AQUIND Limited

AQUIND INTERCONNECTOR

Statement of Common Ground (Onshore) Between Aquind Limited and Environment Agency

Signed Version

The Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010, Rule 8(1)(e)

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TABLES

1. INTRODUCTION AND PURPOSE

1.1. PURPOSE OF THIS STATEMENT OF COMMON GROUND

1.1.1.1. A Statement of Common Ground ('SoCG') is a written statement produced as part of the application process for an application for a Development Consent Order ('DCO') and is prepared jointly by the applicant and another party. A SoCG sets out the matters of agreement between both parties, matters where there is not agreement and matters which are under discussion.

1.1.1.2. In this regard paragraph 58 of the Department for Communities and Local Government's guidance entitled "Planning Act 2008: examination of applications for development consent" (26 March 2015) hereafter referred to as DCLG Guidance) describes a SoCG as follows:

"*A statement of common ground is a written statement prepared jointly by the applicant and another party or parties, setting out any matters on which they agree. As well as identifying matters which are not in real dispute, it is also useful if a statement identifies those areas where agreement has not been reached. The statement should include references to show where those matters are dealt with in the written representations or other documentary evidence.*"

1.1.1.3. The aim of a SoCG is to assist the Examining Authority to manage the examination of an application for a DCO by providing an understanding of the status of matters at hand and allowing the Examining Authority to focus their questioning. The effective use of SoCG is expected to lead to a more efficient examination process.

1.1.1.4. This SoCG has been prepared with the Environment Agency ('EA') to show where agreement has been reached with AQUIND Limited ('the Applicant') during the pre, post DCO application consultation and DCO Examination.

1.2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

1.2.1.1. AQUIND Limited (the 'Applicant') submitted an application for the AQUIND Interconnector Order (the 'Order') pursuant to Section 37 of the Planning Act 2008 (as amended) (the 'PA2008') to the Secretary of State ('SoS') on 14 November 2019 (the 'Application').

1.2.1.2. The Application seeks development consent for those elements of the AQUIND Interconnector (the 'Project') located in the UK and the UK Marine Area (the 'Proposed Development').

1.2.1.3. The Project is a new 2,000 MW subsea and underground High Voltage Direct Current ('HVDC') bi-directional electric power transmission link between the South Coast of England and Normandy in France. By linking the British and French electric power grids it will make energy markets more efficient, improve security of supply and enable greater flexibility as power grids evolve to adapt to different sources of renewable energy and changes in demand trends such as the development of electric vehicles. The Project will have the capacity to transmit up to 16,000,000 MWh of electricity per annum, which equates to approximately 5 % and 3 % of the total consumption of the UK and France respectively.

1.2.1.4. The Proposed Development includes:

- HVDC Marine Cables from the boundary of the UK Exclusive Economic Zone to the UK at Eastney in Portsmouth;
- Jointing of the HVDC Marine Cables and HVDC Onshore Cables;
- HVDC Onshore Cables;
- A Converter Station and associated electrical and telecommunications infrastructure;
- High Voltage Alternating Current ('HVAC') Onshore Cables and associated infrastructure connecting the Converter Station to the Great Britain electrical transmission network, the National Grid, at Lovedean Substation; and
- Smaller diameter Fibre Optic Cables ('FOC') to be installed together with the HVDC and HVAC Cables and associated infrastructure.

1.3. THIS STATEMENT OF COMMON GROUND

1.3.1.1. This SoCG has been prepared by AQUIND Limited and the EA in respect of the Proposed Development, collectively referred to in this SoCG as 'the parties', in respect of the onshore components of the Proposed Development; where onshore components comprise of activities within the onshore extent of the Order Limits only (above Mean Low Water Springs).

1.3.1.2. This SoCG reflects the status of discussions between the parties at up to Deadline 7 referring to application documents as submitted up to and including Deadline 6.

1.3.1.3. This document version includes all points of agreement with no outstanding disagreement between the parties.

2. CONSULTATION

2.1.1.1. The parties have been engaged in consultation since the inception of the Proposed Development. Early correspondence dates back to Q1 2018 with significant consultation occurring between May 2019 and October 2019 and further consultation following application submission during the DCO examination process.

2.1.1.2. A summary of key meetings and correspondence between the parties can be found in Table 2.1.

Table 2.1 – Summary of Key Correspondence between the parties

Date	Form of Contact	Summary
28/03/2018	Meeting	• Initial engagement pre-development of PEIR with initial discussion over the general flood risk environment. • Discussion in relation to the Ground Investigation undertaken to inform the Proposed Development PEIR and ES.
17/07/2018	Various (Flood Risk)	• PEIR Flood Risk Advice.
18/06/2019	Meeting (Converter Station Engineering)	• Indicative converter station site layout and arrangement of buildings and electrical equipment was presented and discussed. • Site constraints and their impact on locating the compound was discussed. • Potential source of contamination within converter station along with proposed mitigations discussed and agreed in principle. • Temporary and permanent site surface drainage system discussed and agreed in principle. • Sustainable drainage including filter drains, infiltration drains, infiltration swales,

Date	Form of Contact	Summary
		detention basin, infiltration basin and soakaway system discussed and agreed in principle. • Karst features along with treatment strategy was discussed with both PW and EA and agreed in principle. • Foul drainage system was discussed and agreed in principle. • Oily water drainage and oil containment discussed and agreed with both PW and EA in principle. • Site investigation findings and foundation solution was discussed and agreed in principle.
23/07/2019	Meeting (Flood Risk Workshop)	• Workshop to discuss the Proposed Development. • Expected Surface Watercourse Crossings. • Proposed Construction Principles in relation to flood risk and surface water quality. Minutes of Meetings, as agreed with the EA can be found in Appendix 1 of APP-436 (ES Appendix 20.1 Consultation Responses).
23/07/2019	Meeting (Groundwater Workshop)	• Workshop discussed temporary dewatering. • Discharges to surface water and groundwater: environmental permits. • Groundwater emergence within a trench would need to be considered on a case by case basis depending on the volumes encountered and may require temporary dewatering consent. • Some discussions on what provisions are anticipated to manage groundwater in HDD

Date	Form of Contact	Summary
		pits and/or open trenching, so as not to increase flooding off-site. • ES would set out principles for the management, however the specific measures taken forward at each location would be contractor led and developed post planning through a permit.
23/07/2019	Meeting (Water Framework Directive Workshop)	• Workshop to discuss the Proposed Development. • Presentation given on each watercourse crossing in relation to WFD quality elements and potential impacts. • Discussion relating to potential impacts. • Discussion relating to WFD mitigation measures set for the potentially impacted WFD water bodies. • Discussion relating to the EA's expectations with regard to WFD mitigation and contribution to biodiversity net gain. • Discussion relating to proposed Construction Principles in relation to WFD.
02/09/2019	Meeting (Converter Station Engineering)	• PW and EA comments Discussed • WSP proposal in response to PW and EA comments were discussed and agreed.
05/08/2020	Meeting	• PW comments on the applicant response to Relevant Representation was discussed. • Supplementary karst report was discussed and further explanation relating to HDD works and the method of dealing with unknown karst features were explained

Date	Form of Contact	Summary
		• Proposed piling solution and piling risk assessment (draft) discussed. • Proposed temporary car park and associated temporary surface water drainage discussed • Converter station drainage system and SuDS explained. • Explanation was provided relating to fire deluge system and how the surface water drainage system will be designed to account for its operation.
02/09/2019	Meeting (Converter Station Engineering)	• PW and EA comments discussed. • WSP proposal in response to PW and EA comments were discussed and agreed.
11/09/2020	Meeting	• Proposed site level and associated Earthworks methodology discussed. • Construction water management and earthwork water management discussed. • Generic method statement and its table of contents discussed.
10/11/2020	Meeting	• Meeting to discuss the content of the Generic Method Statement following draft submission to the EA on 30/10/2020.
16/12/2020	Meeting	• Further meeting to discuss and agree the final content of the Generic Method Statement, and outstanding matters.
Various (email and calls)	Various (Flood Risk)	• Agreement of Flood Risk Workshop Minutes of Meeting. • Agreement of proposed principles for (tidal) flood risk management at Optical Regeneration Station.

Date	Form of Contact	Summary
Various (email and calls)	Various (Converter Station Optioneering)	• Agreement of Aquifer contamination Workshop Minutes of Meeting. • Various correspondence with PW and EA during design development of the preliminary drainage strategy drawings and report. • Various correspondence with EA during the on-going development of draft SoCG.

2.2. SUMMARY OF TOPICS COVERED BY THE STATEMENT OF COMMON GROUND

2.2.1.1. The following topics discussed between the parties are commented further in this SoCG:

- Environmental Statement ("ES") Chapter 19: Groundwater:
  - Baseline and Methodology
  - Predicted Impacts
  - Mitigation:
    - Converter Station Area
    - Onshore Cable Corridor
    - Landfall
  - Residual Effects
- ES Chapter 19 Supplementary Assessments (Technical Appendices), which includes:
  - Appendix 19.3: The Hydrogeology of Kings Pond and Denmead Meadows
  - Supplementary Karst Report which has been updated as part of the ES Addendum as Appendix 7
  - Onshore Outline Construction Environmental Management Plan ('OOCEMP')
- ES Chapter 20: Surface Water Resources and Flood Risk
  - Baseline and Methodology

- Predicted Impacts
- Mitigation
  - Converter Station Area
  - Onshore Cable Corridor
  - Landfall
- ES Chapter 20 Supplementary Assessments (Technical Appendices), which includes:
  - Appendix 20.2: Onshore Water Framework Directive
  - Appendix 20.3: Watercourses Summary
  - Appendix 20.4: Flood Risk Assessment &

    Flood Risk Assessment Addendum as Appendix 9 to the ES Addendum
- OOCEMP
- Residual Effects

- Converter Station Surface Water Drainage and Aquifer Contamination Mitigation Strategy, referred to as 'Appendix 3 of the Design and Access Statement ('DAS')' hereafter; which includes:
  - Surface Water Drainage
  - Foul Water Drainage
  - Oil Containment and Oily Water Drainage
  - SuDS and Water Quality System
  - Temporary Surface Water Management
  - Foundation Design
- OOCEMP
- Generic Method Statement as Appendix 7 to the OOCEMP; and
- Draft Development Consent Order ('dDCO').

2.2.1.2. For the avoidance of doubt, matters not covered in this SoCG in relation to the onshore elements of the Proposed Development have not been discussed between the parties as they have not been raised by the EA.

2.2.1.3. A summary of all documents referenced within this SoCG and their latest library references as per the examination library (as updated 11/01/2021) is provided in Table 2.2.

Table 2.2 – Summary Referenced Documents and latest revisions

Title	Examination Library Reference
ES Chapter 19: Groundwater	APP-134
ES Appendix 19.3: The Hydrogeology of Kings Pond and Denmead Meadows	APP-434
ES Chapter 20: Surface Water Resources and Flood Risk	APP-135
ES Appendix 20.2: Onshore Water Framework Directive Assessment	APP-437
ES Appendix 20.3: Watercourses Summary	APP-438
ES Appendix 20.4: Flood Risk Assessment	APP-439
ES Addendum	REP1-139
ES Addendum Appendix 7: Supplementary Karst Report	REP1-156
ES Addendum Appendix 8: Flood Risk Assessment Addendum	REP1-157
ES Addendum Appendix 9: Sequential and Exception Test Addendum	REP1-158
OOCEMP	REP6-036
OOCEMP Appendix 6: Preliminary Piling Risk Assessment[1]	TBC
OOCEMP Appendix 7: UK Source Protection Zone 1 Generic Method Statement	REP6-036
DAS	REP6-025
DAS Appendix 3: Surface Water Drainage and Aquifer Contamination Mitigation Strategy	REP6-025
DAS Appendix 3, Appendix 6: Indicative Temporary Carpark and Compound Drainage Layout[2]	TBC
dDCO (Clean)	REP6-015[3]
Other Consents and Licences	REP1-029

[1] Currently Appendix 6 to the DAS Appendix 3, however moved to OOCEMP Appendix 6 as part of Deadline 7 version
[2] Currently Appendix 6 to the OOCEMP, however moved to Appendix 6 of DAS Appendix 3 as part of Deadline 7 version
[3] Referenced updates hereafter will be included as part of Deadline 7 version

3. MATTERS AGREED

3.1. ES CHAPTER 19: GROUNDWATER & ASSOCIATED APPENDICIES

Table 3.1 – Groundwater

Ref.	Description of matter	Agreed Position	RAG
Baseline and Methodology			
EA 3.1.1.1	Area of Study - Groundwater	The area of study identified in Section 19.1.2 of ES Chapter 19 Groundwater is agreed.	Agreed as at Deadline 1
EA 3.1.1.2	Baseline - Groundwater	The baseline environment identified in Section 19.5 of ES Chapter 19 Groundwater is agreed.	Agreed as at Deadline 1
EA 3.1.1.3	Assessment Methodology – Groundwater	It is agreed that Section 19.4 of ES Chapter 19 Groundwater clearly outlines the approach to creating the baseline and assessing impacts of the development.	Agreed as at Deadline 1
Predicted Impacts			
EA 3.1.2.1	Groundwater	It is agreed that the predicted impacts as set out in Section 19.6 of ES Chapter 19 Groundwater clearly outlines the impacts following embedded mitigation measures.	Agreed as at Deadline 1
Mitigation - Converter Station Area			
EA 3.1.3.1	Watching Brief (karst dissolution features)	It is agreed that a Karst Dissolution Feature Watching Brief should be kept during construction for karst dissolution features when any Converter Station Area excavation work is undertaken in the Source Protection Zone 1 (SPZ1) as stated within the UK Source Protection Zone 1 Generic Method Statement (Appendix 7 of the OOCEMP), the OOCEMP and Section 12 (Groundwater) of the ES Addendum. The requirement for the submission of a Construction Environment Management Plan and other associated documentation (including a Karst Dissolution Feature Watching Brief, where relevant) in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 7
EA 3.1.3.2	Karst Dissolution Features	Control of surface water drainage and drainage within the ground is to be carefully considered during detailed design to avoid increasing the risk of dissolution, with ground stabilisation and treatment by grouting as the preferred solution in-line with CIRIA C574, to minimise influence of grouting on the SPZ1. It is proposed to use a grout mix, of suitable composition, control and cure time to be approved in consultation with the EA (and PW), for the purposes of ground stabilisation as stated in paragraph 7.1.1.5. of Surface Water Drainage and Aquifer Mitigation Strategy as Appendix 3 of the DAS (as per latest revision as referenced within Table 2.2). The requirement for the submission of detailed design in relation to all works, which accord with the DAS (including the Surface Water Drainage and Aquifer Contamination Strategy), is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1

Ref.	Description of matter	Agreed Position	RAG
		Further karst features may be discovered during construction. Where such findings occur the risk of impact will be managed through a risk assessment and construction management plan. The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	
EA 3.1.3.3	Oil Containment and oily water drainage	It is accepted that the information on the Converter Station design is submitted in outline for detailed approval post grant of the DCO. This will include the final design of the oily water drainage and size of dump tank(s) which will be defined during detailed design of the system in accordance with the details within Section 4 (Oil Containment and Oily Water Drainage) of the Surface Water Drainage and Aquifer Contamination Strategy (Appendix 3 of the DAS). The requirement for the submission of detailed design in relation to all works, which accord with the DAS (including the Surface Water Drainage and Aquifer Contamination Strategy), is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.1.3.4	Foundation Design	The extent of existing ground conditions and proposed foundation was discussed and agreed in principle with the EA (and PW) at a meeting on 18/06/2019. Considering the ground conditions encountered, piling is identified as the likely foundation design to be utilised subject to detailed design development post consent of the DCO. The use of pre-cast driven piles are likely to be one of the design options that will have the lowest impact on the chalk aquifer and restrictions set by PW around the SPZ1 designation. The requirement for the submission of detailed design in relation to the foundation solution, which accord with the DAS (including details within Section 7 (Foundation Solution) of the Surface Water Drainage and Aquifer Contamination Strategy), is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.1.3.5	Grouting prior to earthworks	With reference to OW2.12.2 of the Examining Authorities further written questions (PD-031) and following the production of the UK Source Protection Zone 1 Generic Method Statement (Appendix 7 of the OOCEMP), it is agreed that the measures to grout any surface karst features at the Converter Station site prior to any earthwork movements and to interrupt any pathway to the underlying Chalk aquifer are suitable and achievable.	**Agreed as at Deadline 7**
EA 3.1.3.6	Public water supply	With reference to OW2.12.4 of the Examining Authorities further written questions (PD-031) and following the production of the UK Source Protection Zone 1 Generic Method Statement (Appendix 7 of the OOCEMP), it is agreed that there are no outstanding areas of concern or disagreement regarding the safety and security of the public water supply in Source Protection Zone 1.	**Agreed as at Deadline 7**
Mitigation - Onshore Cable Corridor – General			
EA 3.1.4.1	Dewatering	Dewatering permits may be required during construction as high groundwater levels are likely to be encountered at points along the cable route during trench excavation works. Dewatering permits may therefore be required (unless an exception applies). Permits will be applied for at the relevant time. Paragraph 6.2.6.2. of OOCEMP (as per latest revision as referenced within Table 2.2) states that "*the water management permitting, licenses and agreements will be completed by the appointed contractor, with the quantities of groundwater management determined at the detailed design stage*". Where appropriate, and where Environmental Permits are required in addition and separate to the DCO as detailed in the Other Consents and Licences document. Detailed information for the relevant Environmental Permitting will be submitted to the EA for	Agreed as at Deadline 1

Ref.	Description of matter	Agreed Position	RAG
		review and approval and should follow the construction principles outlined within Section 5.6 and 5.7 of the OOCEMP (as per latest revision as referenced within Table 2.2).	
EA 3.1.4.2	Watching Brief (karst dissolution features)	It is agreed that a Karst Dissolution Feature Watching Brief should be kept during construction for karst dissolution features when any cable trench excavation work is undertaken in the SPZ1 as stated within the UK Source Protection Zone 1 Generic Method Statement (Appendix 7 of the OOCEMP) and the OOCEMP. The requirement for the submission of a Construction Environment Management Plan and other associated documentation (including a Karst Dissolution Feature Watching Brief, where relevant) in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**)..	Agreed as at Deadline 1
Mitigation - Onshore Cable Corridor – HDD works			
EA 3.1.4.3	Presence of mud engineer and use of inert drilling fluids	To ensure drilling fluids do not break out into the groundwater environment nor groundwater seeps into the bore, a mud engineer will be present at all times during the HDD drilling process to monitor drilling fluid viscosity, density, annual pressure, solids contents, filter cake quality and total mud volume and thereby ensuring the filter cake remains intact and that drilling fluid is not lost to the ground and that groundwater does not seep into the bore annulus. In addition, a review of the proposed drilling fluid and inert polymers will also be completed before ground is broken. All drilling fluids, including polymers, will be Centre for Environment Fisheries and Aquaculture Science (Cefas) rated products as stated within the OOCEMP (5.4.1.1., 6.2.6.5., 6.2.6.12. & 6.2.11.3 as per latest revision as referenced within Table 2.2) and is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.1.4.4	Avoidance of karst dissolution features in the Chalk	The scheme design in the first instance ensures that the trenchless construction avoids karst dissolution features (in the Chalk) as much as possible. At HDD-5 (Kings Pond), the drilling will be kept in the overlying Lambeth Group only. The contractor will ensure that when drilling HDD-5 there will always be at least a 5m standoff between the proposed HDD alignment and the Chalk as stated within the OOCEMP (Section 6.2.6.7 as per latest revision as referenced within Table 2.2) and is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.1.4.5	Briefing drill crew on SPZ1 sensitivity, monitoring fluid pressures, identifying karst features and watching brief presence	The drilling team will also need to be briefed on the environmental sensitivity of the SPZ1 and the importance of identifying karst dissolution features prior to work commencing and during the works. They will need to monitor the fluid pressures and observe for significant pressure drops throughout the works. A significant pressure drop would indicate that loss of fluid, potentially to fractures/dissolution features, may be occurring. A Karst Dissolution Feature Watching Brief will need to be implemented to identify any elements of karst dissolution features at any time during the works (OOCEMP Section 6.2.6.8 as per latest revision as referenced within Table 2.2). The requirement for the submission of a Construction Environment Management Plan and other associated documentation (including a Karst Dissolution Feature Watching Brief, where relevant) in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1

Ref.	Description of matter	Agreed Position	RAG
EA 3.1.4.6	Temporary pause of drilling in the event a karst dissolution feature is detected. Notification of EA.	As detailed within Section 6.2.6.9 OOCEMP (as per latest revision as referenced within Table 2.2) it is agreed that should karst dissolution features be detected, drilling will be paused temporarily, until the Engineer on site can determine the most suitable course of action for mitigation, from a catalogue of actions already agreed with PW and the EA. A number of actions can be taken to seal the area of loss, for example increasing the drilling fluid viscosity or introducing a cement grout. Real time downhole annular pressure monitoring should be completed to allow for these observations. The exact pressure change parameters and procedures to evaluate mitigation would need to be agreed with EA (and PW) at detailed design stage. The EA (and PW) will also need to be notified immediately of any loss of drilling fluid. Once the risk from the dissolution feature has been satisfactorily mitigated (i.e. to no risk of contamination), works will then resume. The requirement for the submission of a Construction Environment Management Plan and other associated documentation in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 4
EA 3.1.4.7	Inclusion of sheet piled walls toes into the Chalk to reduce groundwater ingress. Sump pumping from base of pits.	The launch and receptor pits for the HDD-4 (Farlington Railway Crossing (Trenchless)) will include perimeter sheet piled walls toed into the Chalk to reduce groundwater ingress from the superficial River Terrace Deposits. Groundwater seepage at the base of the pits could occur and this will be sump pumped during operation. The potential consents and permits required to manage this water will be completed by the appointed contractor. The method of discharge has yet to be determined. The groundwater collected will either be discharged back to ground, to surface water, sewer, disposed of off-site or a combination of these methods. If the water is to be discharged to ground, a surface waterbody or sewer then a discharge consent(s) may be required. The permitting process is required in addition to the DCO and will be completed by the contractor, after detailed design, once a dewatering and discharge management methodology has been agreed upon. The appointed contractor will be responsible for acquiring the relevant consents and adhering to the conditions of said consents. As stated within Section 6.2.6.10 OOCEMP (as per latest revision as referenced within Table 2.2) any contaminated water would require off-site disposal. The requirement for the submission of a Construction Environment Management Plan and other associated documentation in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.1.4.8	Dewatering quantities to be determined at detailed design	As stated within Section 6.2.6.11 of the OOCEMP (as per latest revision as referenced within Table 2.2) the required groundwater dewatering quantities for HDD-4 pits will be determined at detailed design. The designer must ensure the discharge quantities are accurate or conservative to ensure no flood risk will be increased due to surplus groundwater encountered during construction The requirement for the submission of a Construction Environment Management Plan and other associated documentation in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.1.4.9	Cleaning of drilling equipment	As stated within Section 6.2.6.12 of the OOCEMP (as per latest revision as referenced within Table 2.2) to prevent cross contamination all drilling equipment will be checked and cleaned before use.	Agreed as at Deadline 1

Ref.	Description of matter	Agreed Position	RAG
		The requirement for the submission of a Construction Environment Management Plan and other associated documentation in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	
EA 3.1.4.10	Use of Filter Cake to prevent cross-contamination of groundwater bodies	As stated within Section 6.2.6.13 of the OOCEMP (as per latest revision as referenced within Table 2.2) drilling through alternative geologies can transfer existing contamination from one source to another. Drilling can also generate fines which can increase sediment in the water column, creating turbidity contamination. The Filter Cake will prevent the mobilisation of contaminants from one groundwater body to another, as the cake 'self-seals' as the drilling progresses. It is agreed that following the embedded mitigation measures the drilling fines and fluids will be contained in the drilling cake, preventing contamination from spreading between sources and drilling fines entering the local groundwater receptors and therefore no cross contamination is anticipated. The requirement for the submission of a Construction Environment Management Plan and other associated documentation in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.1.4.11	Presence of flexible hose pump at breakout compound	As stated within Section 6.2.6.14 of the OOCMEP (as per latest revision as referenced within Table 2.2) to ensure surface breakout is not lost to the environment a flexible hose pump will be contained at the exit compound site so breakout fluid can be retained on site. A sufficiently sized Intermediate Bulk Container or similar will be stored on site to store such a breakout. The requirement for the submission of a Construction Environment Management Plan and other associated documentation in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
Mitigation - Onshore Cable Corridor – Onshore Cable Route Trench Excavation Works			
EA 3.1.5.1	Dewatering for trench construction	Section 6.4.3.2 of the OOCEMP (as per latest revision as referenced within Table 2.2) states that the required groundwater dewatering quantities for trench construction will be determined at detailed design. The designer must ensure the discharge quantities are accurate or conservative to ensure no flood risk will be increased due to surplus groundwater encountered during construction. This applies to all sections of the Order Limits and Onshore Cable Route. Where appropriate, and where Environmental Permits are required in addition and separate to the DCO as detailed in the Other Consents and Licences document, detailed information for the relevant Environmental Permitting will be submitted to the EA for review and approval and should follow the construction principles outlined within Section 5.6 and 5.7 of the OOCEMP (as per latest revision as referenced within Table 2.2).	Agreed as at Deadline 1
EA 3.1.5.2	Catalogue of detailed descriptions of mitigation measures in the event an unexpected karst dissolution feature is discovered during	As stated within Section 6.4.3.3 of the OOCEMP (as per latest revision as referenced within Table 2.2) Sections 1, 2 and 3 of the Order Limits have been identified as areas which may contain dissolution features. Previous investigations suggest a very low likelihood of encountering such features. Such features would represent potential contaminant transport pathways (directly to public water abstractions) and have been raised as a concern by the EA (and PW). Although no dissolution features have been identified within Sections 1, 2 and 3 of there may be features present which are as yet unidentified.	**Agreed as at Deadline 7**

Ref.	Description of matter	Agreed Position	RAG
	cable trench excavation works in Sections 1, 2 and 3.	A catalogue of detailed descriptions of mitigation measures will be agreed with PW and the EA prior to construction of Sections 1, 2 and 3 of the Oder Limits. A list of possible measures have been included in Section 6.4.3.4 of the OOCEMP (as per latest revision as referenced within Table 2.2). The requirement for the submission of a Construction Environment Management Plan and other associated documentation in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	
Mitigation – Landfall			
EA 3.1.6.1	Requirement for dewatering/abstraction license	As stated within Section 19.6.4.57 of ES Chapter 19 Groundwater the excavations proposed in the superficial River Terrace Deposits, Storm Beach Deposits and Wittering Formation will likely intercept groundwater meaning trench construction will require groundwater dewatering. The detailed design will consider groundwater seepage rates into the proposed trenches and inform upon whether an abstraction licence and/or a discharge consent will be required. Paragraph 6.2.6.4 of the OOCEMP states that, should groundwater dewatering be substantial (greater than or equal to 20m3 /day), an abstraction licence and discharge consent will be required from the EA. Where appropriate, and where Environmental Permits are required in addition and separate to the DCO as detailed in the Other Consents and Licences document, detailed information for the relevant Environmental Permitting will be submitted to the EA for review and approval and should follow the construction principles outlined within Section 5.6 and 5.7 of the OOCEMP (as per latest revision as referenced within Table 2.2).	Agreed as at Deadline 1
Appendix 19.3: The Hydrogeology of Kings Pond and Denmead Meadows			
EA 3.1.7.1	Possible presence of karst dissolution features around Kings Pond, vulnerability of PW sources and control of activities in Denmead Meadows	As stated within Section 6.4.3. of the OOCEMP (as per latest revision as referenced within Table 2.2) it is agreed that the conceptual model developed by the BGS indicates that karst is likely to be present in low-lying areas around Kings Pond. Groundwater sources (boreholes and springs) are vulnerable to contamination from surface when: • There is no overlying geology; • The water table is close to surface; • The groundwater catchment is small; and • Groundwater flow paths are short. These are characteristics of karst aquifers and it follows that the Bedhampton and Havant springs are vulnerable to contamination. Therefore, project activities in the area of Denmead Meadows need to be carefully controlled. The requirement for the submission of a Construction Environment Management Plan and other associated documentation in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1

Ref.	Description of matter	Agreed Position	RAG
EA 3.1.7.2	Baseline data – Kings Pond Meadow	With reference to OW2.12.3 of the Examining Authorities further written questions (PD-031) the baseline data in the proximity of Kings Pond Meadow are considered to be adequate to ensure a robust assessment and the samples taken from exploratory holes at Soake Farm and Hilcrest are considered to be suitable proxies.	**Agreed as at Deadline 7**
Supplementary Karst Report			
EA 3.1.8.1	Proposed mitigations for impacts related to karst dissolution features	The Supplementary Karst Report (Appendix 7 of the ES Addendum) proposed mitigation measures for dealing with impacts related to the presence of karst dissolution features. These mitigation measures are set out in Section 6.4.3 of the OOCEMP (as per latest revision as referenced within Table 2.2) and the UK Source Protection Zone 1 Generic Method Statement (Appendix 7 of the OOCEMP). The requirement for the submission of a Construction Environment Management Plan and other associated documentation in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
Onshore Outline Construction Environmental Management Plan			
EA 3.1.9.1	OOCEMP comments	During the Relevant Representation process the EA made various comments with regards to the OOCEMP submitted with the DCO application, which included: 1. Limited reference to groundwater (in particular SPZ1, and ES Groundwater Position Statements) 2. Piling Works Risk Assessment 3. Listed receptors 4. Spill management procedure 5. Permits 6. Drilling fluid losses The Applicant has reviewed the comments and provided supplementary information to the OOCEMP as discussed and agreed to against specific items within this SoCG. All related content within the OOCEMP (as per latest revision as referenced within Table 2.2) is agreed. The requirement for the submission of a Construction Environment Management Plan and other associated documentation in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	**Agreed as at Deadline 7**
Residual Effects			
EA 3.1.10.1	Residual effects - groundwater	It is agreed that Section 19.8 and Table 19.7 of ES Chapter 19 Groundwater clearly identifies the residual effects of the Proposed Development.	Agreed as at Deadline 1

3.2. ES CHAPTER 20: SURFACE WATER RESOURCES AND FLOOD RISK & ASSOCIATED APPENDICIES

Table 3.2 – Surface Water Resources and Flood Risk

Ref.	Description of matter	Agreed Position	RAG
Baseline and Methodology			
EA 3.2.1.1	Area of Study - Surface Water Resources and Flood Risk	The area of study identified in section 20.1.2 of ES Chapter 20 Surface Water Resources and Flood Risk is agreed.	Agreed as at Deadline 1
EA 3.2.1.2	Baseline – Surface Water Resources and Flood Risk	The baseline environment identified in section 20.5 of ES Chapter 20 Surface Water Resources and Flood Risk is agreed. It is also agreed that the identified sensitive receptors in section 20.6 have been adequately identified.	Agreed as at Deadline 1
EA 3.2.1.3	Assessment Methodology – Surface Water Resources and Flood Risk	It is agreed that section 20.4 of ES Chapter 20 Surface Water Resources and Flood Risk clearly outlines the approach to creating the baseline and assessing impacts of the development in line with advice from the EA (section 20.3 of ES Chapter 20 Surface Water Resources and Flood Risk and Appendix 20.1).	Agreed as at Deadline 1
Predicted Impacts			
EA 3.2.2.1	Predicted Impacts – Surface Water Resources and Flood Risk	It is agreed that the predicted impacts as set out in section 20.7 of ES Chapter 20 Surface Water Resources and Flood Risk clearly outline the impacts following embedded mitigation measures.	Agreed as at Deadline 1
Mitigation - Converter Station Area			
EA 3.2.3.1	Surface Water (Construction)	(Additional mitigation) Principles of temporary surface water run-off management during construction is detailed within section 6.3.4. of the OOCEMP (as per latest revision as referenced within Table 2.2). For further detail refer to Table 3.3.	For Information – Refer to Table 3.3 for further detail.
EA 3.2.3.2	Surface Water (Design Principles)	(Embedded mitigation) Principles of the surface water drainage strategy are provided in Section 2 of the Surface Water Drainage and Aquifer Contamination Strategy (Appendix 3 to the DAS). For further detail refer to Table 3.3.	For Information – Refer to Table 3.3 for further detail.
Mitigation – Onshore Cable Corridor			

Ref.	Description of matter	Agreed Position	RAG
EA 3.2.4.1	Watercourse Crossings (Construction & Design Principles)	(Embedded & additional mitigation) The principles for Main River watercourse crossings are detailed in ES Appendix 20.3 (Watercourses Summary), section 20.7 (embedded mitigation) and 20.9 (mitigation and enhancement) of ES Chapter 20 Surface Water Resources and Flood Risk and are replicated within section 5.7 of the OOCEMP and section 6.4.4. of the DAS (as per latest revisions as referenced within Table 2.2). Watercourse crossing design principles included within the DAS, with construction principles included within the OOCEMP and are supported by the EA. The requirement for the submission of detailed design in relation to all works, which accord with the DAS, is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP, is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**). Where appropriate, and where Environmental Permits are required in addition and separate to the DCO as detailed in the Other Consents and Licences document, detailed information for the relevant Environmental Permitting will be submitted to the EA for review and approval and should follow the construction principles outlined within Section 5.7 of the OOCEMP (as per latest revision as referenced within Table 2.2). See **EA 3.2.7.1** for more information with regards to watercourse crossings and **EA 3.2.10.2** for more information in relation to Environmental Permits.	Agreed as at Deadline 1
EA 3.2.4.2	Works within Flood Zone 2 & 3 (Construction)	(Embedded & additional mitigation) The principles for works located within Flood Zone 2 and Flood Zone 3 are detailed in section 6 of the ES Appendix 20.4 Flood Risk Assessment and as supplemented by the ES Addendum Appendix 8 Flood Risk Assessment Addendum, section 20.7 (embedded mitigation) and 20.9 (mitigation and enhancement) of ES Chapter 20 Surface Water Resources and Flood Risk and are replicated within section 5.7 of the OOCEMP (as per latest revision as referenced within Table 2.2). Construction principles included within the OOCEMP are supported by the EA. The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP, is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**). Where appropriate, and where Environmental Permits are required in addition and separate to the DCO as detailed in the Other Consents and Licences document, detailed information for the relevant Environmental Permitting will be submitted to the EA for review and approval and should follow the construction principles outlined within Section 5.7 of the OOCEMP (as per latest revision as referenced within Table 2.2). See **EA 3.2.10.2** for more information in relation to Environmental Permits.	Agreed as at Deadline 1
EA 3.2.4.3	Works Adjacent/ Under Flood Defences (Construction & Design Principles)	(Embedded & additional mitigation) The principles for works within 8 meters of a fluvial watercourse/ flood defence and 16m of a tidal watercourse/ flood defence and works crossing under flood defences are detailed in section 6 of the ES Appendix 20.4 Flood Risk Assessment and as supplemented by the ES Addendum Appendix 8 Flood Risk Assessment Addendum, section 20.7 (embedded mitigation) and 20.9 (mitigation and enhancement) of ES Chapter 20 Surface Water Resources and Flood Risk and are replicated within section 5.7 of the OOCEMP and section 6.4.4. of the DAS (as per latest revisions as referenced within Table 2.2). Design principles for works adjacent/ under flood defences are included within the DAS, with construction principles included within the OOCEMP and are supported by the EA. The requirement for the submission of detailed design in relation to all works, which accord with the DAS (including the Flood Risk Assessment), is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP, is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1

Ref.	Description of matter	Agreed Position	RAG
		Where appropriate, and where Environmental Permits are required in addition and separate to the DCO as detailed in the Other Consents and Licences document, detailed information for the relevant Environmental Permitting will be submitted to the EA for review and approval and should follow the construction principles outlined within Section 5.7 of the OOCEMP (as per latest revision as referenced within Table 2.2). See **EA 3.2.10.2** for more information in relation to Environmental Permits.	
Mitigation - Landfall			
EA 3.2.5.1	Tidal Flood Risk Management – ORS (Design Principles)	(Embedded & additional mitigation) In-built tidal flood risk mitigation for the Optical Regeneration Station(s) ("ORS"), which is (are) located within the tidal Flood Zone 3 extent following an update to the Flood Map for Planning in January 2020, is detailed within the ES Addendum Appendix 8 Flood Risk Addendum. The in-built tidal flood risk mitigation measures presented within the ES Appendix 20.4 Flood Risk Assessment are now supplemented by those within section 4 of the ES Addendum Appendix 8 Flood Risk Addendum and embedded into section 5.5.2 of the DAS. The requirement for the submission of detailed design in relation to all works, which accord with the DAS (including the Flood Risk Assessment), is secured via Requirement 6 of the dDCO (see EA 3.4.1.1). These principles are supported by the EA, see **EA 3.2.8.1** for further details in relation to the Flood Risk Assessment and Flood Risk Assessment Addendum.	Agreed as at Deadline 1
Appendix 20.2: Onshore Water Framework Directive			
EA 3.2.6.1	Onshore Water Framework Directive	Based on the principles in ES Appendix 20.3 (Watercourses Summary) and Section 5.7 of the OOCEMP (as per latest revision as referenced within Table 2.2) it has been agreed that the Main River watercourse crossings would not have a significant impact upon Water Framework Directive features. The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP, is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
Appendix 20.3: Watercourses Summary			
EA 3.2.7.1	Main River Watercourse Crossing	The principles for Main River watercourse crossings are detailed in ES Appendix 20.3 (Watercourses Summary), section 20.7 (embedded mitigation) and 20.9 (mitigation and enhancement) of ES Chapter 20 and are replicated within Section 5.7 of the OOCEMP and Section 6.4.4 of the DAS (as per latest revisions as referenced within Table 2.2). Where: Use of HDD supported on open watercourses, including crossing of: a) Soake Farm East (Main River) [WC.02] – Kings Pond (HDD) HDD-5; b) Broom Channel (Transitional/ Tidal Watercourse) [WC.13] – Langstone Harbour (HDD) HDD-3. Use of open trench supported over culverts, including crossing of: a) Old Park Farm (Main River) [WC.04] – Carriageway Culvert; b) North Purbrook Heath (North) (Main River) [WC.09] –Carriageway Culvert; and	Agreed as at Deadline 1

Ref.	Description of matter	Agreed Position	RAG
		c) Great Salterns Drain (Main River) [WC.14] –Carriageway Culvert. Watercourse crossing design principles included within the DAS, with construction principles included within the OOCEMP and are supported by the EA. The requirement for the submission of detailed design in relation to all works, which accord with the DAS, is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP, is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**). It is acknowledged that culverts are critical assets and as such the methodology of such works will require EA approval via an environmental permit, HDD works under watercourses will also require EA approval or exemption of an environmental permit. Whilst the EA cannot guarantee approval of permits until all permit application information, with full details of the proposed construction methodology, has been submitted; the Applicant and EA are in agreement of the general principles to be adopted with regards to open trench works over Main River culverts and HDD works under open channel Main Rivers to ensure there is unlikely to be any impediment to a permit/exemption being provided to enable construction of the Proposed Development. Where appropriate, and where Environmental Permits are required in addition and separate to the DCO as detailed in the Other Consents and Licences document, detailed information for the relevant Environmental Permitting will be submitted to the EA for review and approval and should follow the design principles included within section 6.4.4 of the DAS and construction principles as outlined within Section 5.7 of the OOCEMP (as per latest revision as referenced within Table 2.2). See **EA 3.2.10.2** for more information in relation to Environmental Permits.	
Appendix 20.4: Flood Risk Assessment and Flood Risk Assessment Addendum			
EA 3.2.8.1	Flood Risk Assessment & Flood Risk Assessment Addendum	The ES Appendix 20.4 Flood Risk Assessment is supplemented by the ES Addendum Appendix 8 Flood Risk Assessment Addendum, of which the assessment methodology including consideration of climate change, on and off site impacts and proposed mitigations relevant to the tidal and fluvial environment are supported by the EA. Proposed inbuilt design principles are included within the DAS with other construction mitigation measures within the OOCEMP. The requirement for the submission of detailed design in relation to all works, which accord with the DAS (including the Flood Risk Assessment), is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP, is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
Onshore Outline Construction Environmental Management Plan			
EA 3.2.9.1	Surface Water Resources & Flood Risk Management (Construction)	Whilst the permitting process will be completed after detailed design the general principles in relation to the surface water resources and flood risk environment are as per ES Appendix 20.3 (Watercourses Summary), ES Chapter 20 Surface Water Resources and Flood Risk, Appendix 20.2 (Onshore WFDa) have been embedded into the OOCEMP (primarily within Section 5.7, as per latest revision as referenced within Table 2.2) and are acceptable in principle to the EA. The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP, is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1

Ref.	Description of matter	Agreed Position	RAG
		Where appropriate, and where Environmental Permits are required in addition and separate to the DCO as detailed in the Other Consents and Licences document, detailed information for the relevant Environmental Permitting will be submitted to the EA for review and approval and should follow the design principles included within section 6.4.4 of the DAS and construction principles as outlined within Section 5.7 of the OOCEMP (as per latest revision as referenced within Table 2.2). See **EA 3.2.10.2** for more information in relation to Environmental Permits.	
EA 3.2.10.1	Flood Risk Management (Operation)	Principles for flood risk management for inclusion within the Health and Safety File during operation are provided within the ES Appendix 20.4 Flood Risk Assessment and as supplemented by the ES Addendum Appendix 8 Flood Risk Assessment Addendum, ES Chapter 20 Surface Water Resources and Flood Risk, and Appendix 20.2 are embedded in paragraph 4.1.3.16 of the OOCEMP (as per latest revision as referenced within Table 2.2) for development by the contractor and acceptable in principle to the EA. The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP, is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.2.10.2	Environmental Permits/Licences Overview	It is agreed that Environmental Permitting (under the Environmental Permitting (England and Wales) Regulations 2016) is separate to, and in addition to any grant of DCO consent. Whilst the permitting process will be completed after detailed design the general principles in relation to the surface water resources and flood risk environment as per the ES Appendix 20.4 Flood Risk Assessment and as supplemented by the ES Addendum Appendix 8 Flood Risk Assessment Addendum, ES Appendix 20.3 (Watercourses Summary), ES Chapter 20 Surface Water Resources and Flood Risk, Appendix 20.2 (Onshore WFDa) of which; design principles have been embedded into the DAS and construction principles have been embedded into the OOCEMP which are considered acceptable in principle to the EA. Whilst the EA cannot guarantee approval of permits until all permit application information, with full details of the proposed construction methodology, has been submitted; the Applicant and EA are in agreement of the general principles to be adopted to ensure there is unlikely to be any impediment to a permit/exemption being provided to enable construction of the Proposed Development. These design and construction principles will be used as the basis to ensure that the predicted impacts are managed to reduce any residual effects. The requirement for the submission of detailed design in relation to all works, which accord with the DAS (including the Flood Risk Assessment), is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP, is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**). Consents or exemptions are expected to be required for the following consents/ permits: a) Temporary dewatering consent; b) Flood risk activities permit – environmental permits; and c) Discharges to surface water and groundwater: environmental permits. Activities expected to require the above noted additional permits and consents are summarised below: a) Temporary and/ or permanent works within 16 m and 8 m of a tidal and fluvial Main River or toe of associated flood defences;	Agreed as at Deadline 1

Ref.	Description of matter	Agreed Position	RAG
		b) Temporary and/ or permanent works within the tidal and fluvial flood plain; c) Temporary and/ or permanent works through, under or above a Main River watercourse; and d) Temporary and/ or permanent works requiring temporary dewatering of surface water or groundwater. Where appropriate, and where Environmental Permits are required in addition and separate to the DCO as detailed in the Other Consents and Licences document, detailed information for the relevant Environmental Permitting will be submitted to the EA for review and approval and should follow the design principles included within section 6.4.4 of the DAS and construction principles as outlined within Section 5.7 of the OOCEMP (as per latest revision as referenced within Table 2.2) under the Environmental Permitting (England and Wales) Regulations 2016.	
Residual Effects			
EA 3.2.11.1	Residual effects – surface water resources and flood risk	It is agreed that section 20.10 and Table 20.12 of ES Chapter 20 Surface Water Resources and Flood Risk is agreed.	Agreed as at Deadline 1

3.3. CONVERTER STATION SURFACE WATER DRAINAGE AND AQUIFER CONTAMINATION MITIGATION STRATEGY

Table 3.3 – Converter Station Surface Water Drainage and Aquifer Contamination Mitigation Strategy

Ref.	Description of matter	Agreed Position	RAG
3.3.1 Karst Feature			
EA 3.3.1.1	Known Karst Features	Following conductivity and resistivity geophysical survey three karst feature were identified within Converter Station Area. Two of them are within proposed Converter Station option B(i) and B(ii) and the other located approximately 500m southeast of the Converter Station option B. Following the geophysical survey, the features were further investigated for infilling by cone penetration testing (CPT), the CPT indicated the karstic features to be (naturally) infilled with a Grade D Chalk. If the nature of infilling material requires proving, further sample collections will be required or agreement with relevant authority will be sought to confirm that the CPT data sufficiently supports the interpretation. This should be reviewed at detailed design stage to inform any required mitigation measures. The control of surface water drainage and drainage within the ground shall be carefully considered during detailed drainage design by the Contractor to mitigate increasing risk of dissolution of bedrock and formation of karstic features. It was agreed by EA that, following further investigation by the Contractor, if necessary, ground stabilisation and treatment by grouting will be the preferred solution. To minimise influence of grouting on the SPZ1, the Contractor in accordance with CIRIA C574 shall propose a ground mix that is of a suitable composition, control and cure time to responsible local authority for review and comment (in consultation with the EA and PW). These measures are included within the Surface Water Drainage and Aquifer Contamination Strategy (Appendix 3 of the DAS). The requirement for the submission of detailed design in relation to all works, which accord with the DAS (including the Surface Water Drainage and Aquifer Contamination Strategy), is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1

Ref.	Description of matter	Agreed Position	RAG
EA 3.3.1.2	Proposed site platform level and Earthworks Design Approach	The indicative proposed 84.80m AOD and 85.10m AOD site platform level and finished building level respectively were calculated from the recommendation of the flood risk assessment and, the site-specific initial cut and fill study: • To ensure the platform level lies within Structureless Chalk to minimise impact on the SPZ1. • To make allowance within structureless chalk for installation of below ground services such as drainage, low-voltage ('LV') and high-voltage ('HV') cable ducts, drawpits and trenches. • To maximise retention of the excavated material on site to minimise offsite disposal l and a lower environmental impact. • The preliminary ground investigation data supports the proposed platform level and below ground services lie within the Structureless Chalk. To mitigate the risk of Aquifer contamination, the bulk earthwork shall remain within the Structureless Chalk. The Contractor shall review and, if necessary, shall adjust the proposed Converter Station platform level at the detailed design stage to suit the design requirement of the below ground services such as LV and HV ducts and draw pits and drainage to ensure all excavations will remain within the structureless chalk and the structured chalk will not be exposed. This requirement shall be reflected in the Contractor earthwork management plan which will be prepared in consultation with the responsible local authority. To ensure the building height will not exceed the parameter envelope assessed, Requirement 5(2) secures that in accordance with the Converter Station and Telecommunications Buildings Parameter Plans Option B(i) and Option B(ii), [APP-012] no building within Work No. 2 may be a height which is above +111.100 metres above ordnance datum (excluding the lightning masts which may not be a height which is above +115.100 meters above ordnance datum). Amendments would be made to roof profile design to address any refinement to the site level for the Converter Station and ensure the building height does not exceed the parameter envelope assessed.	Agreed as at Deadline 1
EA 3.3.1.3	Unknown Karst Features	The Contractor shall monitor the ground during bulk earthwork for any unknown and unidentified karst features. As part of site bulk earthwork management and sequencing of work, the Contractor shall develop a risk assessment methodology in consultation with the responsible local authority (in consultation with the EA and PW) as a basis for notifiable and un-notifiable karst features to use during bulk earthwork. As outlined within the UK Source Protection Zone 1 Generic Method Statement (Appendix 7 of the OOCEMP) it is agreed with the EA (and PW) that the Contractor shall follow an agreed communication protocol. The Contractor shall prepare and submit information relating to the karst features including, but not limited to, exact location, type and agreed method of treatment as a record to the Employer and the responsible local authority, EA and PW at the end of the bulk earthwork. In general, the expectation is to treat karst features same as **EA 3.3.1.1**. The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	**Agreed as at Deadline 7**
3.3.2 Existing known underground services			
EA 3.3.2.1	Existing underground services (Surface and Foul drainage)	There are no known records of existing foul drainage network and surface water drainage network with the Converter Station Area or in close proximity.	Agreed as at Deadline 1

Ref.	Description of matter	Agreed Position	RAG
3.3.3 Flood Risk Management			
EA 3.3.3.1	Flood Risk – Converter Station	Pluvial flood risk is to be managed in accordance with the Surface Water Drainage and Aquifer Contamination Strategy (Appendix 3 of the DAS) where Section 2 covers the principles as discussed and agreed alongside PW and Hampshire County Council Lead Local Flood Authority ('HCC LLFA'). It is agreed that these principles are acceptable to the EA with reference to the proposed drainage principles discussed hereafter in relation to protection against aquifer contamination. The requirement for the submission of detailed design in relation to all works (including written details regarding the Converter Station Area surface water drainage), which accord with the DAS (including the Surface Water Drainage and Aquifer Contamination Strategy), is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
3.3.4 Drainage			
EA 3.3.4.1	Surface Water Drainage System – Converter Station	There is no record of any known existing surface water drainage sewer network within the Converter Station Area or in close proximity to the Order Limits. The principles of the surface water drainage design have been discussed and agreed with the EA (PW and HCC LLFA) and are included in sections 2.4 to 2.9 of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy (Appendix 3 of the DAS). The requirement for the submission of detailed design in relation to all works (including written details regarding the Converter Station Area surface water drainage), which accord with the DAS (including the Surface Water Drainage and Aquifer Contamination Strategy), is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.3.4.2	Foul Drainage System – Converter Station	There is no record of any known existing foul drainage network within the Converter Station Area or in close proximity to the Order Limits. The principles of the foul water drainage design have been discussed and agreed with the EA (and PW) and are included in section 3 of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy (Appendix 3 of the DAS). The detailed design will be fully developed in accordance with Section 3 of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy (Appendix 3 of the DAS). The requirement for the submission of detailed design in relation to all works (including written details regarding the Converter Station Area foul drainage system), which accord with the DAS (including the Surface Water Drainage and Aquifer Contamination Strategy), is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.3.4.3	Oily Water Drainage System – Converter station	The principles of the oily water drainage design have been discussed and agreed with the EA (and PW) and are included in Section 4 of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy (Appendix 3 of the DAS). It is accepted that the information on the Converter Station design is submitted in outline for detailed approval post grant of the DCO. This will include the final design of the oily water drainage and size of dump tank(s) which will be defined during detailed design of the system. The requirement for the submission of detailed design in relation to all works (including written details regarding the Converter Station Area Oil Containment and Oily Water Drainage and associated documentation/ management plans), which accord with the DAS	Agreed as at Deadline 1

Ref.	Description of matter	Agreed Position	RAG
		(including the Surface Water Drainage and Aquifer Contamination Strategy), are secured via Requirement 6 and Requirement 12 of the dDCO (see **EA 3.4.1.1**).	
EA 3.3.4.4	Active fire suppression system	Principles of Active fire suppression system have been discussed and agreed with the EA (and PW) and are included in Section 4.2.2 of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy (Appendix 3 of the DAS). The requirement for the submission of detailed design in relation to all works (including written details regarding the Converter Station Area Active fire suppression system and associated assessments/ management plans), which accord with the DAS (including the Surface Water Drainage and Aquifer Contamination Strategy), are secured via Requirement 6 and Requirement 12 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
3.3.5 SuDS and Water Quality System			
EA 3.3.5.1	Sustainable Drainage and Water Quality System	Surface water from oil containment areas and oily water areas will be directed through the proprietary system of an oil separator, with the use of SuDS to further reduce the hydrocarbon concentration of water discharged from the oil separator, prior to discharge via a soakaway to groundwater. The detailed design of these features will be in accordance with the description provided in the associated construction detail within Section 5 and the design drawings contained within Appendix 1 of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy (Appendix 3 of the DAS) (drawing reference AQD-WSP-OS-UK-DR-D-200140-141 & AQD-WSP-OS-UK-DR-D-200140-141). The requirement for the submission of detailed design in relation to all works (including written details regarding the Converter Station Sustainable Drainage and Water Quality System and associated assessments/ management plans), which accord with the DAS (including the Surface Water Drainage and Aquifer Contamination Strategy), are secured via Requirement 6 and Requirement 12 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.3.5.2	Pollution Prevention Principles	Pollution prevention principles, as set out in the Surface Water Drainage and Aquifer Contamination Mitigation Strategy (Appendix 3 of the DAS), deal with the different liquids and fuels on site that can contaminate the Aquifer if infiltrated directly or indirectly into the ground were discussed and agreed. For further information, refer to the Surface Water Drainage and Aquifer Contamination Mitigation Strategy (Appendix 3 of the DAS). The requirement for the submission of detailed design in relation to all works (including written details regarding the Converter Station Sustainable Drainage and Water Quality System and associated assessments/ management plans), which accord with the DAS (including the Surface Water Drainage and Aquifer Contamination Strategy), are secured via Requirement 6 and Requirement 12 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.3.5.3	Infiltration test	The drainage strategy principle of discharge via infiltration is shown to be suitable for this project to manage surface water runoff generated at the Converter Station Area up to the 1 in 100 year rainfall event with a 40% allowance for climate change, following receipt of the infiltration test results undertaken week of 16/11/20. The review of infiltration rates has now confirmed that the rates through the chalk are sufficient for this site and that the more restrictive infiltration rate is the proposed treatment filter media. As such, soil specifications have been recommended to make the treatment filter media appropriate to the drainage design and ensure an appropriate flow rate can be achieved. Further discussion with HCC LLFA has been undertaken and agreement to these principles has been reached during a meeting on 26/11/20 and as agreed has been reflected within the Surface Water Drainage and Aquifer Contamination Strategy (Appendix 3 to the DAS) (as per latest revision as referenced within Table 2.2). Additional evidence will be provided at detailed design to cover the detailed documentation required and in addition to demonstrate that the 1:30 year event has a half-drain time less than 24 hours. The	**Agreed as at Deadline 7**

Ref.	Description of matter	Agreed Position	RAG
		detailed design shall include proposals for planned maintenance of the treatment filter media to basins and soakaways to monitor contaminant build-up and specify contaminant levels at which filter media shall be cleaned or replaced. The requirement for the submission of detailed design in relation to all works (including written details regarding the Converter Station Sustainable Drainage and Water Quality System and associated assessments/ management plans), which accord with the DAS (including the Surface Water Drainage and Aquifer Contamination Strategy), are secured via Requirement 6 and Requirement 12 of the dDCO (see **EA 3.4.1.1**).	
3.3.6 Temporary Surface Water Management			
EA 3.3.6.1	Temporary Surface Water Management	Temporary surface water run-off management during construction has been discussed and agreed in principle by the EA (and PW). Information in this regard and recommended mitigation measures are included in Section 6.3.4. of the OOCEMP (as per latest revision as referenced within Table 2.2), which requires the Applicant to develop a temporary surface water run-off management strategy including construction methodologies to ensure the risk of flooding and contamination is controlled via appropriate mitigation measures. The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP, is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.3.6.2	Temporary Car Park	The temporary car park drainage design principles to mitigate risk of contamination to the aquifer are provided within the Indicative Temporary Carpark and Compound Drainage Layout and is agreed. The Indicative Temporary Carpark and Compound Drainage Layout was included as Appendix 6 to the OOCMEP (as per latest revision as referenced within Table 2.2) however will be moved to Appendix 6 of the Surface Water Drainage and Aquifer Contamination Strategy (Appendix 3 to the DAS) at Deadline 7. The requirement for the submission of detailed design in relation to all works (including the temporary car park and compound drainage), which accord with the DAS (including the Indicative Temporary Carpark and Compound Drainage Layout), is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).	**Agreed as at Deadline 7**
3.3.7 Foundation Design			
EA 3.3.7.1	Foundation Design	The extent of existing ground conditions and proposed foundation was discussed and agreed in principle with the EA (and PW) at a meeting on 18/06/2019. Considering the ground conditions encountered, piling is identified as the likely foundation design to be utilised subject to detailed design development post consent of the DCO. The use of pre-cast driven piles are likely to be one of the design options that will have the lowest impact on the chalk aquifer and restrictions set by PW around the SPZ1 designation. The requirement for the submission of detailed design in relation to the foundation solution, which accord with the DAS (including details within Section 7 (Foundation Solution) of the Surface Water Drainage and Aquifer Contamination Strategy), is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).	Agreed as at Deadline 1
EA 3.3.7.2	Preliminary Piling Risk Assessment.	The Preliminary Piling Risk Assessment is agreed with the EA. The Preliminary Piling Risk Assessment was included as Appendix 6 to the Surface Water Drainage and Aquifer Contamination Strategy (as Appendix 3 to the DAS) (as per latest revision as referenced within Table 2.2) however will be moved to Appendix 6 of the OOCEMP at Deadline 7.	**Agreed as at Deadline 7**

Ref.	Description of matter	Agreed Position	RAG
		The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP (including the Preliminary Piling Risk Assessment), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	
3.3.8 Onshore Outline Construction Environmental Management Plan (OOCEMP)			
EA 3.3.8.1	Mitigation	Following the amendments embedded into the OOCEMP (as per latest revision as referenced within Table 2.2), it is agreed that the document is acceptable and provides appropriate mitigation during the construction stage to address matter previously open for discussion and subsequently agreed within this SoCG. The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP (including the Preliminary Piling Risk Assessment), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	**Agreed as at Deadline 7**
3.3.9 Generic Method Statement (GMS)			
EA 3.3.9.1	Generic Method Statement	Following a meeting with PW, EA and HCC's LLFA on 05/082020, the UK Source Protection Zone 1 Generic Method Statement covering the following for converter station, HDD works, and onshore cable route was prepared: • Outline construction water management • Outline earthwork management plan • Outline construction karstic feature method statement • Outline construction sequencing • Communication statement and strategy • Preliminary dynamic contact list The Applicant shared a draft of the UK Source Protection Zone 1 Generic Method Statement with the EA on 30/10/2020. The EA reviewed the UK Source Protection Zone 1 Generic Method Statement and provided technical feedback and suggested refinements as part of a joint meeting between the Applicant, EA, PW and HCC's LLFA on 10/11/2020. An agreed draft of the UK Source Protection Zone 1 Generic Method Statement is now embedded as Appendix 7 to the OOCEMP (as per latest revision as referenced within Table 2.2). The requirement for the submission of a Construction Environment Management Plan and associated documentation in relation to all works, which accords with the OOCEMP (including the UK Source Protection Zone 1 Generic Method Statement), is secured via Requirement 15 of the dDCO (see **EA 3.4.1.1**).	**Agreed as at Deadline 7**
3.3.10 Design and Access Statement (DAS)			
EA 3.3.10.1	Design and Access Statement	The Surface Water Drainage and Aquifer Contamination Mitigation Strategy forms Appendix 3 to the DAS (as per latest revision as referenced within Table 2.2). Following the latest amendments to this document submitted at Deadline 6, it is agreed that the document is acceptable and provides for appropriate mitigations in relation to the Surface Water Drainage and Aquifer Contamination Mitigation Strategy to address matters previously open for discussion and subsequently agreed within this SoCG.	**Agreed as at Deadline 7**

Ref.	Description of matter	Agreed Position	RAG
		The requirement for the submission of detailed design in relation to all works, which accord with the DAS (including the Surface Water Drainage and Aquifer Contamination Strategy), is secured via Requirement 6 of the dDCO (see **EA 3.4.1.1**).	

3.4. DEVELOPMENT CONSENT ORDER REQUIREMENTS

Table 3.4 – DCO Requirements

Ref.	Description of matter	Agreed Position	RAG
EA 3.4.1.1	Draft DCO Requirements	The wording of the Requirements set out in Schedule 2 of the dDCO submitted at Deadline 7 ensures that EA and PW consultation, alongside the relevant planning authority approval, is appropriately provided for in relation to matters contained within this SoCG. Requirements set out in Schedule 2 relevant to this SoCG are summarised hereafter with reference to documents as they will sit at Deadline 7. The requirement for the submission of detailed design in relation to all works, which accord with the DAS and Flood Risk Assessment is secured via Requirement 6 of the dDCO where the DAS includes: • Appendix 3 Surface Water Drainage and Aquifer Contamination Strategy and associated appendices, including: ○ Appendix 3 Surface Water Drainage and Aquifer Contamination Strategy - Appendix 6 Indicative Temporary Carpark and Compound Drainage Layout (as appended within Appendix 3 of the DAS submitted at Deadline 7) The requirement for the submission of a Surface Water Drainage and Aquifer Contamination Management Plan and associated maintenance strategies/ manuals and emergency management plans, which accords with the Surface Water Drainage and Aquifer Contamination Strategy (Appendix 3 to the DAS) is secured via Requirement 12 of the dDCO. The requirement for the submission of a Construction Environment Management Plans, Method Statements and associated documentation in relation to all works, which accords with the OOCEMP, is secured via Requirement 15 of the dDCO where the OOCEMP includes: • Appendix 6 Preliminary Piling Risk Assessment (as appended within the OOCEMP submitted at Deadline 7) • Appendix 7 UK Source Protection Zone 1 Generic Method Statement.	**Agreed as at Deadline 7**

4. SIGNATURES

Ref.	Environment Agency	Aquind (the Applicant)
Signature	[redacted]	[redacted]
Printed Name	Anna Rabone	Kirill Glukhovskoy
Title	Sustainable Places Advisor	Managing Director
On behalf of	Environment Agency	Aquind Limited
Date	22 January 2021	22 January 2021