AQUIND Interconnector

Application by AQUIND Limited for an Order Granting Development Consent

Local Impact Report

Hampshire County Council

1. Introduction

1.1 For the purposes of this application, Hampshire County Council is the statutory Local Highway Authority (which includes not only metalled vehicular roads but also public rights of way) and Lead Local Flood Authority. The County Council also has interests related to landscape and archaeology, and it provides advice, guidance, and support to a number of district authorities across the county on these matters.

1.2 The County Council is in discussions with AQUIND Limited (hereafter the 'Applicant') with the intention of preparing a Statement of Common Ground (SoCG) on a number of matters of particular relevance to this application. Accordingly, this Local Impact Report (LIR) has been prepared to provide a general overview of the key impacts that Hampshire County Council consider it appropriate to highlight, given its responsibilities and interests. Further, more detailed comments on the specifics of the identified impacts (and the County Council's perspective therein) are likely to be forthcoming within the context of the SoCG and written representations at the invitation of the Examining Authority.

1.3 This report should be read alongside more locally specific local impact reports produced by the respective host boroughs and districts. The County Council has been working closely with both Portsmouth City Council and Highways England, as the respective Highway Authorities for the area affected by the proposed Development Consent Order (DCO), in respect of the highway implications of the application.

1.4 Detailed comments on the drafting of the submitted Development Consent Order are set out in Appendix One .

2. Details of the proposal

2.1 The proposal is to provide an electricity interconnector between France and the UK, providing a net transmission capacity of 2,000 megawatts.

2.2 The proposed development includes:

1. High voltage direct current marine cables from the boundary of the UK Exclusive Economic Zone to Eastney in Portsmouth;
2. Jointing of the marine cables and onshore cables;
3. The onshore cable consisting of two high voltage direct current circuits from Eastney to the converter station;

4. Up to two ‘Optical Regeneration Stations’ - structural units housing telecommunication equipment for the proposed development and responsible for optical signal amplification purposes. They will be located at the landfall within Fort Cumberland car park at Eastney;
5. The converter station area and associated electrical and telecommunications infrastructure.
6. High voltage alternating current onshore cables and associated infrastructure connecting the converter station to the existing National Grid substation at Lovedean; and
7. Smaller diameter fibre optic cables together with the high voltage direct current and high voltage alternating current cables and associated infrastructure.

2.3 In terms of the element of the proposed development that is within the administrative area of Hampshire County Council, the cable crosses the border into Hampshire at the A3 London Road at the junction on Boundary Way (south of Purbrook) and continues up the A3 London Road to the Hambledon Road roundabout. It then follows the B2150 Hambledon Road to north of Soake Road where it crosses private land and some minor roads to get to land adjacent to the Lovedean Electricity sub-station. This is where the converter station is proposed to be located with access via Broadway Lane at the junction with Day Lane, both of which are narrow rural roads bounded by hedgerows.

3. Relevant planning history and any issues arising:

3.1 The planning history provided in the Applicant’s Planning Statement accompanying the submission is considered to sufficiently capture the relevant planning history within Hampshire. The LIRs of individual host city, district and borough councils and the South Downs National Park Authority may be of relevance in relation to any subsequent applications and decisions considered to be of relevance to the determination of this application.

4. Planning Policy

4.1 Hampshire County Council is content with the planning policy context as presented in the Applicant’s Planning Statement, and as supplemented by the individual LIRs of the affected host city, district and borough councils and the South Downs National Park Authority.

5. Impacts: Highways and Transportation

5.1 A Transport Assessment has been submitted (Appendix 22.1 of Volume 3 of the Environmental Statement) to support the application. Comments below are in response to this Transport Assessment and its appendices.

High level description of the highway characteristics

5.2 The A3 connects Portsmouth to London, albeit that A3(M) has replaced its function as part of the strategic road network on the route from Farlington

to Horndean. The section affected by this DCO from Portsmouth to Waterlooville, within the administrative county of Hampshire, is a largely single carriageway road with varying speed limits between 30mph and 40mph. Peak hour flows range from 1519 to 1611 vehicles per hour in the AM peak and 1285 to 1773 vehicles per hour in the PM peak. The A3 is primarily characterised by its alignment through areas of 'urban edge', providing direct frontage access to a number of individual residential properties and other uses such as shops and businesses. The carriageway widths range from 6m to 14m (including bus lanes). Bus priority measures, in the form of sections of bus lanes and high-quality bus stops, are a significant feature along this section of the A3 providing a high-quality bus link between Waterlooville and Porstmouth. It has a number of accesses and key junctions along it including Ladybridge Roundabout, Maurepas Way Roundabout and Hambledon Road Roundabout. The road is also a recognised diversion route if the A3(M) has to be closed for planned or emergency activities.

5.3 The B2150 Hambledon Road, where it meets the A3 London Road, adjoins Waterlooville town centre and provides one of the main entrances to the West of Waterlooville urban extension. Nearby, access is also provided, via the Aston Road signal junction with the B2150, to Wellington Retail Park. The B2150 is also subject to a number of direct residential and business vehicular access points and other key junctions such as the Milton Road roundabout and the Darnel Road signalised junction (providing access to the northern parcel of the West of Waterlooville urban extension). Further north on the B2150, the route becomes more rural until you reach Forest Road roundabout and Denmead where the proposed cable routing exits the highway. The B2150 is subject to a 30mph limit along its length from the Hambledon Road Roundabout to Forest Road Roundabout. Peak hour traffic flows along the route vary between the southern and northern end of the route with 1399 and 874 vehicles per hour respectively in the AM peak and 1474 and 907 vehicles per hour respectively in the PM peak.

5.4 The proposed converter station at Lovedean is in open countryside where the roads are rural in character, with restricted carriageway widths preventing two way flow and bound by hedgerows. The proposed construction routing would be from the A3(M) at junction 2, via the B2149/A3 Portsmouth Road and Lovedean Lane. The B2149 and the A3 Portsmouth Road are key distributor roads with the A3 Portsmouth Road being subject to residential frontages. Lovedean Lane is primarily a residential distributor road with housing frontage and associated residential and business access. It is subject to a 30mph speed limit and has peak hour flows of 626 vehicles per hour in the AM peak and 738 vehicles per hour in the PM peak.

Consultation and Scoping

5.5 The Applicant engaged with Hampshire County Council in its capacity as the Highway Authority prior to the submission of the application for a DCO. Preliminary meetings were held with the Applicant to discuss the scoping for the highways and transport elements of the project.

5.6 Following on from the Preliminary Environmental Information Report (PEIR) consultation period, the Highway Authority provided a detailed list of comments that would need to be addressed to better understand the implications and long-term impacts of the project.

5.7 The Applicant and Highway Authority held further discussions prior to the submission of the DCO application to discuss the scoping of the Transport Assessment and the use of the Sub-Regional Transport Model. The use of the model offers the potential to understand the re-distribution of traffic on the road network as a result of the temporary traffic management measures in place during the construction of the cable route. Future potential disruption to the network arising from ongoing maintenance of the cable route, and its eventual decommissioning, is expected to be appraised on a case-by-case basis.

5.8 The Highway Authority has continued to provide comments to the Applicant on matters that need to be addressed as part of the DCO submission. This report comments on the proposals within the Transport Assessment which have addressed the Highway Authority's comments, and also those matters that remain outstanding.

Summary of Cable Work Extents

5.9 The Highway Authority has reviewed the information provided within the application in relation to the cable works within the areas of highway under the jurisdiction of Hampshire County Council as Highway Authority. The relevant sections are set out below along with initial comments, more detail can be found further within the response:

Section 1 Lovedean (Converter Station Area)

5.10 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, for which comments have been provided in paragraph 5.37-5.41 and Appendix 5. Insufficient information has been submitted, to date, on the potential impact on Horndean Footpath 4

Section 2 Anmore

5.11 This section of the cable route is primarily off the highway except for the crossing of Anmore Road and Denmead Footpath 13. Information is sought on how vehicular access to the field south of Anmore Lane is to be provided 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 carriageway lane which generally would not be considered appropriate for construction traffic without suitable controls in place.

Section 3 Denmead/Kings Pond Meadow

5.12 Section 3 of the cable route covers the area between Anmore Road and B2150 Hambledon Road. Heading south from Anmore Road the route runs through Kings Pond Meadow, to the field north of Hambledon Road. Again, confirmation is required on how vehicular access for construction traffic is to be obtained due to restricted carriageway widths and no clear indication or details of the access requirements for construction.

5.13 Flexibility is proposed within the order limit for the works to either locate the construction compound north or south of Hambledon Road. Should the compound be located to the south, the cable route could run adjacent to Hambledon Road in a south-easterly direction. The potential utilisation of such an alignment could be test further, albeit it is acknowledged that the landscape impacts arising are likely to be significant given the extent of hedgerows and other vegetation in the area. The Highway Authority requires further information to understand the implications of locating the compound to the north or the south of Hambledon Road.

Section 4 Hambledon Road to Burnham Road

5.14 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 as described in paragraphs 5.1 to 5.4, which require more detailed consideration. The section also crosses the jurisdiction of the County Council and Portsmouth City Council (PCC) as Local Highway Authorities. The County Council is only commenting on the part of the network for which it is Highway Authority. Comments regarding concerns and additional information requirements within this section of the works have been included throughout this response

Alternative Route Opportunities

5.15 The proposed route of the cable along the highway network within the administrative control of Hampshire County Council is shown on sections

1-4 of the onshore cable corridor plans. This brings the cables from the proposed converter station site at Lovedean down to the Portsmouth City Council boundary at the A3 London Road (south of The Dale). The route primarily runs along the A3 corridor and B2150, which are highly trafficked, important priority bus routes, and play a key role within the local network. The cable route corridor in this area caters for the bus 'Star' routes 7 and 8 between Portsmouth and Waterlooville which is a key access facility to Queen Alexandra Hospital and Portsmouth's employment areas.

5.16 The proposed route is already constrained to further improvement in general capacity due to the available highway land and frontages of private properties. The ongoing ability for the Highway Authority to be able to maximise the use of the highway land therefore remains paramount on this key connection to Portsmouth and the A27/M27 corridor and therefore should not be unduly constrained by the provision of non-highway infrastructure within the highway boundary.

5.17 The road is also subject to a significant number of private accesses which during the construction period will be subject to access issues, night-time working and additional delay along the corridor as a result of the extensive construction programme. The route also importantly provides access to key retail areas such Asda Waterlooville store, Sainsburys and Wellington Retail Park along with local centres within Purbrook and Hambledon Parade which would all be affected by the works. The western side of the northern section of A3 London Road is also the Waterlooville Major Development Area which is under construction and seen delays previously as a result of the 2008 recession. This site is providing vital housing supply for Havant Borough Council and access works and improvement works secured through the S106 for this site are programmed to conflict with the proposed construction programme for the cable laying along this corridor. Additional delays to construction of the supporting highway works and knock on implications for construction access could lead to delays in buildout of the site and therefore have a negative impact on the surrounding community as a result of increased congestion and delayed delivery of new housing supply.

5.18 Whilst the Environmental Assessment provides some consideration of an alternative non-highway focussed route, Hampshire County Council is yet to be convinced that the conclusions that the ES reached on this matter are fully justified. In particular, little understanding, and weight, appears to be given to temporal disturbance to the highway during construction, subsequent longer term impacts of this disruption and the impact on future planned highway schemes including:

- Ladybridge Roundabout Capacity Improvements as a s106 obligation of the Waterlooville MDA planning permission and potential TCF works;

- Stakes Road/Stakeshill Road capacity improvements as a s106 obligation of the Waterlooville MDA planning permission;
- Milton Road/Lovedean Lane junction improvements as a result of permitted development at Woodcroft Farm secured within the s106 agreement for the development; and
- Resurfacing works at the A3 corridor.

There is also the ongoing potential for future transport works with long term aspirations to improve the bus provision along the A3 corridor to further support the bus 'Star' routes and improve the sustainable transport offer within the area.

5.19 The Transport Assessment does not provide any justification as to why the cable must take this route, or the alternatives that have been explored and as previously noted this should be provided for clarity to all parties. There may be opportunities along the route to take the cable off the highway or at least off the main A3/B2150 corridor in either part of whole such as:

- Fields running parallel with the A3 from B2177 Portsdown Hill Road to Purbrook Heath Road.
- West of Waterloovile urban extension site from Purbrook Heath Road to Hambledon Road/Darnel Road junction
- Fields on the south western boundary Hambledon Road to Forest Road roundabout.
- Service road provisions along the main A3 and B2150 corridor which would take the route off the mainline.

5.20 These opportunities should be considered by the Applicant and justification will be needed should it be considered unfeasible e.g. landscape impact. It is accepted that utilising the public highway may be considered less complicated than negotiating with individual private landowners and will likely be more contained within the existing urban landscape. However, this route will inevitably cause prolonged delay on key areas of the network and has potential ongoing implications for the Highway Authority, private developers where planning permissions rely on delivering improvements to the affected highway and other utility companies. The Highway Authority therefore requires clear justification as to why the highway is the preferred option. This is especially pertinent for the southern section of Hambledon Road and northern end of London Road (north of Ladybridge roundabout) within the development red line given that these areas are particularly heavily trafficked and there are several planned improvement schemes, making cable installation particularly challenging.

Comments on Applicant's methodology

Transport Assessment

5.21 A Transport Assessment has been submitted detailing current vehicular traffic flows on the affected network, existing sustainable modes of transport provision and a summary of the injury accident records. A review by the Highway Authority of the information submitted in relation to the existing conditions is set out within Appendix 2, along with a request for further information. In summary these are:

- Extension of the injury accident study area to include all routes anticipated to experience a material increase in traffic as a result of the works;
- Analysis of accident data, including clusters of accidents, within the extended study area; and
- Improved presentation of accident data to enable analysis.

Transport Assessment Methodology

5.22 The Transport Assessment seeks to present an understanding of the potential impact on traffic, and high safety, during the construction of the cable route. A full review, and commentary on, information submitted in relation to the impact of the proposed works is included in Appendix 3. The Highway Authority does not agree with the conclusions reached within the Transport Assessment. Further information is required, summarised as:

- Further information on how the monitoring of the performance of specific junctions will be provided during the construction works and clarity regarding the mitigation measures to be put in place if necessary.
- Consideration of, and appropriate mitigation, to ensure there is no detrimental impact to sustainable modes of transport use. This could include a S106 agreement with the Applicant in relation possible bus service support via a service level agreement with bus operators and mitigation of the impact on cycling.

Works Programme

5.23 There are significant works to the highway planned in the area and the Applicant will need to coordinate with these works. Some schemes may have secured funding, or planning triggers, which if delayed due to unavailable road space could have wider impacts on securing sustainable development objectives. Discussions regarding programming should be proactively held with the Highway Authority, and other stakeholders, to ensure that road space conflicts are managed effectively. The existing permit scheme fulfils the Highway Authority's legal requirement to coordinate works and activities. This permit scheme complies with national legislation and has been designed to help reduce the impact of works on the highway by facilitating careful planning and the setting of works conditions. Approval of road space availability within the permit scheme,

and works being subject to specific conditions, is therefore sought by the Highway Authority within the provisions of the DCO. Similarly, the Applicant should agree to use Hampshire Countryside Service Temporary Closure procedure for temporary closures and provision of alternative routes during construction that affects a right of way. Where a Temporary Closure Order under section 14 of the Highway Act needs to be secured, a suitable alternative route should be provided for the duration of the works where feasible. Temporary Closure Orders should be applied for at least 6 weeks prior to the commencement of works, while details of how to apply can be found at: http://www3.hants.gov.uk/row/making- changes/temp-closures.htm

Construction Methodology

5.24 It is noted that the proposed extent of the order limits gives flexibility to the siting of the cable route within it, and as such the cable's exact location within the highway is unknown and cannot be reviewed. An assessment of the existing apparatus or services within the highway has not been provided, however it is likely there will be a high volume of existing services. Investigation into the existing services should be carried out and design work undertaken and submitted to the Highway Authority for review to ensure the Onshore Cable can be laid to an appropriate depth. Investigatory trenches may be required. Clarification should be provided regarding whether diversions of existing services are proposed. Consideration should be given to the fact that existing services may have restrictions on working in close proximity, which may restrict delivery of the proposed infrastructure.

5.25 In the absence of this information is it unclear if the proposed infrastructure can be delivered within the suggested timescales, if diversions of existing utilities will be required or if, in constrained locations, delivery is even possible. Further information regarding existing services and delivery of the proposed infrastructure in relation to this is therefore required at the earliest opportunity.

5.26 The Highway Authority is concerned that construction of the proposed infrastructure within the highway will significantly restrict or prevent future highway improvement schemes and the placing of other new utility infrastructure. Discussions with the Applicant confirm that future diversion of the cables, while theoretically possible, is highly likely to be prohibitively expensive and will be of an extensive nature. It is therefore imperative that the cable is laid in such a way to minimise the need for any diversion in the future. Should the Applicant be granted approval for the works sought in the submitted DCO, the Highway Authority require an indemnity to cover the potential cost of diverting the cables should this be necessary to facilitate highway works. Should an indemnity not be agreed, future

improvement schemes, or works to facilitate future development, will become unviable should cable diversion be required, which may prevent future development or highway improvements to support access and travel.

Cable

5.27 The submission material does not include specific details of the onshore cable route alignment, depth of installation and horizontal positioning within or adjacent to the highway (carriageway, footways, cycle paths, verges) and open fields. It is essential that all reinstatements comply with the 'Specification for the Reinstatement of Openings in Highways' and any deviations from this specification must be agreed with the County Council. Any non-compliances will need to be rectified by the Applicant at their own cost. The usual two or three year guarantee period must apply to all reinstatements. Should the reinstatement fail after the guarantee period and it is proven that the Applicant failed to reinstate the works correctly in the first place then the guarantee period is deemed to have not started and the Applicant will remain liable for the reinstatement.

5.28 The Transport Assessment states that the cable will be laid to a normal burial depth of 900mm to the top of the protection covers when situated on agricultural land and open countryside. However, no proposed depth is specified for construction within the highway. As above, a construction method statement for highway works in the vicinity of the cables, with confirmation of an increased minimum burial depth, is required to determine an acceptable construction method.

5.29 Clarification should be provided regarding the implications of high voltage direct current cables within the highway for future 'smart technologies'. This includes the potential for in-road electric vehicle charging and vehicle infrastructure integration. The Highway Authority is keen to ensure that future installation of sustainable smart technologies are not prohibited along the route.

5.30 Whilst a method statement for highway works in the vicinity of the cables, joint bays and link boxes has been provided by the Applicant, it does not include all the information required and should be updated and resubmitted for review. This should detail the required construction methodology, including the minimum required cover depth. Should the cover depth be reduced beyond the minimum in the future due to highway works, details of the required mitigation/ remedial measure (e.g. protection slab if appropriate) should be formally agreed at this stage.

Jointing Bays

5.31 Proposed jointing bays are currently indicatively shown to be within the existing highway including within key junctions. No exact locations have been provided and there is concern regarding the maintenance liability and ongoing temporary traffic management implications of having inspection chambers within the highway. The Highway Authority therefore request that jointing bays are not located within the public highway, and not within an agreed distance of planned highway works. However, should installation within highway land be progressed, the Highway Authority require precise locations to be provided in order to understand the detailed implications of these on future highway works and maintenance. Provision of the detailed construction method for the joint bays is also required, as is a construction method statement for highway works in the vicinity of the joint bays. Information is also required on any constraints that will exist in the vicinity of the joint bays, such as a requirement for the Applicant to retain access in perpetuity. A plan showing locations of planned works within the area has been included with Appendix 6; jointing bays would be unacceptable in these locations. Discussions should be had with the Highway Authority regarding detailed locations of jointing bays if required within highway land.

5.32 Any future construction around jointing bays within the highway would require an Approval in Principle (AiP), following the Highway Authority's approval procedure for structures as per 'Design Manual for Roads and Bridges, DMRB 1.1.1 BD2'. It is understood that maintenance access to the joint bays is proposed to be off-carriageway, located in footways or highway verges. This should be confirmed and should allow space for contractors to safely park and access the joint bays for maintenance.

5.33 The location and construction of all joint bays require approval by the Highway Authority as part of the secured design check process should they be installed on highway land.

Link Boxes

5.34 No reference to link boxes is made within the Transport Assessment; however, there is reference in the draft Development Consent Order Requirements (Schedule 1, paragraph 1, C). The Highway Authority requires clarification as to whether any link boxes are proposed within the highway and, if so, details of the construction methodology and implications for future highway works should be provided.

Construction Methodology Summary

5.35 The Development Consent Order must include requirements for the developer to submit detailed proposals, designs and construction methodologies and specifications for review and approval by the Highway

Authority prior to commencement of each section of the works. There is a need to ensure link boxes/pillars/cabinets do not obstruct footways, cycleways or other rights of way, and do not encroach upon pedestrian or vehicle sightlines and visibility splay areas at driveways and junctions. This can be assessed and approved as part of the secured design check process. Full details of the submission requirements are provided in Appendix 4. Access to inspect the works during construction will also be required, and fees will need to be secured to cover resourcing these requirements.

5.36 Confirmation of adherence to the Specification for the Reinstatement of Openings in Highways, or any local amendments including methods statements will be required. Extensive trenching along the A3 will not be acceptable due to the ongoing maintenance liability for the Highway Authority. Lane width carriageway surfacing will therefore be required for reinstatement and should be secured through the DCO. There are plans to carry out resurfacing along the corridor and therefore the Applicant is required to work with the Highway Authority to ensure appropriate delivery of these works. Any new surface along the route would be subject to section 58 of the New Roads and Street Works Act (NRSWA), protecting the surface for up to 5 years and therefore preventing any cable installation for this period. In addition, S58(A) of NRSWA will also be applied following completion of appropriate sections of the Applicants work in order to protect residents and traffic from further disruption for up to 6 months.

5.37 Fees will be required for design checking and inspecting access and widening S278 works. There will also be fees associated with the Highway's Authority preferred use of its permit scheme for coordination of works/ road space booking and inspection of works to ensure compliance with agreed standards and conditions. The Highway Authority's standard procedures / permit scheme secure these fees, however, if these are not followed, the required fees will be secured in the DCO.
A summary of the required fees is set out below:

- Design check and inspection fees for S278 works; time charge basis.
- Design check of the exact cable route, site-specific cable laying methodology and review of other infrastructure (e.g. joint bays); £50,000 in total for the works is considered acceptable.
- Inspection of the cable laying (including daily inspections, attendance of monthly site meetings and quarterly progress meetings); £5,000 per month over the life of the project within HCC highway is required.
- Road space booking and carriageway reinstatement inspection (using the permit scheme): charged on a per permit basis but the estimated cost is c. £17,000.

- Nb. If the permit scheme is not used, road space booking and carriageway reinstatement inspection: £30,000.

Any change of scope or programme of the proposed works may require amendments to the values stated above.

Transport Impact Assessment Summary

5.38 The application currently retains a significant level of flexibility for the appointed future contractor to determine the exact location and construction method of the cable within the highway. Given the lack of information regarding the exact route of the cable and any specific construction details along each section of the corridor, there is insufficient information to enable the Highway Authority to adequately assess the impact of the proposals. This may result in sections of the cable being undeliverable along the proposed route. The likelihood of this cannot be determined through the level of information submitted to date. The Highway Authority recommend that additional information and detail is provided at this stage to ensure that unknown details do not jeopardise the delivery of the project. Should this information not be provided, it is imperative that a process for review and authorisation of the detailed construction specifics for all sections of the cable route within the highway is secured, along with inspection of the works during construction.

5.39 Should the Examining Authority consider that detailed further information is not required at this stage, it is imperative that a process for review and authorisation of the detailed construction specifics for all sections of the cable route within the highway is secured, along with a programme for the inspection of the works during construction. This should include details of the siting, positioning, construction and subsequent maintenance of the onshore cables, jointing bays, link boxes, pillars and cabinets.

5.40 Consideration must also be given by the Applicant regarding future maintenance of the cables and the reinstatement of the carriageway bearing in mind that liability for any reinstatement could be in perpetuity. It is also unclear how the Applicant 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 and should mirror or adopt existing processes provided within the New Roads and Street Works Act 1991.

Arboriculture Assessment

5.41 An assessment of trees to be impacted has been undertaken to BD 58372012 standard. However, HCC cannot be sure whether all trees that are likely to be affected have been assessed. This uncertainty is due to the

powers being sought within the DCO which suggests that trees outside the order limits may also be impacted. There are also trees within the report which are the property of Hampshire County Council and the issue of compensation for the loss of irreplaceable assets has not been addressed.

5.42 Where Hampshire County Council owned trees have to be removed for example from verges, compensation or mitigation (or a combination of the two) will be required to equal the capital value of the asset lost. This is to be calculated using the industry recognised CAVAT (Capital Asset Valuation for Amenity Trees) system and workings for this valuation should be included within the submission. There is currently no set mechanism for compensating loss set out within the application.

5.43 The Tree Report (paragraph 1.5.4) provides a specification for root cutting and adjustment of root protection areas. While this is not completely untenable, the specification does not include any limits to this prescription. As such, there are concerns that this could be implemented so as to leave trees dangerously unstable. Any work of this kind to HCC trees, which are on or close to the highway, should require agreement from HCC.

5.44 The absence of Tree Preservation Orders on public trees is no indication of their worth; publicly owned trees are rarely protected as they are already managed as appreciating public assets for safety.
The preferred option is always to retain existing tree cover where this has a reasonable 'safe useful life expectancy'. Further details of a suggested hierarchy of approach to addressing highway trees in this context is set out in Appendix 1.

Highway Structures

5.45 Part of the proposed route requires the crossing of a culvert under the A3 south of Ladybridge Roundabout. The Highway Authority requires construction details of this to be provided in order to be able to assess the impact on the culvert. No information has been provided within the application to demonstrate to the satisfaction of the Highway Authority that these works are deliverable, taking into account the likely constraints. Such information should be provided at this stage. The Highway Authority anticipates the need for a subsequent Approval in Principle (AIP).

Proposed Development

Converter Station

5.46 The converter station is proposed to be located at Lovedean, south of the existing electricity sub-station accessed from Broadway Lane. Transport matters relating to these works include the highway impacts of the construction of the converter station and the on-going access to the site once operational.

5.47 Vehicular access to the site is proposed at the Day Lane/ Broadway Lane junction. Prior to the submission of the DCO, the Highway Authority

requested further details of the site access to confirm it meets the required highway design standards and allows for safe and efficient use of the highway network. This requested additional information has yet to be received and accordingly the acceptability of the proposed site access cannot be assessed. Appendix 5 provides full details of the further information required.

5.48 It is noted that Broadway Lane is derestricted and as such visibility splays at the proposed new vehicular access would normally be sought at a ‘distance of 4.5m back from the channel of Broadway Lane. However, the majority of total vehicular movements are expected to be during the construction period of the converter station where all necessary signing can be secured. Vehicular movements following construction are likely to be infrequent. Therefore, securing an ‘x’ distance of 2.4m is considered appropriate for both the construction period and subsequent routine access for future operations and maintenance of the converter station.

5.49 Insufficient detail has been provided to date to confirm that the principle of the access is acceptable and for Hampshire County Council properly to inform the Examining Authority of the likely impacts of the access. It should be noted that a requirement within the DCO will need to secure Hampshire County Council’s standard Section 278 process. This will ensure that the works are constructed to an adoptable standard and are carried out in line with the Highway Authority’s procedures, should the application be permitted. This process includes the requirement for detailed engineering drawings to be provided of the proposals for review and approval. Should a requirement to complete the County Council’s standard Section 278 process not be included, more detailed requirements within the DCO will be necessary to ensure the design and construction of the site access is acceptable.

5.50 A breakdown of average weekday vehicular flows, including the number of east/west movements, the percentage of HGV movements and the average speed of vehicles have been provided by the Applicant. However, the movements of HGVs are an aggregation of the west/east movements. Precise numbers should be provided to understand the overall level of HGV movements when compared to the two-way flow.

Converter Station Internal Road Route

5.51 Drawing No. EN02022-2.7-LAY-Sheet3.01 shows the proposed internal layout for the converter station site during construction. This includes an internal road length of 1200 metres with an indicative width of 7.3metres. Details should be provided to ensure that the proposed access road is suitable for construction traffic. This includes details of vehicle tracking (in particular showing two HGV’s passing and the abnormal loads vehicle for

the delivery of the transformers), speed limit information and a definitive proposed alignment for the route. Vehicle tracking drawings will also be required for HGV's turning within the convertor station compound, as well as parking details for future operations and maintenance.

Operational Phase

5.52 On completion of the works it is noted that it is not anticipated that the development will materially impact on the highway network, with only occasional servicing visits likely.

Decommissioning Phase

5.53 Work to de-commission the converter station is anticipated in a minimum of 40 years. This is assumed to have the same level of construction traffic trip generation as the converter station construction phase. A CTMP (or equivalent) for these works will be required by the Highway Authority for approval ahead of when these works are planned, in order to assess a suitable access strategy at the time. This should be appropriately secured within the DCO requirements. Concerns raised relating to the impact of the construction phase will also be relevant for the decommissioning phase. If appropriate protection cannot be achieved through the DCO for this decommissioning phase, clarity should be provided on the limits of the DCO powers in this regard, and the need for appropriate permissions to be secured from the Highway Authority.

Works within the highway

Cable Route and Conflicting Works

5.54 A plan of the proposed cable routes has been provided by the Applicant. For the area of the network subject to the County Council's jurisdiction, this covers sections 1 to 4. Appendix 6 sets outs the areas of conflicting work along the route. Specific comments on individual sections of the route have been made throughout this response.

5.55 On a general note, the Highway Authority sought confirmation during the PEIR consultation that access to individual properties along the A3 London Road would be retained during construction of the cable route. However, the Transport Assessment does not provide details regarding access to these individual properties. This information should therefore be provided, especially considering the unknown presence of those with mobility issues and likely absence of alternative appropriate on or off-road parking.

5.56 A plan showing the highway boundary overlaying the order limit should be provided to enable a clear understanding of the highway land affected.

This can be obtained from HCC's Asset Information Team assetinformation@hants.gov.uk

Planned Works

5.57 There are several planned highway works within the area, primarily as a result of the ongoing build out of the West of Waterlooville urban extension site, along with other traffic management and safety engineering programmes. This includes a significant improvement scheme planned at Ladybridge Roundabout. In addition, Portsmouth Water and Southern Water are planning to create a new reservoir at Havant Thicket with significant associated construction traffic movements arising. The programme dates for these works are broadly consistent with those proposed for project subject of this proposed DCO. Consideration must be given to committed schemes and the requirements under the relevant planning permissions (and/or Local Plan allocations) for the works to be delivered within specified timescales. The Highway Authority will need to be satisfied that the proposed works can be delivered without prejudicing these committed schemes. Compliance with Hampshire County Council's permit scheme would aid in the coordination of the Applicant's scheme with others in the area. Full details of the planned highway works can be found in Appendix 6. Portsmouth Water and Southern Water will need to be contacted for details of the Havant Thicket project.

5.58 The proposed development must be coordinated with the other planned works on the network in order to avoid undue disruption for users of the network, and to ensure that the planning requirements of local developments are complied with. There is an increasing importance being placed at a national and local level on improving the operation of the local road network and reducing congestion, thereby improving air quality and supporting non-car based sustainable modes of travel.

Construction Traffic Management Plans

5.59 The Framework Construction Traffic Management Plan included as Appendix F of the Transport Assessment presents an overarching plan for the management of construction traffic and site operations across the extent of the delivery of the onshore components, including construction of the converter station and laying of the cables. It is proposed that individual Construction Traffic Management Plans are provided to each contractor with further details relating to their work site locations. It should be secured within the Development Consent Order that these are agreed with the Highway Authority prior to construction commencing on each section.

5.60 Insufficient analysis of the suitability of the route to the site has been undertaken by the Applicant. The construction phase for the converter station is proposed to be a 2.5-year programme and therefore the likely impact of additional vehicle movements is 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 Heavy Goods Vehicle flows. Further analysis is therefore required as set out in the Constraints and Issues section below.

5.61 Furthermore, the proposed development is expected, at any one time, to have a maximum of 150 construction workers at the converter station site, plus 50-60 workers required for the construction of the cable route (initially reporting to the primary compound at the converter station site), in addition to site deliveries. This is likely to generate significant additional movements in and around Lovedean, however the forecast number of daily movements and distribution of all vehicles (including Heavy Goods Vehicles) has not been set out clearly within the Transport Assessment. This information should be provided.

5.62 The submitted Framework Construction Traffic Management Plan proposes a Road Safety and Liaison officer to be responsible for continuous monitoring of traffic management and signage, and to ensure the proactive management of road safety. Near misses or collisions resulting in personal injury from traffic associated with the construction of the cable route would be monitored throughout the programme to identify areas for improvement in traffic management as construction work continues.

5.63 The officer would make improvements where necessary within the confines of the Temporary Traffic Regulation Orders and liaise with the relevant Highway Authorities. It is stated that sufficient road signage to warn the public and inform construction related traffic of appropriate routes would be provided to ensure compliance. If during the construction period localised mitigation measures were required, these would be agreed with the relevant Highway Authorities and incorporated into the individual Construction Traffic Management Plans.

5.64 Public communication and dealing with public enquiries are an important element of the proposals. The Framework Construction Traffic Management Plan sets out that telephone numbers would be provided for signage; further details regarding staffing and operation of these lines is required. In addition, a website is proposed to be provided by the Applicant. Further details of the content and management of this website are required. The Highway Authority will also require details of a dedicated AQUIND communication liaison officer. Approval of roadspace may also

be dependent on localised liaison to ensure residents and motorists are aware of upcoming works.

Highway constraints and issues

5.65 The Highway Authority has concerns regarding the proposed intensification of vehicular use of Day Lane. Tracking has been provided demonstrating that a car cannot pass an HGV at all points on Day Lane. Therefore an assessment of sufficient passing places and forward visibility should be provided to demonstrate that Day Lane can operate safely and without restrictions on private cars. Further details of the proposed shuttle system should be provided with associated tracking drawings. Furthermore, specific details of how HGV traffic will be controlled to stop two HGVs meeting on Day Lane should be provided and secured. It is considered prudent to implement a system where the haul road could be used as a holding area and in advance of any HGV travelling west along Day Lane. A banksman would be required to stop any HGV traffic traveling east along Day Lane and a delivery management system put in place to reduce this occurrence. This is the system successfully employed on a similar section of highway network during construction of the IFA2 interconnector.

5.66 The Highway Authority has provided full detailed comments in Appendix 7, which set out the further information required in relation to the proposed Framework Construction Traffic Management Plan along with all details regarding the full extent of the Highway Authorities concerns.

Proposed compulsory acquisition of highway subsoil

5.67 The Highway Authority does not support the compulsory acquisition of the highway subsoil, particularly that which is in public ownership. Such control is not considered to be necessary given the proposed status of the Applicant as a statutory undertaker. There is very little information or evidence set out by the Applicant to justify this approach, or to explain why no compensatory mitigation is provided for.

5.68 The Highway Authority is concerned that the proposed change in ownership could potentially inappropriately constrain the Highway Authority from operating or altering said highway in any such way as is required in the future. There is also concern that other statutory undertakers, and potentially also residents, who have apparatus already in-situ may be impeded from altering or maintaining said apparatus in future. This includes potential ‘way-leave’ considerations.

Highways and Transportation Summary and Conclusions

5.69 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 within the submitted material as to the discounting of suitable alternatives to the utilisation of the A3 and B2150 for cable laying. This is in order to demonstrate clearly that the likely prolonged delay and disruption to the general public arising from utilising this route 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. This includes ensuring all highway users, residents, nearby development sites, future highway improvement schemes and businesses are not unduly affected by the proposed works.

5.70 Finally, without further information provided by the Applicant to justify, the proposed compulsory acquisition of the highway is not supported at this time.

6. Flood and Water Management

6.1 As the Lead Local Flood Authority, Hampshire County Council has assessed the application documents in relation to surface water drainage and ordinary water courses. The County Council has concerns about the Applicant's assessment, particularly in respect of the converter station site.

6.2 The hydrogeological characteristics of this area are extremely sensitive. The site is within the Bedhampton and Havant springs which has significant karstic features. This means that any water infiltrating to the ground within the chalk bedrock, north of Horndean, has direct linkage with the aquifer which provides much of the drinking water for Portsmouth and the surrounding areas. The karstic elements of this area indicate that there is a high likelihood of infiltration forming stream sinks and dissolution features.

6.3 Groundwater flooding is often a high risk with a chalk aquifer and this type of flooding is known to occur on regular basis in Denmead, Hambledon and other areas in the vicinity. The water table can fluctuate up to 30m so it is critical to understand the depth at the site location before the risk can be fully assessed, particularly as this type of flooding can last up to 3 months.

6.4 Although the information provided is very high level, the submitted Flood Risk Assessment identifies that Sustainable Drainage Systems (SuDS)

features will be included to manage the 1:100 + 40% climate change event.

6.5 It is proposed to use infiltration features to manage surface water although insufficient information on infiltration rates has been provided in the submitted material to date.

6.6 This includes proposals for the converter station where it proposed that the works would be drained by attenuation ponds and infiltration. However, the infiltration rate used for initial design is not stated.

6.7 No depth to groundwater is identified and given the known risk of groundwater flooding to the south, this is potentially a significant risk. The depth to groundwater should be confirmed and the unsaturated zone assessed. This is acknowledged in doc 6.3.3.6 – Appendix 3.6 Surface Water Drainage and Aquifer Contamination Mitigation Strategy.

6.8 There is commentary in the submitted material regarding groundwater levels. However, this was based on a monitoring well located around 1km from the order limits. This is considered too far away to be used for design purposes and onsite monitoring should be provided in those locations that infiltration drainage is proposed.

6.9 The submitted material assumes that infiltration rates through the existing geology (underlying the infiltration drains) will be sufficient to discharge runoff from events up to and including a 100-year return period plus 40% climate change, with additional surface water storage provided within the infiltration drains. In addition, the application assumes that the maximum groundwater levels are at least 1m below the base of the infiltration drains. Site specific infiltration testing will need to be undertaken and this requirement should be included within the DCO.

6.10 Although there is potential to provide additional water storage within the converter station site, no calculations have been provided to show the level of water storage required or the potential alternative outfall.

6.11 Some figures have been provided based on brief, high-level water storage assessments, but the outputs and evidence base have not been included. This is particularly important to get an understanding of runoff rates pre / post development. Further details of how the temporary car park for 150 vehicles has been taken into account are also sought.

6.12 No information has been provided in relation to maintenance schedules and responsibilities, but this could be addressed at a later date, subject to a suitable requirement provided in a revised DCO.

6.13 It is appreciated that a Temporary Site Water Management Plan is to be submitted to Hampshire County Council for approval prior to the start of works. However, this should be worded to reflect approval being required by the Lead Local Flood Authority (as opposed to other departments within Hampshire County Council). Its scope should also include all works where overland flows and surface water drainage could be affected i.e. haul roads, temporary compounds etc.

6.14 No information has been provided about alternative options if infiltration systems are not suitable. Given the understood hydrogeological characteristics of the area, and the limited information submitted with the application to detail the assumptions used in identifying preferred infiltration systems, this is an essential piece of work.

6.15 It is highlighted that several sections of the route are subject to high groundwater levels. These areas should be assessed in more detail and proposed measures highlighted to address:

- How groundwater ingress into temporary works would be managed without increasing flood risk;
- How contamination, as a result of construction practices, would be managed to ensure the aquifers are not affected; and
- How infiltration systems would be secured which ensure a 1 metre unsaturated zone being provided before the maximum known groundwater level.

6.16 The submission material states that the risk from groundwater flooding is low despite the high groundwater levels. As such it is not the risk of groundwater flooding that is the primary issue rather the interaction with the proposed drainage.

6.17 It should however be noted that flooding caused by high groundwater levels is known to occur to the north of the route in the Denmead and Anmore area.

6.18 It is essential that the Lead Local Flood Authority is consulted prior to any discharge from excavation de-watering prior to determining a discharge location due to the potential risk of flooding downstream. The plans provided do not give an understanding of the area available at the converter station and this can have a bearing on the space available to install drainage options.

6.19 Given the nature of the development, additional information should be provided such that the Lead Local Flood Authority can have the confidence that a requirement will be suitable for inclusion in the DCO. Clarification is also sought on the wording in the ES Appendix 3.6 which

could be inferred to imply that the surface water strategy is for information only, rather than a strategy that is designed to deliver suitable protection at this stage.

Ordinary Watercourses

6.20 The ordinary watercourses and main rivers that could be identified via a desktop study and high-level assessment are included within the Flood Risk Assessment and suitable provision made, in principle, to ensure a consent or permit application is submitted at the appropriate time during the design phase. This is welcomed; however, the Flood Risk Assessment should be enhanced to make reference to any other ditch / watercourse / swale etc that may need temporary or permanent works during the construction and operational phases. This is in line with the requirements in the Land Drainage Act 1991. The DCO must make provision for Ordinary Watercourse Consent to be required for those temporary or permanent works affecting capacity within a watercourse.

Development Consent Order

6.21 The main area of concern with regards to the drafting of the proposed DCO, as submitted, is the lack of reference in relation to the Lead Local Flood Authority. This needs to be in addition to the reference to Drainage Authority and should cover all matters relating to surface water and / or ordinary watercourses.

6.22 It is recommended that Part 4, (17) is amended to reflect the role of the Lead Local Flood Authority in relation to Ordinary Watercourse consenting and the Land Drainage Act, which should be in parallel with the requirements of the Environment Agency under the Environment Act provisions.

6.23 It is also requested that the wording around schedule 2 (12) should be amended such that foul and surface water elements are separated and refer to the Lead Local Flood Authority for approval for surface water elements as opposed to the Drainage Authority.

6.24 Please note that the Lead Local Flood Authority has no remit in relation to foul water and as such would not comment on that aspect.

6.25 The Lead Local Flood Authority would highlight that in order to be able to properly consider a surface water drainage proposal a certain level of detail is required and therefore the following two conditions should be included in the DCO requirements;

1. No development shall begin until a detailed surface water drainage scheme for the site, based on the principles within the Flood Risk Assessment PINS ref: EN020022, has been submitted and

approved in writing by the Lead Local Flood Authority. The submitted details should include:

- A technical summary highlighting any changes to the design from that within the approved Flood Risk Assessment;
- Infiltration test results undertaken in accordance with BRE365 and providing a representative assessment of those locations where infiltration features are proposed;
- Detailed drainage plans to include type, layout and dimensions of drainage features including references to link to the drainage calculations;
- Detailed drainage calculations to demonstrate existing runoff rates are not exceeded and there is sufficient attenuation for storm events up to and including 1:100 + climate change;
- Evidence that urban creep has been included within the calculations;
- Confirmation that sufficient water quality measures have been included to satisfy the methodology in the Ciria SuDS Manual C753; and
- Exceedance plans demonstrating the flow paths and areas of ponding in the event of blockages or storms exceeding design criteria.

2. Details for the long-term maintenance arrangements for the surface water drainage system shall be submitted to and approved in writing by the Lead Local Flood Authority prior to commissioning of the converter station. The submitted details shall include maintenance schedules for each drainage feature type and ownership.

7. Landscape and Visual Impact

7.1 Hampshire County Council notes that the Applicant has referred to the use of the 'Rochdale envelope' principles to define the development parameters on which the environmental statement has been prepared.

7.2 However, a number of key details (regarding particularly the onshore cable route, landfall and converter station layout) appear to be subject to the final design, which will be led by the appointed contractor (after the DCO has been issued). Due to the significant size of the converter building; and potential long-term visual impacts associated with its operation, it is considered that some of these more significant details should be fixed prior to a Development Consent Order being issued. It is noted that there are a number of areas of cable route where a number of routing options have been retained within the 'order limits'. Local impacts will differ depending on which option is selected. Hampshire County Council expects more certainty on the final route alignment at this stage in order to

enable a more informed assessment of the landscape impact of the proposal.

7.3 Hampshire County Council also notes and supports the views of its partner local authorities in raising concerns about the indicated scale of the proposed converter station and the inevitable impact this will have on the rural setting of its location. Opportunities to reduce this impact, including the potential reduction in scale/height of the building within the landscape should be explored further.

8. Historic Environment

8.1 The County Council is content with the proposed methodology set out in the Environmental Statement regarding the potential for archaeological remains to be found along the alignment of the route extents, and at the potential converter station site.

9. Ecology

9.1 Hampshire County Council is broadly content that the methodology set out in the Environmental Statement in relation to ecological considerations follows current industry standards and is an appropriate approach. Horizontal Directional Drilling through the Denmead Meadows Site of Importance for Nature Conservation (SINC) is essential, given it supports Lowland Meadow priority habitat of national importance. Recognition of its SINC status (confirmed March 2019) needs to be reflected in Fig 16.2 of the Environmental Statement Vol 2 dated November 2019.

9.2 The mitigation strategy needs to be carefully reviewed to ensure that appropriate weight is applied to locally designated sites, and management prescriptions are appropriate and proportionate for enhancement of priority habitats. For example, it is proposed that the seeding of the substation, which is situated on chalk soils will be supplemented by seed harvested from Denmead Meadows which is on the clays and gravels. Seed should be sourced from soils appropriate to the local geology

10. Highway Trees

10.1 The development proposal has the potential to affect a number of trees on highway land. Such trees are subject of the County Council's ownership and arboricultural management and as such are effectively protected and managed. Although the County Council has the powers available, it chooses not to serve tree protection orders (TPOs) on trees within highway land.

10.2 Suitable control over the impact of development proposals on highway trees is usually secured through Section 278 licences. In these circumstances, evidence is required to justify the proposals, including surveys of relevant trees and the securing of appropriate mitigation. Most recently, the County Council has adopted a new policy which requires

compensation for the loss of highway trees. Further details are available here: https://documents.hants.gov.uk/transport/HighwaysTreePolicy.pdf

10.3 The proposals as submitted fail to demonstrate the impact of the development on the County Council's highway trees. In the continued absence of such information, the County Council is concerned that the proposals would have an unacceptable impact on these trees, many of which are likely to have a landscape and amenity value.

11. Development Consent Order

11.1 Comments from Hampshire County Council on elements of the drafting of the DCO, as submitted, is included at Appendix One.

12. Conclusion

12.1 Hampshire County Council notes the potential benefits that could arise from the proposed development, including the potential for improved resilience of energy supply for the United Kingdom and France, increased competition within the energy market and the scope to continue to reduce the reliance on non-renewable/carbon-intensive sources of energy supply.

12.2 Nevertheless, the development as currently proposed raises a number of concerns about its local impact within Hampshire. These include:

- **The impact on the highway network**
    - The proposed approach set out in the draft DCO is resource intensive and not in line with well-established national processes for the coordination of works and minimisation of the impact of these types of works on the community. The use of Hampshire County Council's permit scheme would be of benefit to both parties by facilitating agile coordination of works and minimising the impact on traffic.
    - Working hours in the DCO need to reflect the need to undertake some works on weekends and at night to avoid serious traffic congestion or disruption to local traffic.
    - Demonstration that alternative route options have been considered and appropriately discounted to justify the prolonged disruption to the network of the alignment as proposed
    - Further information is required regarding accident data and possible mitigation.
    - Further information is required regarding monitoring junction performance during the works and mitigation measures if necessary.
    - The impact on sustainable modes of transport has not been adequately considered.
    - Further information is required in relation to the construction methodology, including existing services/ required service

diversions and highway structures to ensure the proposed infrastructure installation does not restrict future highway works.
    - Confirmation regarding payment of Highway Authority fees is required.
    - Access to the proposed converter station and internal layout has not been demonstrated as acceptable.
    - Further consideration in relation to conflicting highway works is required.
    - Further information in relation to the Construction Traffic Management Plan is required, including HGV access, staff/ contractor movements, condition surveys, Travel Plan and Abnormal Indivisible Loads.

- **The impact on flood and water management considerations, particularly surface water and ordinary watercourses**

    - Further information is needed in the supporting information to demonstrate that the impacts on surface water and ordinary watercourses have been adequately addressed at this stage to demonstrate the principle of the scheme is acceptable
    - Additional requirements in the DCO to ensure a detailed surface water drainage scheme, and suitable long-term maintenance arrangements of this scheme are secured
    - Recognition of the role of the Lead Local Flood Authority in relation to ordinary watercourse consenting and the Land Drainage Act

- **Landscape, historic environment and ecology considerations**

    - Hampshire County Council is concerned that insufficient clarity is being provided at this stage in relation to the proposed cable route, and siting of the converter station. Further information is requested to enable the local landscape impacts to be fully understood. Notwithstanding this, there is some concern about the potential landscape impact of the proposed converter station due to its indicative siting and scale.
    - The environmental statement needs to be updated to recognise the new status of Denmead Meadows as a Site of Importance for Nature Conservation. Some further consideration is also required to ensure that the proposed mitigation/management measures are appropriate and proportionate for enhancement of priority habitats

12.3 Hampshire County Council will seek to continue to work proactively with the Applicant, partner local authorities and other interested parties to explore how these impacts can effectively be minimised and, if necessary, mitigated.

APPENDIX 1 – Hampshire County Council comments on specific elements of the submitted draft Development Consent Order Articles and Requirements

Hampshire County Council have reviewed the dDCO. In summary the elements that Hampshire County Council consider necessary to be secured within the DCO (or by separate planning obligation or other legal agreement where appropriate) for this development are as follows:

- In the absence of any supporting information justifying the benefits of discounting the Permit Scheme, the Applicant should commit to HCC's Permit Scheme within the New Roads and Street Works Act 1991 to allow for the planning and co-ordination of the pipeline works. If this is not adhered to, HCC seek further details on what is to be secured and funding requirements for additional officer time in relation to any scheme specific process.
- Funding for HCC's use of the one.network 'route monitor' product specifically for the A3 corridor during the course of construction works to enable HCC to be alerted to highway problems arising on this corridor.
- The requirement for the Applicant to progress temporary weight restrictions through the Temporary Traffic Regulation Order (TTRO) process to restrict use of certain roads by larger vehicles, if directed by the Highway Authority.
- An indemnity to cover the potential cost of diverting the cables should this be necessary to facilitate highway works in the future, especially considering significant works committed at the A3/Ladybridge Road junction via the Transforming Cities Fund scheme for South East Hampshire Rapid Transit and planning approved development-led capacity improvements.
- Agreement for full lane width carriageway resurfacing reinstatement along the A3 corridor to prevent an ongoing maintenance liability due to excessive trenching along the route.
- The preferred approach is that the Applicant adheres to HCC's standard processes including provision of a legal agreement between the Applicant and HCC under Section 278 of the Highways Act 1980 for the site access works and any highway works required outside that of the cable laying works. This allows the Council, in its role as Highway Authority, appropriate controls in respect of these works. Entering into the agreement would also provide a surety to directly protect the Highway Authority's liabilities on these matters.
- In the absence of a Section 278 Agreement, HCC will seek separate measures for payment of the costs of design checking and inspection fees to cover the approval and review of the proposed access works.
- A clear process needs to be established and secured for the Applicant to submit the detailed designs of all infrastructure to be installed in highway land. This process will include the need for review and approval of the design by the Highway Authority. The Highway Authority will need to give approval for the works prior to construction.
- There is uncertainty under what powers future maintenance would be undertaken to the cable route. It is suggested that to allow for the future maintenance of the cables and reinstatement of the carriageway, the

Applicant commits to HCC's permitting scheme within the New Roads and Street Works Act 1991.

- The DCO must make appropriate provision for future permissions for the decommissioning phase of the development.
- As presented within the application the DCO will need to produce and provide Construction Traffic Management Plans, which builds on the Framework Construction Traffic Management Plan. Appropriate timescales should be secured for submitting and reviewing along with a list of what needs to be included and approval by Highway Authority prior to commencement of that section of works.
- The DCO should require the Applicant to apply for a Traffic Regulation Order (TRO) to prevent right turn movement from the proposed site access onto Broadway Lane.
- Should the Applicant not adhere to HCC's Section 171 license procedure, HCC require the payment of the relevant fees and the design of the highway works to be provided to the Highway Authority's satisfaction.
- All costs associated with the works to the signals to allow for abnormal load movements at the Portsmouth Road/Catherington Lane/Dell Piece Junction should be required to be paid for by the Applicant.
- Abnormal Indivisible Loads (AiL) plan/ process to be provided in sufficient time for Highway Authority review and approval before any AiL movements are permitted.
- The Applicant should commit to following HCC's standard TTRO process.
- A process for Coordination with planned highway works in the vicinity which includes known works to date being significant works on the route itself and within the immediate area to facilitate approved and emerging housing sites and works to be implemented under the Transforming Cities Funding.
- A requirement for the use of the 'Hampshire Countryside Service Temporary Closure' procedure for temporary closures and provision of alternative routes during construction for any rights of way affected by the works.

The Authority also have a number of comments in relation to the current drafting of the DCO and these are set out below.

<u>Highways</u>

Comments on the definitions within the dDCO

1. The definition for 'maintain' does not accord with the scope of the proposed works and appears to permit replacement, reconstruction and the decommission of any permitted works. It is suggested that the wording is amended to apply more clarity over the permitted works under the term 'Maintain'. The definition set out in the (draft) DCO for the replacement Southampton to London Pipeline is suggested as an alternative. This defines 'maintain' as *"in relation to the authorised development includes to inspect, assess, repair, test, cleanse, adjust, alter, divert, renew, re-lay, improve, landscape, preserve, make safe, dismantle, remove, clear, reconstruct, refurbish, replace, demolish, abandon or decommission any part of the authorised development, provided such works do not give rise to any*

materially new or materially different environmental effects to those identified in the environmental statement and for the avoidance of doubt must not include the renewal, re-laying, reconstruction or replacement of the entirety of the pipeline works, and any derivative of "maintain" is to be construed accordingly";

2. The definition for 'Street' refers to section 48 of NRSWA but for clarity it is suggested that the DCO should list the definition in its entirety so it is clear that any clauses in relation to this definition also cover all roads, footways, pavements, public footpaths, bridleways and all other public rights of way, whether it is for the time being formed as such , together with land on the verge of a street or between two carriageways.

3. The definition for 'temporary associated development works' refers to works area numbers 3 and 8 as described in Schedule 1. This appears to be a drafting error as there does not appear to be a 'works number 8'. Clarity is sought on this matter.

4. Similarly, the definition of 'traffic management strategy' should perhaps refer to requirement 19 rather than the suggested requirement 24. Clarity is also sought on this drafting.

5. The definition of 'street authority' refers to Part 3 of the 1991 Act. The definition should be written in full for clarity within the DCO.

6. The definition for 'working day' should be amended to a 'business day' to avoid confusion over separate matters relating to working hours which may be outside of a 'business day'.

Comments on Part 2 of the dDCO

7. Part 2 section 3 (2) refers to works number 8. As raised above, clarification is sought on the accuracy of this reference.

8. Article 8 (3) – Seeks to disapply the Permit Scheme and this this is not considered acceptable unless a clear and compelling benefit to the public can be demonstrated making this requirement necessary. The Hampshire County Permit Scheme replaced the existing noticing regime as specified in the New Roads And Street Works act 1991. Powers to replace noticing with regimes with permit schemes is provided in the Traffic Management Act 2004. Permit schemes are a nationally prescribed system for coordinating all works on the public highway. Permit schemes form a critical part of enabling a Highway Authority to execute its legal duties to coordinate all works and maximise traffic flow. All works promoters (utility companies and County Council works) ordinarily need to apply for a permit to undertake works. Prior to granting a

permit the County Council will review the proposals and check for clashes with other works or activities. Permits may be granted subject to conditions which are aimed at minimising disruption to traffic flow (eg, working outside of peak times). Permits are never withheld unreasonably, and conditions are always relevant to the impact on the network. Standard response times and conditions are set out in legislation and the permit scheme itself.

9. Article 21 relates to clauses in association with the workplace travel plan. It should refer to the framework travel plan which is yet to be approved. However, Hampshire County Council request that the travel plan requirements are secured through s106 obligation to enable the Highway Authority to secure a more robust list of obligations with its own ability to enforce. In addition, Hampshire County Council seek s106 payments for travel plan approval and monitoring fees along with a surety deposit should the applicant default on its travel plan obligations.

Comments on Part 3 of the dDCO

10. Article 10 relates to the approval mechanism for works to the highway. The clauses within this section are not supported by the Highway Authority. The Highway Authority's position is that the Applicant should agree to the Hampshire Permit Scheme and S278 design check process for the works. This would allow the Highway Authority to review the relevant detail, provide relevant protections and controls as necessary for the type of works and enable the works itself to benefit from the flexibility and agility provided through these processes. The Highway Authority has yet to be presented with information which demonstrates a compelling benefit to the public, Highway Authority or indeed the Applicant in discounting these established processes. Once the approach for approvals is agreed, the clauses in Article 10 will need to be reviewed further to ensure appropriate measures are secured.

11. Article 10 (1) appears to provide powers to the Applicant for works both within and outside of the Order Limits. Clarification is sought as to how works outside of the Order Limits would be appropriately controlled through the DCO. Article 10 (3) is not entirely clear in its present drafting and should be reviewed. One suggestion would be to consider splitting the paragraph into two sentences: the first to cover the powers not being exercised without the approval of the street authority, the second to cover how the powers would be approved.

12. The Highway Authority's position in relation to Article 11 is seeking the retention of the Permit Scheme as an appropriate mechanism for the management of the highway during the works. If the Permit Scheme is

disapplied, the clauses here would need to be reviewed to ensure they provide suitable protection.

13. Article 13 refers to temporary stopping up of the highway. Hampshire County Council believe that this actually refers to temporary traffic regulation orders and the wording and definitions should be amended. Stopping up is a separate process either via section 247 of the Town and County Planning Act 1990 or section 14 Of the Highways Act 1980. The title of this Article should be renamed for clarity: “Temporary closure, alteration, diversion or restriction of streets and public rights of way”. Whilst noting the provisions in (5) Clarity is also sought on the details of the approval process for such temporary works, including consultation with the relevant street authority.

14. Article 14 (1 (b)) of the dDCO should perhaps refer to requirement 10 (Highway accesses) as opposed to requirement 9 (Biodiversity management plan). Further clarity on the proposed process is sought. As already set out, the Highway Authority would prefer to agree within the DCO that the Applicant will adhere to Hampshire County Councils S278 process and enter into a separate legal agreement under s278 of the Highway Act 1980 for the site access works.

15. Article 15 of the dDCO refers to agreements with street authorities. Hampshire County Council seeks clarity on the overall aim of this Article and the intention of these clauses.

16. Article 16 relates to the Traffic Regulation Order (TRO) process. The clauses refer to ‘traffic authority’ and this is not defined anywhere. It is suggested that these references are replaced with ‘Highway Authority’. There is also concern about the rationale for the Applicant to secure powers to make permanent TRO’s. For the purpose of construction, it is contended that the Applicant should only have powers to implement temporary TRO’s and these should still be done so with the agreement of the Highway Authority who are experienced in managing and implementing such restrictions. Additional clauses are also sought to require the application to remove all temporary TRO’s on completion of each phase (or whole works where appropriate) to ensure the network is restored to its current arrangement.

Comments on Part 5 of the dDCO

17. Article 41 and 42 relate to arboricultural matters and the Applicant is seeking permission to fell or cut back tree within or overhanging the order limits or any shrub ‘near any part of the authorised development’. There is concern that this provision is not sufficiently precise and is open for interpretation. Further clarity is therefore sought. The clause refers to payment of compensation for unnecessary loss or damage. However, it is unclear if this compensation is

just for unnecessary loss or damage rather than for all loss or damage and this needs to be clarified.

18. The draft wording refers to the terms ‘reasonable’ and ‘necessary’ with regards judgements being made on potential tree losses. However it does not define these terms, or establish who is responsible for determining whether any arboricultural work is reasonable or necessary. The draft text should be amended to refer to assessments being carried out by a competent arboriculturist and in agreement with the Highway Authority.

19. Hampshire County Council seeks robust requirements in the DCO to enforce a mitigation hierarchy regarding HCC owned trees as follows:

    - Unless a tree is structurally impaired, dead, or diseased, such that it would need to be removed for sound arboricultural management within the next five years. *Then,*

    - Ensure that cable trenching and any associated construction work, storage and traffic is excluded from the Root Protection Area (RPA) as recommended by BS5837:2012[1] or canopy spread, whichever is largest.
      If this is not possible then,

    - Work within the RPA must only be done in accordance with an Arboricultural Method Statement (AMS) prepared by a competent arboriculturist and approved by HCC Highways Arboriculture. This AMS must include details of special methods and techniques that will be used, such as micro-tunnelling or air spade excavation, for example, and any methods of ground protection and physical barriers that will be needed to avoid root damage, canopy damage and soil compaction, which will cause subsequent root damage.
      If this is not possible then,

    - As a last resort remove the tree(s) and provide compensation for the loss at the appropriate CAVAT value. This must be agreed with HCC Highways Arboriculture prior to tree removal.

Schedule 2

20. There are a number of requirements which require the relevant planning authority and appropriate highway authorities to be more precisely defined. These include:
    - Requirement 3 (1)
    - Requirement 6 (1)
    - Requirement 6 (2)
    - Requirement 6 (3)

[1] BS5837:2012 trees in relation to design, demolition and construction - Recommendations

- Requirement 6 (4)
- Requirement 22

21. Requirement 10 is a clause which would be incorporated within HCC's Section 171/ Section 184 and Section 278 processes. The Highway Authority seeks a review on the agreement of the mechanism for approving and delivering the works on the highway to be explored further through the examination.

22. Requirement 18 covers the construction hours of the project. Whilst provision is made to vary these within the Construction Environment Management Plan, it is considered that the drafting of the Requirement itself requires amending to provide for sufficient clarity and flexibility as the works progress. A requirement similar to that proposed in the DCO for the Southampton to London Pipeline project is considered to be a reasonable starting point which reads as follows:

    (1) Subject to sub-paragraphs (2), (3) and (4), construction works must only take place between 0800 and 1800 on weekdays (except Public and Bank Holidays) and Saturdays, except in the event of an emergency.

    (2) In the event of an emergency, notification of that emergency must be given to the relevant planning authority and the relevant highway authority as soon as reasonably practicable.

    (3) The following operations may where reasonably necessary continue or take place on an exceptional basis outside the working hours referred to in sub-paragraph (1)— (a) trenchless construction techniques which cannot be interrupted; (b) filling, testing, dewatering and drying; (c) works required to mitigate delays to the construction of the authorised development due to extreme weather conditions; and (d) commissioning of the pipeline works.

    (4) Nothing in sub-paragraph (1) precludes— (a) the receipt of oversize deliveries to site and the undertaking of non-intrusive activities; (b) start-up and shut-down activities up to an hour either side of the core working hours and undertaken in compliance with the CEMP; and (c) works on a traffic sensitive street where so directed by the relevant highway authority pursuant to a permit granted under the permit schemes and following consultation by the relevant highway authority with the relevant planning authority under the terms of such scheme.

    (5) In this Requirement— (a) "emergency" means a situation where, if the relevant action is not taken, there will be adverse health, safety, security or environmental consequences that in the reasonable opinion of the undertaker would outweigh the adverse effects to the public (whether individuals, classes or generally as the case may be) of taking that action; and (b) "non-intrusive

activities" means activities which would not create any discernible light, noise or vibration outside the Order limits.

23. Requirement 19 sets out the traffic management strategy and the mechanism for approval of proposed traffic management measures. The Highway Authority will need to undertake a detailed review of these requirements once agreement has been reached regarding the mechanism for approving and delivering the works on the highway.

24. Requirement 21 relates to securing the travel plan requirements and makes no reference to be in accordance with the framework travel plan. Presently there is no mechanism in place to secure any fees to cover costs of this work. In the absence of such provision through suitable alternative mechanisms, Hampshire County Council requests that this is secured under s106 obligation to enable it to secure the necessary approval fees for the full travel plan and the associated monitoring fees, as well as a bond/cash deposit to cover and default on the proposals by the Applicant.

Schedule 3

25. The provisions of Schedule 3 require some further clarity. This includes indicating the level of information that is considered necessary for the Highway Authority to discharge its obligations.

26. The Highway Authority also seeks provision for the payment of fees to cover its costs in this regard. The following is suggested as a starting point for incorporation in the DCO in this regard:

"Where an application or a request for comments is made to a relevant planning authority for any consent, agreement or approval required by a Requirement, a fee must be paid to the relevant planning authority as follows—

(a) such fee as may be prescribed (under sections 303 and 333(2A) of the 1990 Act for the discharge of conditions attached to a planning permission); or

(b) a fee of £97 per application or request.

Any fee paid under this Schedule must be refunded to the undertaker within 35 days of—

(a) the application or request being rejected as invalidly made; or

(b) the relevant planning authority failing to determine the application or to provide written comments within 28 days from the date on which the application or the request for comments is received, unless within that period the undertaker agrees in writing that the fee may be retained by the relevant

planning authority and credited in respect of a future application or a future request for comments"

Schedule 8

27. This sets out a list of roads, footpaths and public rights of way that are subject to proposed stopping up. Hampshire County Council seeks clarity on whether this relates to temporary closures. The schedule provides no detail on the proposed length or type of closures required. If the reference to stopping up is correct there has been no information provided which justifies the need and associated benefits for formal stopping up and should stopping up be agreed this should only be for a temporary basis, permanent highway rights should not be affected.

Schedule 11

28. The list of trees subject to a TPO does not represent any highway assets under the jurisdiction of HCC. Hampshire County Council do not TPO highway trees as a general requirement as they are under a mechanism of good arboricultural management under the care of the Highway Authority and therefore a TPO is not considered necessary. The Highway Authority do not normally give permission to third parties to remove highway trees unless through a S278 process and within which appropriate compensation for the loss of the asset is achieved through CAVAT.

Schedule 13

29. Article 13 sets out the protective provisions for a number of Statutory Undertakers, however it provides no protective provisions for highway apparatus such as but not exclusively gullies, sewer pipes, catchpits, manholes, soakaways, culverts , service ducts, detector loops, traffic signals and supporting apparatus and private streetlighting cables. There is also an absence for protection of private apparatus licenced for location within the highway.

30. The Highway Authority require sufficient protective provisions to the same manner as other Statutory Undertakers. Drafting of appropriate provisions should be discussed with the Highway Authority.

31. With regards street lighting provision Hampshire County Council have a private finance initiative agreement with SSE. Due to the nature of this agreement, and the permissions needed from the electricity company for working on their networks, the 28 day notice period provided by 5 (2) of Section 13 is insufficient. A minimum period of 30 working days is required, the preferred however is 60 working days.

Comments on dDCO from HCC as Lead Local Flood Authority

Discharge of water

Article 17

32. There is concern that the present drafting of Article 17 is overly broad in its description of permissible activities. In particular, it is unclear whether the provision seeks to authorise activities which would require an ordinary watercourse consent, under the Land Drainage Act 1973. In addition, any discharge to a watercourse will need to be assessed to ensure that flood risk is not increased downstream and to enable effective pollution control. There would also be a presumption against any discharge into highway drainage systems but this would be for the Applicant to liaise with the relevant Highways Authority for any specific requirements should this be necessary.

33. Clarification is sought about the type of connections to the public sewer or drain envisaged in Article 17 (2).

34. Amendments to Article 17 (3) are requested to make it clear that consent should also be secured from the bodies responsible for managing the risk of flooding (i.e. the Lead Local Flood Authority and/or Environment Agency)

35. Similar to the comments made on Article 17 (3), amendments are also sought to 17 (4) to acknowledge the need to secure consent from the Lead Local Flood Authority and/or Environment Agency.

36. The period for determining such an application should be extended in 17 (5) to be in-line with normal LLFA consenting requirements i.e. 2 months from the point of the application being considered valid. Certain information will need to be submitted as detailed at: https://www.hants.gov.uk/landplanningandenvironment/environment/flooding/changewatercourse

37. An amendment to 17 (6) is requested to ensure that any such works does not also reduce the capacity of the watercourse. The addition of 'Ordinary Watercourse' at the end of this paragraph is also sought.

38. Further detail is required in Article 17(7) to further define the acceptability of water quality to be discharged. The current drafting is too open for interpretation.

39. It is suggested that the reference to 'local authority' in paragraph 17 (9) is insufficiently precise in this context given the differing potential functions and roles of local authorities e.g. as Highway Authority, Local Planning Authority, Lead Local Flood Authority. The paragraph could also make reference to the consenting requirements of the Land Drainage Act.

APPENDIX 2 Detailed Highway Authority Comments on the Assessment of Existing Highway Conditions

A2.1 Hampshire County Council, in its role as Highway Authority, has reviewed the Transport Assessment (TA) provided in support of the application and has the following comments.

Existing Conditions – Local Highway Network

A2.2 To understand how the existing highway network will be affected during the construction of the cable route, the Applicant has carried out an assessment of the affected routes and how traffic will be re-routed as a result of the traffic management required for construction. Automatic Traffic Count (ATC) surveys have been undertaken at 36 different locations on the network to understand existing flows and average vehicle speeds.

A2.3 The traffic impact consists of two elements: short-term traffic redistribution as a result of traffic management on the network and the construction traffic associated with the converter station.

A2.4 A description of the link roads forecast to be affected by re-routed traffic has been provided under section 1.5.3 of the TA. This includes reference to the ATC surveys, providing the peak hour vehicular flows, average speeds and the percentage of the movements made by Heavy Goods Vehicles (HGVs).

A2.5 It is for Highways England to provide comment on the impact on the A3(M) corridor that any traffic reassignment as a result of the works may have on this part of the network. Portsmouth City Council are the Highway Authority for the non-strategic road network within the administrative area of Portsmouth City.

Existing Conditions - Sustainable Transport Network

Public Transport

A2.6 There are numerous bus routes and operators that are likely to be affected either directly (by the proposed works) or indirectly (by diverted traffic and delays caused by the works); these are summarised below:

Operator/Route	Origin-Destinations	Affected Roads
First Group		
7/7C	Portsmouth – Cosham – Waterlooville – Wecock Farm	Stakes Hill Road, Stakes Road, Milton Road
8	Southsea – Portsmouth – Cosham – Waterlooville – Clanfield	Hambledon Road
D1/D2	Waterlooville – Denmead – Hambledon	Hambledon Road
Stagecoach		
37	Havant – Petersfield	London Road, Stakes Road
39	Havant – Wecock Farm	Stakes Road, Milton Road

A2.7 It should be noted that additional school/ college bus services exist in the area (primarily affecting South Downs College). Whilst these are not included in the above summary, the relevant institutions will need to be advised of the expected delays to their services.

Walking, cycling and horse-riding

A2.8 The Transport Assessment provides minimal details regarding the walking, cycling and horse-riding provisions for the onshore cable route, construction route and diversion routes.

A2.9 For the length of the cable route that is within the highway boundary under the jurisdiction of HCC, a footpath is present. Cycle facilities are primarily provided along London Road in the form of dedicated cycle lanes or shared with bus lanes. Along the remainder of the route, shared use paths are provided in places (for example alongside Hambledon Road) but the remainder of the route relies on the main cycling route being on-road with no marked cycle lanes. The proposed route also crosses a number of bridleways used for horse-riding.

Highway Safety

A2.10 Personal injury road accident data was obtained by the Applicant from Hampshire Constabulary in July 2019 and covers the 5-year period of Jan 2014 – Dec 2018. This data is too old and should be updated to be

considered acceptable. It is noted that the extent of the study area is limited to the proposed route of construction traffic and near to the main route of the cable. The study area should be extended to include all diversion routes and routes anticipated to experience an increase in traffic as a result of the works. There should also be a particular focus on the construction traffic route from the A3 to Lovedean where HGVs and vehicle movements are anticipated to be significant.

A2.11 The accident data (in Appendix E) should be presented in such a way to make it more readable. For instance, all columns should be on one page and rows segregated into the route sections.

A2.12 No accident cluster analysis or route assessment has taken place. The following concerns have been identified after reviewing the submitted personal injury road accident data:

Zone 3 – Hambledon Road

A2.13 It is noted that two collisions involving pedestrians occurred outside Denmead Infant School, one of which included a child. A further two collisions involved cyclists, again with one involving a child. It is also noted that the causation factor for the latter incident was due to the vehicle travelling on the pavement. Whilst not explicitly stated, it can be reasonably be assumed this was due to a restricted road width. Consideration should be given to mitigating potential accidents at this location through the Construction Traffic Management Plan (CTMP).

A2.14 Hambledon Road is proposed to be impacted by both the cable installation along the road itself and as a diversion route during the closure of Anmore Road. Consequently further analysis of this route is required as the proposed restriction of the carriageway may exacerbate the concerns set out above.

Zone 4 – Hambledon Road/Maurepas Way

A2.15 There are a high number of incidents reported in this small area; 36 collisions including 10 involving cyclists and three with pedestrians. A cluster of incidents was identified at the Rockville Drive roundabout and at the pedestrian crossing on Maurepas Way however no quantum of collisions or narrative has been provided by the Applicant. An analysis of this, including mitigation proposals, is required to ensure appropriate mitigation for the likely impact of the proposed works at this location.

A2.16 It should also be noted that all incidents in this area (Zone 4) involving pedestrians were due to pedestrians crossing the carriageway. All efforts should be made to safely accommodate pedestrians during construction works to prevent the need to cross traffic.

Zone 5 – A3 London Road

A2.17 The A3 has a significant proportion of incidents involving cyclists (13 out of the 40 accidents recorded in this area). Despite this, no proposal has been put forward to protect the high cyclist usage along this route. Details of mitigation should be provided regarding arrangements to avoid cyclists being suddenly forced into traffic leading to potentially dangerous occurrences.

A2.18 A cluster of incidents has been identified at the London Road/Bushy Mead junction. Unfortunately, no details or analysis has been undertaken of this, nor has any mitigation been proposed to prevent exacerbation of the situation.

A2.19 The Transport Assessment concludes that in most cases accidents are due to driver error. This conclusion is not accepted on the basis of the evidence as presented. Further analysis should be carried out to review whether there are any patterns of accidents which would be exacerbated by construction of the proposals.. Where accident patterns may be exacerbated due to reassignment of traffic as a result of construction, mitigation may be required.

APPENDIX 3 Detailed Highway Comments on the Transport Impact Assessment

A3.1 Hampshire County Council, in its role as Highway Authority has reviewed the Transport Impact Assessment provided in support of the application. The Assessment sets out the likely impact of the proposed development works on the highway network. The following comments need to be addressed before the Highway Authority can comment further on the application.

A3.2 To gauge the potential impact on existing traffic during the construction phase of the works, the Applicant has utilised the Sub Regional Transport Model (SRTM) to forecast the redistribution of traffic as a result of temporary traffic management on the network. In order to ensure that a robust assessment has been undertaken, it has been assumed that six sections of the cable route will be worked on at any point in time, therefore incorporating a mixture of temporary traffic signals, shuttle traffic working and single lane closures. The SRTM factors in all of the temporary traffic management measures mentioned above and redistributes traffic onto the network across identified scenarios. In this instance, 2026 has been chosen as the future year scenario to align with the timescales anticipated with the works.

A3.3 Alongside the AM and PM peak hour assessments, an “inter-peak” assessment has also been undertaken between 12:00-13:00 as a comparison for the worst-case off-peak period. The assessment takes account of the potential traffic impacts on the cable route itself and also the local roads which will be affected as a result of re-routed traffic. This approach is considered robust for assessing the direct impact of the cable construction on existing traffic flows. The potential traffic generated by the construction of the converter station has been assessed in a separate section of this response.

Traffic Management

A3.4 As mentioned above, it is possible that several sections of the cable route will be constructed simultaneously, given its length. Section 1.10.3.4. sets out the six forms of traffic management which have been tested within the SRTM and also the future year scenarios that the traffic flows have been tested to. These are as follows:

- Shuttle working traffic signals on the B2150 Hambledon Road between Soake Road and Closewood Road;

- Temporary traffic signal operation on the B2150 Hambledon Road/A3 Maurepas Way/Houghton Avenue roundabout in Waterlooville;
- Shuttle working traffic signals on the A3 London Road between Poppy Fields and the roundabout with Ladybridge Road;
- Single lane closure on Havant Road between Farlington Avenue and the A2030 Eastern Road;
- Single lane closure on the A2030 Eastern Road between Airport Service Road and Burrfields Road; and
- Shuttle working traffic signals on Henderson Road between Bransbury Road and Fort Cumberland Road.

A3.5 Of the identified traffic management measures, the first three measures in the list affect Hampshire County Council's network. The following modelling scenarios have been assessed within the Traffic Impact Assessment:

Modelling Scenarios

- 2026 Do Minimum Scenario AM Peak Period;
- 2026 Do Minimum Scenario Inter-Peak Period;
- 2026 Do Minimum Scenario PM Peak Period;
- 2026 Do Something Scenario 1 AM Peak Period;
- 2026 Do Something Scenario 1 Inter-Peak Period;
- 2026 Do Something Scenario 1 PM Peak Period;
- 2026 Do Something Scenario 2 AM Peak Period;
- 2026 Do Something Scenario 2 Inter-Peak Period;
- 2026 Do Something Scenario 2 PM Peak Period.

A3.6 Two 'do something' scenarios have been tested within the SRTM. 'Do Something Scenario 1' (DS1) tests a situation whereby traffic management measures are present on the northbound lanes of the route. 'Do Something Scenario 2' (DS2) tests the same situation, but with traffic management measures present on the southbound lanes. As a comparison, 'Do Minimum' (DM) scenarios have been presented for the AM and PM peak hours to understand how the network is likely to operate without the proposed development. During the scoping for the SRTM assessment, it was agreed that a future year of 2026 would represent a robust assessment for the development, based on the proposed construction timescales.

SRTM Outputs

A3.7 Outputs from the SRTM have been presented as volume/capacity (V/C) to ascertain whether the re-routed traffic during the construction phase of the cable route has the potential to have a significant impact on the identified

junctions in the area. To supplement this, journey time data has been provided for eight strategic corridors across the Portsmouth City area and administrative area of Hampshire to understand whether they are likely to be impacted during the cable construction. During the scoping of the transport impact assesment, it was agreed that the following junctions would be assessed within Hampshire's network:

- Hambledon Road/ Milton Road Roundabout;
- Hambledon Road/ Ashton Road signal junction;
- Hambledon Road/ A3/ Maurepas Way roundabout;
- Maurepas Way/ A3 London Road roundabout;
- Rocksville Drive/ Stakes Hill Road signal junction;
- A3 London Road/ Ladybridge Road roundabout;
- Stakes Road/ Stakes Hill Road/ Purbrook Way roundabout;
- Stakes Hill Road/ Frendstaple Road roundabout;
- Hulbert Road/ Frendstaple Road roundabout;
- A3/ Hulbert Road roundabout; and
- Purbrook Way/ College Road.

A3.8 Following an initial analysis of the SRTM results, the following junctions were also identified for review:

- A3(M) Junction 2;
- A3(M) Junction 3;
- Dell Piece West/ A3 Portsmouth Road/ Catherington Lane signal junction; and
- B2177 Portsdown Hill Road/ Marylands Road/ B2177 Bedhampton Road/ B2177 Bedhampton Hill roundabout.

A3.9 Further to the SRTM assessment, the Applicant has also undertaken modelling using 'Linsig' software to calculate the expected queue lengths and delay at locations where shuttle working traffic signals are required. Similarly to the SRTM, the signals are assessed during the AM, PM and inter-peak hours.

TEMPRO

A3.10 To calculate the growth in traffic flow from the base year to 2026 TEMPro was utilised. The TEMPro trip rates were reviewed and agreed between Hampshire County Council and the Applicant prior to submission of the DCO.

Links Modelling Results

A3.11 The results from the SRTM forecast which routes and links are either likely to see a reduction or increase in the level of traffic flow as a result of re-distributed traffic during the cable construction.

A3.12 Across Hampshire's network in the vicinity of the proposal, the re-distribution of vehicular traffic has been sub-divided into 3 separate categories: West of Waterlooville, Waterlooville and East of Waterlooville. A description has been provided for each area as to the suitability of the roads which have been identified as routes for re-distributed traffic. Across these locations, all of the potential links (the extent of highway between junctions) within a 5km study area were identified and filtered through a selection process. This ultimately resulted in links with a forecast V/C ratio increase of over 10% from the do minimum scenario being assessed in further detail. To assist with the impact assessment, Manual for Streets 2 has been utilised which classifies streets and defines them based on place and their ability to accommodate levels of vehicular flow. These classifications were assigned to the links identified along the route to ensure they were correctly identified within the model.

A3.13 The link capacity assessment has been further categorised into a RAG (red, amber, green) assessment. Green indicates that the link is an appropriate diversion, amber highlights that the link can accommodate the forecast flows but is not wholly appropriate and red means that the link is not acceptable. From the links that have been assessed, Closewood Road is the only link within Hampshire's road network to be classed as unsuitable as a diversion route owing to the rural road's narrow width. It is understood that the link is only likely to be affected for approximately 2-3 weeks of the construction programme. As such, suitable measures should be put in place at this time to redirect traffic away from using Closewood Road as an alternative route.

Journey Time Analysis

A3.14 From the eight key corridors modelled to understand the impact on journey times, four fall under Hampshire County Council's jurisdiction. These comprise of:

- Corridor 1: A3 Portsmouth Road/ A3 London Road/ A3 Maurepas Way/ A3 London Road/ A3 Southampton Road;
- Corridor 2: Ladybridge Road/ Stakes Road (Purbrook);
- Corridor 3:Rockville Drive/ Stakes Hill Road/ Crookhorn Lane/ B2177 Portsdown Hill Road; and
- Corridor 4: A3(M)/ A27 Havant Bypass.

A3.15 Forecast journey times increases are observed across a number of the approaches to the aforementioned corridors, specifically Corridor 2

(westbound) which sees an increase in journey time in the AM peak hour from 419 seconds in the DM scenario to 538 seconds in both the DS1 and DS2 scenarios. This equates to a journey time increase of 119 seconds, or 29%. A forecast journey time increase of 32% is also observed along this corridor in the PM peak. Both of these increases are a result of forecast traffic redistribution along the diversion routes. Whilst it is acknowledged that journey time increases are inevitable during the construction period, no mitigation measures have been proposed to offset the likely additional delay to motorists during the construction of the cable route. This matter is covered in further detail below.

A3.16 A link flow assessment has also been undertaken for Hambledon Road (between Milton Road and A3 Maurepas Way) which is a dual carriageway along the route that will be subject to lane closures during construction. This has been undertaken by establishing the theoretical capacity based on DMRB Volume 5 Section 1 Part 3 – TA79/99 and comparing this to the SRTM outputs in the Do Something scenarios. When comparing the dual carriageways on Hampshire's network with the forecast associated flows, it is noted that these all expected to be within the anticipated capacity based on the DMRB assessment. The links are therefore forecast to operate within capacity with the lane closures in place.

Junction Modelling Results

A3.17 Detailed junction modelling has been undertaken along the proposed route of the cable corridor and also along the diversion route to understand potential operational capacity with the forecast redistributed traffic flows. A number of junctions have been identified as being likely to operate over design capacity (a Ratio of Flow to Capacity (RFC) value greater than 1.00) under the Junctions 9 and ARCADY detailed junction modelling assessments:

- Shopping Centre/ Rockville Drive/ A3 London Road/ A3 Maurepas Way;
- Dell Piece East/ A3(M) S/ B2149 Dell Piece West/ A3(M) N;
- Dell Piece West/ A3 Portsmouth Road/ Catherington Lane;
- Hulbert Road E/ A3(M) S/ Hulbert Road W/ A3(M) N;
- Purbrook Way/ Crookhorn Lane/ Stakes Road/ Stakes Hill Road; and
- Bedhampton Road/ Bedhampton Hill/ Portsdown Hill Road/ Maylands Road.

A3.18 The junctions assessed at this level have been compared to the 2026 forecast flows to understand if the junctions are likely to be tipped over capacity as a result of the construction of the cable route. The identified junctions are assessed in further detail below.

Shopping Centre/ Rockville Drive/ A3 London Road/ A3 Maurepas Way

A3.19 Under all of the scenarios tested, the Rockville Drive arm of the roundabout is predicted to be over capacity. Under 'Do Something 2' scenario, the arm operates with a forecast ratio of flow over capacity of 1.56 in the AM peak hour and 1.48 in the PM peak hour. Whilst there is a reduction on the forecast operation under the 'Do Minimum' scenario, this arm of the roundabout is still predicted to significantly operate over capacity.

A3.20 It is noted that the SRTM is expecting high levels of traffic to be diverted through the Rockville Drive arm of the roundabout. Given the anticipated level of traffic during the construction period, the situation at this roundabout should be monitored carefully throughout the construction period and alternative routes identified and directed towards as appropriate.

Dell Piece East/ A3(M) S/ B2149 Dell Piece West/ A3(M) N

A3.21 The Dell Piece East (A3(M) Junction 2 roundabout) is modelled close to design capacity on the A3(M) S arm under both the Do Something 1 and Do Something 2 scenarios respectively, with a forecast ratio over capacity of of 0.98 and 0.97. Given the junction's proximity to the strategic road network, both the A3(M) (S) and A3M (N) approaches should be closely monitored and potentially reassessed for their suitability for redirected traffic during construction to ensure that no queuing occurs back onto the A3(M).

Dell Piece West/ A3 Portsmouth Road/ Catherington Lane

A3.22 The Catherington Lane approach has been modelled through the SRTM as overcapacity under all of the scenarios tested in both the AM and PM peak hours. However, it is noted that the forecast capacity of the Catherington Lane arm only changes marginally from the Do Minimum scenario to the Do Something 1 and Do Something 2 scenarios. It has therefore been demonstrated that the diverted traffic is likely to have a minimal impact on the overall operation of the junction.

Hulbert Road E/ A3(M) S/ Hulbert Road W/ A3(M) N

A3.23 Similarly to A3(M) Junction 2, A3(M) Junction 3 is forecast to be at capacity on the A3(M) N approach in the PM peak under the Do Minimum Scenario, with a a ratio of flow to capacity of 1.00. This drops to 0.99 when assessed under the Do Something 1 and Dom Something 2 scenarios.

A3.24 The Applicant has stated that the forecast level of queuing can be accommodated on the slip road, causing no blocking back onto the A3(M). This situation should be monitored during construction to ensure that the queuing does not increase above that which has been modelled and potentially blocking back onto the A3(M). The views of Highways England should be sought in this regard, including their views on the information submitted relating to potential queue lengths on slip roads.

Purbrook Way/ Crookhorn Lane/ Stakes Road/ Stakes Hill Road

A3.25 The operation of the Stakes Road approach of the Stakes Hill Road roundabout is modelled to worsen under the Do Something 1 and Do Something 2 scenarios compared to the Do Minimum scenario, increasing from an ratio of flow over capacity of 1.02 in the AM peak hour for the Do Minimum scenario to 1.13.

A3.26 The Stakes Hill Road roundabout is due to be upgraded as part of the off-site occupation triggers associated with the West of Waterlooville Urban Extension/MDA (Havant Borough Council's planning permission reference APP/10/00828). It is uncertain whether the junction improvements will be in place before or during the construction of the cable route. Best endeavours should be made to ensure that the works are co-ordinated to prevent any additional delays than those forecast under the ARCADY assessment.

Bedhampton Road/ Bedhampton Hill/ Portsdown Hill Road/ Maylands Road

A3.27 The Portsdown Hill Road approach to the Bedhampton Road roundabout is forecast to operate at a ratio of flow over capacity of 0.96 in the PM peak hour under the Do Minimum scenario. Under the Do Something 1 and Do Something 2 scenarios, the capacity of this approach worsens, with a forecast ration of flow over capacity of 1.03.

A3.28 Along with the junctions referenced above, the situation at the roundabout should be monitored, with appropriate changes to the diversion route made should the capacity of the junction worsen above that which has been forecast.

A3.29 The temporary operation of a number of junctions affected by the re-diversion of existing traffic during the construction of the cable route has been assessed above. While it is noted that this is a temporary situation, these junctions should be monitored during construction to ensure that their associated capacities are not worsened further than modelled within the Transport Impact Assessment. Should the operation of these junction during construction be worse than that forecast, remedial solutions should

be implemented. Further information should be provided by the Applicant regarding potential remedial solutions in order to support this application.

Impact on Sustainable Transport Networks

A3.30 Any longer-term impact on sustainable modes of transport must be understood. Appropriate mitigation must be in place to ensure there is no detrimental impact in terms of a reduction in sustainable transport modes, or conversely an increase in private car use.

A3.31 Construction of the two proposed trenches along the A3 London Road will be likely to detrimentally affect the A3 Star bus corridor, one of south-east Hampshire's most successful and popular transit corridors which provides high frequency, reliable and popular bus services.

A3.32 On-road cable route construction activities will damage the appearance and potentially the effectiveness of the following sustainable transport options and complimentary infrastructure located within the construction envelope:

- Bus lanes;
- Bus stops and shelters;
- Footpaths;
- Cycle lanes;
- Cycle parking;
- Pedestrian and cycle crossing facilities;
- Street furniture (street lighting, signage, benches);
- Green verges; and
- Utility apparatus

Public Transport

A3.33 The Applicant has not submitted any evidence of discussions with bus operators. This will be required to determine the acceptability of relocated bus stops, the proposed diversions routes, the anticipated delays to services and the expected resultant loss in patronage. Ongoing consultation and close working between the Applicant and operators of local bus services along the corridor will also be required during the construction phase to minimise the impact on bus service timetables and the number of additional buses and drivers required to operate services.These services are likely to need to be modified for the duration of construction activities

A3.34 If no extra buses and drivers are provided (i.e. the existing peak vehicle requirement is maintained) then the bus service reliability will likely decline and some existing bus users are likely to change to alternative modes of transport resulting in a loss of bus passengers and associated revenues during, and potentially beyond the construction phase.

A3.35 It is therefore a reasonable expectation that the Applicant will provide support to cover the aforementioned bus service-related costs. This should be through a service level agreement between operators and the Applicant, ideally secured via a S106 Agreement.

Pedestrianscyclists and horse-riders

A3.36 During the installation of the cable on highway land, pedestrian routes are likely to be hindered due to footway width restrictions, closures and diversions. Where possible, pedestrians should be able to continue their journey without the need to cross a road to avoid works. Consideration should also be given to pedestrians with particular restrictions on their mobility. The proposed route also crosses a number of bridleways used by horse-riders.

A3.37 Along the onshore cable route, there are three main means for cyclists to travel: on-road, shared use footway and dedicated on-road cycle/bus lanes. Each of these means will need to be managed to avoid cyclists being suddenly forced into adjacent traffic and/or pedestrians. It is noted that the diversion route along Stakes Hill Road will also impact on Sustrans National Cycle Route 222.

A3.38 It is considered that due to the time and scale of the works, there will be a significant impact on the attractiveness of utilising the public rights of way and other foot/cycle networks. This is likely to result in a modal shift to other, potentially less sustainable means. Mitigation of this impact should be explored further by the Applicant.

APPENDIX 4 Submission requirements for construction approvals

A4.1 In order to undertake a full review of the works to be undertaken within the Highway further information must be provided for review and approval by the Highway Authority prior to works being undertaken for any given section.

A4.2 The Highway Authority requires the submission of full design drawings, at appropriate scales, to enable the Highway Authority to carry out the design check for each section of the cable route, to include as a minimum the following:

- Proposed horizontal alignment of cables
- Proposed vertical alignment of cables to include proposed cover from existing ground level
- Cross sections at 100m centres minimum, and at any location of cross over with highway assets, other statutory undertaker apparatus, jointing bays and service bays
- Proposed reinstatement specification, specific to each location and construction type
- Proposed position of jointing bays
- Proposed specification of jointing bays
- Proposed locations of any service bays
- Proposed specification of service bays
- Designs and details of any proposed structures within and up to 4.5m of the highway, including special protection details, e.g. protection slabs or foam concrete
- Root protection zones for any existing highway trees
- Details and location of any required root protection measures for highway trees
- Existing drainage systems overlaid on General Arrangement drawings to show how they are to be avoided or amended where required
- Existing statutory undertaker apparatus along the proposed route overlaid on GA's to highlight potential clashes and details of any required diversions
- Any required changes to the existing lighting systems or ITS systems to accommodate the works
- Chamber details

A4.3 In addition to the submission of design drawings, the following information or items will be required for review:

- Method statements for routine maintenance and access to cable infrastructure, including jointing bays
- Statement including plans detailing the proposed phasing of construction
- Full consultation will be required for any proposed structures within and up to 4.5m of the highway, the Approval in Principle process will be

required in line with the DMRB code CG 300. This will be required for all structures including significant chambers and spanning slabs. Supporting information such as the associated SI will be required when providing the design

APPENDIX 5 Detailed Highway Comments on the Converter Station Site Access

A5.1 To enable the Highway Authority to be satisfied that the proposed vehicular access for the converter station is suitable in design to provide safe and efficient access and egress to the highway for the construction of the development and for ongoing maintenance the following information is required:

1. Swept path analysis is required for all expected highway movements at the proposed junction both during and post construction. This should include the largest articulated vehicle which is proposed within the Transport Assessment to enter the site both during and post construction. Tracking should be indicated towards the haul road, both entering and egressing the site as well as for right in/left out movements from Broadway Lane.

2. Confirmation is needed that the land required for the construction of the proposed haul road is within the Applicant's ownership as it falls outside of the redline for the development.

3. Demonstration is required that sufficient visibility to the south from the site access can be achieved and appropriately secured in perpetuity. This should be based on the recorded speeds along Broadway Lane. Should provision of this visibility be restricted, a further speed check in the vicinity of the semi-detached farm cottages is required to confirm measured speeds in a location appropriate to the end of the visibility splay. Should these measured speeds not accord with the achievable visibility, a 'Departure from Standards', would be required; this is a separate process and approval and is not guaranteed. Should a Departure from Standards be required, formal undertaking of the Departure from Standards process should be completed prior to planning approval in order to ensure the access proposals are deliverable.

4. It is noted that in order to achieve an appropriate visibility splay to the north, hedgerow removal is required. It appears only a small section of the existing hedge around the sharp bend at the junction of Day Lane/ Broadway Lane will remain. The complete section should be removed and replaced clear of the visibility splay, subject to an assessment demonstrating that the landscape impact is acceptable. If the replacement hedge is less than the existing a CAVAT (Capital Asset Value for Amenity Trees) payment may be required to mitigate the loss of the highway asset.

5. Movements left from the site access are to be physically restricted to ensure use of the proposed haul road for large vehicles. The northern radius of the proposed access should therefore be reduced to 4-6m to accommodate small vehicles only post construction.

6. No construction traffic, including contractor's vehicles, should use Broadway Lane to the south of the proposed access. The junction design should discourage egressing vehicles from turning right by including amendments to

junction geometry and no right turn signage within the required updated access drawings. A TRO will be required to prevent right turn movements from the site access and should be secured within the DCO.

7. To ensure that material is not dragged from the haul road onto the highway, confirmation has been sought as to whether the haul road will be metalled. At a minimum the section between Day Lane and Broadway Lane, along with the first 50m within the site, will be required to be of full metalled construction to reduce the risks of mud and debris being taken onto the highway. Appropriate wheel washing facilities will also be required and secured within the CTMP.

8. A Stage 1 Road Safety Audit of the updated/ revised proposals is required.

APPENDIX 6 Details of Planned Highway Works

A6.1 A number of highway improvement schemes within the cable laying route have been identified and these are as follows:

- 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.
- A3 Ladybridge roundabout provision of the southern access to the West of Waterloville urban extension/Major Development Area demonstrated in drawing number GTWVILLE_SA/GA/01 Rev J. These are third party works currently undergoing the Section 278 design check process with the Highway Authority. As part of the planned improvement scheme to the Ladybridge roundabout, secured through the access strategy for the development, the existing culvert will need to be bridged and this will involve piling. To avoid the need to alter the works being undertaken to the culvert, the Applicant will be required to route the cable underneath this area of the network. A sufficient exclusion zone will need to be provided around the culvert to ensure that any replacements works can take place unimpeded. The redline around Ladybridge roundabout is extensive and may have implications for planned and future works at this junction. The acceptability of cable laying around this junction must be considered in the context of these projects.
- Emerging Transforming Cities Fund (TCF) schemes for rapid bus corridor improvements to the A3 in the vicinity of Ladybridge Roundabout
- West of Waterlooville Urban Extension/Major Development Area Phase 8 construction access as shown in drawing number GTWVILLE_P8/GA/01 Rev E.
- Milton Road/Lovedean Lane junction works to convert to a mini roundabout in relation to the approved Woodcroft Farm application (planning reference APP/13/00804). These works sit along the proposed construction route to the converter station and are demonstrated below in drawing number 21834-004-SK001 Rev A.

A6.2 Through the ongoing monitoring of the integrity of the highway surface there are a number of emerging locations where resurfacing may be required within the lifetime of this project. This includes:

- A3 London Road, Widley;
- Charlesworth Drive to Milton Roundabout; and
- A3 adjacent Forest End.

A6.3 In addition to these works there are planned Section 278 works off the cable route, but which will be affected by redistributed traffic:

- Stakes Road/ Stakes Hill Road roundabout conversion to traffic signals.
- Duelling Purbrook Way between College Road and Stakes Road Roundabout.

A6.4 The emerging Havant Borough Local Plan has identified a site (proposed allocation reference H41) on College Road for significant residential development which will require improvements to the local highway network, including the following junctions:

- Stakes Road/Stakes Hill Road roundabout;
- A3(M) junction 4 dumbbell roundabouts;
- College Road/ Purbrook Way junction; and
- Crookhorn Lane/ Portsdown Hill Road junction.

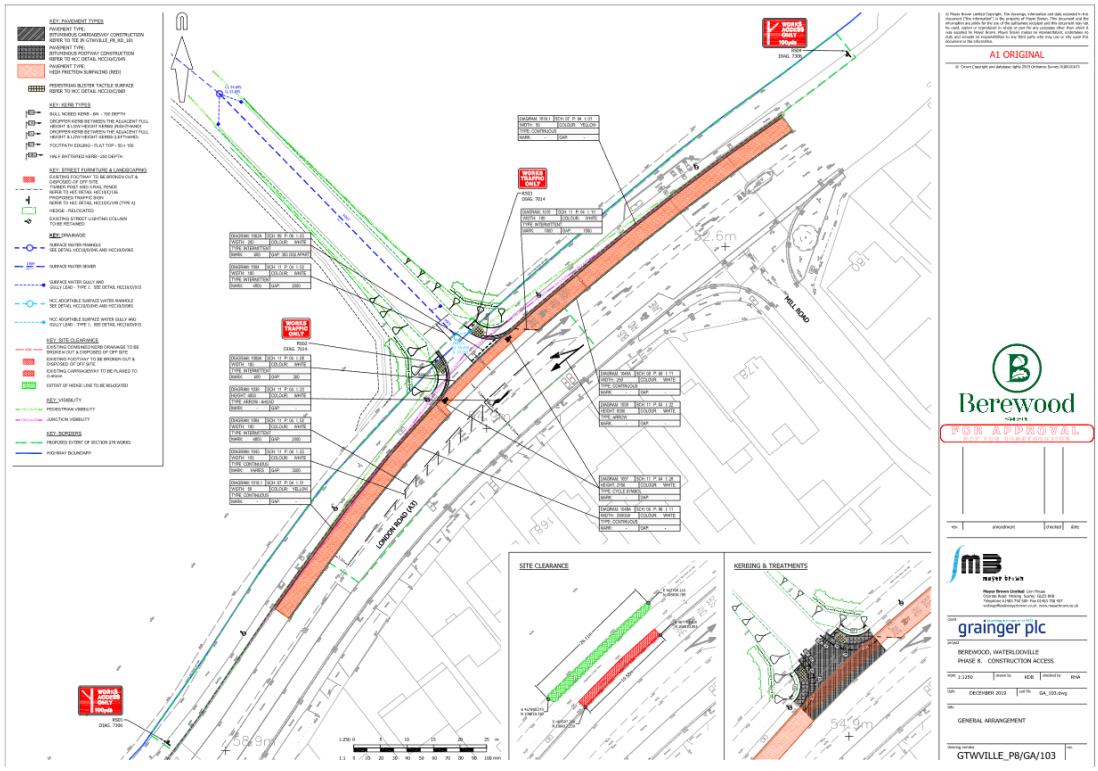
A6.5 A planning application (reference APP/19/01101) has recently been submitted for development on this site and modelling work by the Applicant for this site will be required to understand the extent of junction improvements required. The form of these improvements is therefore still being considered.

Drawings:

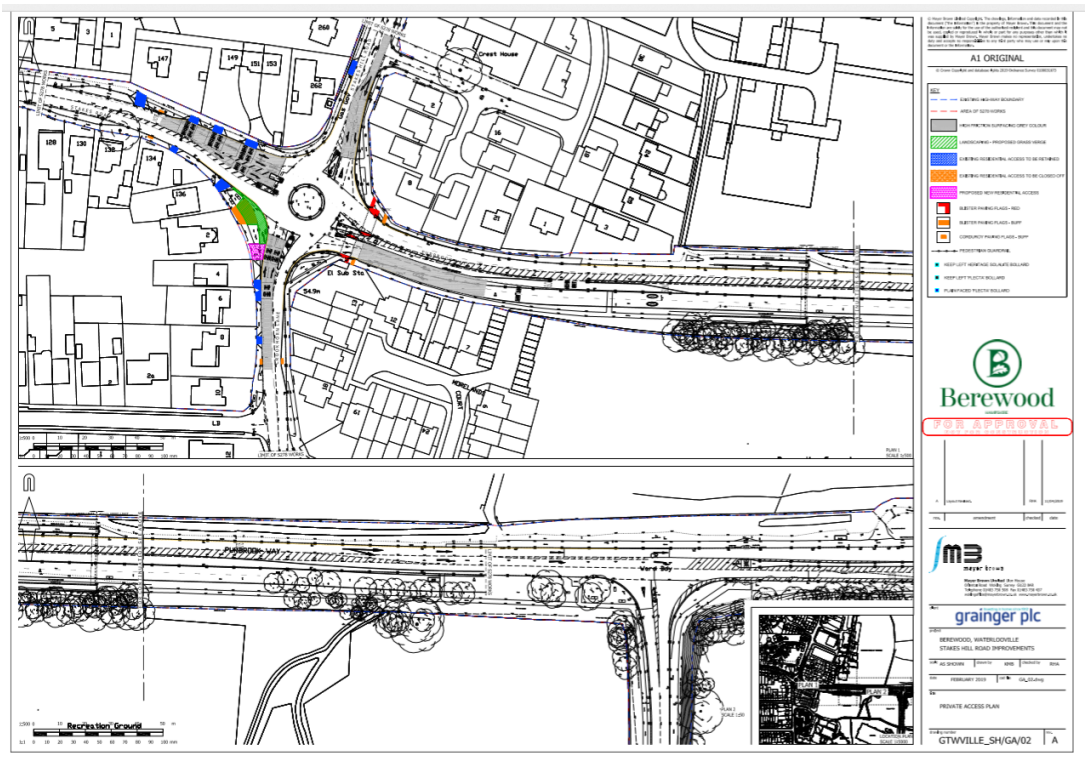
Overview Drawing of Planned Highway Works

Milton Road/Lovedean Lane Junction Works – Woodcroft Farm Application

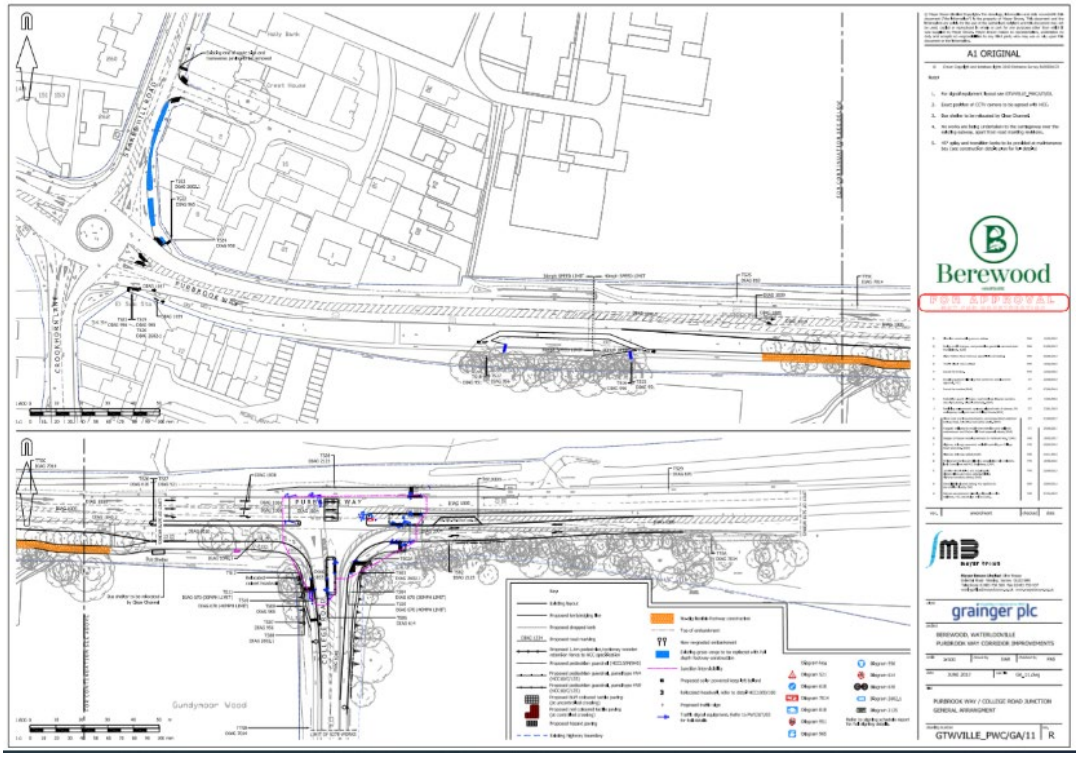
Phase 8 Construction Access Works- Waterlooville MDA



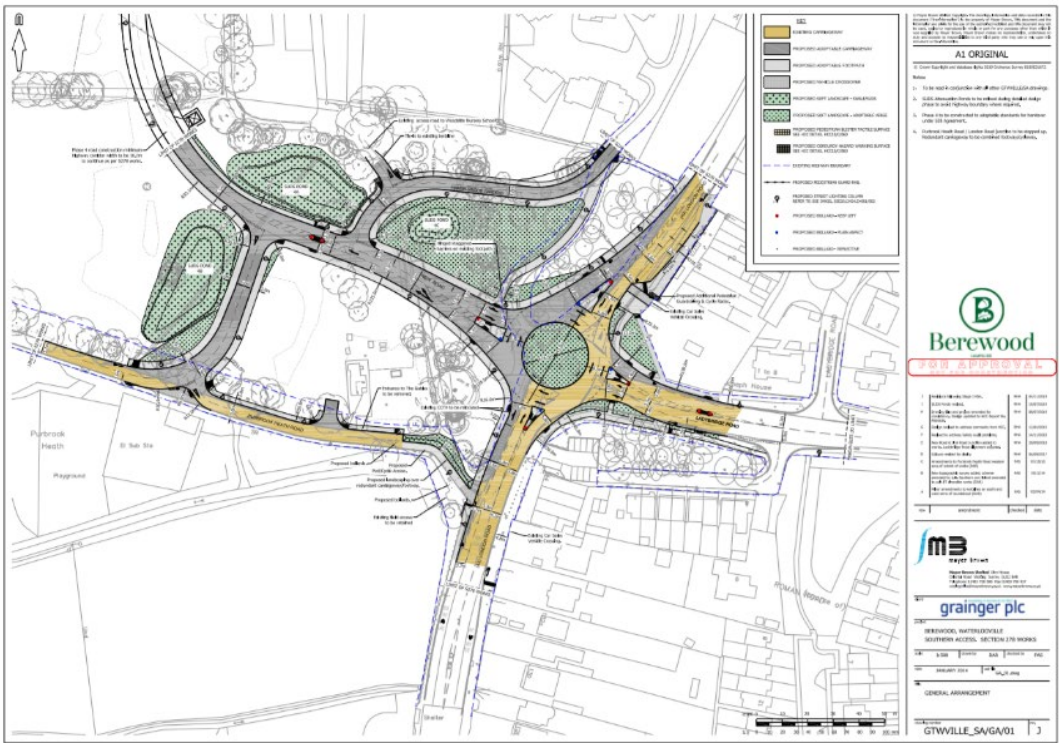
Stakes Road/Stakes Hill Road Roundabout Works – Waterlooville MDA



Duelling Works to Purbrook Way between College Road and Stakes Road Roundabout



Ladybridge Roundabout MDA Works



Emerging TCF Works at Ladybridge Roundabout

APPENDIX 7 – Detailed Comments on the Framework Construction Management Plan and Traffic Management Strategy

A7.1 Hampshire County Council, in its role as the Highway Authority has undertaken a review of the submitted Framework Construction Management Plan (FCTMP) and the proposed Traffic Management Strategy (TMS). The following comments address in detail matters arising from both documents.

A7.2 The FCTMP should cover matters including, but not exclusive to, the following:

- Programme and duration of the works;
- Compound details including contractor parking;
- Construction traffic access arrangements, including construction traffic route strategy and signage and restrictions on certain routes and at certain times;
- The suitability of the routes to the site to cater for all traffic types. Of particular concern are 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;
- Working hours;
- Any on site material storage;
- Highway condition survey of construction traffic routes;
- How mud will be managed from the site to ensure it is not taken onto the highway and provision to remove mud from vehicles;
- Contact details for the development road safety and liaison officer. Contact details for onsite staff;
- 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, including control of inappropriate contractor parking;
- Management of Rights of Way and Temporary Closures; and
- Communication plans regarding each section of the works.

A7.3 The Construction Traffic Management Plan should identify and secure suitable mitigation measures in line with the points set out above, and informed by a suitable appraisal, to manage construction traffic and impact. Similarly, measures for the construction of the joint bays should also be clearly set out within the Construction Traffic Management Plan for that section of works.

A7.4 It is noted that *'alterations to the highway to enable construction including temporary and permanent'* is stated as an item for inclusion in

Construction Traffic Management Plans to be provided at a later date. However, it is deemed necessary by Hampshire County Council that in order to determine the suitability of any proposed permanent, or significant temporary, alterations to the highway should be provided for review at this stage.

Emergency Access

A7.5 Discussions should be held with the emergency services regarding how the additional congestion/ queuing may impact on response times for emergency vehicles.

Indicative Programme

A7.6 Construction of the converter station is programmed to take two and a half years, and the installation of the onshore cable is programmed to take 27 months plus 12 months of enabling works. Further consideration is given to details of the programme to limit disruption in the Framework Traffic Management Strategy.

Sensitive Receptors

A7.7 Sensitive receptors such as schools and medical facilities have been identified as part of the Framework Construction Traffic Management Plan, however the Queen Alexandra Hospital, police stations and fire services, residential properties and other rights of ways appear to have been omitted and should be included.

Compound and Laydown Areas

A7.8 The primary compound will be located at the Lovedean converter station with satellite contractor compounds and laydown areas along the Onshore Cable Corridor. The specific locations and layouts of these areas should be agreed with the Highway Authority, and Hampshire County Council Countryside Services in relation to Horndean Footpath 4 as part of the Construction Traffic Management Plan for that section.

A7.9 Two compounds are proposed for the materials and staff required for the cable routing. The compound impacting on Hampshire's highway network is at the Lovedean site. Further information is required regarding site selection for a compound at Lovedean. This compound is 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.

A7.10 In addition, the impacts of construction worker movements do not appear to have been assessed in terms of the number of movements to and from the site. Confirmation of the maximum number of 'gangs' working from each compound is required (set out within the summary as an 'assumed' maximum number of three) and included within the assessment of the number of trips to and from the Lovedean site.

HGV Routes

A7.11 Construction traffic movements have been forecast 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

A7.12 The proposed route for converter station construction traffic assumes all workers and deliveries will originate from/ return to the A3(M) Junction 2 for Horndean/ Cowplain. The route then follows the B2149 to the west and passes through the Dell Piece roundabout serving Hazelton Interchange industrial estate and a Morrisons supermarket.

A7.13 Passing the roundabout, the B2149 reduces to a 40mph speed limit. The route continues towards the A3 (Portsmouth Road) and turning south at the A3/Dell Piece/Catherington Lane signal-controlled junction. The A3 is subject to a 30mph speed limit for the 2.6km to the junction with Lovedean Lane. Whilst being a main distributor road, the A3 is bounded by residential accesses on both sides of the road, albeit with separation from the carriageway via provision of footways/shared-use paths.

A7.14 The route then turns west into Lovedean Lane (a C-classified road), which is bounded on both sides by residential properties for the majority of its length. The route then turns west into Day Lane (a C-classified road) before arriving at the Lovedean Substation on Broadway Lane. Day Lane is rural in nature, with limited residential accesses on the southern side, and subject to the national speed limit. This route will also be used for abnormal load deliveries.

Construction workers

A7.15 Construction workers undertaking the onshore cable installation are proposed to arrive at a compound on the converter station site prior to the start of each shift. All ‘gangs’ will then travel to their respective works from this location and return at the end of the day. As stated in 3.4.2.1 of the Framework Construction Traffic Management Plan, no construction traffic will use the route from the south via Anmore Lane. A requirement within the DCO will be needed to ensure a ban on right-turn movements out of the converter station access onto Broadway Lane, and the proposed access junction will need to be designed accordingly.

A7.16 The Transport Assessment assumes a car occupancy of 1.2 persons per vehicle (referred to as the standard rate for commuting trips) which results in a forecast of 125 movements a day to and from the site. Census 2011 data has been used to determine the origin and destination of workers.

A7.17 Due to the bespoke nature of the project, this approach may not be wholly representative of the true distribution. Notwithstanding this, the variation in origins for workers will unlikely cause major changes in distribution in the locality of the convertor station due to the limited routes to the site. In light of no other reasonable alternative methodology for distribution, the proposed approach is deemed acceptable.

A7.18 In addition to this, it is not mentioned how workers will travel from the converter station to each of the work locations. The benefits of this arrangement are also unclear, as there will be a significant level of trips to the converter station and then again from the converter station to the work locations, with the reverse being the case in the evening peak. Provision of a shuttle service to sustainable transport hubs is mentioned, but no further details have been provided.

A7.19 Some works locations are a substantial distance from the converter station, and it is suggested that more appropriate locations for workers to meet are explored (e.g. Farlington or the West of Waterlooville Major Development Area). If construction worker gangs are to commute individually to the works locations the parking impact at each site will need to be addressed. In conjunction with this, the necessity of initially commuting to the substation is questioned.

Working hours

A7.20 The Transport Assessment stated that all workers and HGV's will originate from the converter station (Section 1.8.3.4.). This operation will result in constructions workers and HGV's attempting to return to the converter station during peak periods, which should be avoided. It is also noted that no avoidance of the school PM peak is considered.

A7.21 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. Analysis of traffic data is required to confirm the peak periods, which may need to be extended. Furthermore, it is noted extended working hours and night working may be required in certain locations and the DCO must not restrict these timing requirements.

A7.22 These time restriction requirements will need to be considered in conjunction with the local planning authorities. Stringent restrictions on movements may need to be applied along both the cable route and diversion routes 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.

A7.23 Horizontal Direction Drilling (HDD) works movements are proposed to be restricted outside of 0800-0900 and 1700-1800 unless there is an emergency, however what constitutes an emergency is not made clear in the submission and should be clarified and agreed.

Management of road safety

A7.24 The location of the construction works will at times require the displacement of existing on-street parking, but no analysis of quantum, displaced location or duration has been undertaken and should be considered.

A7.25 Section 1.9.2.2. indicates smaller plant can be used to reduce the impact on the local highway network, although it is not made clear why this practice is not used as standard. Further justification should be given as to why the larger plant is used at the detriment of highway users.

A7.26 As part of the method statements for the works locations, it is necessary for debris/mud overspill onto the highway to be mitigated at every location. A system to prevent material migration and cleaning of the highway for each site should be included and secured within the CTMP.

Required highway interventions

A7.27 Should any junction used by construction traffic be found to require widening then, being temporary, such works should be covered via a S171 licence and agreed with by the Highway Authority. If the developer will not commit to adhering to Hampshire County Council's S171 licence procedure, requirements will need to be included in the DCO to ensure works are designed, constructed and the Highway Authority's fees are funded appropriately.

A7.28 Weekly surveys are proposed detailing the condition of the highway network affected by the construction activities. This should include signed diversion routes and routes experiencing increased traffic as a result of redistribution of traffic. A comprehensive pre-condition survey of all impacted routes should be completed and submitted to the Highway Authority prior to commencement of any development. A commitment should be provided to not only immediately rectify hazardous deterioration (as provided within the CTMP) but also remedial measures to ensure the highway is not negatively impacted following completion of construction activities.

A7.29 The level of forecast vehicle movements, and in particular daily HGV movements, is of a scale which means that parts of the route, particularly closest to the converter station, is unlikely to be of a construction standard sufficient to accommodate these vehicle loading levels. This is likely to result in the failure of the highway surface along the construction traffic routes. The Applicant must examine this matter further and commit to 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.

A7.30 It is stated that all temporary and permanent site accesses will be designed to the relevant standards. As the proposals include the formation of a new access onto the highway, which will include works within the highway, these works will be required to be secured appropriately through the DCO, ideally through the provision for the developer to enter into the Highway Authority's S278 process.

Framework Construction Worker Travel Plan

A7.31 The Framework Construction Worker Travel Plan (FCWTP) has been assessed using Hampshire County Council's evaluation criteria for the assessment of travel plans – "A guide to development related travel plans" (https://documents.hants.gov.uk/transport/guide-to-travel-plans.pdf) . Whilst the Hampshire County Council is broadly content with the FCWTP, it requires some amendments and further information.

A7.32 A section should be included which references national and local policy documents relevant to the Travel Plan. This section should also reference the Applicant's policies on sustainable travel. If the Applicant does not have a policy on sustainable travel, a statement of support for the aims of the Travel Plan from a senior member of staff at AQUIND Ltd would suffice. The planning reference should be included in Section 1.

A7.33 Generally, the measures as laid out in Section 5 are appropriate for the FCWTP. However, there are a few additional measures which should be considered for inclusion:

Cycling

- Temporary showers, changing facilities and lockers (if not already included in the application)
- Minor repair tools and resources (puncture repair kits, pumps, etc)

Public Transport

- Employers can consider provision of interest free loans to purchase season tickets for travel by bus or train (up to £5000 can be provided without tax implications)
- Guaranteed ride home for staff and contractors in emergency situations

Car Sharing:

- Provision of emergency ride home facility for car sharers

Car Park management:

- Allocate priority parking space to car sharers

Marketing and promotion:

- Introduction of a personalised journey planning scheme
- Advertising the travel plan to staff and contractors through recruitment
- Item on team meeting agenda.

A7.34 Paragraph 5.3.1.1.1 states that a car sharing app could be developed specifically for the site. This is an interesting measure, but there are existing car sharing websites which can also be promoted such as https://liftshare.com/uk. Travel Plan Coordinator (TPC) resources should also be allocated to administering car sharing for the FCWTP, potentially forming part of the personalised travel planning.

A7.35 Paragraph 5.4.1.1.2 states that a shuttle bus from the Havant Rail Station will be considered. This should be in place at the start of construction and suitably promoted amongst workers. This service should be monitored and expanded if there is sufficient demand. A shuttle service to Cosham Rail Station should also be considered.

A7.36 The action plan as set out in table 6-1 should be amended to better reflect the example below. A cost estimate for these items must be included which is used to approximate an appropriate cash deposit to support the Travel Plan.

Objective	Action	Start Date	Due Date	Responsibility	Mode affected	Cost Estimate

A7.37 Further information must be supplied regarding the monitoring scheme for the FCWTP. Travel questionnaire surveys or Trip Rate Information Computer System (TRICS) database's Standard Assessment Monitoring

(SAM) surveys should be conducted annually to determine the modal split, and monitor progress towards the targets set out in Section 7.1. A minimum 35% response rate should be attained in order for travel questionnaire surveys to be considered statistically significant.

A7.38 There should be measures in place to encourage construction workers to complete a questionnaire survey. Entry into a prize draw could be offered to those who complete a survey, although it should be noted that the prize should not be travel-related (e.g., bus tickets, cycle vouchers, etc). A sample questionnaire survey should be provided in the appendices.

A7.39 There should be a reference in the document to a means for enforcing the FCWTP. Typically, this is accomplished through a Section 106 agreement. A commitment to pay HCC's monitoring and approval fees should be included in Section 7. Sanctions should also be in place in the event that the commitments stated in the FCWTP are not met. This includes any remedial measures which could be implemented if the targets are not met, e.g. personalised transport planning.

Abnormal Indivisible Loads

A7.40 The FCTMP states that Abnormal Invisible Loads will comply with the statutory regulations, including agreement of routing and communication with affected residents and other road users. This should be secured within the DCO Requirements.

A7.41 There is only one signal junction on the route of the abnormal load (transformer) which is Portsmouth Road/ Catherington Lane/ Dell Piece. There are 6 signal poles that will be affected by the abnormal load. None of the poles are in the sockets which makes the task of removing them more challenging, and therefore their removal will need to be arranged significantly in advance of the load passing through. The advance work will need to be programmed approximately 3 months before the abnormal load is taken through. Existing road space bookings may restrict these movements.

A7.42 If it is required that the existing poles are removed, then new sockets and poles will be required to be installed. The street furniture could be re-used, and the signal cables disconnected and rewired. This may require temporary lights to be installed to allow necessary work to be undertaken.

A7.43 On the day that the abnormal load is taken through, the Applicant will need to arrange for Hampshire County Council's contractor to be on site to remove these 6 signal poles. Further details of the Traffic Management will decide how the traffic is managed directly in advance of the load going through as certain movements will no longer be available or be under

signal controlled. It would also be necessary to know the ground clearance of the abnormal load/vehicle.

A7.44 All costs associated with the works to the signals, in advance, and on the day, will be required to be recharged to the Applicant. A thorough pre-condition survey will be required prior to the first abnormal load delivery, and any repairs or works to bring the highway back up to standard to be implemented after the final abnormal load delivery.

A7.45 There is also widening works required at the junctions of Lovedean Lane/ London Road and Lovedean Lane/ Day Lane to facilitate the abnormal load delivery. However no information has been submitted detailing what these are proposed to be, nor the timescales for implementation. This information is required. Any widening required at the junctions of Lovedean Lane/ London Road and Lovedean Lane/ Day Lane should be temporary and once all abnormal load movements have been completed, the carriageway/ verge restored back to its original width and standard. A S278 will be required for these works and secured appropriately within the DCO.

A7.46 Details are required for an indicative timescale for the abnormal load arrival (i.e. all 6 in one day/ week/ month) as well as tracking drawings showing how the trailer can return to the strategic road network after delivery.

Framework Traffic Management Strategy

A7.47 The Framework Traffic Management Strategy (FTMS)has been reviewed, specifically Appendix G of the Transport Assessment. Hampshire County Council has the following comments:

- 2.7.1.3. The “Overlord” event in Denmead needs to be noted and planned around. It is held over a weekend in May/June each year. https://www.overlordshow.co.uk/

- 2.8.1.2. The Applicant should include and liaise with Havant and Waterlooville Football Club.

- Passing motorists should also be recognised as a stakeholder and accordingly, advanced warning signs advising of works must also be considered for each site.

- 2.8.3 Hampshire County Council will be seeking to direct enquiries relating to the project to a bespoke website created and managed by the Applicant. It is considered essential that the website

focusses on the identified stakeholder groups and the impact from each specific site.

- 2.8.4. The ‘roadworks.org’ website has been rebranded as one.network. It is noted that the Applicant proposes to add works details to the one.network website. Hampshire County Council would like further information on how this would be achieved. If Applicant were to use the nationally prescribed electronic system for permits, this website would be automatically updated. It is also recommended that the Applicant take advantage of the one.network ‘comms app’ as this would greatly help their ability to reach the various stakeholders.

- 2.8.6 Hampshire County Council will seek to work with the Applicant to ensure that all councillors are kept updated and informed in an appropriate manner.

- 2.10. Hampshire County Council’s Passenger Transport Team will need to be actively engaged in any works impacting bus lanes, routes or bus stops. A charge may be made for setting up of temporary bus stops.

- 2.11 Restricting works outside schools to summer holiday periods may be possible. However, the A3 is a key link to and from places of education and any works on this corridor will impact schools, so there will be an unavoidable impact on students travelling to and from places of education.

- 2.12. Hampshire County Council would like further discussions on the ‘Responsive Traffic Management Protocol’. This seems to reflect the existing processes of permit modifications, but it would be necessary to see how the Applicant consider this might work on a day to day basis. Again, the adoption of Hampshire County Council’s permit scheme would greatly assist in both parties reacting in an agile manner to traffic complications arising from the works.

A7.48 In general, the traffic management proposals can be summed up as lane closures and temporary traffic lights along the A3 from the administrative boundary of Hampshire with Portsmouth City Council to the converter station. Accordingly, the restrictions on traffic movements will be likely to be required . These restrictions will need to be secured through Hampshire County Councils’ permit scheme, or as part of any alternative approval process described in the approved DCO and can be summarised as follows:

- Temporary traffic signals are likely to be required to be manually managed to manage the dynamic changes in traffic flows and keep critical junctions clear.
- Works to be expedited at certain parts of the network to minimise impact on traffic and residents. This may involve working additional hours.
- Working in the month of December must be avoided at all costs in order to protect the vital Christmas trade and traffic at this time of year. All works should be lifted, and the highway should be free and open to all traffic with no restrictions.
- The A3 is a tactical diversion route for the A3(M). The Applicant will need a plan, agreed by Highways England and Hampshire County Council, in place to reopen the highway in the case of a long running incident on the A3(M).
- Permanent reinstatements of the highway should be secured wherever practical. Temporary reinstatements should be a last resort and where a quick reopening of the highway is necessary. It is essential that works for permanent reinstatements are planned and coordinated in a similar manner to the main works.
- Section 6.7. of the FTMS - The stated closures on the A3 between Post Office Road and Rocking Horse Nursery are very likely to be required to be night closures only as a result of the high volumes of traffic during the day. Similar restrictions have been used on other works requiring closures on this road. Similar restrictions will apply to any proposed closures on the A3 or the B2150

Temporary Traffic Regulation Orders

A7.49 A Temporary Traffic Regulation Order (TTRO) is typically the legal process used to implement temporary restrictions e.g. closure to a road, change to a one-way system, parking, speed or weight restrictions and changes to a right or left turn only. A TTRO is also typically used to suspend permanent Traffic Regulation Orders (TRO) e.g. one-way street, parking (including parking bays), to ensure safety whilst works or events take place.

The closure or restriction of a highway is typically made by an order under the Road Traffic Regulation Act 1984. It is Hampshire County Council's position that the Applicant should commit to following HCC's standard TTRO process as outlined by the link below. A notice period of at least 6 weeks is required for each TTRO. In relation to temporary closures of public rights of way, an application under Section 14 of the Highways Act is invited to Hampshire County Council Countryside Services. A link to further details is also provided

below.https://www.hants.gov.uk/transport/licencesandpermits/roadopening/trafficmanagement; and

https://www.hants.gov.uk/landplanningandenvironment/rightsofway/temporaryclosures

A7.50 It is noted that Article 8(3) of the draft DCO seeks to disapply Hampshire County Council's Traffic Management Permit Scheme Order 2019. Hampshire County Council's position, as Highway Authority, is that it is unacceptable to disapply this. This is because the proposed alternative in the DCO is resource intensive and not as agile as the permit scheme. Noticing and permit schemes have been operated nationally for over 20 years and are a well-established means of enabling the Highway Authority to comply with its legal duties to coordinate works and maintain traffic flow. Hampshire County Council's permit scheme has been developed in line with national guidance and is in line with other schemes operated across the country. All works promoters operating within the county make use of the permit scheme and all works are recorded on the County's Street Works Register. This allows efficient coordination of the works to the benefit of the applicant, Hampshire County Council and the wider communities.

Summary comments on the Framework Traffic Management Strategy

A7.51 More details need to be provided in the FTMS to the processes proposed for keeping stakeholders informed. Specifically, there is great value in the use of the one.network website to disseminate information and manage enquiries. The one.network website should be used to log works and manage communication. Because of the high level of impact of the works, the Applicant should fund Hampshire County Council's use of the one.network 'route monitor' product specifically for the A3 corridor .

A7.52 Calendar restrictions for various phases of works need to be reviewed to consider local activities and the general December restrictions for Christmas working. Further detailed discussions with the Applicant will be needed to manage works and minimise disruption on the A3, which is a strategic route and a tactical diversion route for the A3(M).

A7.53 This project is likely to have a significant impact on the travelling public and on the structure of the public highway. The plans currently proposed by the Applicant lack detail to enable the County Council to have confidence that it will be able to execute its duties under Section 59 of New Road Street Works Act and Section 16 of the Traffic Management Act. The proposals to disapply Hampshire County Council's permit scheme and replace it with a bespoke process will result in a resource-intensive process to approve and coordinate works. Accordingly, additional

funding to resource the coordination and roadspace booking will be sought from the Applicant.

A7.54 S82 of NRSWA is not proposed to be disapplied and therefore Hampshire County Council will have powers to seek compensation for any loss or highway damage resulting from the works or a failure of the Applicant's apparatus.

A7.55 As the works are likely to have a significant impact on the highway with no direct benefits for the road user, the Applicant should consider additional mitigation, such as enhanced reinstatements or half-width reinstatements.

A7.56 In relation to changes in heavy vehicle movements, redistribution of traffic due to delay caused by the proposed works may result in heavy vehicles choosing to use inappropriate routes to limit delays. As such, the Highway Authority requires a commitment from the Applicant to progress temporary weight restrictions through the TTRO process to restrict use of certain roads by larger vehicles at the request for the HA should the need arise.