

## Welcome

**AQUIND Limited (AQUIND) is proposing to construct and operate an electricity interconnector between the south of England and Normandy in France, to be known as AQUIND Interconnector.**

As part of this consultation, we are inviting you to provide feedback on our proposals, explained in more detail on the following boards and within the consultation documents. We will carefully consider all responses before we submit an application for a Development Consent Order (DCO) to seek permission to build and operate AQUIND Interconnector in the UK.

Please take time to consider the consultation documents and materials available before providing us with your feedback. If you have any questions, please do not hesitate to approach a member of the project team.

## Why is AQUIND Interconnector needed?

AQUIND Interconnector will have the capacity to transmit up to 16,000,000 MWh of electricity annually or approximately 5% of Great Britain's total electricity consumption – enough to keep the lights on in up to 4 million British households.<sup>1</sup>

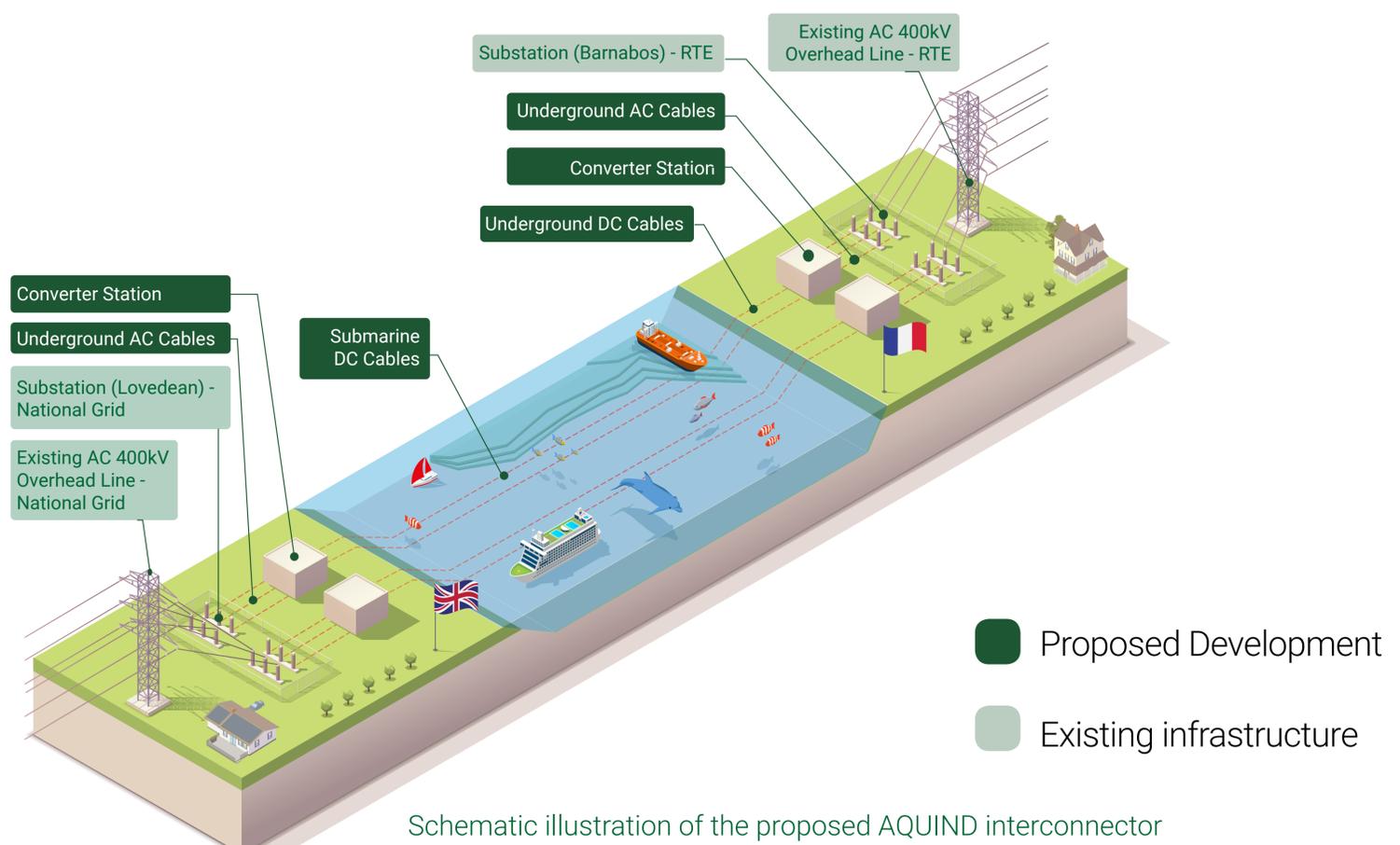
It will make a significant contribution to improving the security and sustainability of electricity supply and will help to make energy more affordable by improving competition and making Great Britain's energy market more efficient, as well as helping to fight climate change by integrating more renewable energy sources.

## How will AQUIND Interconnector work?

Electricity would be transmitted between Great Britain and France as High Voltage Direct Current (HVDC) using underground and marine cable, as DC is a more efficient means of transmitting electricity over long distances. Electricity transmitted as DC will need to be converted to Alternating Current (AC) at a Converter Station to connect the supply into the existing electricity grids of the respective countries.

## What are interconnectors?

Electricity interconnectors are the physical links which allow the transmission of electricity across borders.



Schematic illustration of the proposed AQUIND interconnector

<sup>1</sup>BEIS, Energy Consumption in the UK (ECUK) (2018): [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/729326/ECUK\\_Tables\\_2018.xlsx](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/729326/ECUK_Tables_2018.xlsx)

## How the proposals have evolved

We presented our emerging proposals to the local community at a series of consultation events in January 2018. The feedback received from residents and stakeholders has guided the work undertaken by the project team over the past year, in particular by the environmental and engineering teams.

### Listening and responding

#### What you told us

Feedback from the public and local planning authorities was received in respect of the proposed cable route, in particular around Milton Road and Eastern Road.

Feedback from the public and local planning authorities was received on the selection of the preferred Converter Station location near to the existing Lovedean substation, and in relation to the parameters and design principles for the Converter Station and visual mitigation measures.

#### What we've done

We have sought to identify alternative routes which take the cable installation away from these roads to minimise traffic disruption. As a result, there are multiple options for the cable route presented as part of this consultation that we are seeking feedback on.

We are now consulting on a single preferred location for the Converter Station, which includes greater detail about its proposed spatial parameters for the Converter Station and design principles to be imposed on the DCO which the final design will be required to be in accordance with.

Preliminary assessments have been carried out to identify measures to mitigate visual impact on the surrounding environment, and will be further refined as the proposals progress.

### What we would like your feedback on now

Certain elements of the project are considered to be fixed, while others remain open for comment.

### As part of this consultation, we would particularly welcome your views on the following:

#### Converter Station area:

- The design parameters;
- The proposed approach to mitigating visual impacts.

#### The onshore (underground) cable route:

- The options presented for individual sections of the onshore (underground) cable route;
- The approach to cable installation (e.g. traffic management, construction impacts, noise, parking, access to properties).

#### The marine cable route:

- The potential impact on marine users;
- The environmental considerations, timing and management of the works at the landfall.

## The story so far...

- **2014** – Work on AQUIND Interconnector begins by identifying that an interconnector between the UK and France would be the most efficient and beneficial given market conditions, the long term trends in European electricity supply and transmission and France's proximity to the UK.
- **2015** – National Grid confirms the existing Lovedean substation as the preferred connection point to the GB electricity network for AQUIND Interconnector.
- **2016** – AQUIND signs a connection agreement with National Grid to connect into the GB electricity network at the existing Lovedean substation and Ofgem grants an interconnector licence.
- **January 2018** – Public consultation on the emerging proposals for AQUIND Interconnector takes place.
- **April 2018** – AQUIND is awarded the Project of Common Interest (PCI) status by the European Commission.
- **July 2018** – The Secretary of State directs that AQUIND Interconnector should be treated as a Nationally Significant Infrastructure Project (NSIP).
- **February to April 2019** – AQUIND undertakes statutory consultation on its proposals in preparation for the submission of an application for a DCO.

## The Converter Station area

In 2015, National Grid confirmed their substation at Lovedean, near Waterlooville in Hampshire as the preferred substation which would connect AQUIND Interconnector to the national electricity network in Great Britain.

### What will be located at the Converter Station site?

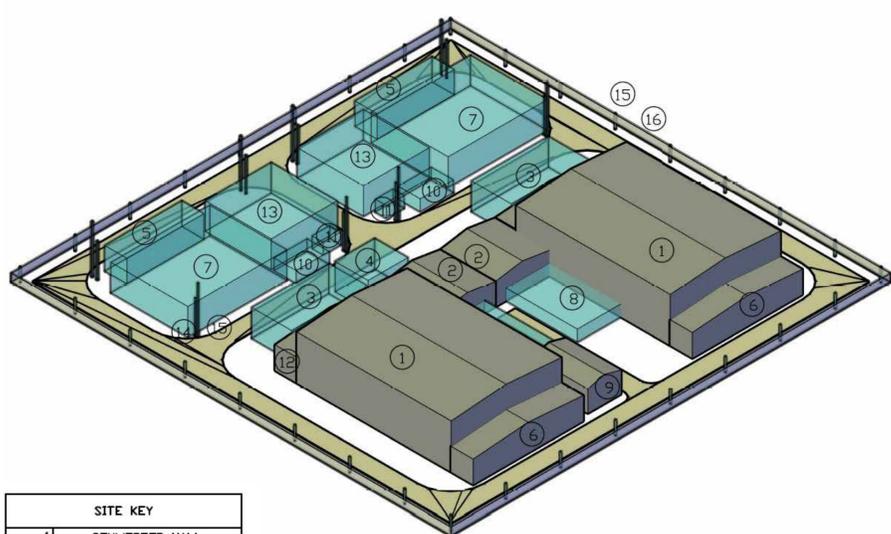
The Converter Station will be made up of a mix of buildings and outdoor electrical, together with internal roads and car parking. The Converter Station is expected to be approximately 4ha potentially as a 200m x 200m square. Depending on the final design, it may have a height of up to 26m. It will be contained within a security fenced compound and a new access road would be created from Broadway Lane.

In addition, HVAC cables (of up to 400m in length), together with one fibre optic cable, will be installed to connect the Converter Station to the existing National Grid Lovedean substation.

Two telecommunications buildings with a footprint of approximately 5m x 10m will be required to house equipment for the fibre optic cable.

### Selecting the Converter Station site

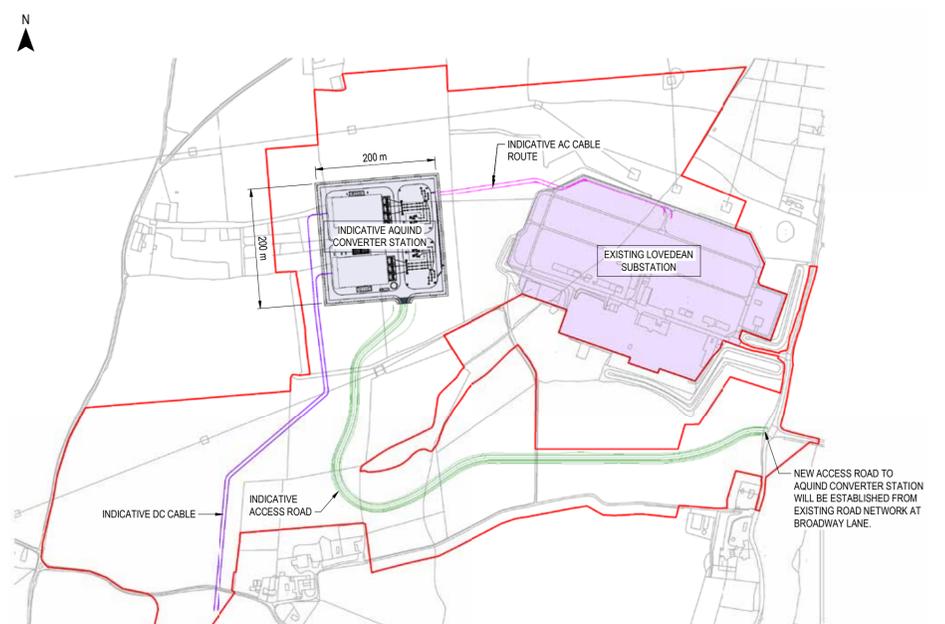
1. Four potential sites were initially identified in the vicinity of the existing Lovedean substation where the required Converter Station could be located.
2. This was reduced to two sites following a first stage review. Further detailed work was undertaken on the remaining two Converter Station site options, focusing on engineering and environmental considerations.
3. The two remaining sites (known as 'Option A' and 'Option B') were consulted on in January 2018 and the feedback indicated that the local community favoured the western option ('Option B').
4. Option B was identified as the preferred location for the Converter Station following further assessment against a range of environmental, planning and technical considerations.
5. The area within which the proposed Converter Station will be located is now fixed, although the precise location within that area remains to be determined.



Indicative converter station layout

SITE KEY	
1	CONVERTOR HALL
2	CONTROL BUILDING
3	TRANSFORMERS
4	SPARE TRANSFORMER
5	AC CABLE TERMINATIONS
6	DC CABLE TERMINATIONS
7	400kV SWITCHYARD
8	VALVE COOLERS
9	SPARES BUILDING
10	STANDBY GENERATOR
11	AUXILIARY TRANSFORMER
12	REACTORS
13	FILTERS
14	LIGHTNING MAST
15	LIGHTING COLUMN
16	PERIMETER FENCE

 BUILDING  
 LOCATION OF OUTDOOR ELECTRICAL EQUIPMENT



Indicative location of the Converter Station

## The Converter Station design

AQUIND recognises the sensitivities associated with the visual impact of the Converter Station and would welcome feedback on the approach to the design and landscape mitigation.

### The approach to design

It is important that some design flexibility is retained for when a construction contractor is appointed. To achieve that flexibility, the final design of the Converter Station will be confirmed after the grant of the DCO, and will be required to be in accordance with the spatial parameters and design principles set out in the DCO.

We are committed to delivering the most aesthetically appropriate design solution possible, and recognise the importance of setting clearly defined parameters.

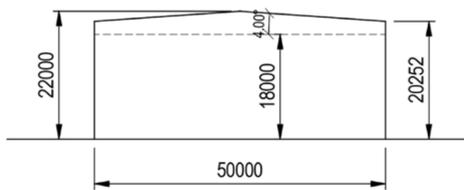
We are consulting on the spatial parameters and 'design principles' which the final design will be required to comply with. The detailed design would then be approved via a condition of the DCO, known as a Requirement.

### The design principles

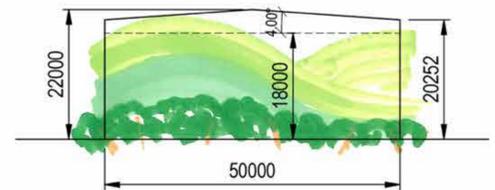
The principles that are informing the development of the design principles and parameters which the final design of the Converter Station will be required to comply with include:

- Built form to be kept to a minimum to minimise visual impact - width, length and height to suit technical requirements i.e. 18m internal clear height across the 2 halls;
- The highest external roof point will be no higher than 26m, currently anticipated at 22m;
- Landscape mitigation will be provided in order to screen the building as effectively as possible. Locations for proposed mitigation will be confirmed, taking into account illustrative design information;
- Colours for the external facade of the Converter Station buildings will be selected from a limited and specified palette, informed by the local surrounding environment;
- Colours could be pixelated or banded horizontally or vertically to break up the built form and wherever possible reflect the changing colours of the seasons; and
- Colours for the upper section of the building may be selected to seemingly blend into the skyline.

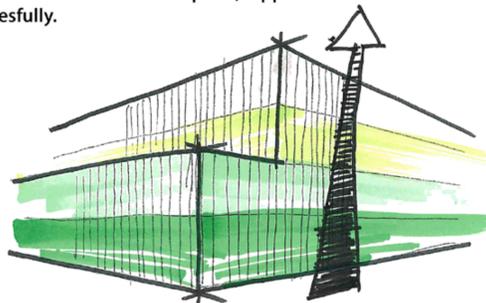
### Concept development



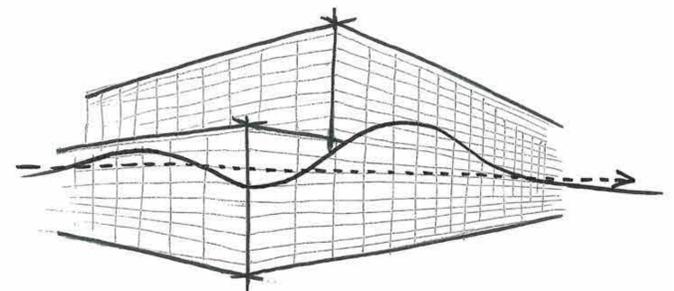
A study was carried out to determine the roof type which was most appropriate in order to keep the buildings height to a minimum. It was determined that a low pitch, hipped roof achieved this most successfully.



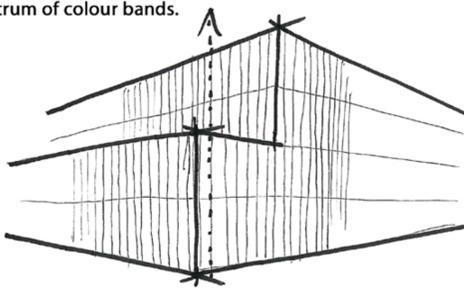
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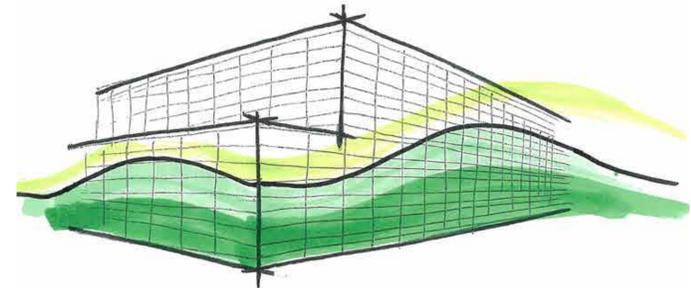
The design concept aims to ground the building into its surroundings whilst softening the buildings appearance as it elevates. The above precedent illustrates how this can be achieved with the use of a spectrum of colour bands.



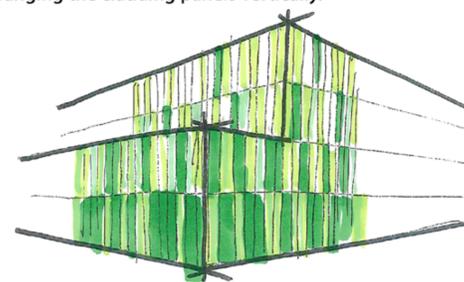
The design concept aims to ground the building into its surroundings whilst softening the buildings appearance as it elevates. The intention is to reflect the iconic undulations of the South Downs within the building design.



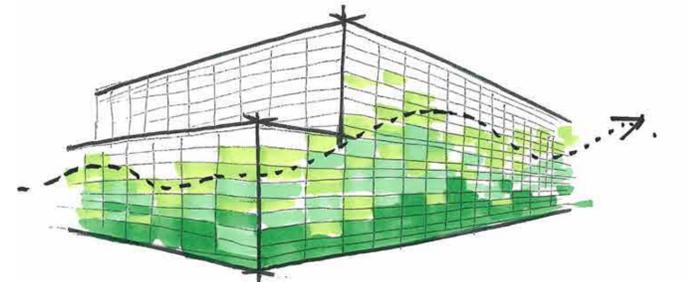
To enhance the design and introduce a tonal quality to the building when viewed from both near and far a vertical force can be introduced by arranging the cladding panels vertically.



To allow the best representation of the gentle undulations of the South Downs the cladding panels can be laid horizontally. In order to allow the building to subtly merge into the sky pastel colour bands can be introduced.



The vertical cladding panels give the opportunity to pixelate the bands of colour. This creates a tonal affect thereby softening each colour band and bringing depth to the design.



By pixelating the horizontal cladding panels a tonal effect is produced thereby softening/breaking up the colour undulations and helping the building blend into its surroundings more affectively.

Indicative design concepts

## The Converter Station landscape principles

In consultation with the local planning authorities and the South Downs National Park Authority (SDNPA) we have prepared an initial landscaping plan for the Converter Station. This identifies measures to reduce potential landscape and visual effects and we would welcome your feedback on this.

### The landscape principles

The following principles, which have been agreed with the local planning authorities, will be used to inform the micro-siting of the proposed Converter Station within the Converter Station Area and influence the scheme landscape design:

- Considering as a whole the different effects of all elements of the development: proposed Converter Station, access track and cable connections;
- Integrating the development and associated infrastructure into the surrounding topography;
- Seeking to cut the proposed Converter Station construction platform into the gentle hill slope where possible, to reduce the ridge level of the building;
- Minimising the loss of existing vegetation of ecological value (particularly long established hedgerows and veteran trees);
- Introducing new planting which is sympathetic to the surrounding landscape character and, mindful of local ecology, reflective of native species;
- Considering the soil types, seeding mixes and management regimes to create species-rich meadows and glades within areas of new screen planting;
- Considering the potential for introducing offsite planting in discussion with adjacent land owners to reduce effects of middle and long-distance views; and
- Considering height, mass, colour, texture and nature of materials for the buildings and associated infrastructure which is sensitive to the immediate surroundings.



Indicative mitigation planting around proposed converter station



Existing view



View at 0 years post construction (height at 22m)



View at 10 years post construction



View at 20 years post construction

## Constructing and operating the Converter Station

### Construction

The construction of the Converter Station is expected to take place between 2021 and 2023, based on the current programme.

During construction there will be a need for a temporary construction compound (approx. 4-5 hectares) within the Converter Station area. This area will be restored to its previous state once the construction is complete.

Material excavated during earthworks will be reused in construction and screening where possible. This will help reduce the number of vehicle movements during construction.

At the peak of construction, up to 45 two-way HGV movements per day are envisaged, with up to 10 telescopic cranes and approximately 150 personnel on site. Some abnormal loads will be required to deliver plant and heavy items. Measures to deal with these vehicles will be included in a Construction Traffic Management Plan, to be developed in conjunction with Hampshire County Council.

### Operation

- **Noise** - AQUIND recognises the importance of minimising noise impacts arising from the operation of the Converter Station. A preliminary optioneering assessment of the potential for noise impacts identified that the potential for impacts from operational noise associated with the western option (Option B) option was less than the other options considered, taking into account the surrounding environment.

The Converter Station will generate some noise (predominantly from the transformers). A further assessment of noise levels and how these can be mitigated has been carried out. Mitigation measures (such as acoustic enclosures, sound shields, acoustic lining and acoustic barriers) will be included to reduce noise impacts if necessary.

The proposed mitigation measures will be subject to further assessment to ensure that the noise limits agreed with the relevant local planning authorities are achieved.

### Maintenance

The design life of all equipment, buildings and infrastructure would be up to 40 years. After approximately 15-20 years, the control system and proposed converter technology is normally updated and overhauled.

The cable systems that link the converter station to the substation are reliable and require very little maintenance.

### Decommissioning

The decommissioning of the Converter Station would involve each item of equipment being removed for recycling or disposal, as appropriate. Following decommissioning, the Converter Station location would be reinstated to its previous use as far as practicable.

- **Lighting** - Normal night-time operation will not require lighting of the site, although lighting columns will be installed along the perimeter fence and around the outdoor equipment areas for emergency use only.
- **Traffic** - Traffic during operation will be minimal and consist of light vehicles. On rare occasions, larger vehicles may be required for maintenance.
- **Staffing** - The Converter Station is designed for unmanned operation although a team of 3-4 maintenance staff will be on 24/7 callout if required.

## The onshore (underground) cable route

The proposed corridor in which the onshore underground cable will be located runs from the proposed Converter Station at Lovedean to the Landfall site on the coast in Eastney – a route of approximately 20km.

The basic apparatus to be installed within the cable corridor are:

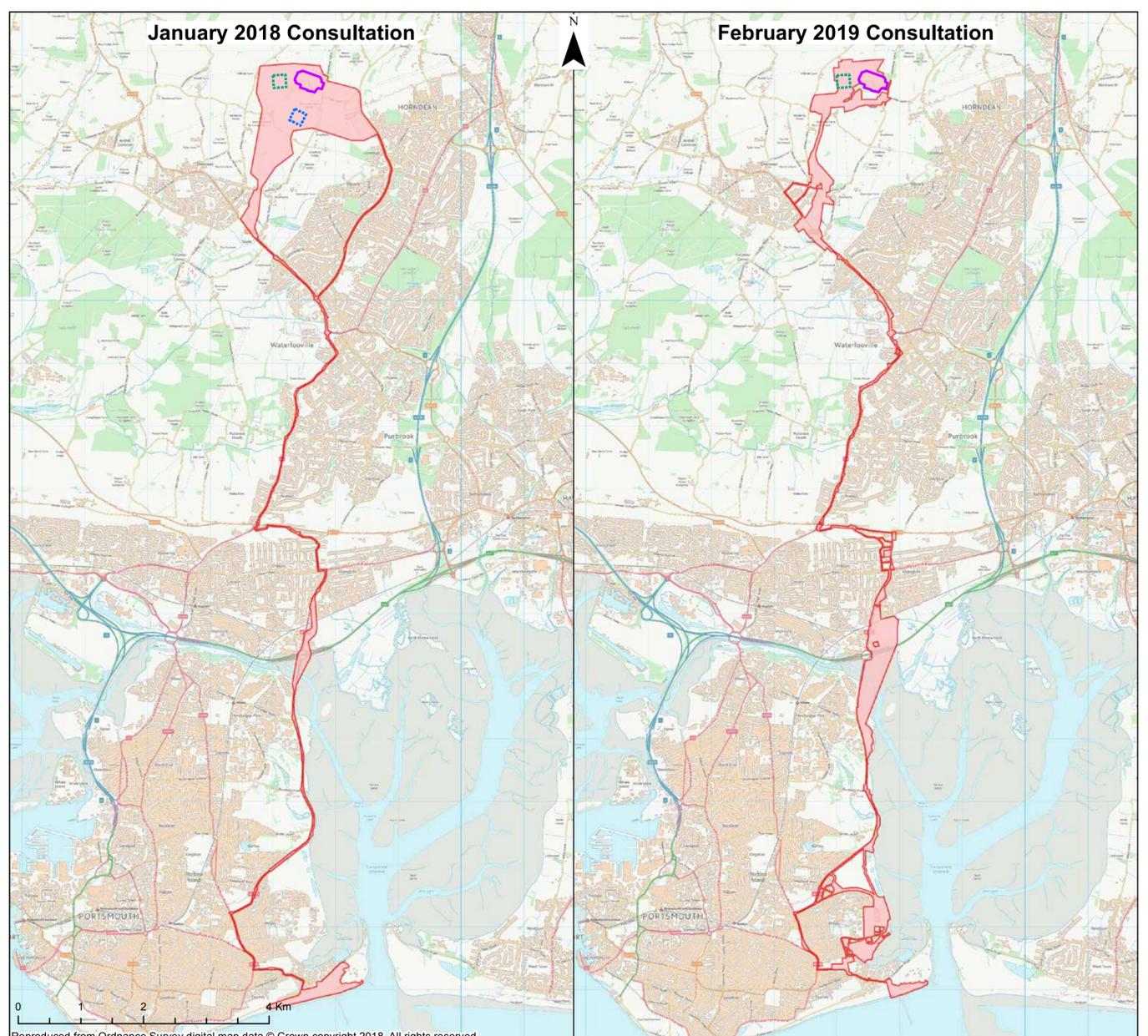
- 4x HVDC cables (laid in pairs);
- 2x Fibre Optic Cables (approximately 35-55mm in diameter) and Fibre Optic Cable Infrastructure;
- 2x Transition Joint Bays (TJBs) at the Landfall (to join the marine cables to the onshore cables);
- Joint bays (located approximately every 600m to 2km along the cable route); and
- Link boxes and link pillars or link cabinets at some joint bays (required approximately every 6km along the cable route).

We understand the sensitivities of traffic disruption. In response to the feedback received during our previous consultation, we have sought to identify alternative cable route options predominantly to minimise traffic disruption in constrained areas.

Further technical and environmental work is needed in some locations to further assess the feasibility of these options, however we are keen to receive feedback from the local community before making a final decision on the final underground cable route.

### Operation & Maintenance

- The electromagnetic field strengths of the DC and AC cables are significantly below the relevant guidelines and fully compliant with International and UK health and safety standards.
- Testing of the cable will be carried out at link box locations every two years along the cable route.



Evolution of the onshore underground cable route

## SECTION 3 – DENMEAD/KINGS POND MEADOW

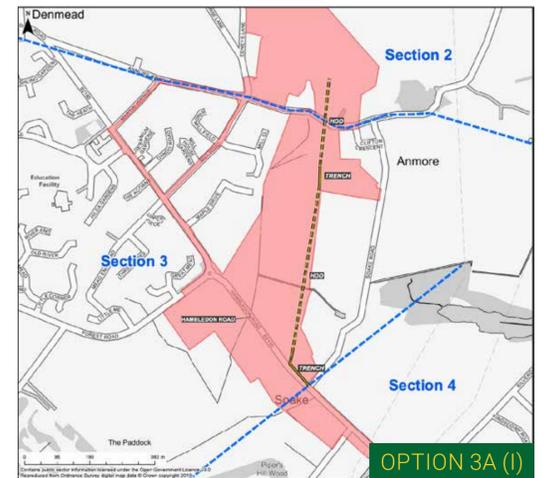
### Key Considerations:

Trees, woodland, hedgerows, ecology, agricultural land, geology/water tables, protected aquifers, SINC designation (Kings Pond), underground utilities, amenity of local residents and users of land and rights of way in the locality.

### OPTION 3A(I)

**Route:** Running south along land north of Anmore Rd → crossing Anmore Rd near Kings Pond → Hambledon Rd through the fields known as Kings Pond Meadow.

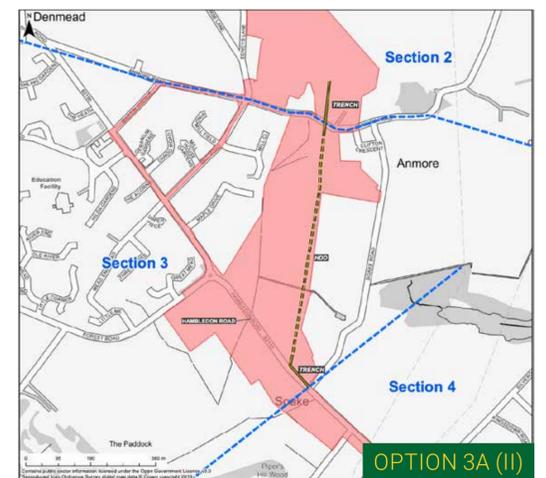
**Installation method:** HDD, save for a short stretch of trenching south of Kings Pond Meadow.



### OPTION 3A(II)

**Route:** Running south from north of Anmore Rd → crossing Anmore Rd near Kings Pond → Hambledon Rd through Kings Pond Meadow.

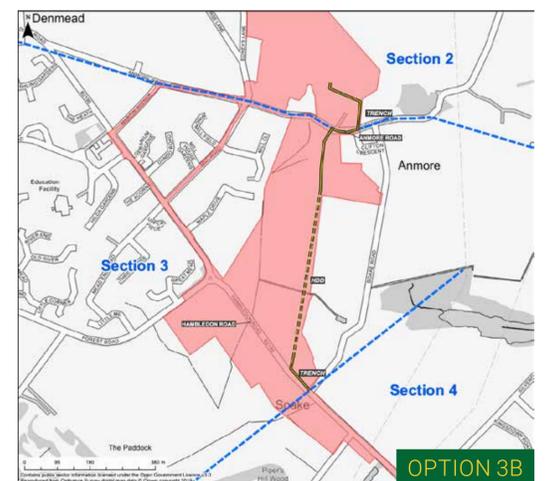
**Installation method:** Trenching, until south of Kings Pond Meadow and along Hambledon Rd, with HDD used in the intervening section.



### OPTION 3B

**Route:** Running east from properties located north of Anmore Rd → south to Anmore Rd (opposite Clifton Crescent) → west along Anmore Rd → south to Hambledon Rd through Kings Pond Meadow.

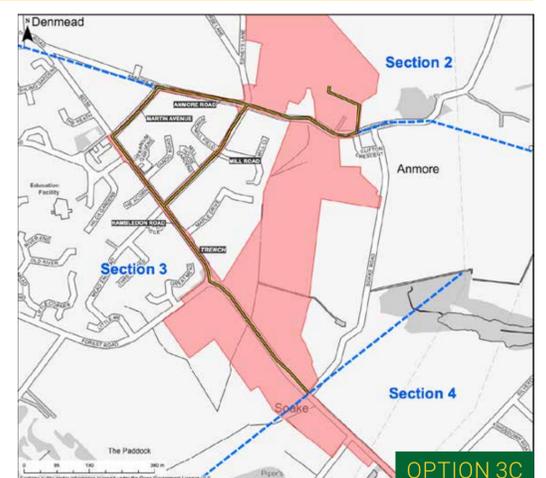
**Installation method:** Trenching from north of Anmore Rd to south of Kings Pond Meadow, and along Hambledon Rd, with HDD used in the intervening section.



### OPTION 3C

**Route:** Running east from properties located north of Anmore Road → south to Anmore Rd (opposite Clifton Crescent) → west along Anmore Rd → at junction with Mill Rd the cables split with one running south along Mill Rd and one running further along Anmore Rd, south along Martin Ave and south-east along Hambledon Rd → cables converge at junction of Hambledon Rd → both cables continue south-east along Hambledon Rd.

**Installation method:** Trenching only.



## SECTION 5 – FARLINGTON

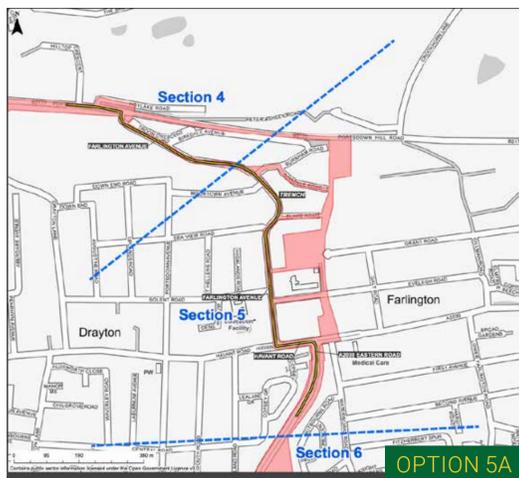
### Key Considerations:

Traffic, school access, playing fields, underground utilities, amenity of local residents and users of land and rights of way in the locality.

### OPTION 5A

**Route:** South along Farlington Avenue → east along Havant Road → south along A230 Eastern Road.

**Installation method:** Trenching only.



### OPTION 5C

**Route:** East along Portsdown Hill Road → grassed area of land → southwards through the field between the dwellings to the west and the covered reservoir → eastern edge of the recreation ground → south through the grassed strip → west along a short section of Havant Road → south along A2030 Eastern Road.

**Installation method:** Trenching only.

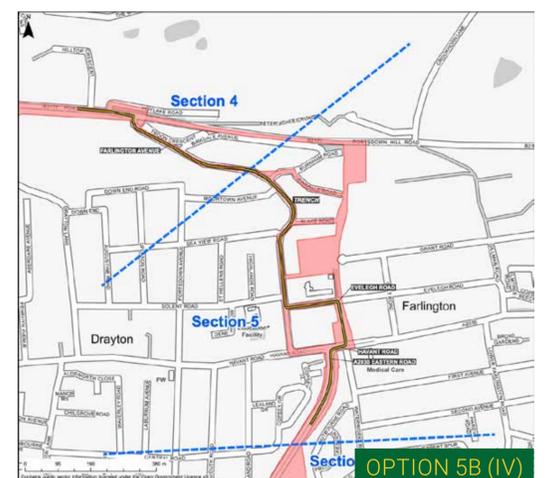
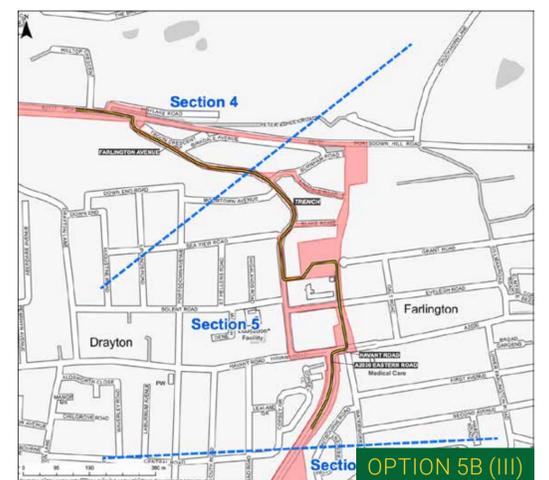
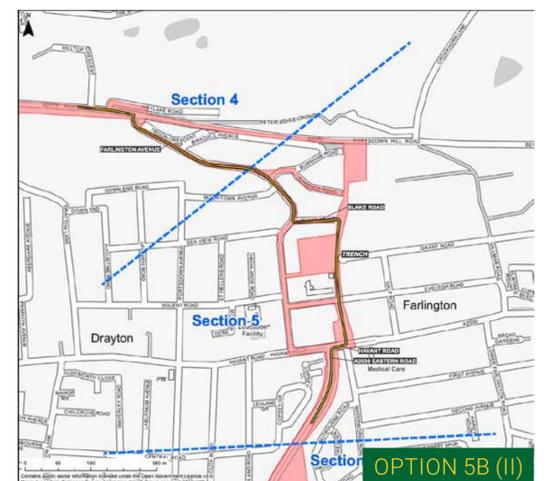
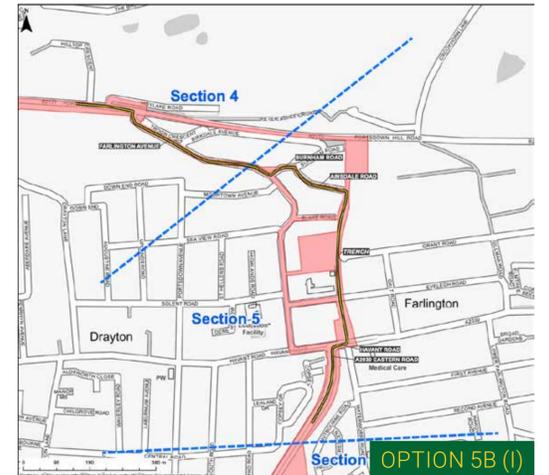


### OPTION 5B

**Route:** South-east along Farlington Avenue to A2030 Eastern Road via one of the following sub-options, utilising land belonging to Portsmouth Water to the east of Farlington Avenue related to Farlington Water Works:

- I. Farlington Avenue → east onto Burnham Road and Ainsdale Road → grassed area of land → south via the eastern edge of the recreation ground → south adjacent Solent Infant School → Havant Road
- II. Farlington Avenue → east onto Blake Road → grassed area of land → running south via the eastern edge of the recreation ground → south adjacent Solent Infant School → Havant Road
- III. Farlington Avenue → east through the pedestrian access to the recreation ground → grassed strip of land → south adjacent Solent Infant School → Havant Road
- IV. Farlington Avenue → east along Eveleigh Road → south through the grassed strip of land → Havant Road

**Installation method:** Trenching only.



## SECTION 6 – ZETLAND FIELD AND SAINSBURY’S CAR PARK

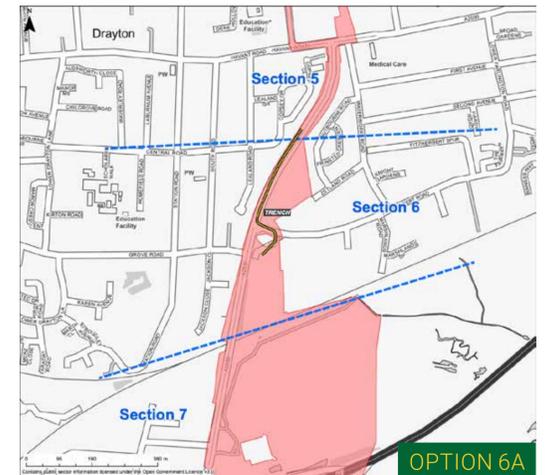
### Key Considerations:

Traffic, trees, ecology, access to Sainsbury’s supermarket and petrol filling station/B&M Homestore and impact on car park, underground utilities, amenity of local residents and users of land and rights of way in the locality.

### OPTION 6A

**Route:** South along A2030 Eastern Road → east into Fitzherbert Road → east of the Sainsbury’s petrol station → western side of Sainsbury’s car park.

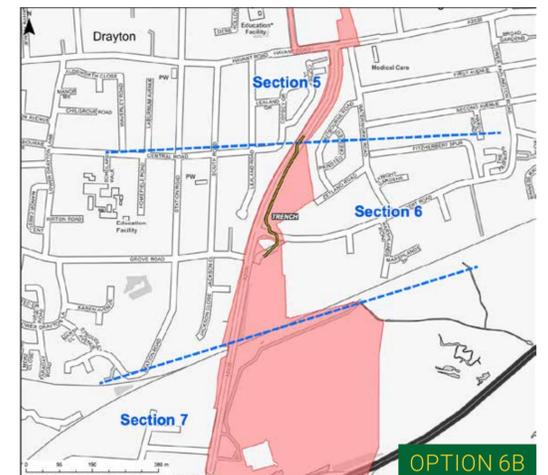
**Installation method:** Trenching only.



### OPTION 6B

**Route:** South along A2030 Eastern Road → east into Zetland Field → south through the pedestrian access onto Fitzherbert Road → east of the Sainsbury’s petrol station → western side of the Sainsbury’s car park.

**Installation method:** Trenching only.



## SECTION 8 – GREAT SALTERNS GOLF COURSE TO VELDER AVENUE/MOORINGS WAY

### Key Considerations:

Milton Common, ecology, contaminated land (former landfill), sea defences, traffic, underground utilities, amenity of users of land and rights of way in the locality.

### OPTION 8A

**Route:** Eastern Road A2030 (utilising the verge wherever possible) → junction with Milton Road (A288).

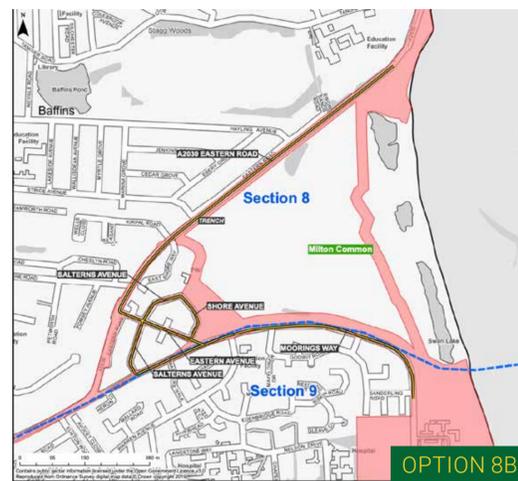
**Installation method:** Trenching only.



### OPTION 8B

**Route:** Eastern Road A2030 (utilising the verge wherever possible) → junction with Eastern Avenue → through a combination of, or all of: Eastern Avenue; Salterns Avenue; and Shore Avenue → eastwards along Moorings Way OR in the southern edge of Milton Common parallel to Moorings Way.

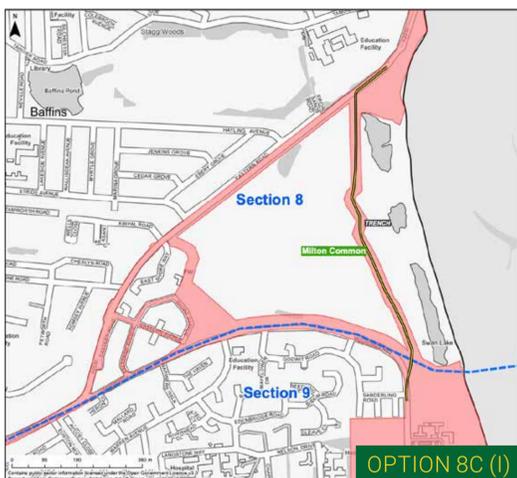
**Installation method:** Trenching only.



### OPTION 8C(I)

**Route:** Eastern Road A2030 → northern extent of Milton Common → south within the path that forms part of the sea defences → eastern extent of Moorings Way.

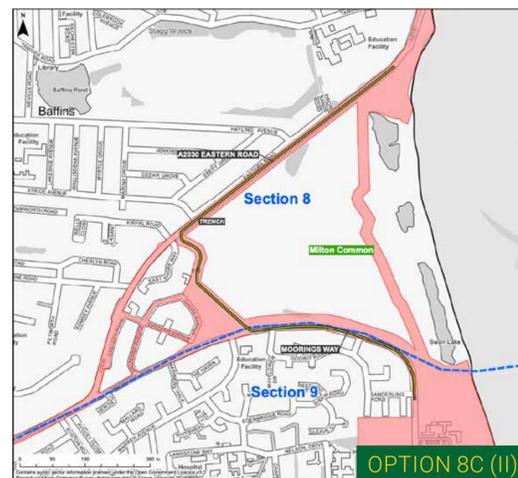
**Installation method:** Trenching only.



### OPTION 8C(II)

**Route:** Eastern Road A2030 → northern extent of Milton Common (utilizing the verge wherever possible) → north-western edge of Milton Common → junction with East Shore Way → southwards along the western edge of Milton Common → eastwards along Moorings Way, either in the highway or in the southern edge of Milton Common.

**Installation method:** Trenching only.



## SECTION 9 – VELDER AVENUE/MOORINGS WAY TO BRANSBURY ROAD

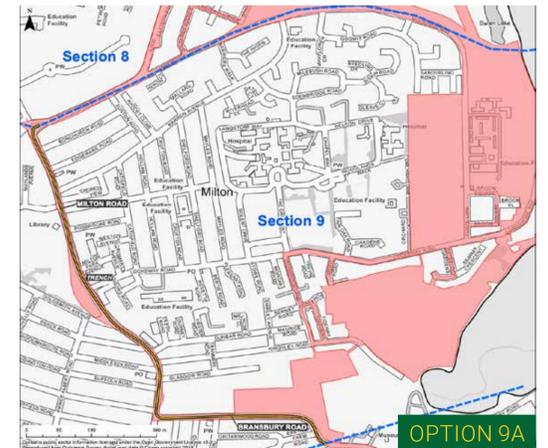
### Key Considerations:

Portsmouth University, Furze Lane bus route, traffic, allotments, trees, Bransbury Park, underground utilities, amenity of users of land and rights of way in the locality.

### OPTION 9A

**Route:** From Option 8A → southwards along Milton Road → eastwards along Bransbury Road (possibly within the southern extent of Bransbury Park) → Henderson Road junction.

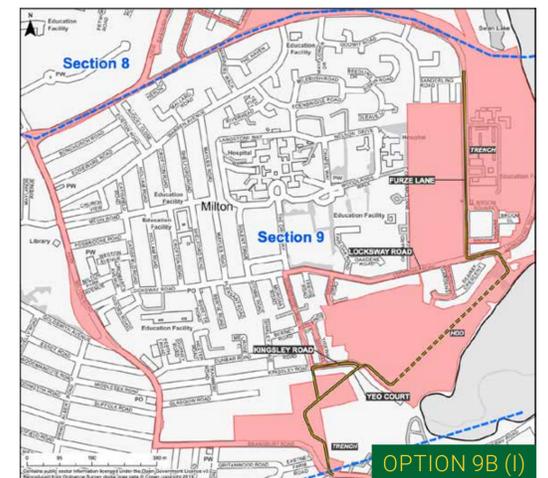
**Installation method:** Trenching only.



### OPTION 9B(I)

**Route:** From Option 8B or 8C → southwards, either through the University of Portsmouth Langstone Campus grounds or via the bus lane and Furze Lane → Longshore Way and/or Locksway Road → southern-most car park of the Thatched House pub → southwest under the allotments → open space north/northeast of Kingsley Road → via Yeo Court or Kingsley Road → Bransbury Park → southwards (to the west of the footpath/cycleway, avoiding the recreational space), → Bransbury Road → south-eastwards to Henderson Road junction.

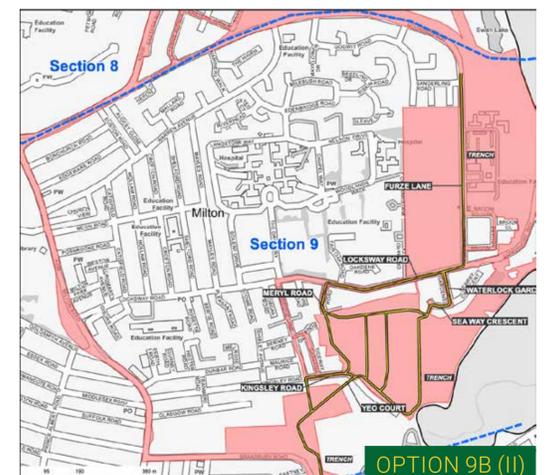
**Installation method:** Trenching, except for a section of HDD under the allotments from the Thatched House car park to the open space north of Kingsley Road.



### OPTION 9B(II)

**Route:** From Option 8B or 8C → southwards, either through the University of Portsmouth Langstone Campus grounds or via the bus lane and Furze Lane → Longshore Way and/or Locksway Road → access the allotments via Waterlock Gardens/Seaway Crescent and/or Meryl Road → utilising different paths within the allotments → re-joining the open space north of Kingsley Road → via Yeo Court or Kingsley Road into Bransbury Park → southwards (to the west of the footpath/cycleway, avoiding the recreational space) → Bransbury Road → south-eastwards to Henderson Road junction.

**Installation method:** Trenching only.



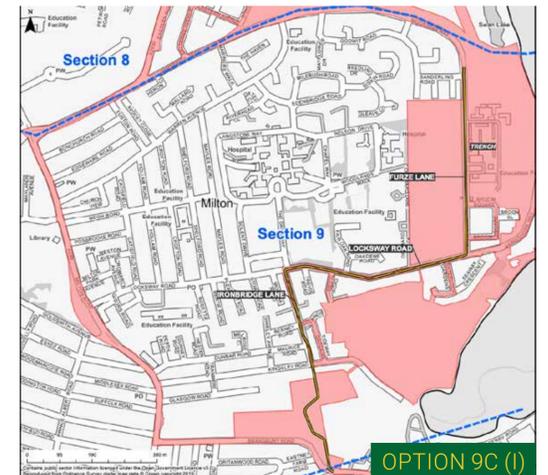
## SECTION 9 – VELDER AVENUE/MOORINGS WAY TO BRANSBURY ROAD

### OPTION 9C

**Route:** Southwards, either through the University of Portsmouth Langstone Campus grounds or via the bus lane and Furze Lane → westwards along Locksway Road → junction with Ironbridge Lane → reaching Henderson Road by one of the following options:

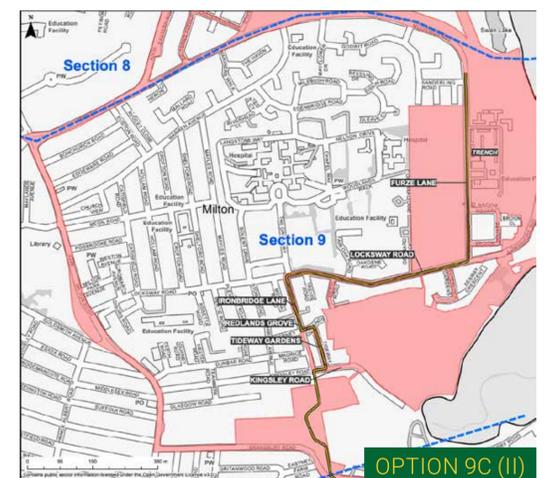
- I. Ironbridge Lane → southwards into Bransbury Park (to the west of the footpath/cycleway, avoiding the recreational space) → Bransbury Road → south-eastwards to the Henderson Road junction.

**Installation method:** Trenching only.



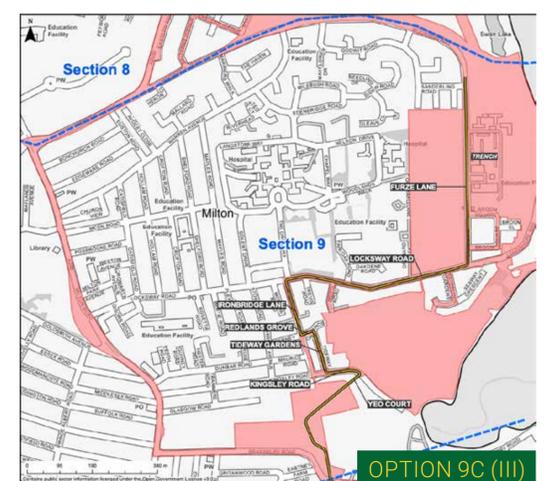
- II. Ironbridge Lane → southwards to the junction with Redlands Grove → eastwards, then southwards along Tideway Gardens → west along Kingsley Road → south into Bransbury Park (to the west of the footway/cycleway, avoiding the recreational space) → Bransbury Road → south-eastwards to the Henderson Road junction.

**Installation method:** Trenching only.



- III. Ironbridge Lane → southwards to the junction with Redlands Grove → eastwards, then southwards along Tideway Gardens → eastwards along Kingsley Road → south into Yeo Court → Bransbury Park, continuing westwards, and then southwards (to the west of the footpath/cycleway, avoiding the recreational space) → Bransbury Road → south-eastwards to the Henderson Road junction.

**Installation method:** Trenching only.



## Installing the onshore (underground) cables

The onshore underground cables will be laid within existing highways or verges where practicable. **It is not intended that the cables will be laid within the boundary of any homes or gardens along the proposed cable route.**

### Phasing the works

The cable ducts will be installed in sections of approximately 100m. Typically, the installation rate for cable ducts per circuit (or trench) is approximately 18m to 30m per day. It is estimated that it could take an average of 1 week to install the cable ducts for a 100m section. It is anticipated that more than one (up to six) 100m sections on the cable route may be constructed at the same time.

The installation of cable ducts is estimated to take approximately 18 months.

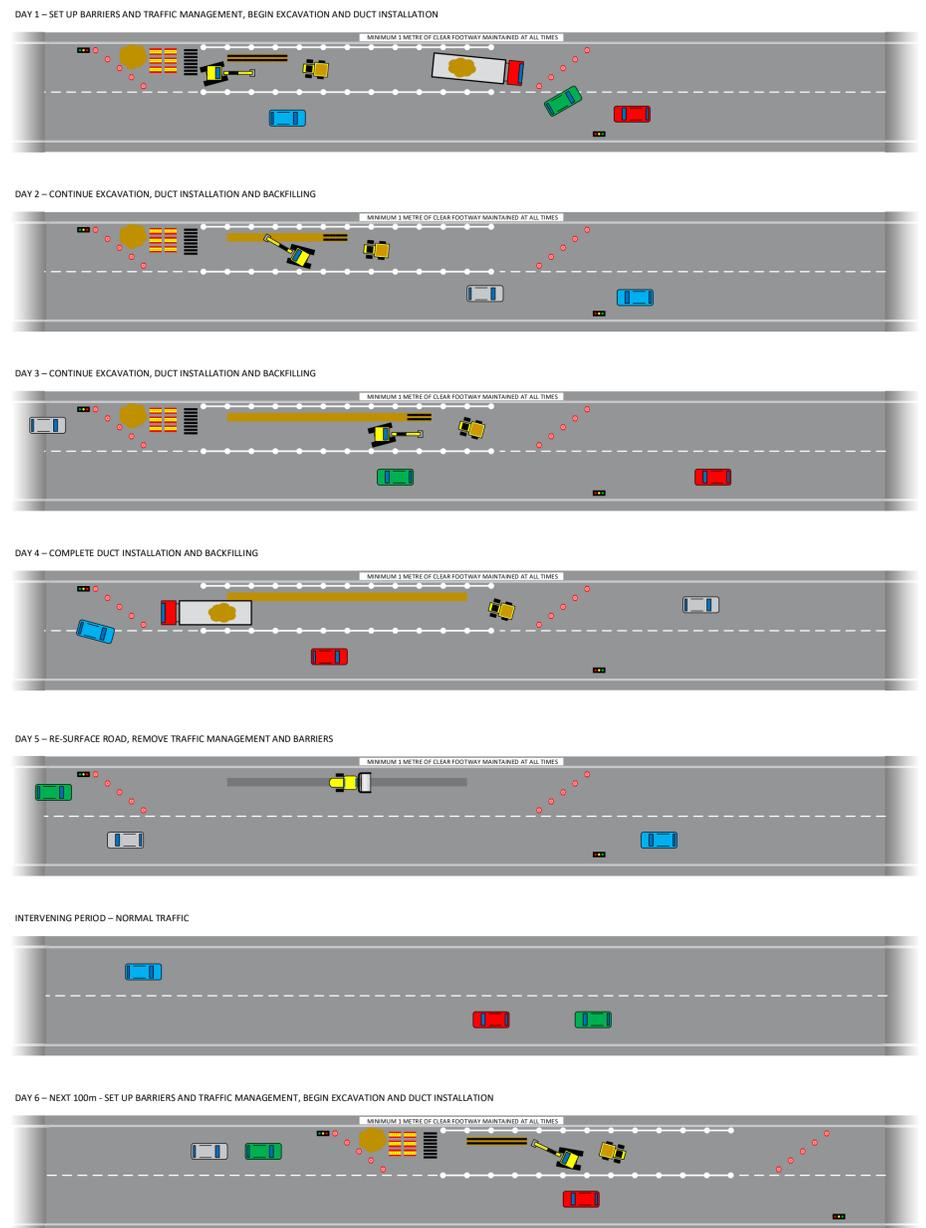
### Installing the cables

The majority of cables will be installed in excavated trenches (approx. 1m deep). There are four HVDC cables and two fibre optic cables to be installed. The cables will be installed in two separate trenches (also referred to as “circuits”). There will be two HVDC cables and one fibre optic cable per circuit.

To avoid the need to keep long sections of trench open to lay the cables, cable ducts will be installed in the trenches first, meaning the cables can be pulled-through at a later date with relatively little impact or disruption to traffic.

Where the cable route is in or adjacent to a highway, the installation will require traffic management measures which are set out in more detail on the next display board.

Where the cables cannot be installed by trenching, it is likely that HDD will be used. This is a trenchless installation method used to cross beneath areas where conventional construction methods cannot be used due to constraints, where other methods may cause damage, or where access is restricted.



Indicative diagram of rolling cable installation process where closure of one half of the carriageway is required



Typical cable arrangement in the highway

## Approach to traffic management

It is inevitable that the installation of infrastructure in the highway will result in disruption. With that in mind, AQUIND is committed to devising and implementing traffic management measures to minimise the disruption to the transport network during construction. An overall philosophy has been to keep at least one lane of traffic flowing and road closures to a minimum.

The approach to traffic management outlined below is intended to give an indication of the type of measures which may be employed during construction. A full traffic management strategy will be produced as part of the DCO application.

- Where closure of one half of the carriageway is required, temporary traffic signals will be used to manage traffic. During peak hours, these traffic signals will be manually adjusted to ensure that delays are kept to a minimum. Three-way temporary traffic signals may be required but will be avoided where possible;
- On dual-carriageway roads (such as Eastern Road), one lane of the carriageway will be closed intermittently where the cable cannot be installed within the footway or verges (with the closure relating to the section of the highway being worked on at that time only);
- On wide single-carriageways (such as A3 London Road) it may be possible for two-way traffic to continue at a safe passing distance when the construction area is located within the existing bus lane;
- In some instances, there will be insufficient space for traffic to safely pass the construction area, meaning a full road closure will be required. On residential streets these restrictions would be kept to a minimum, with temporary access allowed where possible. Where required, diversions will be agreed with the local highway authority;
- Where pedestrian crossings are impacted by lane or full road closures, alternative crossing locations will be explored and provided;
- Providing there would be no unacceptable impact on nearby properties, consideration will be given for opportunities to extended construction hours and/or night working to further minimise traffic disruption;
- The programme for installing the cables will factor in major scheduled events (e.g. football matches), major shopping events (e.g. Christmas), and school term times where possible.



Indicative backfilled trench ducts (courtesy from Neary Construction)



Indicative traffic management measures

## The landfall

The onshore and marine cables will be joined together in a car park on Fort Cumberland Road, Eastney. The marine cables and two fibre optic cables will travel from the marine environment to a Transition Joint Bay (TJB) in the car park (which will also be underground).

The marine cables will travel onshore through ducts using Horizontal Directional Drilling (HDD).

### Selecting the landfall location

29 potential landfall locations were initially identified, before a feasibility study reduced this to nine. Further optioneering exercises confirmed Eastney as the most appropriate landfall location.

### Why not come ashore at Langstone Harbour?

Langstone Harbour was discounted as a potential landfall location due to the numerous environmental designations which protect the harbour and the surrounding area from development and help care for protected species. Trenching in extensive tidal mudflats within the harbour could also be disruptive and slow as mud creates significant engineering problems.

In addition, the harbour's shallow water depths and narrow entrance rendered it unsuitable for the use of cable installation machinery.

### Why not come ashore at Hayling Island?

Hayling Island was discounted due to the environmental and technical constraints associated with the DC cable route crossing from Hayling Island to the mainland. It was also considered that landfall at Hayling would have been more challenging and technically complex from a marine installation perspective.

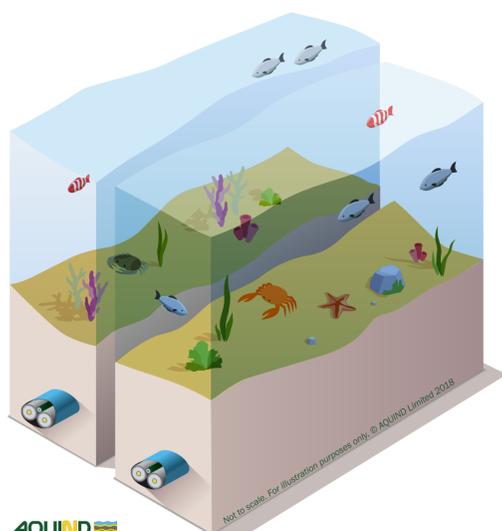
### The marine cables

Marine HVDC cables will be required to connect the onshore elements of the project in the UK with the onshore elements of the Project in France. These will be laid within the UK "Marine Cable Corridor".

The "Marine Cable Corridor" runs from the landfall site at Eastney out to the UK/France Exclusive Economic Zone ('EEZ') boundary line – a distance of around 109km from the coast. The four cables (and two fibre optic cables) will be laid in two pairs approximately 50m apart, within a cable corridor that is approximately 500m wide.

### Installation

Before the cable is laid, seabed debris will be cleared and surface boulders will be removed. The marine cables will then be installed from a cable lay vessel. The cables will be pulled overboard and on to the seabed.



AQUIND 

Typical cable arrangement in the channel

### Operation

The Marine Cable Route will be designed to minimise the requirement for regular inspection surveys and the fibre optic cable will have a role in monitoring the operational performance of the marine cables.

Some surveys may be required to be undertaken every 6-12 months for the first 2-5 years, reducing in frequency to every 1-5 years for the lifetime of the project.

### Decommissioning

The options for decommissioning the cable will be evaluated and will likely include leaving the marine cable in situ, removal of the entire marine cable or sections of the marine cable. The current best practice is to leave inert and environmentally benign cables in situ to avoid unnecessary disturbance of the seabed.

## The planning process

### Environmental Impact Assessment (EIA)

The Preliminary Environmental Impact Report (PEIR) presented as part of this consultation contains the preliminary environmental information that we have collated and assessed to date.

In addition we are voluntarily undertaking an Environmental Impact Assessment (EIA) and will submit an Environmental Statement (ES) in support of our application. The ES will identify any likely significant environmental effects of the project, together with the proposed mitigation.

### Land referencing

As part of the planning process, we are legally required to identify all persons with an interest in land which is potentially affected by the proposals.

We would like to provide reassurances that acquisition of homes or gardens is not proposed. Where owners of houses adjoining the proposed onshore cable corridor have been contacted, this is purely in their capacity as the presumed owners of subsoil under public highways.

If you have been contacted in regard to land you have an interest in, and would like to discuss this further, you can contact the Land Referencing team via:

**Phone:** 020 3116 9389

**Email:** [aquindinterconnector@wsp.com](mailto:aquindinterconnector@wsp.com)

### The planning process and next steps

- **February to April 2019** - Statutory consultation on AQUIND's proposals takes place. Responding to the consultation is the course of action for influencing the proposals, whether you agree, disagree or believe they could be improved.
- **Autumn 2019** - Anticipated submission of the DCO application seeking the permission to build and operate AQUIND Interconnector. At the Acceptance stage, The Planning Inspectorate (PINS) will decide whether the application meets the requirements of the Planning Act 2008 to confirm whether it may proceed to the Examination stage.
- **Autumn 2019 – Spring 2020** – At this stage, the public will be able to register their interest in the application with PINS and give their views on the application.
- **Spring 2020** – The Examination phase will begin, with PINS having up to six months to carry out the Examination.
- **Late 2020** – PINS will make a recommendation to the Secretary of State three months following the close of the examination, who will have a further three months to make the final decision, taking into account the local impacts of the proposals.
- **Early 2021** – If approved, construction works for AQUIND Interconnector will begin.
- **2023** – AQUIND Interconnector will become operational.

For further information about the DCO planning process, please visit the PINS website:

[www.infrastructure.planninginspectorate.gov.uk](http://www.infrastructure.planninginspectorate.gov.uk)

## Have your say

This consultation will run until **Monday 29 April 2019**.

Before submitting feedback, AQUIND would encourage members of the public to review the consultation documents available. Please speak to a member of the project team at today's event if you have any questions.

### Responding to the consultation

Responses to the consultation should be submitted no later than midnight on **Monday 29 April 2019**.

Feedback can be submitted using the feedback forms available at today's event. These can be completed here today or returned using one of the freepost envelopes available.

Feedback can also be submitted via the online feedback form ([www.aquindconsultation.co.uk](http://www.aquindconsultation.co.uk)). Copies of the feedback form can be downloaded from the website and returned via the Freepost address (FREEPOST AQUIND CONSULTATION) or via the consultation email address ([aquindconsultation@becg.com](mailto:aquindconsultation@becg.com)). Comments can also be submitted in writing via the Freepost address or via the consultation email address.

All feedback received during the consultation will be recorded and carefully considered by AQUIND. An explanation of how all feedback received has been taken into account will be detailed in a Consultation Report to be submitted as part of the DCO application.

### Contact us

If you have any queries, please speak to a member of the project team here today or contact us via the contact details below:

 **Call us:** 01962 893869 (Mon to Fri, 09:00-17:30)

 **Email us:** [aquindconsultation@becg.com](mailto:aquindconsultation@becg.com)

 **Write to us:** AQUIND CONSULTATION (no stamp required)

Further information is also available on the consultation website at [www.aquindconsultation.co.uk](http://www.aquindconsultation.co.uk)

### Data Protection

By submitting your personal data as part of the consultation process you are agreeing that BECG can hold and process your personal data in relation to this public consultation exercise. BECG may share personal data with AQUIND Limited and its consultant team for planning evaluation and land referencing purposes only. Copies may also be made available, in due course, to statutory authorities so that your comments can be noted. We will however request that your personal details are not placed on public record. Your identifiable, personal data will not be used for any other purposes without your consent.

BECCG, on behalf of AQUIND Limited, will use your data to:

- Send you updates about the project (where you provide us with your contact details)
- Develop a Consultation Report (or similar document) about this public consultation that will be submitted to the planning authority or similar body; this will be a publicly available document. Your comments will be anonymous, and we will only identify you in these reports with your express permission

If you provide us with your contact details, we might also contact you to ask you more about the comments you've made. BECCG acts on behalf of AQUIND Limited to run public consultation activities. We hold all personal data in accordance with the General Data Protection Regulation (GDPR) (EU) 2016/679 and your personal data will not be transferred outside of the European Economic Area.

You can see our full Privacy Statement, Data Protection Policy, Data Retention Policy and find out how to make a Subject Access Request at the following website address [becg.com/dp](http://becg.com/dp) or by contacting us on 01962 893 893 / [dataprotection@becg.com](mailto:dataprotection@becg.com).

BECCG act on behalf of AQUIND Limited to run public consultation services.