifies a potential diversion route to the south of Shed 3 (reproduced below), a route which according to ABP has been used for HGV movements in the past (see REP5 -023, paragraph 9.5).
- 13.2.9 The Applicant acknowledges that, having regard to the suspended quay along this frontage, the available road width is in the order of 5m and therefore expects that (subject to appropriate risk assessments) the diversion route would be set up with traffic management to only allow one-way movements, alternating from either direction.
- 13.2.10 While it is agreed that the central section of the route below would need to skirt the southern side of Shed 3, the approaches need not follow the alignment shown below, they could be modified to accommodate prevailing construction and port requirements. For example, given that the diversion route is required to accommodate the positioning of the span over Commercial Road, additional space adjacent to that span for the positioning of cranes suggests that the diversion route would depart Commercial Road at a point further east, potentially in the vicinity of the unused railway sidings, depicted in the image below. That would therefore reduce the interference between the construction compound and the diversion route, though it is recognised that Dudman's operations are a further consideration (see below).

Figure 3 – Proposed diversion route for Commercial Road (proposed by ABP)



13.2.11 The Applicant maintains that the diversion of Commercial Road is practicable, and is agreeable to ABP's requests with respect to pre- and post-condition surveys, health and safety/risk assessments, provision of traffic management and enter into agreement for the occupation of this land. All such matters are able to be dealt with pursuant to ABP's ability to consent to both the diversion under article 11, and more generally to the use of temporary possession powers under their protective provisions.

Dudman's

13.2.12 SCC out of courtesy has sought ABP's permission to engage with its tenants directly, but this has been declined. As such the Applicant's consideration of potential mitigation measures has, unfortunately, been considered without direct tenant input.

13.2.13 Lengthy exchanges on mitigation measures for Dudmans were set out in the exchange of letters between the parties, appended to REP8-007. These were summarised at p16 of REP9-010. The Applicant agrees that a traffic management will be required to manage movements around the Dudman site (including access to weighbridges), and this may include vehicle marshalling, and consideration of Temporary Traffic Regulation Measures (able to be brought forward under article 52) on Commercial Road. Additionally, the Applicant remains receptive to discussing a means of corralling vehicles elsewhere in the Port, if it is safer and more efficient to do so. These are all, in the Applicant's view, reasonable conditions that could be imposed pursuant to the harbour authority's protective provisions.

13.2.14 The mitigation measures required for Dudmans will vary according to the prevailing requirements of both the Applicant and Dudmans in relation to the land proposed to be used for a construction compound, a pressure that would indeed be

intensified where a diversion route to Commercial Road is also required. Consequently, as the Applicant has previously noted, the principal mitigation measure is sequencing of construction activities (as informed by contemporary requirements of all parties).

Shed 3

13.2.15 The Applicant acknowledges that access to Shed 3, through its eastern door, would be impeded during construction, and that the costs of accommodation works to permit its continued occupation would be recoverable from the Applicant. Post-construction, similarly, if works are required to secure the continued use of that building, they would be at the Applicant's expense. This is explained in section 9.4 of REP8-008.

13.2.16 In summary, the Applicant recognises that ABP has outstanding practical concerns in relation to the management of construction activities, though the Applicant has sought to address these points through (i) the drafting of the Order; (ii) outlining potential mitigation measures and (iii) providing additional clarity and comfort to ABP in the draft Side Agreement (discussed further below). The Applicant does not consider ABP has identified any issues that cannot be overcome through further liaison in the development of the construction programme, and appropriate mitigation measures, or, as relevant, compensation.

14 Development Consent Order

14.1 Development Consent Order

Previous submissions of relevance by the Applicant	Note
REP5-009 – Written summaries of oral submissions at Issue Specific Hearing 1 (draft DCO)	
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	p38-43
REP8-008 – Port Impact Paper	Chapter 10
REP10-080 – Summary of Applicant's Oral Submissions at Hearings on 14 May and Responses to Interested Parties' Deadline 9 Submissions	p5-13

- 14.1.1** The Applicant and ABP have made a number of submissions on the drafting of the DCO; and good progress has been made (with the notable exception of the indemnity in the protective provisions, dealt with below). In particular, the Applicant notes that the Examining Authority's DCO released on 29 May 2019 dealt with only two aspects of outstanding matters related to ABP. In the table below, the Applicant sets out a summary of the provisions that have been considered through the course of the Examination, including in the ExA's DCO, and explains what it considers to be the position on these matters at Deadline 11.

Table 1 – Extent of agreement on DCO provisions with ABP

DCO Provision (D11 DCO)	Status	Comments/Applicant Submissions where not Agreed
Article 2: Definitions of 'harbour authority' and 'Lowestoft Harbour'	Agreed.	
Article 3: Disapplications (Port byelaws)	Agreed	All byelaws except 25 now deleted.
Article 5: Limits of Deviation (ABP approval of dredging depths)	Not Agreed	The Applicant notes the inclusion of a new paragraph (9) to this article in the ExA's DCO of 29 May, however it does not agree with its conclusions for the reasons given in REP10-080 – there is already a process in the Protective Provisions for ABP to have these controls. To put it in article 5 would create a duplication within the DCO and lead to potential confusion at implementation stage.
Articles 8 and 11	Agreed	Amendments made in the D10 version of the DCO, following ABP's comments received prior to that deadline.
Article 20 (temporary)	Agreed	

DCO Provision (D11 DCO)	Status	Comments/Applicant Submissions where not Agreed
suspension of navigation within Lake Lothing in connection with the authorised development)		
Article 21 (removal of vessels)	Agreed	
Article 41 (operation of the new bridge)	Principles agreed, but confirmation awaited from ABP that wording is fully agreed.	REP10-080 sets out the Applicant's response to ABP's proposals with tweaks to ABP's suggested wording and the reasoning why. The Applicant does acknowledge that ABP does not consider the Scheme of Operation should be a certified document.
Article 42 (Extinguishment of right of navigation within Lake Lothing in connection with authorised development)	Agreed	
Article 45 (Protection against dredging)	Agreed	
Article 46 (Byelaws)	Agreed save for paragraph (6) (Applicant to consent to changes to Port byelaws by ABP which affect the new bridge) which ABP considers should be removed. Additional byelaw inserted at D11 and notified to ABP, as set out in the Applicant's D11 covering letter.	Applicant has explained that this is necessary to protect the undertaking authorised by the DCO in: Port Impact Paper (REP8-008) Written Summary of DCO ISH 1 (REP5-009) Response to ABP's comments on DCO (REP10-080)
Requirements 4, 7 and 8	Requirements 4 and 7 Agreed Requirement 8 not fully agreed	REP10-080 sets out the Applicant's response to ABP's proposals. The Applicant made tweaks to ABP's suggestion to take account of the role that ABP as SHA should have within the contaminated land regime as a whole.
Requirement 11	Principles	REP10-080 sets out the

DCO Provision (D11 DCO)	Status	Comments/Applicant Submissions where not Agreed
	Agreed, but confirmation awaited from ABP that wording is fully agreed.	Applicant's response to ABP's proposals with tweaks to ABP's suggested wording and the reasons why.
Schedule 12 (DML)	One condition not agreed with ABP (fully agreed with MMO).	REP10-080 sets out the Applicant's reasons why it does not agree that further references to the harbour authority need to be made - because protections already exist pursuant to ABP's Protective Provisions, leading to potential duplication and confusion. These reasons still subsist for condition 11 notwithstanding that the Applicant notes that the ExA had agreed with ABP's suggestion for that condition in its 29 May DCO.
Protective Provisions Paragraph 53	Agreed.	
Protective Provisions Paragraphs 54 and 55	Not agreed	Latest position expressed in REP10-080. Applicant agrees to the concept but tweaked ABP's suggested wording to ensure that these paragraphs cannot be used to frustrate the Scheme.
Protective Provisions Paragraph 62	Not agreed	Latest position expressed in REP10-080. The Applicant does not agree that there should be no dispute resolution process under this paragraph.

14.1.2 From the above table it can be seen that with the exception of article 41 and article 46(6) (byelaws), longstanding issues with the draft DCO have been able to be resolved, and that it is matters raised towards the end of the Examination where there is not 100% agreement between the parties.

14.1.3 The Applicant notes the Examining Authority's DCO released on 29 May 2019, and considers that on the basis of REP10-080, the Examining Authority will be able to make a recommendation as to the proposed wording of the DCO in full awareness of the parties' views on the preferred form of wording.

14.1.4 As a final point, the Applicant notes that if the Examining Authority has any concerns with regard to R2 of the Scheme of Operation in making its

recommendations to the Secretary of State, it would be able to modify article 41(1) to state that the undertaker must operate the new bridge in accordance with the Scheme of Operation 'with the exception of paragraphs X, Y, and Z', 'but that paragraph X of the Scheme of Operation will not apply and is replaced by XXX', or similar words to the same effect.

14.2 Indemnity (DCO Protective Provisions Paragraph 63)

14.2.1 The DCO issue that has taken up a large portion of ABP and the Applicant's submissions to the Examination has been with regard to the nature of the indemnity that should be given.

14.2.2 In summary, ABP's position is that it considers that the Applicant should provide a comprehensive indemnity which accounts for all costs, losses and liabilities that could be incurred by ABP as a result of the imposition of the bridge across the Port - through its construction, maintenance, existence, location, failure and operation (noting in respect of the latter that the Environment Agency's Protective Provisions provides for 'operation' in its indemnity). It has pointed to what it states is the only real comparable example, that of the Welsh Government's proposed M4 Scheme which crosses ABP's Port of Newport (abandoned by the Welsh Ministers on 4 June 2019) and the indemnity voluntarily given to ABP in that case by means of a confidential agreement; and in its submissions sets out all of the costs and losses which it considers the Applicant should indemnify ABP for - whether on the face of the DCO, or to be agreed between the parties.

14.2.3 The Applicant's responses to these contentions is set out respectively in section 10 of the Port Impact Paper (REP8-008), the written summary of case at the first DCO hearing (REP5-009), the response to ABP's Deadline 5 Submissions and Oral Submissions (REP7-005) and in REP10-080, and can be summarised as follows:

- the position agreed with the Welsh Government was part of a negotiated settlement, not an imposed decision, so has little weight in precedent terms;
- the indemnity provided to ABP in relation to the existing A47 Bascule Bridge covers defaults arising from design, construction and maintenance of that bridge but not its mere existence (para 8 of Appendix B, Port Impact Paper REP8-008);
- the indemnity provided in the DCO is already wide ranging in terms of costs, being termed as 'all costs, losses and expenses' however arising; meaning that the majority of costs requested by ABP are in fact already covered, whether direct or indirect;
- the indemnity provided is suitably and appropriately framed by reference to the construction, maintenance and failure of the new bridge, relevant acts and omissions by the Applicant in the course of construction and operation, ABP's role in operating and approving the detail of the new bridge, and any failure in the opening mechanism of the new bridge - as these relate to how the bridge is designed, constructed, maintained and works and the problems that this may cause to ABP's undertaking;

- the DCO will authorise a new statutory undertaking, which interacts with an existing statutory undertaking, and in the context of how protective provisions have developed over time from the beginning of statutory authorisations of infrastructure, it is not the role of such an authorisation to then provide protections and indemnities in perpetuity for the fact that that a new undertaking will exist and be put in place;
- there is no legal principle (nor any reason of public policy) that ABP should be entitled to enjoy in perpetuity an unchanging physical environment or risk environment (or entitled to an indemnity to give it absolute and unqualified protection from all and any changes to its existing physical/risk environments), especially in the context of changes which are themselves the consequence of a statutory authorisation;
- the role of ABP as harbour authority contrasts with the role of the Environment Agency as a statutory regulator, with each having different responsibilities and functions by virtue of their respective statutory underpinnings, such that the breadth of the indemnity provided to one party is not to be measured by the breadth of the indemnity provided to another;
- in any event, in an instance where an event occurs which is a civil wrong (tort or trespass) and that causes a loss by, for example, dint of persons launching from the bridge, ABP will have recourse through the general law (see, for example, the *Great North Eastern Railway v Hart* case, see REP7-005, p40)) and has not shown that in any non-fault event it would be liable for damages if a third party did seek to claim against it, leaving aside the inherently unlikely nature of the scenario postulated by ABP (as discussed in REP10-080, p12);
- REP7-005 goes through each of the heads of 'cost' and 'loss' sought by ABP and applies these considerations to each item;
- the Applicant has, throughout the course of the Examination added to and amended the indemnity following ABP's comments, leading to a position where it looks much different from all other precedent harbour authority protective provisions (or for similar bodies); and
- in so doing, it has sought to cover all appropriate and relevant circumstances where ABP may suffer losses and costs as a result of the way that the Scheme is working and operated; but not just as a result of its existence.

14.2.4 As mentioned in its Examination submissions, the Applicant has and continues to be willing to discuss this issue with ABP, and has in its final DCO at Deadline 11 made a final tweak to paragraph 63 to be clear as to the scope of the indemnity relating to the failure of the new bridge to open fully.

15 Mitigation

15.1 Mitigation

Previous submissions of relevance by the Applicant	Note
AS-013 - Applicant's Response to Relevant Representations	MP1
REP5-007 - Applicant's Responses to Interested Parties' Representations Submitted at Deadline 4	P15
REP8-008 – Port Impact Paper	Chapter 11
REP10-076 – Statements of Common Ground	Appendix 1

- 15.1.1 ABP, in Chapters 15 through 19 of its Written Representation (REP3-024) set out a series of mitigation measures that it believed was necessary to mitigate the impact of the Scheme. The Applicant responded to these points in REP8-008. In summary:

Emergency berth

- 15.1.2 An emergency berth was sought, though for the reasons explained in the relevant section of this report, the Applicant does not consider this is necessary, and it is therefore not provided. In any event, as the Applicant noted in paragraph 7.4.15 of REP8-008, the suggested location for an emergency berth would be, in some situations, ineffective as it is seaward of the location at which the request to open the Scheme bridge would be made. Therefore should the bridge fail to open a vessel would have already passed the emergency berth before they knew of the failure and would thus have to either turn or reverse back to the berth and have to undertake the manoeuvres ABP indicate may not be possible.

Replacement berthing in the Outer Harbour

- 15.1.3 The Applicant has set out its assessment on berthing in an earlier section of this report, including its consideration of the impact of the Scheme on berth utilisation. Notwithstanding that ABP did not provide its evidence in relation to the impact on berthing until half way through the Examination, the Applicant maintains that the assessment set out in the Environmental Statement in relation to the effect of berth loss is accurate, and there is a slight adverse impact on the Port. Consequently, as explained on p15 of REP5-007, the Environmental Statement concluded that mitigation for this loss is not necessary.
- 15.1.4 Separately, in accordance with the guidance in relation to the compulsory acquisition of statutory undertakers' land, the Applicant has considered whether the taking of the land required by the Scheme would cause serious detriment to the harbour authority's undertaking, and thus needed to be replaced. For similar reasons, the scale and effect of the loss is not concluded to lead to serious detriment and therefore require replacement.

Other matters

- 15.1.5 The Applicant has agreed (see for example the Statement of Common Ground between the parties (REP10-076)) and explained in oral and written submissions that it is willing to cover the new or additional costs associated with the following mitigation measures:

- an oil spill retention boom;
- the relevant navigational marks that may be required by the harbour authority and Trinity House;
- a review of the Port Security Plan to reflect the existence of the Scheme;
- accommodation works in the form of fendering that may be required to North Quay 4 East;
- the relocation of the security fence currently dividing North Quay 4 East and West;
- accommodation works associated with Shed 3;
- provision of appropriate traffic management measures or associated accommodation works to implement a diversion route of Commercial Road, and safeguard the ongoing Dudman's operations;
- dredging operations, insofar as additional expense is incurred as a consequence of the Scheme; and
- a joint review, and as relevant, modification works to existing CCTV, lighting and communications equipment such that it is not compromised by the Scheme.

15.1.6 The above measures collectively, alongside the provisions in the Order itself (which place constraints on how the Applicant may interfere with the harbour authority's undertaking), when taken alongside the 'embedded mitigation' within the Scheme design, for example its elevated alignment, opening section and proposed operating regime, adequately mitigate for the effect of the Scheme on the Port of Lowestoft.

15.1.7 Furthermore, whilst the detail of these measures is sought to be dealt with through the Side Agreement discussed below, they are all matters that would in any event be consequential to the Applicant seeking to obtain ABP's consent under the Protective Provisions for ABP's benefit or to the requirement of those Protective Provisions for the Applicant to reimburse ABP's costs for the matters set out in paragraph 63.

15.2 Side Agreement

15.2.1 The Applicant has for some months now sought to engage ABP in a Side Agreement to provide additional comfort to ABP, particularly in respect of its detailed concerns which cannot be addressed at this stage owing to the preliminary nature of the Scheme design, that such issues will be fully considered in due course. As such the draft Side Agreement has particularly expansive provisions in relation to liaison, including with the Applicant's contractor.

15.2.2 Additionally, the Side Agreement has been proposed as a medium to confirm that specific mitigation measures are indeed agreed and will be provided – this particularly relates to the items list in paragraph 15.1.5, above. Additional matters proposed to be included relate to the commercial terms on which land may be occupied or acquired, and in relation to the operation of the Control Tower.

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- 15.2.3 The Side Agreement is a complement to the Order, and indeed to the Compensation Code. There is no impediment to implementing the Scheme in the absence of such agreement, though the Applicant recognises that reaching agreement with ABP, pursuant to discussions under the protective provisions, may be more challenging. The Applicant would suggest that as the items above would relate to the protection of ABP's undertaking, and/or involve ABP incurring a 'loss' of some description, they could reasonably be expected to be addressed through either engagement with the protective provisions, or the compensation code in the absence of such an agreement.
- 15.2.4 Nevertheless, the proposed Side Agreement remains evidence of the Applicant's endeavours to seek to address ABP's objections to the Scheme. At the current time the agreement is some way from completion as the Applicant does not consider that a number of ABP's requests are reasonable, though discussions are ongoing.

16 Serious Detriment & Compulsory Acquisition

16.1 Compulsory Acquisition

Previous submissions of relevance by the Applicant	Note
APP-008 – Funding Statement	
AS-013 - Applicant's Response to Relevant Representations	LD1, LD2
REP3-029 – Responses to the Examining Authority's Written Questions	Q3.7 to 3.10
REP4-014 – Responses to Written Representations and Interested Parties Responses to Written Questions	Appendix E
REP5-010 – Written summaries of oral submissions at Compulsory Acquisition Hearing	P40-44 Appendix 1
REP7-005 – Response to ABP's Deadline 5 and Oral Submissions at 7 & 8 March 2019 Hearings	p19-30
REP8-008 – Port Impact Paper	Chapter 2, 12
REP8-007 – Response to ABP's Summary of Case at 8 March Hearing and to Second Written Questions 1.11 to 1.13	
REP9-010 – Response to ABP's Deadline 8 Submissions	p1,2
REP10-009 – Statement of Reasons	Paras 6.1.23 to 6.1.27, section 6.3
REP10-080 – Summary of Applicant's Oral Submissions at Hearings on 14 May and Responses to Interested Parties' Deadline 9 Submissions	P14-20
SCC/LLTC/EX/202 – Closing Submissions (other Interested Parties)	Section 5

- 16.1.1** Through the course of the Examination there has been some conflation by ABP between the need for the Applicant to justify its compulsory acquisition proposals in and of themselves, and the question of whether a serious detriment to the carrying on of ABP's statutory undertaking could be caused by those compulsory acquisition powers being granted. This is particularly the case in the context of ABP's Protective Provisions which provide that the Applicant must obtain ABP's consent prior to the use of its compulsory acquisition powers (the Applicant's reference to which was unfairly and inaccurately characterised by ABP as a 'magic wand' to fix all its land ills). This aspect of the Protective Provisions is discussed further below.
- 16.1.2** As is set out in the Applicant's submissions at Deadlines 9 and 10 (REP9-010, REP10-080), it entirely accepts that, pursuant to section 122 of the Planning Act 2008, it needs to justify the acquisition of each and every plot sought to be acquired – to prove it is required for the development to which the development consent relates, or that it is required to facilitate or is incidental to that development, and in either case that there is a compelling case in the public interest for the land to be acquired compulsorily.
- 16.1.3** The Applicant has done this; most particularly in the Statement of Reasons (REP10-009), but also in REP7-005 starting at page 24, in so doing demonstrating that

each plot is required for a specific part of the Scheme, taking account of the current stage of design and its limits of deviation. This justification has also extended to plots where compulsory acquisition of rights is required, or where only compulsory acquisition of airspace is required. The 'compelling case in the public interest' flows directly from the needs and benefits of the Scheme identified in section 1 above and those matters are not repeated here. When those matters are weighed against the inevitable interferences with private rights entailed by the Scheme, the Applicant maintains that the public interest strongly outweighs those interferences (which will, of course, be eligible for compensation in accordance with the Compensation Code).

16.1.4 The Deadline 7, 9 and 10 submissions referred to above, and submission REP8-007 have also noted the following in respect of compulsory acquisition generally:

- as set out in MHCLG guidance, part of the test of the compelling case in the public interest is that compulsory acquisition is a matter of last resort, and that attempts must be made to negotiate first – the Applicant has sought to do this by pursuing a Side Agreement with ABP, and has also acknowledged that, provided there is a clear commitment by ABP to dedication of the relevant land as highway, a long lease is an acceptable option to the Applicant; however compulsory acquisition powers are still necessary in case this is not able to be agreed in time to facilitate the implementation of the Scheme;
- that the Protective Provisions provide, in paragraph 54, a 'lock' on the exercise of compulsory acquisition powers in the case of ABP's port land, such that those powers can only be exercised with the consent of ABP (such consent not to be unreasonably withheld) and ABP can make the giving of consent subject to the imposition of reasonable conditions. This gives ABP a considerable degree of control over the manner and timing of the compulsory acquisitions which will affect its statutory undertaking. With sensible working and liaison between the Applicant and ABP as the Scheme moves forward to implementation (assuming that the DCO is made), and it would be reasonable to expect both statutory bodies to act responsibly in that process, there is no reason why the compulsory acquisition should cause undue interference with the continued successful operation of the Port;
- that additional to the Protective Provisions 'lock', there is a lock within the drafting of article 22. This gives the Applicant the power to compulsorily acquire land only as 'is required for the authorised development, or to facilitate it, or is incidental to it'. This means that, once the Scheme is refined through the detailed design process to produce the final bridge design that is to be constructed, the DCO does not authorise the compulsory acquisition of land that is not any of those things. As such, in using these powers, the Applicant will have to satisfy itself (and any challenger, including an affected landowner) that the land is so required;

- whilst the section 122 test does not apply to temporary possession, it has in any event been made out in respect of those plots in the Statement of Reasons and those Examination submissions (including in relation to the lake plots); and
- the MHCLG guidance also indicates that the Examining Authority needs to be satisfied that sufficient funding is in place to discharge all compulsory acquisition liabilities. The Applicant has set out that sufficient funding is in place in its Funding Statement, REP3-029 (responses to questions 3.7-3.10), Response to Written Representations (REP 4-014), REP5-010 Appendix 1 and REP7-005 p37, and provided a summary position in document SCC/LLTC/EX/202, submitted to this deadline.

16.1.5 As the Applicant has argued, the 'lock' of the ABP's Protective Provisions therefore needs to be seen in the context that by the time that the Applicant comes to ABP for consent under their Protective Provisions, the Secretary of State would already have determined that the compulsory acquisition powers are justified. The focus of that consent would therefore be related to the 'how' of that compulsory acquisition powers being used, i.e. the practical usage and consequence of them. Further details on this point are set out in REP8-007 on page 9.

16.1.6 The lock is therefore not a 'magic wand' but a practical (and very well established) way that the use of the fully justified powers can be managed to ensure that impacts to ABP can be minimised.

16.2 Serious detriment

16.2.1 The section 127 test needs to be seen in that preceding context, but separate from it. That is because whilst compulsory acquisition powers may comply with the section 122 test it is then a separate question as to whether those justified compulsory acquisition powers cause a serious detriment to a statutory undertaking. The Applicant has made the point (in its representations on serious detriment in REP8-007) that the serious detriment test has the effect of preventing schemes for which a compelling case has otherwise been shown from proceeding, and this underscores the need for demonstration that the adverse effects are indeed seriously detrimental to the carrying on of the undertaking rather than merely disadvantageous.

16.2.2 The framing of the question/test has been the subject of many submissions by ABP and the Applicant when in fact the parties are actually likely in agreement on all bar three subsidiary aspects of that test.

16.2.3 Set out initially in the Ports Impact Paper (REP4-015 now superseded by REP8-008), and then carried through to the submissions set out in the previous section, the Applicant has sought to be clear that it considers that the test should be considered as follows:

- no words should be attempted to be 'read into' the wording of section 127 - it is simply a question of whether or not there is serious detriment to the carrying on of ABP's undertaking arising from the compulsory acquisition of the statutory undertaker's land;

- serious detriment is a holistic term so does not apply solely to the direct impact of the land directly taken, but also what that land take means for the operation of the statutory undertaking as a whole, both now and in the future;
- impingements on ABP's ability and needs to meet its statutory duties and requirements is part of that holistic consideration and the test is not limited only to the discharge of statutory duties but includes also any impingements on ABP's powers so far as they relate to the carrying on of its statutory undertaking;
- the Recommendation Reports of Able Marine, Hinkley and Richborough are instructive and indicate that size is not in and of itself determinative but needs to be seen in the context of the statutory undertaking and its future as a whole;
- those reports also highlight that it is an objective test where all the evidence provided by both sides need to be considered;
- as such whether the detriment is serious is a matter of judgement; and in making that judgement, the Examining Authority and the Secretary of State will need to consider what the statutory undertaking is, and will be in the future, both of which are also judgements;
- in the context of harbour authorities, it would be false to create a dichotomy between the commercial and statutory operations of ABP in the carrying on of its statutory undertaking – both are relevant when considering whether a serious detriment is caused.

16.2.4 The Applicant hopes that these are all statements that ABP can agree with as they reflect its submissions as much as the Applicant's. The main difference between the parties lies in the matter of how the performance of tenants should be considered within the test. As set out in REP7-005, it is the Applicant's view that a line should be drawn at a point which excludes impacts on parties with whom ABP has entered into contracts, in particular, for example, with tenants of the Port. The justification for this view is that carrying on its statutory undertaking enables ABP to exercise its powers and comply with its duties (to the extent that such duties are a function of its statutory authority, rather than enforceable duties in the ordinary sense of the term - see paragraphs 6.1.23 to 6.1.27 of the Statement of Reasons). The carrying on of ABP's undertaking does not (and should not, in the Applicant's view) extend so far as to encompass the success or failure of its tenants' businesses.

16.2.5 The Applicant and ABP also diverge on the weight to be given to ABP's future growth aspirations in the context of the serious detriment test. Whilst the Applicant accepts that future business prospects do not have to be certain to arise in order to be relevant to the question of serious detriment, the Applicant considers that the less certain a future event is, the less likely it is that the loss of that opportunity would have any serious consequences for the carrying on of ABP's statutory undertaking. The Applicant is supportive of ABP's growth aspirations, and the Scheme is intended to assist in the realisation of those aspirations by improving terrestrial access to and from the Port (and the rest of Lowestoft), but the Applicant

does not accept that the assessment of the Scheme's effects on ABP's operations should be judged on the basis that all of the new business it hopes to secure will in fact be secured. A realistic view needs to be taken of what is likely to happen in terms of future business prospects, both with and without the Scheme. This is of particular relevance to the attractiveness of the Port to CTV operators if the Scheme were to be permitted (as already discussed in the preceding sections).

16.2.6 There is also a divergence of views on temporary possession powers – the Applicant's views expressed in REP8-007 being that being as they are not compulsory powers, they are not subject to the section 122 and 127 process. The Applicant also notes that the DCO already provides a mitigation measure for these powers by requiring the Applicant to pay for any loss or damage caused by those powers. Nevertheless, even if this is not accepted, the Applicant considers, as set out in REP10-080, that no serious detriment is caused arising from the activities to be carried out on that land: as they can either be managed as the Applicant has set out in submissions or correspondence; and they would be of such short time or space not to cause a detriment that would be 'serious'.

16.2.7 The Examining Authority and Secretary of State will therefore make a decision in this context - determining whether a serious detriment has been caused, in a holistic and objective manner.

16.2.8 This is considered in the next section, considering all of the matters discussed in this Closing Submission.

16.3 Serious detriment – specific matters

16.3.1 Through the course of the Examination, ABP has sought to claim serious detriment will occur as a result of the Scheme from five broad issues (an expansion from the matters summarised by the Applicant in REP8-007):

- i. the detriment that is caused due to the direct loss of berth space – both at that specific location and the consequential impact on the amount of berth space available across the Port in both the current and future scenario;
- ii. the detriment that is caused by the bridge's physical presence in terms of navigational risk and safety and loss of permitted development rights;
- iii. the operation of the bridge in terms of the timing restrictions in the Scheme of Operation and the number of vessels that would require an opening due to their height - the delay this would cause and thus the consequential attractiveness of the Port of Lowestoft in the future to vessels who may be affected by those restrictions (e.g. as an offshore hub);
- iv. the inability of ABP to comply with its statutory duties as a result of the provisions of the DCO; and
- v. the costs and losses that may be caused by the existence of the bridge that therefore need to be indemnified.

16.3.2 These factors are all inter-related and need to be considered holistically together in determining whether a serious detriment to the carrying on of ABP's undertaking is caused, as set out in the previous section. However, the Applicant has sought to demonstrate, throughout the Examination, that no individual element of these factors, or if they are taken together in any form of combination, leads to a detriment that is serious:

- i. in the context of the Port as a whole (i.e. not just the physical land take itself), the berth loss caused by the Scheme is small both now, and in the future, particularly given that there is no level of certainty that can be given to the rate of berth take up in the future, and taking account of the mitigation measures the Applicant has offered through the Side Agreement (and which would be able to be demanded through the Protective Provisions in any event);
- ii. navigational risk will be able to be mitigated through the full NRA approved by ABP (as shown by the pNRA), discussions with the DfT have indicated security concerns will be able to be dealt with, and PD rights will be able to be returned if the bridge is ever dismantled (see the Applicant's submissions at REP8-007, REP9-009 and REP10-080);
- iii. vessel operators will be able to modify their timing to meet the timings of the existing and new bridges and the Scheme of Operation enables sufficient flexibility for the harbour master to avoid vessels getting 'stuck' thus reducing any level of potential 'unattractiveness';
- iv. ABP has not identified any specific statutory duty that it would be unable to discharge if the Scheme was in place, and the Applicant has also made the point that the performance of those duties in that scenario would need to be considered in the context of the Scheme's existence (see REP8-008), so that if the Scheme led to a need to change the way that duties were performed, then that change would become part of the legal and factual matrix for the performance of those duties. For example, ABP's duty to provide an 'open port' (see REP10-009, para 6.1.24) is currently discharged in the context of the restricted opening regime of the A47 Bascule Bridge, with there being no suggestion by ABP that those restrictions are incompatible with its 'open port' duties. If the Scheme was in place, with some additional restrictions on when transits could be undertaken, ABP's duty to provide an 'open port' would fall to be discharged in that context;
- v. the wording of the DCO is agreed in respect of those provisions which interact with ABP's statutory duties or the aspect of disagreement will be able to be resolved by the Examining Authority if felt necessary; and
- vi. an appropriate indemnity is in place.

16.3.3 The Applicant does not deny that the imposition of the Scheme over the Port of Lowestoft will cause some adverse impacts to the statutory undertaking, however it considers that nothing has been put forward by ABP to demonstrate that the

detriment is serious, and that the Applicant has put forward sufficient evidence to show that this would indeed not be the case.

- 16.3.4 It therefore considers that the Secretary of State is able to include a provision in the DCO authorising the compulsory acquisition of ABP's land, which will in turn facilitate the construction of the Scheme.

17 Conclusion

17.1 Conclusion

17.1.1 ABP has objected to all aspects of the Scheme in legal, practical, policy and compulsory acquisition terms. Throughout the course of the Examination, the Applicant has sought to show that whilst it is undeniable that the Scheme will have some impacts on ABP's port operations, there is neither a 'serious detriment to the carrying on of the undertaking' in compulsory acquisition terms, nor 'significant' effects in environmental assessment terms, caused by the Scheme.

17.1.2 The Applicant has shown in its submissions, summarised in this document, that:

- the Scheme creates local, regional and national benefits;
- the central location of the Scheme is appropriate and preferable to any of the alternative options considered;
- the impacts on ABP's land and activities are no greater than necessary to deliver the Scheme and have been appropriately assessed;
- the evidential basis of the assessment, including the vessel survey and vessel simulation, is robust, and will be able to be updated as part of the final NRA for the Scheme;
- the Port of Lowestoft has future growth prospects, but it has not been demonstrated that these are unable to be realised as a result of the Scheme, including as a result of the air draft of vessels;
- the improvement in traffic conditions in Lowestoft will benefit the Port's users, employees and customers, when travelling to and from the Port, and will also facilitate its future growth;
- the proposed Scheme of Operation for the lifting regime will not unduly constrain vessel movements but will enable the traffic benefits of the Scheme to be maximised;
- there is a minimal impact on berthing from the Scheme;
- the Scheme will be able to be operated in a manner that will ensure impacts are as low as reasonably practicable to navigational risk or safety;
- the construction impacts of the Scheme on ABP will be able to be managed to ensure that adverse impacts are minimised;
- the provisions of the DCO will not prevent ABP from carrying out its statutory duties; and
- ABP has sufficient protection for its interests (financial or otherwise) through the Protective Provisions and other provisions in the DCO.

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- 17.1.3 As a result of these submissions, the Applicant considers that it is possible for all ABP's concerns to be overcome and that they should therefore not form an obstacle to the DCO for the Scheme being made.

18 Postscript

18.1 ABP Letter to the Secretary of State for Transport 30 May 2019

- 18.1.1 On 3 June, the Applicant was emailed a copy of letter sent by ABP to the Secretary of State for Transport dated 30 May 2019 ('the Letter'). In the Letter, ABP seeks to persuade the Secretary of State that a serious detriment to its statutory undertaking is caused by the Scheme, setting out many of the same points that it has made in its submissions to the Examination.
- 18.1.2 This letter has been sent directly to the Secretary of State on the basis of ABP's view, expressed at paragraph 4.1 of the Letter, that the Secretary of State is required to issue a certificate under the provisions of section 127 of the Planning Act 2008 to the effect that the compulsory acquisition of its land will not lead to a serious detriment to the statutory undertaking.
- 18.1.3 However, this is not the case under the current provisions of section 127, following amendments made to it by the Growth and Infrastructure Act 2013 (which modified this section of the Planning Act 2008 from June 25 of that year).
- 18.1.4 That 2013 change had the impact of amending section 127(2) and (3) as follows:
- (2) An order granting development consent may include provision authorising the compulsory acquisition of statutory undertakers' land only to the extent that the Secretary of State—*
- ~~(a) is satisfied of the matters set out in subsection (3), and~~*
- ~~(b) issues a certificate to that effect.~~*
- (3) The matters are that the nature and situation of the land are such that—*
- (a) it can be purchased and not replaced without serious detriment to the carrying on of the undertaking, or*
- (b) if purchased it can be replaced by other land belonging to, or available for acquisition by, the undertakers without serious detriment to the carrying on of the undertaking.*
- 18.1.5 Similar changes were made to paragraphs (5) and (6) in respect of the compulsory acquisition of rights.
- 18.1.6 The position before 2013 was therefore that the Secretary of State was required to issue a separate certificate in respect of section 127 matters, and it was the practice in DCO projects for interested parties and applicants to make specific and separate submissions in respect of obtaining such a certificate. However, even in this previous regime, such submissions were made within the Examination process, involving the ExA (see, for example, the Richborough Connection project).
- 18.1.7 Post 2013, such certificates are not required; as such the starting point of the Letter is fundamentally misconceived and seems to be based on a wholly out-of-date misunderstanding of the applicable statutory provisions. It is the practice that the

Secretary of State makes his decision under section 127(3) having had regard to the submissions of the parties to the Examination process, rather than separate submissions being sent directly to the Secretary of State.

- 18.1.8 The Applicant therefore considers that it is entirely inappropriate for the letter to have been sent to the Secretary of State outwith the Examination process, and that it is disappointing to learn that ABP has been proceeding on a patently incorrect legal basis in putting forward that letter.
- 18.1.9 Notwithstanding this, the Applicant has reviewed the contents of the Letter and considers that the vast majority of its content is a repeat of what ABP has set out in its Examination submissions. As such the Applicant's response to those points throughout the Examination, as summarised in this document, will equally apply to the contents of the Letter.
- 18.1.10 However, there are three specific points to which the Applicant feels it is necessary to additionally respond in order to fully clarify its position for the benefit of the Examining Authority:
- Paragraph 7.5 of the Letter suggests that the Applicant has argued in Examination that the test of serious detriment relates only to ABP's ability to perform its statutory duties and obligations and has no relevance in terms of ABP's ability to carry out its port operations as a statutory port undertaker. This is fundamentally not the case – as summarised in part 16 of this document, the Applicant has consistently recognised that the test is a wide, holistic one, and that both ABP's statutory and commercial operations are relevant. There has been (as noted in part 16) a debate as to the relevance of the commercial performance of ABP's tenants to the test, but it is simply wrong to suggest that the Applicant has suggested that the test is limited purely to ABP's statutory duties and obligations.
 - Paragraph 17.3 of the Letter suggests that the Applicant is 'not prepared to offer any form of indemnity to ABP during the bridge's operation'. This is again a fundamental mischaracterisation of the Applicant's statements. The Applicant has been clear throughout the Examination (as set out in part 15 of this document) that it is not prepared to indemnify ABP for all risks arising from the fact that the Scheme will exist in the chosen location. The risks of costs and losses arising from the operation of the Scheme as an opening bridge are already indemnified by the provisions set out in the Protective Provisions.
 - Paragraph 16.3 of the Letter sets out that '*ABP's approach adopted in respect of mitigation is one of "equivalence" i.e. the provision of replacement assets and legal safeguards to offset the serious detriment that will otherwise be caused by the proposed LLTC. Equivalence will leave the Port neither better nor worse off as a result of the mitigation works*'. In the Applicant's submission, this is a fundamentally incorrect approach. The test in section 127 is whether a serious detriment is caused, thus any agreement on mitigation must be with the aim to seek to avoid that level of detriment. The test is not to leave the Port in a

'no better nor worse' position in a world with the Scheme. Both parties' submissions on the need or otherwise for the various suggested mitigation measures that have been put forward in the Examination process need to be seen in that context.

- 18.1.11 Whilst the Applicant is disappointed that the Letter has been put forward by ABP at all, it believes that its submissions, including this Closing Submission, demonstrates that the Secretary of State can be satisfied that provisions can be included within the DCO to authorise the compulsory acquisition of ABP's land because they would not cause serious detriment to the carrying on of ABP's undertaking.