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<i>Date</i>	29 April 2019	<i>Email</i>	laura.mcculloch@hants.gov.uk

Dear Sir,

AQUIND Interconnector Statutory PIER Consultation

Thank you for consulting the County Council on the PIER for the AQUIND interconnector proposal.

The following comments have been made in the County Council's capacity as Local Highway Authority, a prescribed consultee, and in relation to the County Council's other duties and interests as an upper-tier authority.

Local Highway Authority

Summary of Route

The proposed route through the Hampshire network is shown on sections 1-4 of the proposed routing. This brings the cables from the Lovedean converter station site down to the Portsmouth City Council boundary at the B2177 Portsdown Hill Road. The route primarily runs along the A3 corridor which is a highly trafficked, important priority bus route, and which plays a key role within the local network.

Alternative Cable Route Opportunities

There would also appear to be opportunities along the route to take the cable off the highway and these should be given serious consideration by the applicant, with evidence provided if these are not considered acceptable. The highway appears to have been chosen as an easier route to delivery as opposed to utilising privately owned land. This approach will inevitably cause prolonged delay on key areas of our network and has the potential for ongoing implications to future schemes both for the Highway Authority, private development and other utility companies. The County Council will therefore require clear justification on why the highway is the best option when all matters are considered.

The PIER sets out a redline for the proposed route which covers mainly the highway, however there are also noted some locations of greenfield areas which could be utilised. The PIER suggests that the route will be finalised at a later date but does not confirm the timescales for this. The Highway Authority needs to be engaged in this process to understand and influence the route choices made to enable a detailed understanding of the decision-making process.

It is apparent and has previously been raised with the project team that there are also additional opportunities which could considerably reduce the impact of the cable laying works, conflicts with other works on the highway and routing the cable through contentious areas. This would be by routing the cable through the West of Waterlooville MDA site, this does not appear to have been considered in detail by the applicant.

Further specific justification is also required on the route from the B2150 through the residential streets of Martin Avenue, Anmore Road and Mill Road which will be constrained in width for provision when there would appear to be more direct open land available for the cable routing. Further comments on this matter are made under the relevant section review.

Converter Station

The converter station is located at Lovedean south of the existing sub-station. Transport matters relating to this works includes the construction of the converter station and the on-going access to the site once operational.

Site Access

Site access is proposed at the Day Lane/Broadway Lane junction. No details have been provided of the form of junction proposed or how the proposed access will fit within the existing road layout at this point. These details must be provided and agreed with the Highway Authority. Initial 'in principle' agreement is required now, and subsequent formal approval will be required once the design is completed. The design at all stages must be supported by recorded vehicle speeds, vehicle tracking, visibility splays, forward visibility and a safety audit.

There are particular concerns regarding the location proposed with regards operation of the access point and the ability to achieve forward visibility around the bend of Day Lane/Broadway Lane and these must be specifically addressed.

Construction Phase

Vehicle Routing

Vehicle routing to the site is proposed from the A3(M) junction 2 along the B2177, south on the A3, Lovedean Lane, Day Lane and then into the site.

Construction traffic movements have been forecast for this phase of works for the converter station only as follows:

- 45 two-way HGV construction traffic movements per day
- 55 two-way non-HGV construction traffic movements per a day

The PIER assumes in addition to the above construction traffic movements a total of 150 staff will be working on the site during construction. Car occupancy has been assumed as 1.2 persons per a vehicle which is referred to as the standard rate for commuting trips, this results in a forecast 125 movements a day and from the site. Census 2011 data has been used to determine the origin and destination of workers. This methodology cannot be agreed. Given the specific and specialist nature of the works being undertaken it is not appropriate to apply general travel pattern data to forecast the trip generation, distribution or parking requirements. Measures should be considered to actively reduce car trips to the site during construction and consideration given by the applicant on how this can be achieved. More relevant assessment of trip generation from similar sites or projects should be used to determine the impact of the works on the Lovedean area.

Insufficient analysis of the suitability of the route to the site has been undertaken by the applicant within the PIER. The construction phase for the converter station is a 2-year programme. The impact of the additional vehicle movements is therefore considered to be significant. Lovedean Lane is a predominantly residential road and Day Lane is a rural lane with a width unable to accommodate two-way HGV flow.

The proposed working hours for the site, and therefore the period of time construction traffic movements, are expected to be between 07:00 and 19:00 Monday to Friday with movements spread evenly across the day with the exception of HGV's which will avoid the peak hours of 08:00-09:00 and 17:00-18:00. Traffic data is required to confirm the peak periods. These time restriction requirements will need to be considered in conjunction with the planning authorities as more stringent restrictions on movements may need to be applied along the route due to the sensitive nature of parts of the route or the presence of schools requiring school drop off and collection hours to be restricted with regards HGV movements. Clarification is also required on how these proposed restrictions on HGV movements will be enforced and details of these measures need to be provided and agreed.

Asset Resilience

The level of proposed vehicle movements, and in particular daily HGV movements, is of a nature which the route is unlikely to be of a construction standard to accommodate these vehicle loading levels. This will result over the time of construction in the failure of the asset along the route. The applicant must examine this matter further and provide suitable mitigation measures to ensure the Highway Authority is not left with a maintenance burden at the expense of the public and that the highway remains in a safe operational condition both during and beyond the construction period.

Planned Works

There are proposals for the installation of a new pedestrian crossing refuge island on Lovedean Lane. A drawing of this scheme can be provided directly to the project team. The design of the scheme is such that high level features can be removed to facilitate abnormal loads. The time frame for delivery of this new island is ahead of the proposed timeframe for this project and therefore should be considered as implemented infrastructure within any assessment.

Internal Road Route

The drawing shown in Figure 5 of the 'Consultation Document' shows the proposed internal layout for the site during construction. This includes an internal road of 1200 meters with a proposed width of 7.3m. This is shown as an indicative plan. An understanding of when the details for the internal layout needs to be agreed to ensure comments are made at the appropriate stage. Details should be provided to ensure that the proposed access road is suitable for construction traffic including tracking, speed limit information and a fixed location for the route.

Construction Traffic Management Plan

A detailed Construction Traffic Management Plan (CTMP) should be provided for this specific phase of works. This should consider the following:

- abnormal load movements and the details of these movements. These will need to be considered as part of the CTMP with regards how they will reach the site and any works required to the network to accommodate these.
- How mud will be managed from the site to ensure it is not taken onto the highway
- The turning of delivery vehicles within the site to allow them to enter the highway in a forward gear
- Contractors vehicle parking during site clearance and construction of the development
- the suitability of the routes to the site to cater for all traffic types. Of particular concern would be the narrower more rural lanes nearer the site and the suitability of these roads to cater for the traffic including matters such as the width, forward visibility as well as the carriageway construction being suitable to accommodate the additional loading.
- The CTMP should identify and secure suitable mitigation measures as appropriate to manage construction traffic and impact.

Operational Phase

On completion of the works it is noted that it is not anticipated that the development will impact on the highway network. However, the Highway Authority will require confirmation of movement numbers anticipated and the permanent access arrangements to the converter station.

Decommissioning Phase

Work to de-commission and re-new the converter station is anticipated every 40 years. This in itself is assumed to take the same level of trip generation from construction traffic as the converter station construction phase. A CTMP for these works will be required by the Highway Authority when these works are planned to assess a suitable access strategy at the time. This should be appropriately secured within the DCO permission. The concerns relating to the construction phase regarding the impacts would be relevant for the decommissioning phase. If appropriate protection cannot be achieved through the DCO for this phase, confirmation should be provided on how additional permissions and protection for the Highway Authority for these works will be obtained.

Cable Route

A high-level summary of the analysis of the cable routes has been provided by the applicant. For the area of the network subject to the County Council's jurisdiction as Highway Authority this covers sections 1 to and including 4. Comments follow relating to each of these areas of the proposed cable route.

As a general note confirmation is required regarding availability of access to residential properties during works and if these are not able to be maintained an understanding of the implications should be set out and mitigated. The majority of the A3 corridor has direct private access points and the nature of the route does not facilitate on-road parking. The requirement for access to properties driveways throughout the works should be considered in more detail especially considering the unknown presence of those with disabilities or mobility impairments.

Section 1 Lovedean (Converter Station Area)

This area of work is mainly off highway through the converter station site. The highway works associated with this section are the site access works. No details of the proposed site access onto Broadway Lane/Day Lane have been provided. The likelihood that the works could be completed however within a single day's closure alone seems unlikely. This will need to be considered further once the principle of the access works has been agreed and as part of the approval process.

Section 2 Anmore

Again, this section of the cable route is primarily off the highway. The cables cross the highway at Anmore Lane and no highway closures are anticipated. Confirmation is required on the proposed delivery mechanism for the cables as they cross Anmore Lane. Information is also sought on how access to the field south of Anmore Lane is to be obtained to ensure an appropriate and safe access from the highway for construction and maintenance vehicles. It is noted that Anmore Lane is a narrow single lane which generally would not be considered appropriate for construction traffic.

Section 3 Denmead/Kings Pond Meadow

Section 3 of the cable route covers the area between Anmore Road and B2150 Hambledon Road. There are four options at the Anmore Road point of this route. These are:

- Option 3A(i) Sub option HDD under Anmore Road
- Option 3A(ii) Sub option trenching from north of Anmore Road to Kings Pond Meadow, then HDD to field north of Hambledon Road
- Option 3B Anmore Road
- Option 3C Highways Route

Option 3A(i), 3A(ii) and 3B take the cable south through farmland and require only the crossing of Anmore Road and a short section on Hambledon Road within this area. Option 3A(i) as set out within the PIER has the least impact on the highway and therefore by default would be the preferred option in highway terms. Option 3C proposes a highway route for the cables utilising Anmore Road, Martin Avenue, Mill Road and B2150 Hambledon Road. This route has a significant impact on the highway. The impact is considered significant within the assessment work undertaken and results in long periods of road closures on residential streets. This route also requires routing the cables through the B2150 Hambledon Road/Forest Road roundabout which can be avoided through all other options. This may prevent

improvement work at the roundabout in the future should it be required. Finally, proposed highway route lands directly outside Denmead Infant School and therefore there are safety implications of significant road works along with the added working hour restrictions which would be put in place potentially further extending any required closures. The impact on the school and residents would need to be fully considered and weighed up against other consideration factors to justify route 3C. The Highway Authority would require this to be clearly set out within that Transport Assessment.

Section 4 Hambledon Road to Burnham Road

Section 4 is a very long section including the B2150 Hambledon Road, A3 London Road, B2177 Portsdown Hill Road and Farlington Avenue. This route therefore covers a number of significant sections of public highway with varying characteristics which require more detailed consideration. The section also crosses the jurisdiction of the County Council and Portsmouth City Council as Local Highway Authorities. This route should be broken down into more appropriate areas to ensure a clear and thorough assessment is undertaken for each area.

Our comments relate to the areas under the jurisdiction of the County Council only. Remaining comments should be sought from the City Council.

It is noted that there are no alternative options presented for this cable route. No evidence has been provided for why this is the case. Consistent representation has been made by the County Council as Highway Authority that alternatives should be fully explored that would take the cable routing off this strategic corridor. The land to the west of the A3 is greenfield and as evidenced within the PIER construction times and traffic impact is significantly less for development through open space as opposed to the highway (2 days per 100m as opposed to 7 days with TM proposals as assumed). These time frames for highway delivery are likely to be extended further due to work restrictions along the route.

Several options have been highlighted within the PIER relating to opportunities to take the cable away from the main A3 corridor into more minor residential roads. The impact of these alternatives has not been considered in detail however, for example the impact on the Hambledon Road parade of shops of any works to Hambledon Parade. It is evident that there are also further opportunities that exist which have not been included, for example utilising more of the West of Waterlooville MDA site and opportunities to avoid the A3 through Waterlooville town centre. Where diversions from the A3 directly affect residential properties the implications of this should be assessed against the benefit of doing so.

Regarding the impact of the cable laying there are significant closures proposed for cable laying to the bus lanes. Given the priority of this route in connecting Havant areas with Portsmouth and the focus of the 'Transforming Cities Fund' bid being along this route extensive closures of the A3 Star corridor considered significant. The impact this will have to bus journey times and reliability of bus services along this corridor should be fully considered by the applicant. At present no assessment of this type has been undertaken and this is required.

Any areas where the cable routing can be taken off highway would be welcomed by the Highway Authority in order to reduce the overall impact of the proposals, delay on the corridor due to construction and implications on planned and future schemes.

Specifically, at Ladybridge roundabout the proposed route requires the crossing of a culvert at Purbrook under the A3 south of Ladybridge Roundabout. The Highway Authority will require details of the crossing over the structure in order for it to grant approval for the works.

The redline around Ladybridge roundabout is extensive and may have implications to planned works and future works at this junction. The acceptability of cable laying around this junction must be considered in the context of these projects.

Generally, junctions along the route should be avoided as these are most likely to require works either planned now or in the future. Where avoidance is not possible the highway authority would require cable laying to be of a depth which would ensure that the presence of the cable would not prejudice or significantly affect the cost of future delivery any planned or future schemes. In the instance that the cable required rerouting this would need to be secured to be delivered at the applicant's expense.

Jointing Bays

Confirmation of the joint bay locations are required so the Highway Authority can understand the implications to planned and future highway works. Information is also sought on any constraints that will exist on highway works in the vicinity of the joint bays.

Link Boxes

It is understood that no link boxes are proposed within highway land. Confirmation of this is requested from the applicant.

Construction Traffic Management Plan

Materials and staff required for the cable routing is proposed at two compounds. No details have been provided for the justification of these as the best locations for compound areas. The nearest compound for the works on the County Council network is at the Lovedean site. Further information is required regarding site selection for a compound at Lovedean which seems remote from the majority of cable laying works, in particular the A3 corridor, resulting in additional impact on the Lovedean area which may not be necessary. In addition, these impacts don't appear to have been assessed within the narrative in the assessment of the number of movements to and from the site. Confirmation on the maximum number of gangs working from each compound is required (set out within the summary as an 'assumed' maximum number of 3) and included within the assessment of the number of trips to and from the Lovedean site.

CTMP's will need to be produced covering appropriate sections of any cable laying within the highway which would cover matters including but not exclusive to:

- Contractor parking
- Construction traffic access arrangements (routing to the site)
- Provision from remove mud from vehicles

- Working hours
- Any on site material storage
- Details of reinstatement of the highway
- Details on construction period
- Contact details for onsite staff
- Chapter 8 compliant traffic management proposals

CTMP measures for the construction of the joint bays should also be clearly set out.

Transport Study Area

The proposed study area for Transport Assessment work has been set as the redline area of the application. This is not considered appropriate for assessment of the impact of the proposed works. The assessment area should include assessment of the impact on the adjoining road network including but not exclusive to the key east to west corridors between the A3 and A3(M). There are a number of junctions along these corridors which are likely to be affected by rerouting as a result of delays on the A3. An indication of the key junctions likely to be affected is set out below however a full assessment should be undertaken by the applicant of the likely impacts of the rerouting which may highlight additional roads and junctions which will be impacted.

- Stakes Road/Stakes Hill Road Roundabout
- College Road/Purbrook Road junction
- Asda Roundabout
- A3(M) junction 3
- A3(M) junction 4

Highways England should be consulted regarding any assessment work of the impact on the A3(M) corridor that any traffic rerouting may have.

With regards the area that has been considered (the cable route itself), whilst it is acknowledged that the traffic generation for cable laying itself will not generate large amounts of vehicle movements the impacts of the road works on the surrounding network for an extensive period of time will have an impact on journey routes and journey times for residents. This will therefore result in the redistribution of traffic. The work to date has not assessed this impact or identified if mitigation measures are required elsewhere on the network to reduce the adverse impact such as a result of inappropriate rat running.

Route Impact Assessment

Traffic Surveys

Traffic surveys have only been undertaken along the cable route itself and therefore any assessment works is not able to consider the impact of the adjoining network of redistributed traffic. Further survey work is therefore required, and the extent of these surveys should be agreed with the Highway Authority.

In addition, clarity is sought on the survey data. The raw data should be provided for review along with appropriate analysis. There appears to be discrepancies within

the presentation of the survey data, specifically between appendix 21.1 and figure 21.2. Clarification is sought to ensure the information presented is robust.

Assessment of Highway Impact

The need to assess routes has been based on the following criteria:

1. All highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%).
2. Any other specifically sensitive areas where traffic flows have increased by 10% or more
3. All links that were rated as having a high sensitivity
4. Any links that were through roads and did not have traffic flow information at the time of writing the PIER

Clarification is sought regarding how the project team have determine the traffic sensitivity of the route. This information should be obtained from Hampshire County Council's New Roads and Street Works Act (NRSWA) team.

Further clarification is also sought on how traffic flow increases have been calculated and on what assumptions. Generally, we would welcome discussions on whether this is the most appropriate approach to assess the impact of extensive works on the highway.

It is not clear what triggers a road to be considered specifically highly sensitive as set out within criteria option 3.

A list of all roads to be assessed and on which of the four criteria they have been triggered for assessment should be provided. This will enable the Highway Authority to be satisfied that the network area being considered within the assessment work is appropriate. The network area should include an assessment of adjoining roads and routes which are likely to be impacted on by the works.

The PIER refers to a number of assumptions on which we would require further detail. It is noted that assumptions have been split across the three key areas of implementation works which include:

- Converter Station
- Cable Corridor
- Jointing Bays

This principle is agreed.

It is noted that peak construction is anticipated to occur in 2021. An understanding of the whole construction programme and its impacts throughout should be discussed in greater detail with relevant officers at the highway authority in order to ensure appropriate coordination within the programme.

Reference has been made to the use of TEMPRO growth factors and these being an average of 5% for a period between 2018 and 2021. Details are required on the factors assumed and how these have been derived.

Assessment of Traffic Delay

It is proposed to assess the impact of traffic delay of temporary signals using Linsig. This approach is welcomed however no assessment has to date been provided. There are however no details of how alternative types of traffic management (TM) will be assessed and this should be considered by the applicant and agreed with the Highway Authority.

Ultimately the assessment work undertaken should be able to identify the impact with regards to delay on the corridor and therefore the likelihood of rerouting traffic. An understanding will therefore be required of the programme of works to be undertaken at one time in order to truly assess the impact of multiple areas of road works along the route.

The PIER suggests that the specific TM requirements will be set out within a DCO condition. However, this would not allow the impact of the works over a prolonged period to be fully assessed and therefore it is considered that this matter must be suitably addressed ahead of the DCO decision making.

Casualty Data

Personal Injury Accident (PIA) data has been provided however it is considered to be out of date. Updated information should be included within the assessment work. The analysis of the data is also unacceptable concluding that in most cases accidents are due to driver error. This is the nature of most accidents and the analysis should review whether there are any patterns of accidents which would be exacerbated by construction of the site. There should be particular focus on the construction traffic route from the A3 to Lovedean where HGV and vehicle movements are anticipated to be significant.

Public Transport

The PIER acknowledged the need to assess diversions and disruptions but is not specific on how or whether consultation with the bus companies has been undertaken. Concerns regarding the impact of closures on the A3 corridor of the star bus route have already been set out within this response. The bus companies must be directly engaged in this project and comments sought from them regarding the impact of the proposed works and any required mitigation to ensure there are no impacts on patronage or journey time reliability. This may include direct funding of additional services or measures to provide incentives to passenger to both maintain current patronage and mitigate the impacts of any additional delay along the route which undermines the efforts of the Transforming Cities Funding project. This is a key nationally funded project across Portsmouth and Hampshire providing sustainable access opportunities to key employment areas. The emerging project within this area looks to connect the Waterlooville area with Portsmouth with the A3 corridor being paramount within achieving improved connectivity for bus travel.

Tempo Growth Factors

TEMPRO has been used to growth traffic data for 2021 as a base assessment year. However, no details of the TEMPRO figures used have been provided and will need to be agreed with the Highway Authority. Given the proximity of the West of Waterlooville MDA and the direct access onto the network confirmation is sought that TEMPRO can accurately assess the impact of the additional development along the

corridor given its general approach to traffic growth within an area. Manual assignment of trips from the MDA may be a more appropriate method. In addition, confirmation is required on the level of development currently assumed within TEMPRO and whether for this area it accurately reflects Winchester, Havant's, East Hampshire's and Portsmouth's adopted and emerging local plans.

Link Sensitivity

Appendix 21.1 sets out the assessment of link sensitivity. This assessment work does not appear to have considered schools or picked up the Hambledon Parade shops or Purbrook shopping areas. These should be included within the assessment.

The table in section 5 should be amended to include existing traffic flows for comparison and checking purposes. Clarification is also sought on the type of HGV classes using the routes at present and in the forecast years. The assessment summary has been carried out over 7 days although works will only be undertaken over this period each week, this dilutes the impact of the development and therefore should be amended appropriately. Some values are missing from the table and therefore a full review cannot be undertaken. At present the impact on Day Lane and Broadway Lane even over 7 days is considered significant with an increase in HGV movements of 79%. The review has also noted a significant delay on the A3 corridor as a result of the works however no mitigation or acknowledgement of this is made elsewhere within the PIER.

The Highway Authority has significant concerns regarding the impact of these works however are not able to comment in detail until such time as appropriate assessments have been carried out. It is suggested that the applicant discuss this matter directly with the Highway Authority to agree an assessment approach and study area.

Traffic Management Requirements and Anticipated Impacts

Proposed draft traffic management requirements have been set out within the document. Three categories have been proposed of 'major, moderate and minor' the exact definition of these should be provided for clarity.

It should also be noted that any closures on the A3 will likely be required at night and other restrictions may be applied along the corridor regarding time of works. Details of traffic sensitive times can be found on the gazetteer at www.roadworks.org. Any works on the A2030, A3 and B2177 would require comprehensive local consultation which would be outside the consultation process for the application.

Generally, it is considered that the TM proposals are underestimating the extent of positive traffic management that is required when considered against the depth of installation and the size of the cables. This should be outlined in greater detail and discussed directly with the Highway Authority ahead of the application.

Comments regarding assessment of the impacts of the works have been made elsewhere in this response and understanding of the impact on other planned works

in the area and how traffic flow might be affected as a result of prolonged major works along with associated disruption will be required.

Additional Highway Matters

Transport Policy

Section 21.2 of the PIER sets out the relevant policy in relation to the application. This should include reference to the New Roads and Street Works Act (NWSRA) 1991.

Arboriculture Assessment

A preliminary arboriculture report has been provided within the PIER. This has been assessed by our arboriculture team and the following comments on the document are as follows. Firstly, the report suggests that all category A trees will be avoided however, as an environmental asset, all trees should be avoided if possible or construction works should be carried out using methods which do not damage trees or leaves the stability of the tree compromised.

It is noted that the cable route within the highway is constrained by a number of factors and the report notes that options for avoiding trees will need to be carefully considered. This will need to be set out clearly and a method statement provided detailing how damage to trees will be avoided.

The report states that cable routes shall avoid route protection areas wherever possible. However, details need to be provided on what action will be taken and what methods will be used where avoiding route protection areas is not possible.

The report details for the purpose of future planting soft landscaping areas should be avoided for the cable laying. This needs to be balanced against other highway implications and should not be taken as a general rule. Where there is the ability to utilise verges or soft landscaping areas this should be discussed with the Highway Authority to seek views on whether future planting is a potential possibility and whether there are considered benefits to laying the cables within these areas.

It is agreed that the cumulative impacts of the loss of a number of lower value trees should be assessed. Clarification is also sought on what action will be taken and what methods will be used where avoiding route protection areas of lower value trees cannot be avoided.

It is assumed that tree routes are likely to be infrequent within the carriageway construction. Given the depth of the cable laying depending on the make up of the road construction this cannot be assumed. Especially on lower order roads. Roads with less depth construction will have a high likelihood of having been exploited soils below the surface. Where tree roots have exploited the carriageway, footway or verges what action will be taken and what methods will be used where it isn't possible to avoid these areas?

A full arboriculture report will be required for all works to identify all highway and private trees effected by works undertaken within highway land. There is particular

concern regarding the possible impact of the jointing bays which appear to require significantly sized areas for construction.

The loss of any highway asset will require appropriate compensation payment to the Highway Authority and this will require assessment via CAVAT and securing appropriately within the planning process. Permission will need to be given for any highway tree loss by the Highway Authority. The loss of any trees should be avoided in order to protect this environmental asset.

Construction Details

A typical detail for the cable laying has been shown at a depth of 1m. A key concern for the Highway Authority is the impact of the cables on the ability of the authority to deliver further schemes along a key route within the network. Confirmation is required on the maximum depth the cable can be laid. Further discussions are required with the applicant to produce a plan with regards the exact route of the cable and the depth of its installation along each section of the corridor.

Integrity of the Highway Asset and Reinstatement

The applicant should set out its intentions regarding reinstatement work of the Highway. Extensive trenching along the A3 is not considered acceptable and will impose an ongoing maintenance liability to the Highway Authority. There are identified maintenance requirements and planned works for resurfacing along the corridor and the applicant is required to work with the Highway Authority to ensure appropriate delivery of these works along with avoiding burdening the authority with additional maintenance liability. Any new surface along the route would be subject to section 58 of the NRSWA protecting the surface for up to 5 years.

Consideration must also be given by the applicant regarding future maintenance of the cables and the reinstatement bearing in mind that liability for any reinstatement could be in perpetuity. It is also unclear how AQUIND will register and be permitted to undertake future reinstatement and defect repairs including being eligible to apply and pay for works permits. This is a critical matter to be addressed by the project team.

Detailed TM plans are required for the route, the information to date is insufficient and more detail is necessary to understand the overall impacts of the prolonged period of works.

Strategic Transport Implications

Hampshire County Council, along with Portsmouth City Council, has been successfully shortlisted for funding with regards to the Transforming Cities funding stream from central government. A key priority of this bid is to deliver bus priority improvements along the A3 corridor. These works would look to utilise available highway land to deliver these strategic improvements. The Highway Authority welcomes further discussions with the applicant to identify areas of conflict that may emerge between these two projects and in order to prevent either project having to incur abortive or unnecessary costs. The timescales for delivery fall within the same planned period.

Planned Works

There are a number of planned highway works within the area primarily as a result of the ongoing build out for the West of Waterlooville MDA site and our traffic management and safety engineering programmes. This includes a significant scheme at Ladybridge Roundabout. The programme dates for these works are broadly consistent with that proposed for this project. Consideration must be given to this committed scheme and the timescales required for its delivery as part of the planning approval for the site and as set out within the section 106 agreement. The Highway Authority will need to be satisfied that the works proposed through this scheme can be delivered without prejudicing the committed scheme from the MDA.

Identified works conflicts include:

- Resurfacing of the A3 corridor between a position north of Campbell Crescent to a location south of Ladybridge roundabout as shown on plan H677/01 attached.
- Implementation of capital works at Hambledown Road/Milton Road roundabout to install a toucan crossing. Drawing CJ008981-ECH-GEN-17024883-DR-HE-0002 attached.
- A3 Ladybridge roundabout provision of the southern access to the West of Waterlooville MDA. These are 3rd party works which the Highway Authority are yet to provide preliminary approval of the scheme.
- Emerging Transforming Cities schemes for rapid bus corridor improvements to the A3 (exact scheme details available June 2019).
- Lovedean Lane pedestrian refuge crossing – drawing to be provided. This may impact construction traffic.
- West of Waterlooville MDA Phase 8 construction access

Through the ongoing monitoring of the integrity of the highway asset there are a number of emerging locations where resurfacing may be required within the lifetime of this project. This includes:

- B2150 between Green Lane, Denmead to Martin Avenue (Works required 1-2 years)
- B2150 from Soake Road to 100m NW of Sunnymead Drive (Works required in next 3-5 years)
- B2150 from Sunnymead Drive to Milton Road roundabout (Works required in next 2-5 years)
- A3 from Hillside Avenue to 100m north of Park Avenue
- A3 from Rockville Drive roundabout to the A3/B2150 roundabout

In addition to these works there are planned section 278 works offline which need to be considered this includes:

- Purbrook Way / College Road junction – programme date to be delivered ahead of this scheme.
- Stakes Road/Stakes Hill Road Roundabout conversion to traffic signals
- Duelling Purbrook Way between College Road and Stakes Road Roundabout.

There is also a significant scale development emerging as an allocation within the Havant Local Plan at College Road which will require improvements to the local highway network considered at this stage to be at the following junctions:

- A3(M) junction 4 dumbbell roundabouts

- College Road/Purbrook Way junction
- Crookhorn Lane/Portsdown Hill Road junction

No application has been made to date and therefore the full extent of mitigation is unknown. However, should the application come forward delivery timescales for that project may be affected by the availability of road space impacting on Havant's deliverability of housing. This is a matter for Havant as the Planning Authority to comment on.

Works Programme

The project team should be aware that as there are other significant works planned in the area, primarily as a result of the West of Waterloville MDA and other strategic sites emerging within the local plan. Discussions regarding programming should be proactively held with the Highway Authority to ensure that road space conflicts are managed. Due to potential clashes the project team should be aware that there may be road space delays along the A3 corridor. Early engagement and coordination of programmes should be had with other stakeholders and the Highway Authority to reduce delays to any committed projects.

Legal Implementation of Cables in the Highway

It is understood that the applicant is a private company with no statutory undertaker status. In order to be permitted to install cables within the highway the AQUIND project will need to either be registered as a statutory undertaker or be subject to appropriate legal approvals as set out within the Highways Act 1980 in order to install private apparatus within highway land. Alternatively, the DCO and any statutory document needs to replicate the existing, widely used and understood processes for regulating and managing streetworks, including NRSWA, the relevant Codes of practice and permitting. This would include applying for permits and processes for overruns, defects and all associated costs for managing such that are incurred by the County Council.

Recording of Plant and Apparatus

No details have been provided on how the presence of the plant and apparatus within the highway will be recorded. Clarification on who is to do this and how it will be made available is required. Records will need to be kept in accordance with National requirements. Measures will also need to be in place to future proof the process for diversionary works enquiries as a result of future works by both the Highway Authority and third parties.

Implementation Officer Requirements

Should the scheme be progressed with considerable works on the highway, the Highway Authority would require funding for specific officer time to manage, coordinate and oversee the works within the highway. The extent of this funding requirement is dependent on the final cable route. There is considerable work involved with the ongoing discharge of conditions relating to highway matters, obtaining appropriate approvals, approving final traffic management, coordinating road space availability and general coordination of projects in this area to avoid unnecessary delay to both this scheme and the wider development requirements within Havant and East Hampshire.

Summary

The Highway Authority require additional information in order to fully assess the application, which should be covered through a specific Transport Assessment and Construction Traffic Management Plans. Fundamentally the Highway Authority require further clarification and justification as to why there are no suitable alternatives to the utilisation of the A3 and B2150 for cable laying in order to ensure the prolonged delay and disruption to the general public can be considered a necessity for delivery of this project. The Highway Authority will require appropriate mitigation measures to offset the impacts of the development and ensure residents, nearby development sites and businesses are not unduly affected by the proposed works and this should be considered further by the applicant within the ongoing work on the project.

Environmental Impact Assessment

Assessment Methodology

A summary of potential impacts for each sensitive receptor, mitigation measures and residual impacts should be included in table form at the end of each topic chapter.

Need & Alternatives

The EIA needs to include further information and discussion on the need for the scheme. This should define what the drivers for the scheme are, what the alternatives options are for meeting this need and why an interconnector provides the best option, therefore, justifying any resulting environmental impacts.

To ensure compliance with Schedule 4 of the EIA Regulations 2017, the EIA will need to include a detailed and robust analysis of the environmental effects of all reasonable alternatives in terms of design, technology, location, size and scale relevant to the development. This should include consideration of different site options, route alignments, site layouts, building designs and construction methods; presented in a transparent and consistent manner. The County Council is particularly interested to understand the environmental impacts of routing the cable within the highway, as opposed to off-line, and the impact that such works will have on issues such as air quality.

The alternative sites analysis should demonstrate how environmental impacts have been taken into consideration in the decision-making process and describe how these have been defined. It should show that the same weighting has been given to these issues in the site selection process as operational and engineering requirements. Justification will be required for any residual impacts particularly on the South Downs National Park, locally and nationally designated ecological and historic sites, local residents and highways.

The proposed Converter Station, Eastney Landfall site and onshore cable routes will all potentially have residual environmental impacts following mitigation; therefore, the selection of these sites needs to be clearly justified.

The alternatives assessment should include consideration of alternative designs for the above ground structures as well as different cabling techniques, demonstrating how these have evolved in response to the EIA and that the preferred options will have minimal impacts on the environment.

Proposals

The PEIR states that there is still some uncertainty about preferred routes for cabling works and the design and construction of significant above ground structures including the convertor station. The EIA should include detailed information on the construction methodology and final options and designs for any new structures including building heights etc and routes selected. It should ensure both the construction and operational impacts of these activities are fully addressed in the individual technical chapters of the EIA. The EIA should also be supported by detailed plans/figures showing the location of any above ground structures, dimensions and materials, to assist with understanding the potential impacts of the proposals.

The EIA should include detailed information on any inherent design or working methods to be included in the scheme to reduce environmental impacts and any mitigation measures to be provided to prevent or compensate for any impacts from the different elements of the scheme.

Details of specific mitigation measures required to reduce potential effects should be clearly identified and defined within each relevant chapter of the EIA and the mechanism by which these measures will be secured and implemented eg CEMP.

Lighting - Landscape/Ecology

Due to the location of the proposed Converter Station within the SDNP and the proximity of the site to sensitive ecological areas, the EIA should include a detailed assessment of the potential visual effects of operational lighting on nearby properties, and ecological areas including any impacts on protected species particularly bats.

Noise

A detailed assessment of construction noise and vibration from the Converter Station and the Onshore Cable Route, along with operational noise from the Converter Station should be provided in the EIA.

Cumulative Effects

A full assessment of inter and intra project effects has not been included in the PEIR and we would expect to see this in the final EIA. The EIA should include further details on the methodology used to identify and define the significance of potential intra-project effects.

Flood and Water Management

The Lead Local Flood Authority is satisfied that a Water Resources and Flood Risk Assessment will be submitted as part of the EIA. This should include a surface water

drainage strategy, as per the County Council's guidance which can be found at www.hants.gov.uk/landplanningandenvironment/environment/flooding/planning and includes recommended surface water drainage techniques.

Please note that if the proposals include any works to an ordinary watercourse require the prior consent of the Lead Local Flood Authority, under the Land Drainage Act 1991 (as amended by the Flood and Water Management Act 2010). Details can be found online at: www.hants.gov.uk/landplanningandenvironment/environment/flooding/changewatercourse.

Ecology

The section of the report (chapter 16) dealing with designated sites insufficiently reports the extent and location of the locally designated sites that will be impacted by the scheme.

The Environmental Constraints Plans does not show any SINC's or Important road verges (RVEIs), both of which support priority habitat and notable species which carry weight in NPPF. These have a direct bearing on some of the route options. Biodiversity must be a consideration when evaluating route options.

Figure 16.3 shows a significant impact on Kings Pond Meadow, and minor impacts to many other SINC's. In particular, Milton Common and Soake Farm meadows – the latter of which was approved as meeting the SINC criteria by the SINC Advisory Panel last month (map attached). No mention is made of their high biodiversity interest (regardless of the SINC designation and SSSI designation under consideration). The in-combination impact/loss is likely to be significant and therefore without a much better assessment of impacts against each individual designation the County Council cannot support the conclusions given in 16.6.3.2, and further conclusions that there will be no likely impacts to designated sites.

The route passes adjacent to or on top of (depends on route options) various SINC's and RVEI along Portsdown Hill Road important for their chalk grassland and notable species. These need to be evaluated in terms of impact and route options, and either avoidance or mitigation/compensation measures.

The description of the habitats is not accompanied by a summary of the areas that will be impacted by the proposal. It is therefore not possible to determine levels of impacts, especially in consideration of potential for supporting protected species.

The County Council has concerns about the lack of survey for dormice along the length of the offshore cable route and the Converter Station. These animals have legal protections and therefore 'limited vegetation clearance' does not offer any protection for them, and in combination could lead to a significant impact to conservation status. Much more robust assessment of the species and the habitat potential on a landscape level is required, as the species is much under-recorded. Any application should assess the population and demonstrate enhancement of their habitat through net-gain.

Archaeology and Historic Environment

The County Council has assessed the red line boundary of the proposal and would make the following comments on each section:

Section 1

A Bronze Age cremation cemetery (HER no: **69596**) has been recorded immediately to the south west of the Lovedean Energy Storage site, while a stray find of a single fragment from a copper-alloy bracelet of late Roman date (c. 4th century AD) and a coin dating from the reign of Elizabeth 1 (1558-1603) have been recorded close to The Crossways, around 850 metres to the south west. Traces of field systems have been recorded from cropmarks to the north west of the Lovedean Storage site although these remain undated with fragments of medieval pottery recorded to the south.

Overall, there is some potential for further, as yet unrecorded, archaeological features to be found in Section 1, although an archaeological evaluation (HER no: **70042**) carried out immediately to the south of the Lovedean site in 2018 recorded nothing of note.

Section 2

Several Grade II Listed Buildings are located at Denmead Farm, with further Grade II buildings at Brooks. An undated pit (probably a former quarry) has been recorded in a copse to the east of the farm (HER no: **53530**), while a Neolithic flint has been recovered around 55 metres to the south east of Brooks.

Overall the archaeological potential of the section is low, but with the possibility of as yet unrecorded archaeological features within the open fields.

Section 3

King's Pond (HER no:**38956**), which is medieval in date, is located at the far northern end of the section.

Overall the archaeological potential of the section is low, but with the possibility of as yet unrecorded archaeological features within the open fields.

Section 4

No cultural heritage assets have been recorded within Section 4. The far north west end of this section is within green fields that may contain as yet unrecorded archaeological features, the majority of the section follows the existing road network where the likelihood of exposing archaeological features and/or deposits is considered to be negligible.

Section 5

Two areas of open green are included within the redline boundary, one to the north of the Reservoir and a school playing field. No cultural heritage assets have been

recorded within the section but as always, the possibility remains of as yet unrecorded archaeological features within these open areas.

The remaining part of this section follows the existing road network where the likelihood of exposing archaeological features and/or deposits is considered to be negligible.

Section 6

Most of this section follows an existing road network where the likelihood of exposing archaeological features and/or deposits is considered to be negligible. One area of open green is included within the redline boundary, to the north west of an industrial estate. No cultural heritage assets have been recorded within the section but as always, the possibility remains of as yet unrecorded archaeological features within the open area of green.

Section 7

This northern half of the section follows the existing road network (A2030) as well as enclosing a recreational field. No cultural heritage assets have been recorded within the section but as always, the possibility remains of as yet unrecorded archaeological features within the recreational ground.

The southern half of the section crosses intertidal mudflats within Langstone Harbour. This is a drowned prehistoric landscape with the possibility of uncovering ancient peat deposits, as well as stray archaeological finds.

At the very southern end of the section is Kendall's wharf where previous Geotechnical surveys have not recorded any archaeological features or deposits although the potential for as yet unrecorded features does remain, albeit not high.

Section 8

Most of this section follows an existing road network where the likelihood of exposing archaeological features and/or deposits is considered to be negligible. Other sections Milton Common, but area has been identified by previous archaeological investigations to be made up largely of modern waster material, dumped over former intertidal mudflats and clays. The archaeological potential of these opens areas is considered to be negligible.

Section 9

There are two principal cultural heritage issues in this section;

1. The area of relative high ground immediately to the east of St James' hospital, to the south of Milton Common, is believed to have been occupied in the prehistoric era, while a flint scatter has been recorded close to the hospital buildings (PCCHER no: **MPM1192**). Any construction along this section, particularly on the school site close to the hospital, may well expose prehistoric archaeological features and/or stray finds.

2. The cable route crosses the line of the former Portsmouth Canal (PCCHER no: **MPM1347**). Excavations may expose the infilled remains of the canal basin which has yet to be properly recorded. However, it is doubtful that the construction methodology employed would expose enough of the feature for interpretable sections to be recorded.

The section also crosses the allotments to the south of Locksway Road. This area contains no recorded heritage assets, although there is potential here for as yet unrecorded archaeological features and/or deposits to be found.

The remaining part of the section follows the existing road network where the likelihood of exposing archaeological features and/or deposits is considered to be negligible.

Section 10

At the far south east end of the section, the cable route crosses surviving World War II Beach defences at Eastney (PCCHER no: **MPM55**). It would be preferable for construction to avoid damage to these defences. The areas of waste ground and beach at the end of the section are considered to be of low archaeological potential, although as always there is a chance of as yet unrecorded archaeological features and/or deposits being exposed during groundworks.

Much of the north west part of this section follows the existing road network where the likelihood of exposing archaeological features and/or deposits is considered to be negligible.

Landscape and Visual Impact

The County Council notes that the converter station at Lovedean will be of considerable scale, with the building being between 22 -26m in height, 90m in length and 50m in width. The landscape and visual impact of such a building in this location will need to be carefully considered. No doubt the local planning authorities at East Hampshire and Winchester, along with the South Downs National Park authority, will wish to make detailed comments on the appropriateness of such a building in the countryside.

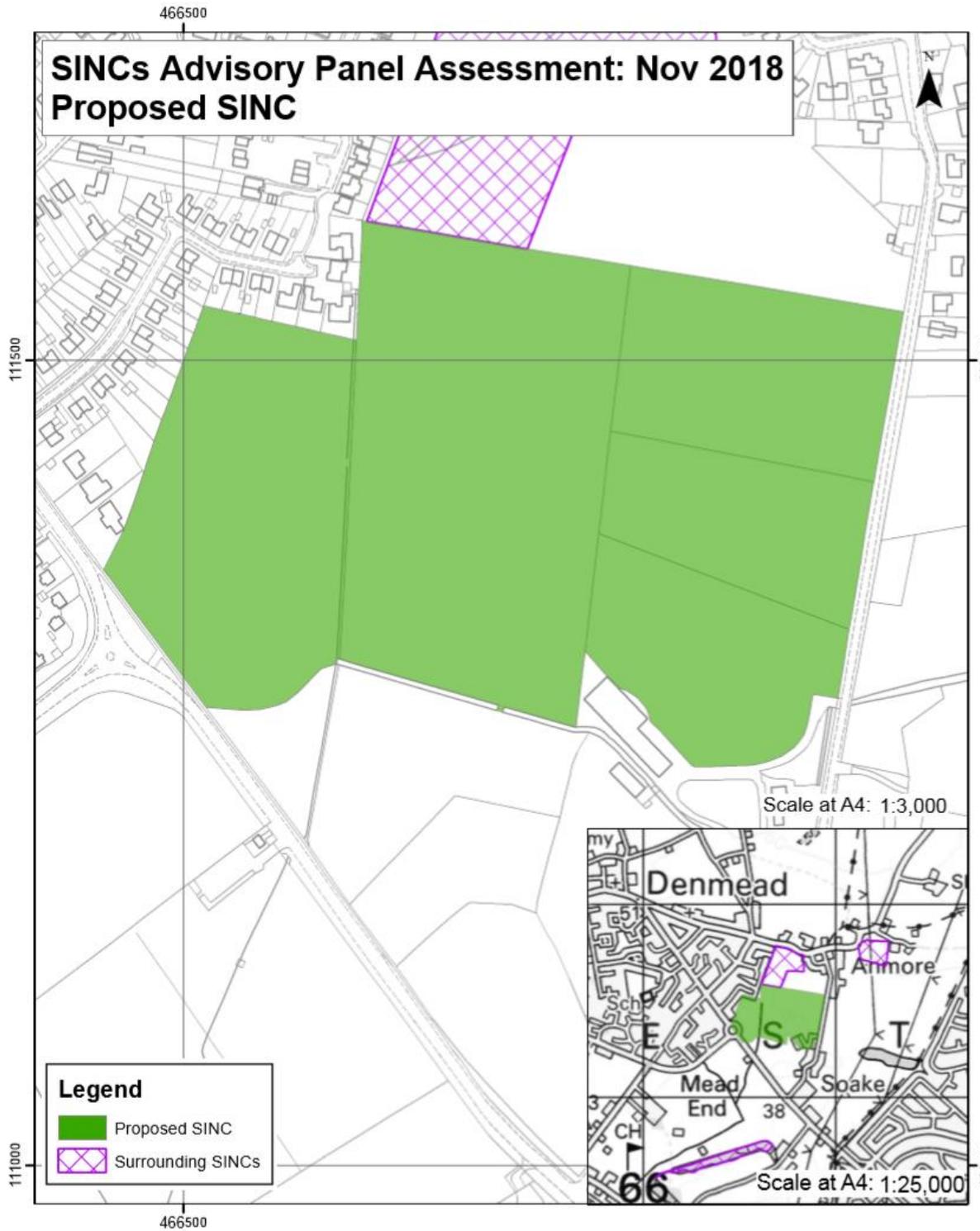
If you have any queries concerning the above, please do not hesitate to contact my colleague Laura McCulloch on (01962) 846581.

Yours faithfully,



Stuart Jarvis
Director of Economy, Transport and Environment

Soake Farm Meadows Proposed SINC



Site Name: Soake Farm Meadows
 Site ref: WC0825
 Authority: Winchester CC
 Grid Ref: SU66701142
 Criteria: 2A/6A

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