AQUIND Limited

AQUIND INTERCONNECTOR

Environmental Statement – Volume 3 – Appendix 22.2 Framework Construction Traffic Management Plan

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(a)

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1. INTRODUCTION

1.1. OVERVIEW

1.1.1.1. This document sets out the proposed construction traffic arrangements and mitigation measures associated with the Onshore Components of the Proposed Development. The terminology used in this document is consistent with that used in the Glossary (REP1-005). For ease of reference, the Glossary terms relevant to this document are repeated below.

Table 1 - CTMP Glossary

Term	Definition
Abnormal Load	An Abnormal Load is a vehicle that has any of the following: a mass of more than 44,000 kilograms ('kg'), an axle load of more than 10,000 kg for a single non-driving axle and 11,500 kg for a single driving axle, a width of more than 2.9 m ('m'), a rigid length of more than 18.65 m.
Abnormal Indivisible Load	An Abnormal Indivisible Load (AIL) is a load which can't be divided into two or more loads to be transported by road.
Access Road	The permanent road that will be constructed to facilitate vehicular access to the Converter Station from the existing highway network.
AQUIND Interconnector	The Project
Cable Joint	The components required to connect together two sections of Cable.
Cables	Insulated metallic electrical conductors used for the transfer of power.
Construction Environmental Management Plan (CEMP)	Document setting out methods to avoid, minimise and mitigate Impact on the environment and surrounding area and the protocols to be followed in implementing these measures in accordance with environmental commitments during the Construction Stage.
Converter Station	The fenced compound, adjacent to Lovedean Substation, comprising the necessary equipment to convert AC to Direct Current ('DC') and vice versa.

Term	Definition
Converter Station Area	This is the area of land identified to accommodate: • The Converter Station and associated equipment; • The connection between the AC Cables and the National Electricity Transmission System ('NETS') at Lovedean Substation; • The AC Cable Corridor to accommodate the AC Cables and Fibre Optic Cable ('FOC') between the Converter Station and Lovedean Substation; • The High Voltage Direct Current ('HVDC') Cables and FOC corridor from the Converter Station southwards; • A Works Compound and Laydown Area; Access Road and associated haul roads; • Surface water drainage and associated attenuation ponds; • Landscape and ecology measures; • Utilities such as potable water, electricity and telecom; • the compound comprising the Telecommunications Building(s) and associated equipment.
Development Consent Order (DCO)	A Development Consent Order ('DCO') is a statutory instrument made by the Secretary of State ('SoS') pursuant to the Planning Act 2008 (as amended) ('PA 2008')
Direct Current (DC)	A flow of continuous electrical current which flows in one direction.
Ducted Installation	An installation method where ducts are installed in the ground and cables are subsequently pulled into them.
Fibre Optic Cable	A telecommunications cable made from thin strands of glass fibre, which uses pulses of light to transfer data. Each Pole will have a FOC, which will be used to provide a dedicated communications link between the UK and French converter stations for the purposes of control, protection and monitoring of the Project. Capacity provided by strands that

Term	Definition
	are not utilised for these functions will be available for third parties to purchase for other telecommunication purposes.
Fibre Optic Cable (FOC) Infrastructure	The physical infrastructure associated with the fibre optic telecommunication system. This includes: • Fibre Optic Cables; • up to two Optical Regeneration Stations (ORS) at the Landfall; • up to two Telecommunications Buildings in the vicinity of the Converter Station; • auxiliary power supply and fuel supply to buildings; • securely fenced compounds around buildings; access and parking to buildings.
Haul Road	A temporary road constructed for use during the Construction Stage.
Highway Boundary	The area which is adopted road, maintained at public expense.
Horizontal Directional Drilling (HDD)	A trenchless technology that involves drilling into the ground to create a bore with a generally horizontal profile, along a planned pathway.
HVAC Cable	The Cable designed to transfer power using High Voltage Alternating Current (HVAC) at a nominal voltage of 400 kV, which will connect Lovedean Substation to the Converter Station.
HVAC Cable Corridor	The area within which the HVAC Cable Route and all associated Temporary Works will be located.
HVAC Cable Route	The final refined route for the HVAC Cable that lies within the HVAC Cable Corridor.
HVDC Cable	The Cable designed to transfer power using High Voltage Direct Current (HVDC) at a nominal voltage of 320 kV. For the purpose of the Proposed Development, this comprises the Onshore Cable and the Marine Cable.

Term	Definition
HVDC Cable Corridor	Comprises the Onshore Cable Corridor and the Marine Cable Corridor.
HVDC Circuit	One of two pairs of HVDC Cables, an associated Fibre Optic Cable (FOC), and any ancillaries, each of which will carry half of the specified rating.
Interconnector	An electrical system which provides the connection between electricity transmission systems, usually between areas over long distances or different frequencies.
Joint Bay	The location where sections of Cable are connected together. Each Joint Bay will be an excavation containing two joints for the HVDC Cables that form a HVDC Circuit and, at some locations, a joint for the Fibre Optic Cable (FOC) and / or equipment for testing the cable sheaths, to ensure the performance of the Cables.
Landfall	The Landfall is the area where the Onshore Cable Corridor and Marine Cable Corridor meet and includes the Transition Joint Bay (TJB), HDD compound and works where the Marine Cables come ashore, and the Optical Regenerations Stations (s) including their compounds and mitigations.
Laydown Area	Temporary area required during the Construction Stage of the Proposed Development for short-term storage of materials, which will be reinstated to its original state following demobilisation.
Lovedean Substation	The existing National Grid electrical substation located at Lovedean, Hampshire.
Marine Components	The Marine Components of the Proposed Development are all of that part below the Mean High Water Springs (MHWS).
Micro-Tunnelling	Driving tunnel sections, usually steel tubes or reinforced concrete section, in a straight line, between pits excavated on either side of the obstruction to be crossed. Hydraulic rams are used to drive the tunnel sections.
Mitigation Measures	Actions proposed to prevent, reduce and where possible, offset significant adverse Effects arising from the whole or specific elements of the Proposed Development.

Term	Definition
Onshore Cable	The part of the HVDC Cable installed inland from the Mean High Water Springs (MHWS).
Onshore Cable Corridor	The area within which the Onshore Cable Route and all associated Temporary Works will be located. This runs landward from the Mean Low Water Springs (MLWS).
Onshore Cable Route	The final refined route for the Onshore Cable that lies within the Onshore Cable Corridor.
Onshore Components	The Onshore Components of the Proposed Development are all of that part landward from the Mean Low Water Springs (MLWS).
Operational Stage	The stage after which the Proposed Development is handed over by the relevant contractor and signed off as operational. It would remain in its Operational Stage until it is decommissioned.
Optical Regeneration Station(s) **(ORS)**	Structural unit housing telecommunication equipment for the Proposed Development and responsible for optical signal amplification .
Order Limits	The limits shown on the Works Plans (document reference 2.4) within which the Authorised Development may be carried out.
Project	The Project comprises the Proposed Development, as well as the development proposed within French borders and the French Exclusive Economic Zone (EEZ) which do not fall within the remit of the Application.
Proposed Development	The development for which a Development Consent Order (DCO) is sought. This is equivalent to the Authorised Development that is set out in Schedule 1 of the draft Development Consent Order (dDCO) submitted with the Application (document reference 3.1).
Site	The land within the Order Limits that is shown on the Works Plans (document reference 2.4).
Telecommunications Building(s)	A building or buildings housing telecommunication equipment. For the Proposed Development, this / these will

Term	Definition
	be contained within (a) dedicated building(s) within its / their own perimeter adjacent to the Converter Station perimeter.
Temporary Works	Those parts of the works that allow or enable construction of the Proposed Development and which do not remain in place at the completion of the works.
Transition Joint Bay (TJB)	The underground onshore point at which the HVDC Cable is jointed at the Landfall.
Trenching	The excavation and reinstatement of a narrow trench, typically 700 – 1,000 mm wide and 1,200 mm deep, into which the Cable ducts will be placed. The trench may be internally supported and will be reinstated as per the original construction.
Trenchless	Any techniques for installing the HVDC Cable ducts and Fibre Optic Cable (FOC) ducts that does not require the excavation of a trench, enabling infrastructure and sensitive locations to be crossed with limited disruption. Examples include Horizontal Directional Drilling (HDD), whereby a hole is bored from, and exits at, ground level, and Micro-Tunnelling, auger boring and thrust boring, whereby a bore is drilled to and from excavated pits, using hydraulic ramming equipment.

1.2. BACKGROUND

1.2.1.1. AQUIND Interconnector is a proposed electricity interconnector between France and the UK. The Project includes a new marine and onshore High Voltage Direct Current ('HVDC') power cable transmission link between Normandy in France and the south coast of England, converter stations in both England and France, and fibre optic data transmission cables.

1.2.1.2. With a net capacity of 2000 megawatts ('MW'), it will significantly increase the cross-border capacity between the UK and France, increasing competition and security of the electricity supply in each of the respective countries. To enhance the security of supply and availability of its power transfer capability, it is being designed as two independent pairs of cables, each with the net capacity of 1000 MW with a total net transmission capacity of up to 2000 MW. The Proposed Development is a part of the Project and comprises the Onshore and Marine Components.

1.2.1.3. Extensive consultation has been undertaken with the Local Highway Authorities and Highways England in relation to the draft Development Consent Order ('dDCO') for the Proposed Development, which this Framework Construction Traffic Management Plan (herein referred to as the Framework CTMP) is part. This document should be read in conjunction with the following documents:

- Chapter 3 (Description of the Proposed Development) of the ES Volume 1 (Examination Library Reference: APP-118);
- Appendix 22.1 (Transport Assessment) of the ES Volume 3 (Examination Library Reference: APP-448);
- Onshore Outline Construction Environmental Management Plan ('CEMP') (Examination Library Reference: APP-505);
- Appendix 6 (Framework Traffic Management Strategy) of Appendix 22.1 (Transport Assessment) ES Volume 3 (Examination Library Reference: REP1-068); and
- Supplementary Transport Assessment (REP1-142).

1.3. SCOPE OF FRAMEWORK CTMP

1.3.1.1. This Framework CTMP provides an overarching plan as to how the construction traffic and site operations will be managed across the extent of the Onshore Components. Individual CTMP documents will be approved in relation to relevant work site locations, which will be required to accord with the relevant to them contained in this Framework CTMP. These will be prepared and approved by the relevant Local Highway Authority(s) for the area in which the works to which they relate are located, ahead of the relevant works commencing.

1.3.1.2. The Onshore Cable Corridor passes through a number of administrative boundaries which include East Hampshire District Council ('EHDC'), Winchester City Council ('WCC'), Havant Borough Council ('HBC'), and Portsmouth City Council ('PCC'). Hampshire County Council (HCC) is the Local Highway Authority for the roads within the WCC, HBC and EHDC administrative areas and PCC, as a unitary authority, is highway authority for Portsmouth. The Onshore Cable Corridor crosses or runs adjacent to the A3(M) and the A27 which fall under Highways England's jurisdiction, albeit no part of the Onshore Cable Corridor is located on the strategic road network for which Highways England has responsibility.

1.3.1.3. The Framework CTMP sets out the framework for the detailed CTMP's to be approved, including hours of operation, traffic routing, safe vehicular access and manoeuvring and minimising traffic impacts.

1.3.1.4. The individual CTMPs to be prepared and approved post grant of the DCO for the Proposed Development must contain relevant details of:

- Vehicle routing plans;
- Proposed programme and duration;
- Number of construction personnel including travel arrangements and mitigation;
- Alterations to the highway to enable construction, including temporary and permanent;
- Details of the number of construction and delivery vehicles using the public highway, including abnormal and indivisible loads;
- Traffic management details;
- Compounds and Laydown Area details; and
- Highway condition surveys.

1.4. OBJECTIVES OF CTMP

1.4.1.1. The Framework CTMP sets out the measures that can be implemented to provide mitigation for the construction traffic associated with the Onshore Components of the Proposed Development. The Framework CTMP has the primary objective of minimising impact and disruption to existing users of the public highway network and the surrounding community, forming the framework the individual CTMP's to be approved and which must be complied with during the construction of the Onshore Components. This will be achieved by:

- Minimising the number of vehicular trips required for the movement of material and people;
- Ensuring construction traffic trips and routes used are planned to be safe, efficient and timely;
- Ensuring the impact to residents, local sensitive receptors and the travelling public are minimised; and
- The CTMP and the individual CTMPs being monitored, reviewed and updated as necessary and improvements incorporated throughout the duration of the works being undertaken.

1.5. REPORT STRUCTURE

1.5.1.1. The following sections are included in this Framework CTMP and will form, in part, the basis of the individual CTMPs;

- Section 1 – Introduction – this section including scope and objectives;
- Section 2 – The Proposed Development – Onshore Cable Corridor, site compounds and Laydown Areas, typical construction vehicles, Abnormal Loads

(including AILs) and construction activities;

- Section 3 – Vehicular Movement Management – vehicle routing strategy, timing of movements, sensitive receptors, reducing impacts of Heavy Goods Vehicle ('HGVs'), local highway issues and constraints and section specific constraints, management of Abnormal Loads and construction HGV routes;
- Section 4 – Construction Workforce – descriptions of controls to mitigate the impact of construction staff traffic;
- Section 5 – Site Accesses/Haul Road – location, design, management and mitigation of permanent and temporary accesses points;
- Section 6 – Highway/Railway Crossings – details of interventions required ;
- Section 7 – Management of Road Safety – Existing collision records and highway condition surveys; and
- Section 8 – Implementation and Monitoring – Implementation, compliance and monitoring of the individual CTMPs.

2. THE PROPOSED DEVELOPMENT

2.1. OVERVIEW

2.1.1.1. This section summarises the Construction Stage for the Onshore Components, including construction techniques and the indicative construction programme. The main construction activities for the Onshore Component include the following:

- Landfall works, including the erection of the Optical Regeneration Station ('ORS') buildings at Eastney;
- Construction of the Onshore Cable Route, with an approximate length of 20 km, including Horizontal Directional Drilling ('HDD') at;
    - Landfall UK-HDD-1;
    - Milton and Eastney Allotments UK-HDD-2;
    - Langstone Harbour UK-HDD-3;
    - Farlington Railway Crossing (Trenchless) UK-HDD-4;
    - Kings Pond UK-HDD-5; and
    - Milton Common UK-HDD-6.
- Substation works at Lovedean Substation;
- Cable jointing bays at intervals on the Onshore Cable Route;
- Permanent highway interventions;
- Permanent access from the highway; and
- Temporary construction haul roads and accesses from public highway.
- Construction activities at the Lovedean Converter Station Area;

2.1.1.2. The Order Limits for the Onshore Components of the Proposed Development are shown in Appendix 1.

2.2. CONVERTER STATION AREA

2.2.1.1. The Converter Station will be erected to the west of the existing Lovedean substation and will be connected to the substation by HVAC cables and FOC. A new Access Road, proposed to act as the construction and permanent access, will be built from Broadway Lane across farmland to access the new Converter Station Area from the south. This road will also serve as the new permanent access to the Converter Station. The Telecommunications Buildings will be constructed to the south of the Converter Station. The Converter Station Area will also contain attenuation ponds,

various mitigations measures and a part of the Onshore Cable Route as well as areas of temporary use.

2.3. CABLE CORRIDOR SECTIONS

2.3.1.1. The Onshore Cable Corridor has been divided into ten sections for ease of understanding, planning and consultation. The sections are as follows from the north at the site of the Converter Station in Lovedean to south where the cables make Landfall at Eastney;

- Section 1 – Lovedean (Converter Station Area);
- Section 2 – Anmore;
- Section 3 – Denmead/Kings Pond Meadow;
- Section 4 – Hambledon Road to Farlington Avenue;
- Section 5 – Farlington;
- Section 6 – Zetland Field & Sainsbury's Car Park;
- Section 7 – Farlington Junction to Airport Service Road;
- Section 8 – Eastern Road (adjacent to Great Salterns Golf Course) to Moorings Way;
- Section 9 – Moorings Way to Bransbury Road; and
- Section 10 – Eastney (Landfall).

2.3.1.2. Please refer to Figure 3.9 of the ES Volume 2 (Examination Library Reference: App-154) for a plan identifying the section of the Onshore Cable Corridor.

2.3.1.3. Below are brief descriptions of the works associated within each section of the Onshore Cable Corridor..

2.3.2. SECTION 1 – LOVEDEAN (CONVERTER STATION AREA)

2.3.2.1. The Onshore Cable Corridor will head south through farm land for approximately 800 m crossing Broadway Lane west of Denmead Farm and east of Edney's Lane (The Crossways).

2.3.3. SECTION 2 – ANMORE

2.3.3.1. This 1.2 km section of Onshore Cable Corridor will cross agricultural farm land between Broadway Lane to Anmore Road in the land bound by Edney's Lane in the west and Anmore Lane in the east. The Onshore Cable Corridor then crosses Anmore Road.

2.3.4. SECTION 3 – DENMEAD/ KINGS POND MEADOW

2.3.4.1. This section covers the Onshore Cable Corridor from Anmore Road east of Denmead to B2150 Hambledon Road, following an off-road route via land known as Kings Pond Meadows. The section length is approximately 760 m. This Section partially comprises installation via HDD (HDD-5), in the fields to the south of Anmore Road and to the north of B2150 Hambledon Road.

2.3.5. SECTION 4 – HAMBLEDON ROAD TO FARLINGTON AVENUE

2.3.5.1. This section of the Onshore Cable Corridor passes from the administrative boundary of HCC into PCC. The Onshore Cable Corridor heads south for approximately 5.4 km through the HCC area following the B2150 Hambledon Road from Waterlooville and the A3 Maurepas Way/London Road through Purbrook and Widley to the highway boundary of HCC and PCC, which is north of B2177 Portsdown Hill Road.

2.3.5.2. The Onshore Cable Corridor within the PCC area is 1.2 km long and continues east through the Portsdown Hill car park and B2177 Portsdown Hill Road to Farlington Avenue as far as the junction with Burnham Road.

2.3.6. SECTION 5 – FARLINGTON

2.3.6.1. This 1 km section leads the Onshore Cable Corridor south from the junction of Burnham Road on Farlington Road, to the junction with A2030 Havant Road and turning east to the A2030 Eastern Road and continuing south until Zetland Field.

2.3.7. SECTION 6 – ZETLAND FIELD & SAINSBURY'S CAR PARK

2.3.7.1. This 600 m section will leave the carriageway of A2030 Eastern Road and use Zetland Field to continue south to Fitzherbert Road which it will cross and enter the car park of the retail park and Sainsbury's supermarket. Following the western side of the car park, it will reach the south coast railway.

2.3.7.2. A trenchless solution will be utilised for the Onshore Cable Route to pass under the railway embankment (HDD-4). This will require a compound for the launch/reception pit.

2.3.8. SECTION 7 – FARLINGTON JUNCTION TO AIRPORT SERVICE ROAD

2.3.8.1. After passing under the south coast railway into Farlington Playing Fields (HDD-4), the Onshore Cable Corridor will follow the eastern boundary of Farlington Playing Fields where it will be required to pass under the A27 Havant Bypass (maintained by Highways England) for which HDD beneath Langstone Harbour will be utilised (HDD-3).

2.3.8.2. South of the A27, the Onshore Cable Corridor will cross beneath the mud flats of Langstone Harbour to reach Portsea Island, re-joining the A2030 Eastern Road at Kendall's Wharf opposite Anchorage Road, where it will proceed south to Airport Service Road junction. This section has a total distance of approximately 2.3 km.

2.3.9. SECTION 8 – EASTERN ROAD (ADJACENT TO GREAT SALTERNS GOLF COURSE) TO MOORINGS WAY

2.3.9.1. This section has three potential routes for the Onshore Cable Corridor. The first route utilises the A2030 Eastern Road and the residential street of Eastern Avenue. The second crosses the western and southern boundary of Milton Common from Eastern Road to Moorings Way. The third follows the eastern boundary of Milton Common to reach Moorings Way. Milton Common is a former landfill site, and as a consequence there remains uncertainty it will be fully suitable for the laying of the Onshore Cables. For this reason, the options are retained to ensure engineering feasibility.

2.3.10. SECTION 9 – MOORINGS WAY TO BRANSBURY ROAD

2.3.10.1. The Onshore Cable Corridor leads from Moorings Way to head south through the sports grounds of University of Portsmouth where it will cross Locksway Road into the Thatched House public house car park and pass under the Milton and Eastney Allotments (through use of HDD-2). It will then enter Kingsley Road and passing into Bransbury Park via Yeo Court or via the access opposite Ironbridge Lane (or potentially a Cable Circuit utilising each depending on final confirmed engineering feasibility). The route will continue across Bransbury Park to join Henderson Road.

2.3.11. SECTION 10 – EASTNEY (LANDFALL)

2.3.11.1. This section of the Onshore Cable Corridor leads to the Landfall, where the Transition Joint Bays (TJB) and Optical Regeneration Station (ORS) buildings are to be located. After exiting Bransbury Park, the Onshore Cable Corridor will travel east along Bransbury Road, Fort Cumberland Road and Henderson Road to the Fraser Range access road to the Landfall site, which is currently a car park with unmade ground. The car park will serve as a contractor's compound and lay-down area for the construction of the TJB, ORS and in respect of the jointing of the Onshore Cables and the Marine Cables.

2.4. PERMANENT ACCESS POINTS

2.4.1.1. There will be two permanent accesses delivered by the completion of the Proposed Development. The first will be at the proposed Converter Station from Broadway Lane in Lovedean and the second to the ORS from Fort Cumberland car park, discussed further below.

2.4.2. SECTION 1 – LOVEDEAN (CONVERTER STATION AREA) ACCESS

2.4.2.1. To provide a permanent access junction to and facilitate construction of the Converter Station the junction of Broadway Lane and Day Lane will be upgraded, which will include the construction of a Haul Road and temporary holding area. The proposed access junction is shown in Drawing AQD-WSP-UK-OS-DR-Z-200215 included at Appendix 2.

2.4.2.2. As can be seen in drawing AQD-WSP-UK-OS-DR-Z-200215, the proposed Haul Road and temporary holding area comprise a new highway link to be provided between Day Lane, east of the existing bend, and at Broadway Lane, south of the existing bend. This will provide a managed facility for vehicles entering the Site during the Construction Stage with vehicle movements across Broadway Lane able to be marshalled. This link also accommodates HGV / abnormal load movements and would be retained as a permanent feature (unadopted) to allow future access for such vehicles should this be required in connection with the operation and maintenance of the Converter Station and the Telecommunications Buildings.

2.4.3. SECTION 10 – EASTNEY (LANDFALL)

2.4.3.1. A new formal access arrangement is required for the ORS buildings to be located in the public car park south of Fort Cumberland Road. This access will be located on the southern side of the ORS compound and directly from the public car park. A new permanent access will therefore not be required onto Fort Cumberland Road.

2.5. COMPOUND AND LAYDOWN AREAS

2.5.1.1. The contractor's compound will be located at the proposed Converter Station Area. This compound will be accessed from Broadway Lane via the new junction (described in 2.4), which will provide access to the Access Road which will serve as a Haul Road during the Construction Stage. The Access Road will also provide a permanent access to the Converter Station during operation.

2.5.1.2. To facilitate construction, temporary Laydown Areas may be created at Joint Bay locations (which are to be confirmed as part of the detailed design approvals) to store materials such as cable ducting and arisings from the works. This will prevent double handling of materials and additional vehicular trips.

2.5.1.3. A generic layout for Laydown Areas is shown in Plate 1 below. The areas will be fenced from the public and vehicular access to them will be managed.

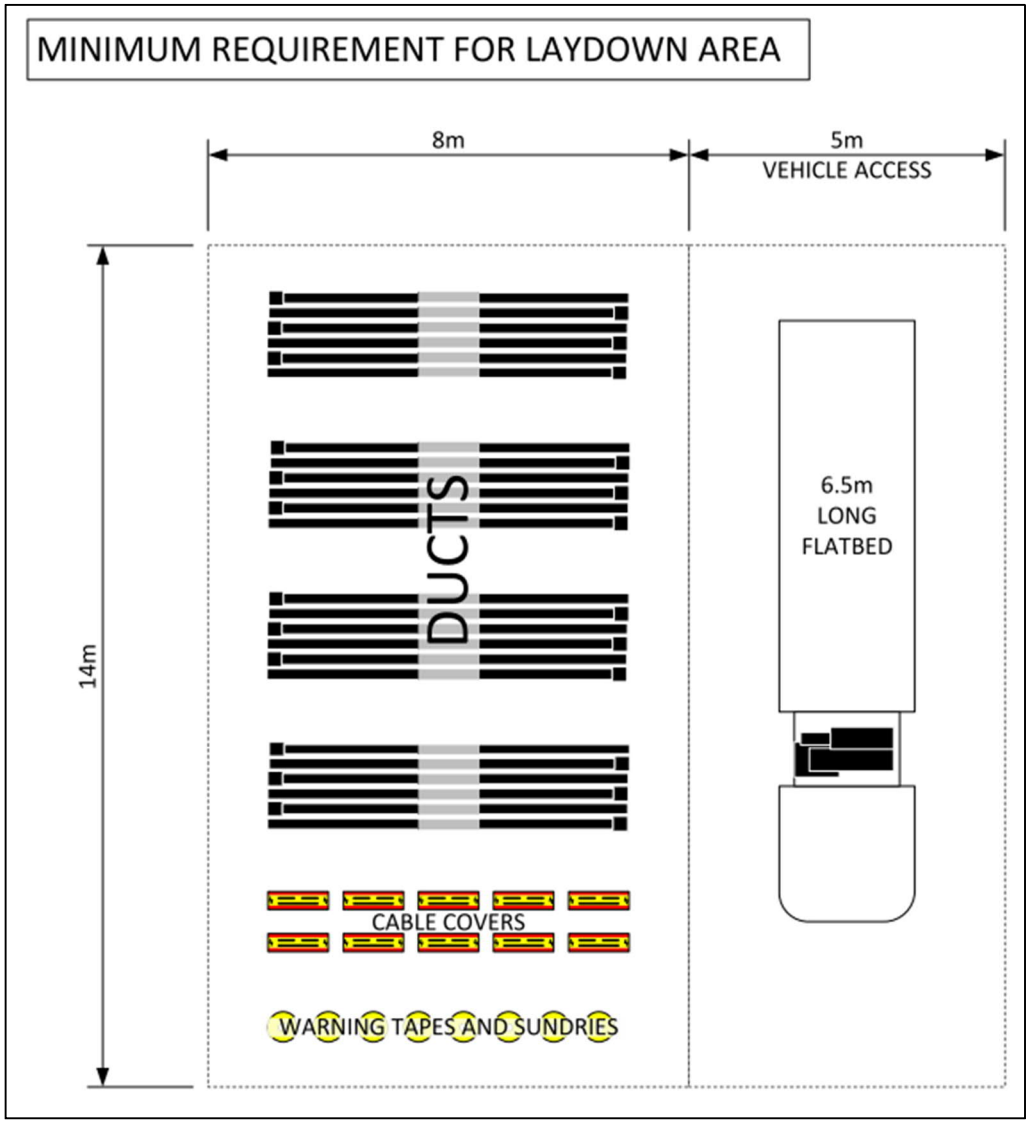


Plate 1 - Typical Laydown Area Dimensions

2.5.1.4. Welfare facilities, usually in the form of a mobile welfare unit, will be provided with each individual works area and therefore no additional facilities will be provided at Laydown Areas.

2.5.1.5. At Joint Bays, a compound area of 20 m by 6 m will be required, which will include space of welfare facilities within the areas identified for winch/drum land-take shown in Plate 2.

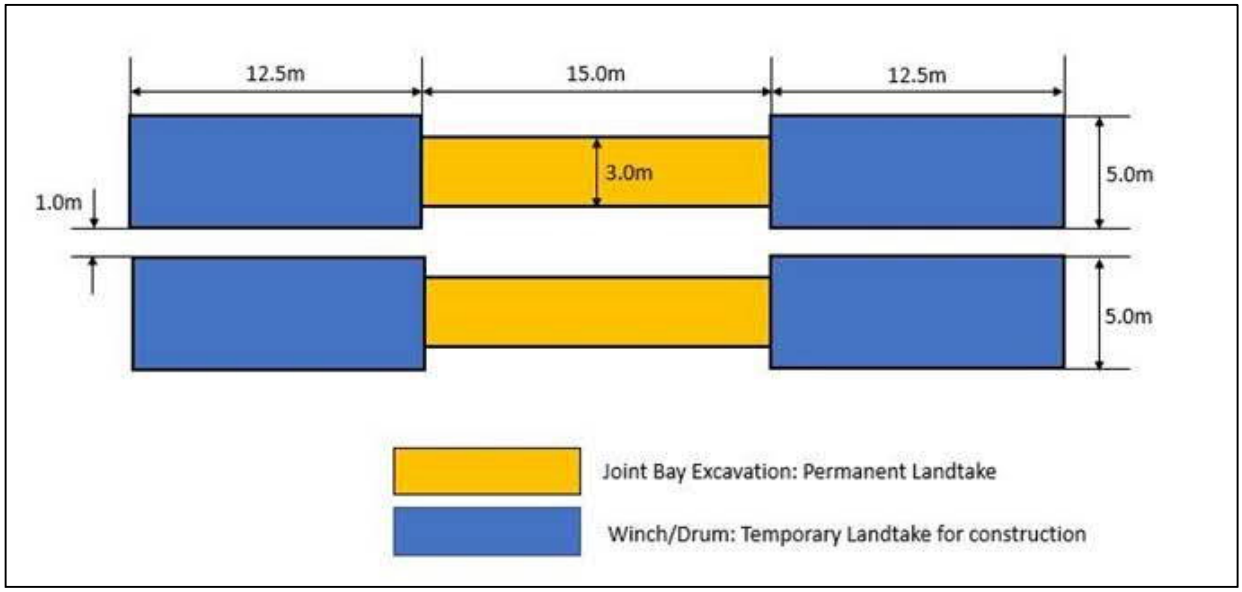


Plate 2 – Typical Compound Area for Joint Bay

2.6. INDICATIVE PROGRAMME

2.6.1.1. The indicative construction programme is anticipated to extend over three years, with further information provided within Chapter 3 (Description of the Proposed Development) of the Environmental Statement Volume 1 (Examination Library Reference: APP-118). The indicative construction programme is shown in the Table 2 below. These timescales are subject to cable production, installation rates and environmental considerations. A Gantt chart of the proposed programme is provided in Appendix 3.

Table 2 - Indicative Construction Programme – Converter Station & Onshore Cable Corridor

Construction Activity	Anticipated Programme
HDD and Landfall installation	Q3 2021 – Q1 2024
Onshore HVDC Route Construction / Installation	Q3 2021 – Q4 2023

2.6.1.2. Enabling works are indicatively anticipated to take place in quarter three of 2021 and last approximately 12 months through to the middle of 2022. These works would include site clearance, such as tree and hedge pruning and clearance and modifications to junctions and roads to accommodate construction activities and vehicles.

2.6.1.3. The construction of the Converter Station at Lovedean is anticipated to take approximately two and a half years from Q3 2021. The construction of the Landfall for the TJB, HDD works and ORS is anticipated to last up to 18 months.

2.6.1.4. The installation of the Onshore Cable Route is anticipated to start in the third quarter of 2021 and continue for 27 months to Q3 2023.

2.6.1.5. The following ecological considerations are taken into account in the phasing of enabling and construction works for the Converter Station Area and Onshore Cable Route:

- Badger breeding season from January to March;
- Bird breeding and nesting season from March to August;
- Plant growing season and winter wet season from August to November, at Kings Pond Meadow SINC and Denmead in Section 3; and
- Wintering bird season, from October to March.

2.6.1.6. Public activities and events that the Applicant has been aware of which are likely to be planned in proximity to the Converter Station Area and Onshore Cable Corridor, include but are not limited to the following:

- School term times (as required);
- Football season;
- Coastal Waterside Marathon;
- Great South Run;
- South Central Festival; and
- Victorious Festival.

2.6.1.7. The Framework Traffic Management Strategy (REP1-068) provides more detailed information regarding the anticipated duration of the construction programme for each individual section of the Onshore Cable Route and provides restrictions in relation to which sections and subsections may constructed in parallel so as to avoid unacceptable levels of cumulative effects.

2.6.1.8. The controls provided for within the FTMS mitigate the impacts of the construction works on the highway network. Traffic Management Strategies for the works are to be prepared in accordance with the FTMS and approved by the relevant local highway authorities separately to the approval of the individual CTMP's.

2.7. SENSITIVE RECEPTORS

2.7.1.1. Identification of local sensitive receptors that would be negatively impacted by the construction of the Onshore Cable Route is taken into account in this Framework

CTMP. Mitigation measures are to be developed in the detailed CTMPs in terms of construction requirements and programme constraints in relation to them. The identified sensitive receptors include:

- Residential properties close to the highway
- Schools, nurseries and places of learning;
- Hospitals, medical centres and doctor surgeries;
- Places of worship; and
- Leisure facilities.

2.7.1.2. The following table identifies the main receptors per section which are required to be considered in relation to works proximate to them. Additional receptors may be identified by when and the individual CTMP's are prepared for approval in liaison with HCC and PCC. A plan locating all the identified sensitive receptors listed below is contained within Appendix 4.

Table 3 – Identified Sensitive Receptors

Section	Location	Receptor
1	Broadway Lane, Day Lane, Lovedean Lane	Campsite, pub, school, local shops, B&B and residential properties, South Downs National Park
2	No Sensitive Receptors	
3	Anmore Road, Hambledon Road, Soake Road	Retail, pub, community centre, infant and junior school, care home, residential properties
4	Hambledon Road, London Road, Portsdown Hill Road	Retail, industrial estates, pubs, schools, places of worship, care home, medical centre, guest house, Queen Alexandra Hospital
5	Farlington Avenue, Solent Road, Evelegh Road	Pub, infant and junior school, Scout hut
6	Eastern Road	Retail
7	Eastern Road	Hotel, sports ground, retail, football club, sailing club, Victorious Music Festival (Farlington Playing Fields)

Section	Location	Receptor
8	Eastern Road, Tangier Road, Burrfields Road, Moorings Way	Golf club, pub/restaurant, caravan park, hotel, retail, college, infant school, places of worship, cemetery
9	Milton Road, Bransbury Road, Longshore Way	Places of worship, community centre, park, retail, nurseries, junior schools, museum, adult day care, medical centre, university campus, pub/restaurants, sailing club, hospital
10	Henderson Road, Fort Cumberland Road, Ferry road	Museum, adult day care, holiday park, playground, marina, lifeboat station

2.8. CONSTRUCTION VEHICLES

2.8.1.1. The following section provides details of typical vehicles which are expected to be used during the construction of the Onshore Cable Route, Converter Station and Landfall works. All vehicles associated with construction of the Proposed Development will have engines with the minimum standard of Euro 6 for diesel and Euro 4 for petrol. This will ensure that vehicular emissions are minimised as much as possible during construction.

2.8.2. HEAVY GOODS VEHICLES FOR CONVERTER STATION WORKS

2.8.2.1. These are vehicles that will be utilised for the delivery of materials and equipment and removal of waste. These vehicles will be in the form of articulated and rigid vehicles. These vehicles may include;

- Six axle articulated tractor and trailer units including low-loader trailers for the delivery of materials and plant with gross weights up to 44 tonnes;
- Ready-mix concrete in the form of four axle rigid vehicles up to 32 tonnes in gross weight
- Rigid four axle tipper trucks with and without loader cranes for delivery of bulk aggregates and waste removal. Lorries will be of low and high visibility cabs for cyclist safety;
- Six axle articulate tractor and modified trailer for cable drum delivery to jointing bays; and
- Rigid flatbed trucks for delivery of construction materials for offloading with loader crane or forklift truck.

2.8.3. LIGHT GOODS VEHICLES AND CARS FOR CONVERTER STATION WORKS

2.8.3.1. Vehicles such as cars, vans and Light Goods Vehicles ('LGVs') under 7.5 tonne in gross weight will be used during the construction process for the movement of staff, equipment and deliveries. The individual CTMPs will propose measures to reduce the number of movements in so far is as possible in connection with the works. Further details of possible measures to reduce movements are provided later in this report in Section 0.

2.8.4. CONSTRUCTION VEHICLES FOR DUCT INSTALLATION, JOINT-BAY CONSTRUCTION/BACK FILL & REINSTATEMENT

2.8.4.1. The following vehicles will be used for duct installation, joint bay construction and reinstatement works along the Onshore Cable Route:

- Low loader for plant deliveries;
- Grab wagon for muck away/stone & deliveries;
- HGV with loader crane for material deliveries;
- Vacuum tanker for dewatering excessive amounts of ground water;
- Tarmac lorries; and
- Welfare vehicle.

2.8.5. CONSTRUCTION VEHICLES FOR CABLE INSTALLATION AND CABLE JOINTING

2.8.5.1. The following vehicles will be used for cable installation and cable jointing works along the Onshore Cable Route:

- HGV with loader crane /low loader for plant deliveries;
- Low loader for cable deliveries;
- Welfare vehicle;
- Light vehicles, including security vehicle; and
- Vacuum tanker for dewatering excessive amounts of ground water.

2.8.6. CONSTRUCTION VEHICLES FOR HORIZONTAL DIRECTIONAL DRILLING

2.8.6.1. The following vehicles will be used in connection with HDD works:

- Low loader for plant deliveries;
- HGVs for material deliveries, including water, fuel, bentonite etc;
- HGV with loader crane for moving equipment from pipe side to rig side, delivery of cabins, storage and welfare;

- Vacuum tanker for mud return;
- Water tankers;
- Grab wagon for muck away;
- 20t tipper for stone deliveries; and
- Light vehicles.

2.8.7. ABNORMAL LOADS

2.8.7.1. The construction of Onshore Cable Route and Converter Station requires a number of abnormal loads, although it is expected the number of such vehicle movements will be low and most construction activities will take place with standard vehicles. The delivery of abnormal loads will primarily relate to delivery of infrastructure and construction plant at the Converter Station and cable drums to Joint Bays along the Onshore Cable Route.

2.8.7.2. The assessment of cable drum delivery routes is included within the Supplementary Transport Assessment (REP1-142). The assessment is based on indicative Joint Bay locations. The cable drum delivery routes will be provided to PCC and HCC (as appropriate) for the Joint Bay locations when detailed design approvals are obtained. A summary of the route restrictions which impact upon likely Abnormal Load delivery routes is included in Section 3.5 “Abnormal Load Routes” of this Framework CTMP.

2.8.7.3. Management of Abnormal Loads will be the responsibility of the contractor appointed to undertake the works. They will be required to comply with the statutory regulations in terms of consulting with the relevant highway authority, police and other stakeholders and this will be confirmed in the individual CTMP’s. The notification requirements and process are provided in The Road Vehicles (Authorisation

2.8.7.4. of Special Types) (General) Order 2003.

Abnormal Indivisible Loads

2.8.7.5. In addition to abnormal loads, the construction of the Proposed Development will require the delivery of some AILs. These will be required for the delivery of transformers to the Converter Station and cable drums to Joint Bays.

2.8.7.6. All such deliveries will be required to comply with the statutory regulations in terms of consulting with the relevant highway authority, police and other stakeholders. The routing and timing of the AILs will be agreed and communicated to minimise impact to residents and other road users as appropriate. Arrangements to confirm this is secured will be included in the individual CTMP’s as necessary.

2.8.7.7. Given the anticipated size of the AIL deliveries and the traffic management required, it is expected that the deliveries would be undertaken overnight or at weekends, require temporary road closures, temporary adjustment of highway geometry and

temporary removal of street furniture.

2.8.7.8. For all AIL deliveries, coordination will be required to ensure that access is achievable through traffic management locations along the Onshore Cable Corridor. Where possible, programming of deliveries will aim to prevent AILs from needing to travel through live traffic management locations but where this is required overnight or weekend deliveries (outside of construction working hours) will be used to allow traffic management to be 'pulled in' to ensure adequate width is available for an AIL to pass. Under no circumstances should AIL deliveries be programmed to route along signed diversion routes associated with full road closures unless these are undertaken overnight or outside of normal working hours..

2.8.7.9. A specialist abnormal load contractor, Collett, has developed the study titled Route Access Survey contained within Appendix A of the Supplementary Transport Assessment (REP1-142). This considers the local highway requirements for the delivery of large transformers to the Converter Station via AILs. It is anticipated that AILs would use the same route as National Grid transformer deliveries completed to Lovedean substation in 2018 as follows:

- A3 (Mile End Road): a dual-carriageway with 2/3 lanes in each direction, which directly serves Portsmouth Cargo Port, subject to a 40mph speed limit;
- A3 Twyford Avenue / Northern Parade: a wide single-carriageway road with some on-street parking which mainly provides access to residential properties but also some commercial properties. Twyford Avenue and Northern Parade are subject to a 30mph speed limit;
- A3 London Road: A dual-carriageway with 2/3 lanes in each direction, subject to a 30mph speed limit;
- A27 Havant Bypass: a dual carriageway with 2/3 lanes in each direction, subject to the national speed limit and part of the Strategic Road Network.
- A3(M): a dual carriageway with 2/3 lanes in each direction, subject to the national speed limit and part of the Strategic Road Network.

2.9. CONSTRUCTION ACTIVITIES

2.9.1.1. This section provides further detail on the different construction methods to be employed along the Onshore Cable Corridor. These methods are determined according to the complexity and constraints of the surrounding environment, and the type of infrastructure being installed.

2.9.2. OPEN CUT TRENCH

2.9.2.1. The majority of the Onshore Cable Route will be constructed utilising an open cut trench method. The cable ducts will be installed and the trenches reinstated before

the cables are pulled through the ducts and connected at Joint Bays. The installation of ducts minimises the duration of trenching operations, allowing highways to be reinstated more quickly. Plate 3 provides a typical cross-section of open cut trench works. The trenches will typically be in the region of 700 mm wide and a minimum of five metres apart, although this may vary to respond to specific constraints encountered.

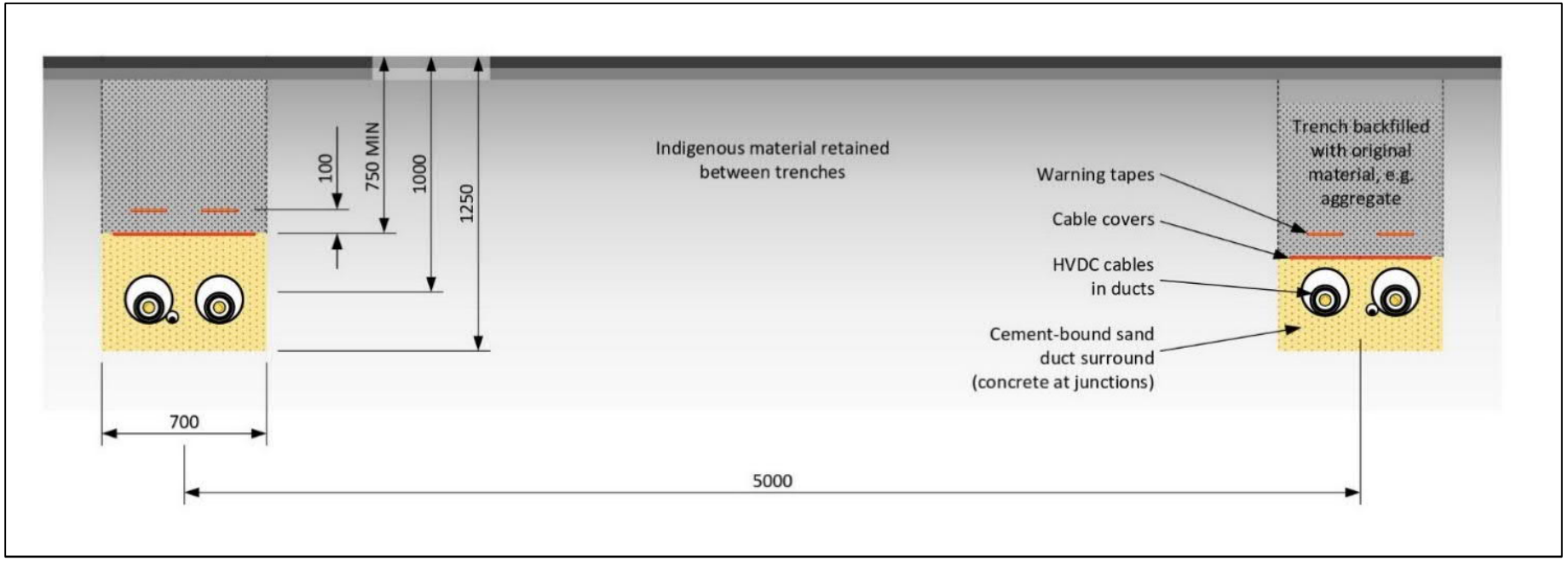


Plate 3 - Typical arrangement of HVDC and FOC cables in roads, verges and footpaths (all measurements in mm)

2.9.2.2. A large proportion of the Onshore Cable Route will be within the public highway and typically one trench will be opened and reinstated before the second trench is opened in any particular section. In some locations the Onshore Cable Route may cross fields or open land. The width of the temporary construction corridor within these locations will include land necessary for temporary access and construction works. Typically, the width of the temporary construction corridor required through fields/open land is approximately 23 m (this includes a five metre haul road and safety clearance distance of one metre either side of this haul road) between safety barriers. This is shown in Plate 4.

2.9.2.3. The installation rate for cable ducts is approximately 12 m to 30 m per 10-hour day shift, on average, within urban areas and approximately 50 m per day in open country. These typical installation rates are per gang, per shift and are dependent upon the level of obstacles and utility services encountered within the road or constraints that need to be observed to minimise the impacts during the Construction Stage. Further information on the anticipated rates of installation along the Onshore Cable Corridor is available at Appendix 2 to the ES Addendum (REP1-138).

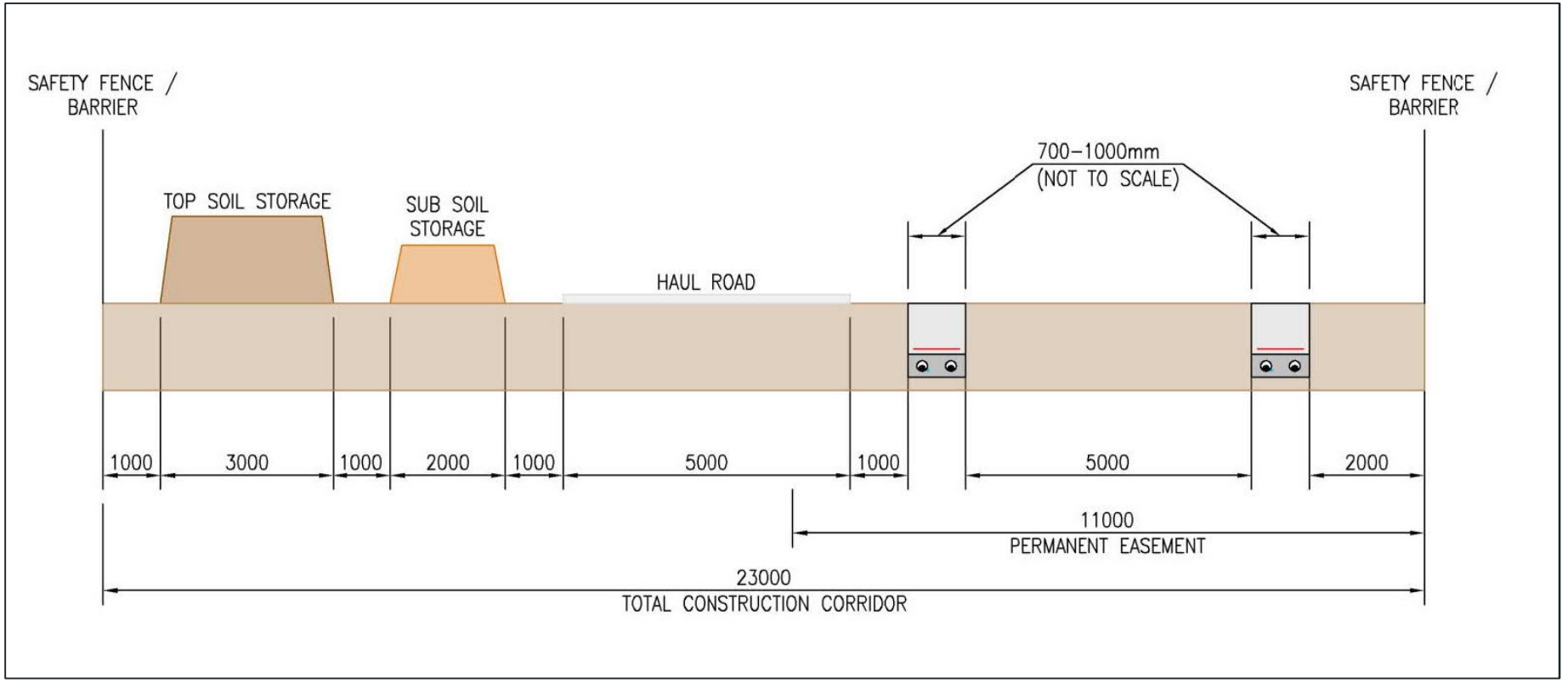


Plate 4 - Typical Onshore Cable Route Cross-Section within Fields or Open Land (all measurements in millimetres)

2.9.3. HORIZONTAL DIRECTIONAL DRILLING/TRENCHLESS

2.9.3.1. There are six locations along the Onshore Cable Corridor where the ducts will be installed by HDD or other Trenchless Techniques. This allows for the Cable Circuits to cross under certain constraints along the route, namely water ways and environmentally sensitive areas, without causing any adverse impacts. This method will also be used to bring the Marine Cables to the Landfall. It limits disturbance to the environment when compared with open trenching techniques. The 6 HDD locations are:

- HDD-1: Landfall at Eastney (located within section 10);
- HDD-2: Milton and Eastney Allotments (between north-east of Bransbury Park and Thatched House public house car park) (located within section 9);
- HDD-3: Langstone Harbour crossing (between Kendall's Wharf and Farlington Playing Fields) (located within section 7);
- HDD-4: Farlington Railway Crossing (between Farlington Playing Fields and southern extent of Sainsbury's car park) (located within section 6 and section 7);
- HDD-5: Kings Pond near Anmore (between Kings Pond Field and field north of Anmore Road) (located within section 3); and
- HDD-6: Milton Common, crossing under the sea defence (located within section 8).

2.9.3.2. The HDD operations require a suitable space for the temporary construction area (including temporary access/egress routes) which will vary depending on the length and size of the HDD works in the respective locations. The HDD operations require a working area at the start and finish point (or entry and exit point) to locate the drilling rig, water bowser/pump, generator, layout of ducts/pipes and other construction equipment. Land within the Order Limits is to be utilised to facilitate the HDD construction works. Further information on the requirements for the individual HDD locations is provided within the HDD Position Statement (REP1-132). For each individual HDD location, a delivery plan will be formulated which will provide a management strategy for the offloading of materials arriving on-site. The delivery plan will also include details of the anticipated frequency of deliveries and time restrictions as set-out in this FCTMP.

2.9.3.3. For HDD-4, a Trenchless Techniquesimilar to HDD has been selected for the installation of the Cable Route under the railway north of Farlington Railway Crossing from the playing fields, known as Micro-Tunnelling. Micro-Tunnelling enables the Cables to be installed within ducts or pipes under a feature such as a railway with minimal impact on that feature, and for this reason is the preferred method of crossing railway infrastructure.

2.9.4. JOINT BAYS

2.9.4.1. At specific intervals along the Onshore Cable Route Joint Bays will be situated from which the operation of pulling the Cables and jointing of the Cables will take place. Plate 5 shows a typical schematic of a joint bay which will be in the region of 15 m by 3 m excavation per joint bay plus compound requirements. The operation will require a compound and Laydown Area for material and parking to be created and will be situated out of the public highway unless unfeasible to do so. Access to each Joint Bay will be required from the highway. The completed Joint Bay footprint will be approximately 6 m by 3 m, and each Joint Bay will be approximately 1.85 m in depth.

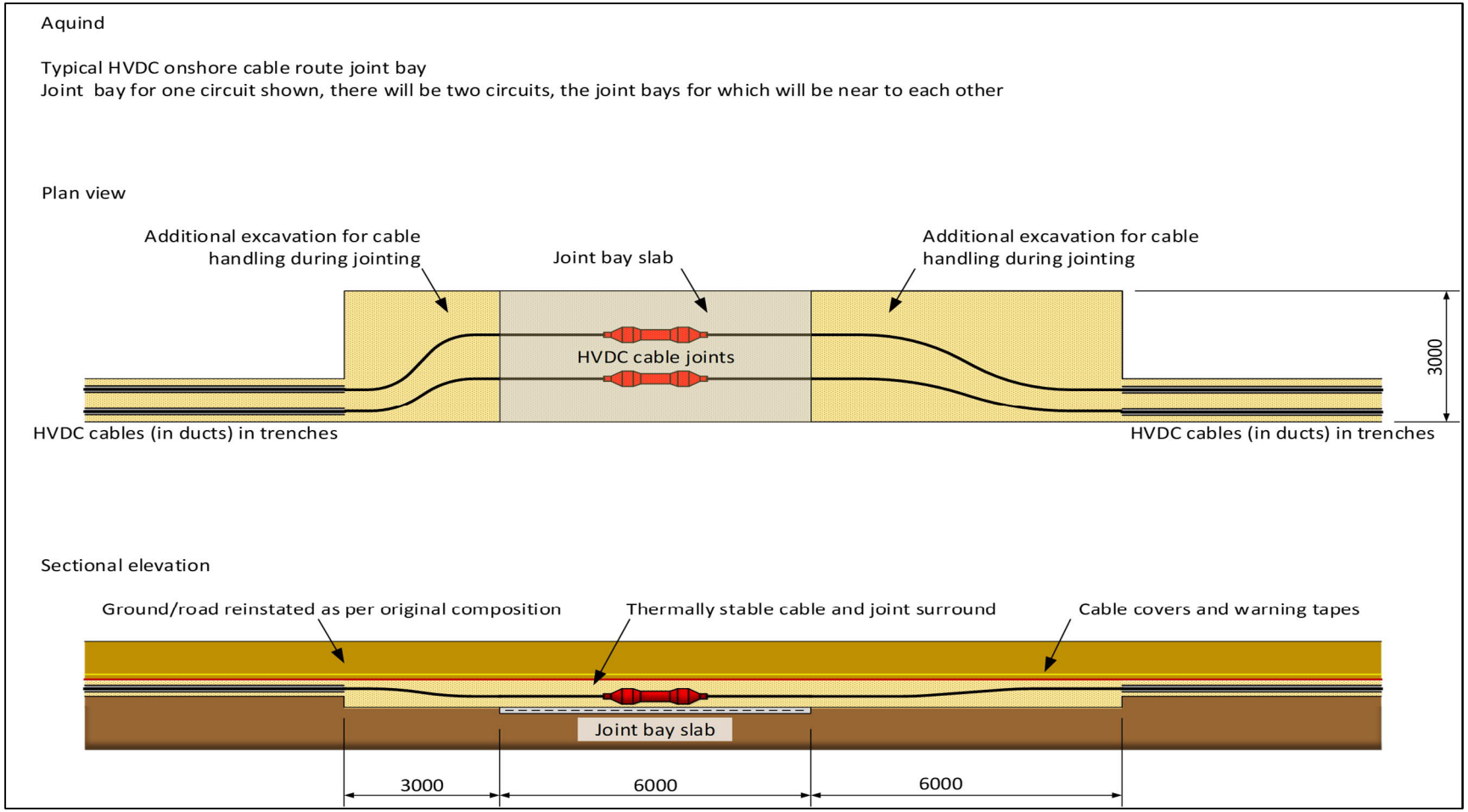


Plate 5 – Typical Schematic of Joint Bay (distances in millimetres)

3. VEHICULAR MOVEMENT MANAGEMENT

3.1. OVERVIEW

3.1.1.1. The Framework CTMP's purpose is to consider the Construction Stage only. This section discusses the vehicular access and route strategy for construction vehicles. The vehicular movement strategy for construction is based on a number of core principles:

- Ensuring a safe and efficient use of road space to provide access to the construction site;
- Minimising the number of vehicle movements and reducing impact as far as practical by the use of mitigation measures as required;
- Use of the shortest but most suitable routes to the construction sites; and
- Avoiding residential areas and those near sensitive receptors such as schools etc.

3.1.1.2. The Framework CTMP should also be read in conjunction with the following transport reports completed for the Project:

- Appendix 6 (Framework Traffic Management Strategy) of Appendix 22.1 of ES Volume 3 (REP1-068): This document provides details of the traffic management required to facilitate construction of the Onshore Cable Route within or adjacent to public highway. The Framework Traffic Management Strategy sets out the overarching principles and methodology for traffic management to be used during the Construction Stage. Individual traffic management strategies in relation to works along the Onshore Cable Route in the highway are required to be prepared and approved by the relevant highway authority..
- Appendix 22.1 of ES Volume 3 (Transport Assessment) (APP-448): This document provides an assessment of the impacts of the Construction Stage, both in relation to the Converter Station and Onshore Cable Route. It also provides details of proposed mitigation measures that will be provided as part of the Proposed Development.
    - This Supplementary Transport Assessment (REP1-142), which details the anticipated impact on all forms of traffic and travel as a consequence of the construction of the Proposed Development.

3.2. VEHICLE ROUTING STRATEGY

3.2.1.1. Vehicular access to the construction works will follow three levels of road hierarchy.

- Level 1 Strategic Road Network – These are roads managed by Highways England being motorways and trunk roads which provide access to the construction sites from a wide catchment area to be distributed by the lower levels of road.
- Level 2 Primary and Local Road Networks – These being roads under the authority of Hampshire County Council and Portsmouth City Council, which provide access to the Converter Station from the Strategic Road Network and most of the Onshore Cable Corridor.
- Level 3 Access Road – These will be temporary haul roads created by the construction contractors linking back to the Level 2 road network. These also may be existing privately owned roads utilised for the construction purposes.

3.2.1.2. Taking account of this road hierarchy, all construction traffic related to the Converter Station will be required to use the A3, M27, M3 or A27 Strategic Road Network to access the A3(M) where access to the Converter Station will be achieved only from A3(M) Junction 2, Dell Piece West, A3 Portsmouth Road, Lovedean Lane and Day Lane. A plan showing these construction traffic routes is included within Appendix 5 of this FTCMP.

3.3. WORKING HOURS

3.3.1.1. Working hours for the installation of the Onshore Route are shown in

3.3.1.2. Table 4.

Table 4 - Working Hours

Activity	Anticipated working hours per day	Anticipated working days per week
Converter Station Area Construction	10 hour shifts, 08:00 – 18:00	6 days*
Marine Cable Installation	24 hour shifts	7 days
Onshore Cable Installation	10 hour shifts, 07:00 – 17:00	6 days*
Landfall Installation ***(including HDD-1, TJB and ORS)***	07:00 – 19:00	7 days
HDD-2, HDD-5 and HDD-6 Installation	07:00 - 19:00	6 days*

Activity	Anticipated working hours per day	Anticipated working days per week
HDD-3 and HDD-4 Installation	12hr (07:00 to 19:00) to 24 hour shifts	7 days

**Day 6 is Saturday working which is typically a 5-hour shift 08:00 to 13:00.*

3.3.2. TIMING OF MOVEMENTS

3.3.2.1. HGV movements to the works sites will be as restricted to reduce impact to the surrounding road network. .

3.3.2.2. For all sections of the Onshore Cable Corridor, additional restrictions on HGV movements will be included to suit local sensitive receptors, such as schools. Local schools include:

- Lovedean Lane: Woodcroft Primary School, located on Woodcroft Lane 250m from Lovedean Lane;
- B2150 Hambledon Road: Denmead Junior School and Denmead Infant School, located on Bere Road and Hambledon Road and located approximately 250 m from Mill Road (Denmead);
- A3 London Road: Mill Hill Primary School, located on Mill Road (Purbrook) approximately 300 m from the from Onshore Cable Corridor;
- Farlington Avenue: Solent Junior School located approximately 90 m from the Onshore Cable Corridor on Solent Road and Solent Infant School located on the Onshore Cable Corridor on Evelegh Road;
- Moorings Way: Moorings Way Infant School, located on the Onshore Cable Corridor; and
- Locksway Road: Mary Rose Academy, located on Locksway Road which will provide direct access to the Onshore Cable Corridor

3.3.2.3. Where AIL movements are required these may be undertaken outside of peak hours and may be limited to weekend and overnight periods to mitigate the impact of these moving through the highway network.

3.3.2.4. Vehicle marshals will be required direct construction traffic/HGV movements at the Site entrances through to site compound areas. Flash cards will be issued to all HGV drivers and visitors entering and vehicles/deliveries will be provided with escorts where required.

LOVEDEAN (CONVERTER STATION AREA)

3.3.2.5. General HGV movements will take place between 09:00 and 17:00 for HGVs relating to construction of the Converter Station, therefore avoiding the AM and PM peaks of 08:00-09:00 and 17:00-18:00.

3.3.2.6. HGV trips may occur in relation to construction of the Onshore Cable Route to deliver equipment to each location, leaving the compound between 07:00- 08:00 in addition to movements between 09:00 – 17:00.

3.3.2.7. On Saturdays, working hours will be 08:00 to 13:00. HGV movements associated with construction of the Converter Station and construction HGVs traveling to and from the Onshore Cable Route will also occur between these hours.

3.3.3. EASTNEY (LANDFALL) (HDD-1)

3.3.3.1. On weekdays general HGV movements will take place between 07:00-08:00, 09:00 -17:00 and 18:00-19:00 for HGVs relating to construction of the ORS and Landfall, therefore avoiding the AM and PM peaks of 08:00-09:00 and 17:00-18:00 and matching the proposed working hours of 07:00-19:00.

3.3.3.2. With regards to the HDD, once drilling plant and cabins have been delivered (a 1-2 day process) the Landfall construction site will only generate HGV movements associated with water, bentonite, fuel and removal of spoil. These movements however will be restricted to outside of the 08:00-09:00 and 17:00-18:00 peak traffic hours.

3.3.3.3. At weekends, HGV movements will occur between 07:00 and 19:00 in line the construction working hours.

3.3.4. ONSHORE CABLE ROUTE

3.3.4.1. On weekdays HGVs carrying equipment and material will leave the from the Converter Station Area at 07:00 and arrive on-site before 08:00. General HGV movements will take place between 09:00-17:00 to avoid the peak traffic hours. At the end of the working day, equipment/material will also be transported away from each site, traveling back to the Converter Station Area between 16:00 and 17:00.

3.3.4.2. On Saturdays, normal working hours will be 08:00 to 13:00. HGV movements associated with construction of the Converter Station and construction HGVs traveling to and from the Onshore Cable Route will also occur between these hours.

3.3.4.3. HGV movements outside the above stated hours may be required where 24-hour or weekend Onshore Cable Route works are permissible. These movements however will be restricted to outside of the 08:00-09:00 and 17:00 to 18:00 peak traffic hours.

3.3.5. HORIZONTAL DIRECTION DRILLING WORKS

3.3.5.1. On weekdays where working hours are 07:00-19:00 HGV movements associated with HDD works will occur over the same period but be restricted to outside of the

08:00-09:00 and 17:00-18:00 peak traffic hours. Where 24-hour construction working hours are used HGV movements between 19:00-07:00 will be restricted to avoid disturbance to nearby residential properties. However, in areas that are not in close proximity to residential properties, some HGV movements may occur within this timeframe.

3.3.5.2. On Saturdays where 08:00 to 13:00 working hours are utilised; HGV construction traffic movements will occur between these hours.

3.3.5.3. On weekends where 07:00-19:00 working hours are utilised; HGV construction traffic movements will occur between these hours. Where 24-hour construction working hours are used HGV movements between 19:00-07:00 will be restricted to avoid disturbance to nearby residential properties. However, in areas that are not in close proximity to residential properties, some HGV movements may occur within this timeframe.

3.3.5.4. For each individual HDD location, a delivery plan will be formulated which will provide a management strategy for the offloading of materials arriving on-site. The delivery plan will also include details of the anticipated frequency of deliveries and time restrictions as set-out in this FCTMP.

3.3.5.5. Non HGV construction vehicle movements will be required throughout the day at HDD locations due to the different functions performed by specialist construction workers. To accommodate for this, a small car parking area (less than 10 vehicles) may be provided within each HDD compound to provide for construction worker parking. Construction staff working normal shift patterns will arrive / depart by minibus or works van wherever practicable and parking of construction worker vehicles outside of HDD compound will not be permitted and will be enforced by the contractor.

3.3.6. TRENCHLESS SOLUTION UNDER SOUTH COAST RAILWAY (HDD-4)

3.3.6.1. On weekdays where working hours are 07:00-19:00 HGV movements will occur 07:00-08:00, 09:00-17:00 and 18:00-19:00 therefore avoiding the AM and PM peaks of 08:00-09:00 and 17:00-18:00. There may be a requirement for some HGV movements outside of those time periods presented above to support 24 hour working (though not during the peak traffic hours of 08:00-09:00 and 17:00-18:00)). However, endeavours will be made to avoid HGV movements between the hours of 19:00 to 07:00 to avoid disturbance to nearby residential properties.

3.3.6.2. On weekends where 07:00-19:00 working hours are utilised; HGV construction traffic movements will occur between these hours. Where 24-hour working is required endeavours will be made to avoid HGV movements between the hours of 19:00-07:00 to avoid disturbance to nearby residential properties.

3.3.7. ISSUES AND CONSTRAINTS IDENTIFIED

3.3.7.1. There are a number of common issues that extend over the Onshore Cable Corridor. Table 5 lists those common issues and constraints and identifies the mitigations proposed to address them in so far as reasonably practicable.

Table 5 - Common Issues and Constraints – Onshore Cable Route

Issue/constraint	Mitigation stage	Proposed Mitigations
Narrow rural roads/no pedestrian footways/ unrestricted speed limit	Route planning and CTMP	Routing strategy, traffic management and signage to be agreed with HCC and PCC
Narrow residential streets with on-street parking	Route planning	Parking suspension, HGV routing strategy, communication with residents
Congestion and impact on strategic roads	Route planning, Framework Traffic Management Strategy and CTMP	Traffic capacity assessments. Vehicle movements restricted to outside of peak hours.
Geometry of junctions and roads not suitable and visibility constrained for proposed construction vehicles	Route planning and design stage	Interventions proposed and agreed with highway authority
Long diversion routes for closed roads	Route planning and design stage	Construction techniques to avoid road closures if possible. Advanced signage/communication with local communities

3.4. HGV ROUTES

3.4.1.1. An assessment has been made of potential HGV routes to access the Converter Station Area and Onshore Cable Corridor and is detailed in sections 3.4.2 to 3.4.11. These routes will be communicated to all hauliers and managed/enforced via inclusion within the individual CTMP's as necessary.

3.4.1.2. Drivers will be required to adhere to all existing restrictions such as weight and height restrictions. Temporary signage will be utilised to direct construction traffic to

compounds and site accesses. The signage required will be agreed with the relevant local highway authorities.

3.4.1.3. A plan identifying construction access points is presented in Appendix 4.

3.4.2. SECTION 1 – LOVEDEAN (CONVERTER STATION AREA)

3.4.2.1. HGV construction traffic will use junction 2 of A3(M), B2149 Dell Piece West, A3 Portsmouth Road, Lovedean Lane and Day Lane and Broadway Lane.

3.4.2.2. No construction traffic (HGVs and constructions workers) will use the route from the south from Hambledon Road via Soake Road, Anmore Road, Anmore Lane and Broadway Lane.

3.4.2.3. There are no vehicular restrictions in this section other than geometric constraints along Day Lane and Broadway Lane. Day Lane and Broadway Lane are rural country lanes with a general width of 6.0 m or less. Each are bordered by hedgerow/grass verges without footways. Given its existing width, passing bays will be implemented on Day Lane to able to accommodate two-way HGV traffic as discussed in Section 6.2. Vehicles entering and exiting the Converter Station Area will be controlled along Day Lane with the vehicle routing and management strategy discussed in further detail in Section 6.2.2.

3.4.3. SECTION 2 – ANMORE

3.4.3.1. HGV construction traffic within Section 2 will travel directly from the Converter Station compound via the internal haul road and therefore HGV movements on highway will be limited to the assigned route to from the A3(M).

3.4.3.2. No construction traffic will use the route from the south from B2150 Hambledon Road via Soake Road, Anmore Road and Anmore Lane.

3.4.3.3. There are no vehicular restrictions in this section other than those mentioned in Section 1.

3.4.4. SECTION 3 – DENMEAD/KINGS POND MEADOWS

3.4.4.1. HGV construction traffic to/from Anmore Road and Kings Pond will be routed either via the Converter Station Area and A3 London Road, B2150 Hambledon Road and Mill Lane or directly from junction 3 A3(M), Hulbert Road, A3 London Road, B2150 Hambledon Road and Mill Road.

3.4.4.2. No construction traffic will use routes along Broadway Lane south of the Converter Station Area or Soake Road. This will be managed and enforced by provision of route planning information by the contractor.

3.4.4.3. There are no vehicular restrictions in this section but the width of Mill Lane in combination with exiting on-street parking may restrict access by abnormal loads. This on-street parking would therefore need to be temporarily suspended. The width of Anmore Road between Mill Road and the proposed construction access location

may require management to prevent conflicts between HGVs and private vehicles.

3.4.5. SECTION 4 – HAMBLEDON ROAD TO FARLINGTON AVENUE

3.4.5.1. Given the length of this section, HGV construction traffic will use different routes depending upon the location of the Onshore Cable Corridor construction works unless it is travelling to /from the Converter Station Area. All HGVs using the Converter Station Area will use Day Lane, Lovedean Lane, A3 London Road and B2150 Hambledon Road to reach the relevant construction location.

3.4.5.2. HGV construction traffic not travelling via the Converter Station Area will use the following routes:

- B2150 Hambledon Road: Junction 3 A3(M), Hulbert Road and A3 London Road;
- A3 Maurepas Way/London Road north of Ladybridge Roundabout: Junction 3 A3(M), Hulbert Road, A3 Maurepas Way and A3 London Road;
- A3 London Road south of Ladybridge roundabout: Junction 4 A3(M), Purbrook Way, Stakes Road, Ladybridge Road and A3 London Road;
- Portsdown Hill Road: Junction 5 A3(M), Bedhampton Hill and B2177 Portsdown Hill Road; and
- Farlington Avenue: A27, A2030 Eastern Road, Havant Road and Farlington Avenue.

3.4.5.3. No construction traffic will use Frendstaple Road, Stakes Hill Road and Crookhorn Lane. This will be managed and enforced by provision of route planning information by the contractor.

3.4.5.4. Restrictions in this section include the ‘Access Only’ 7.5 tonne weight restriction on Farlington Avenue which will be required to be rescinded for the duration of the works on Farlington Avenue. This weight restriction has been implemented in conjunction with the existing traffic calming measures to reduce use of Farlington Avenue as a through-route.

3.4.6. SECTION 5 – FARLINGTON

3.4.6.1. HGV construction traffic will use junction 5 A3(M), A2030 Havant Road, Farlington Avenue and A2030 Eastern Road or A27 junction with A2030 Eastern Road.

3.4.6.2. No construction traffic will use any surrounding residential roads. This will be managed and enforced by provision of route planning information by the contractor.

3.4.6.3. Restrictions in this section include the ‘Access Only’ 7.5 tonne weight restriction on Farlington Avenue which will be required to be rescinded for the duration of the works on Farlington Avenue.

3.4.7. SECTION 6 – ZETLAND FIELD & SAINSBURY'S CAR PARK

3.4.7.1. HGV construction traffic will use junction 5 A3(M), A2030 Havant Road, and A2030 Eastern Road or A27 junction with A2030 Eastern Road.

3.4.7.2. No construction traffic will use Lower Farlington Road or Fitzherbert Road. This will be managed and enforced by provision of route planning information by the contractor.

3.4.7.3. There are no vehicular restrictions in this section and no geometric constraints have been identified.

3.4.8. SECTION 7 – FARLINGTON JUNCTION TO AIRPORT SERVICE ROAD

3.4.8.1. HGV construction traffic will use the A27 junction with the A2030 Eastern Road northbound for the Farlington Playing Fields works and southbound for Portsea Island works.

3.4.8.2. No construction traffic will use the London Road, Copnor Road and Norway Road. This will be managed and enforced by provision of route planning information by the contractor.

3.4.9. SECTION 8 – EASTERN ROAD (ADJACENT TO GREAT SALTERNS GOLF COURSE) TO MOORINGS WAY

3.4.9.1. HGV construction traffic will use the A27 junction with A2030 Eastern Road for access.

3.4.9.2. No construction traffic will use the section from Copnor Road to Milton Road. This will be managed by provision of route planning information by the contractor.

3.4.10. SECTION 9 – MOORINGS WAY TO BRANSBURY ROAD

3.4.10.1. HGV construction traffic will use A27 junction with A2030 Eastern Road, A288 Eastney Road, Milton Avenue, Moorings Way, Locksway Road, Kingsley Road, and Bransbury Road.

3.4.10.2. No construction traffic will enter the 5-tonne restricted zone of Salterns Avenue residential area. Traffic will not use other residential side streets to travel north or south but will return to A88 Eastney Road or A2030 Milton Road. Construction traffic will leave Portsea Island via A2030 Eastern Road only.

3.4.10.3. There are no vehicular restrictions in this section other than geometric constraints associated with use of residential roads such as Locksway Road, Kingsley Road and Bransbury Road. These are generally 6.0-7.0 m in width with on-street parking on at least one-side of the carriageway. Taking this into account, the contractor will be required to use smaller construction vehicles and plant when accessing these roads and there may be a need to temporarily suspend on-street parking on parts of

Locksway Road and Kingsley Road.

3.4.11. SECTION 10 – EASTNEY (LANDFALL)

3.4.11.1. HGV construction traffic will use the A27 junction with A2030 Eastern Road, A288 Eastney Road and Bransbury Road, Henderson Road and Fort Cumberland Road.

3.4.11.2. No construction traffic will use the section of Henderson Road to the roundabout with A288 Cromwell Road. This will be managed and enforced by provision of route planning information by the contractor.

3.4.11.3. There are no vehicular restrictions in this section, no geometric constraints have been identified other than removal of the existing height restriction gate at the existing public car park.

3.5. ABNORMAL LOAD ROUTES

3.5.1.1. An assessment has been made of potential Abnormal Load routes to access the Converter Station Area and Onshore Cable Corridor and is detailed in sections 3.5.2 to 3.5.9. These routes will be communicated to all hauliers and managed/enforced via inclusion within the individual CTMP's as necessary.

3.5.1.2. This section sets out elements relevant to Abnormal Loads, over and above the general information applicable to HGVs set out above.

3.5.2. SECTION 1 – LOVEDEAN (CONVERTER STATION AREA)

3.5.2.1. Geometric constraints at the A3 Portsmouth Road / Dell Piece West / Catherington Lane signalised junction mean AIL manoeuvres associated with transformer deliveries to the Converter Station may require temporary removal of traffic signal poles and other street furniture. These removals will be undertaken with support of escort vehicles.

3.5.3. SECTION 4 – HAMBLEDON ROAD TO FARLINGTON AVENUE

3.5.3.1. Due to their size and weight, cable drum delivery vehicles accessing Joint Bays on Portsdown Hill Road and Farlington Avenue will use A3(M) Junction 4, Purbrook Way, Stakes Road, Ladybridge Road and A3 London Road. Exit would be via A3 London Road to Cosham, with the delivery vehicle continuing along A3 Southampton Road to reach the M275 / M27.

3.5.4. SECTION 5 – FARLINGTON

3.5.4.1. Due to their size and weight, cable drum delivery vehicles accessing Joint Bays on Portsdown Hill Road and Farlington Avenue will use A3(M) Junction 4, Purbrook Way, Stakes Road, Ladybridge Road and A3 London Road. To gain access to the Portsdown Hill car park, the existing traffic island and posts will need to be temporarily removed. Exit would be via A3 London Road to Cosham, with the delivery vehicle continuing along A3 Southampton Road to reach the M275 / M27.

3.5.5. SECTION 6 – ZETLAND FIELD & SAINSBURY'S CAR PARK

3.5.5.1. There are no vehicular restrictions in this section and no geometric constraints have been identified for general construction traffic but abnormal loads associated with cable drum deliveries may require temporary removal of traffic signal poles on Fitzherbert Road to facilitate access.

3.5.6. SECTION 7 – FARLINGTON JUNCTION TO AIRPORT SERVICE ROAD

3.5.6.1. Due to the 50t weight limit on the Eastern Road bridge south of the A27, cable drum delivery vehicles will route through Portsmouth to gain access to Section 7. Access to Joint Bays in Section 7 from Portsmouth Cargo Terminal will be via A3 Commercial Road, A3 Marketway, A3 Anglesea Road, A2030 Winston Churchill Avenue, A2030 Victoria Road North and A2030 Goldsmith Avenue, Fratton Way, Rodney Road, A2030 Velder Avenue and A2030 Eastern Road. A loop of Airport Service Road, Robinson Way and Anchorage Road will also be required to access construction locations on or adjacent to the southbound carriageway of the A2030 Eastern Road. This routing will also apply to other abnormal loads that are heavier than the A2030 Eastern Road bridge weight restriction.

3.5.7. SECTION 8 – EASTERN ROAD (ADJACENT TO GREAT SALTERNS GOLF COURSE) TO MOORINGS WAY

3.5.7.1. Restrictions in this section include the 5 tonne weight restrictions on Eastern Avenue and Moorings Way. These are environmental weight restrictions usually intended to protect the character of the area rather than restrictions for structural reasons, which restricts use of these links by HGVs between midnight and 07:00 and 19:00 to midnight Monday to Saturday and all day on Sunday. These restrictions will be required to be disapplied on Saturday and Sunday in relation to Abnormal Loads in connection with the construction of the Onshore Cable Route. The impacts of lifting this restriction can therefore be mitigated by ensuring that access by construction vehicles follows these restrictions through the contractors CTMP.

3.5.7.2. Due to the 50t weight limit on the Eastern Road bridge south of the A27, cable drum delivery vehicles will need to route through Portsmouth to gain access to Section 8. Access to Joint Bays in Section 8 from Portsmouth Cargo Terminal will be via A3 Commercial Road, A3 Marketway, A3 Anglesea Road, A2030 Winston Churchill Avenue, A2030 Victoria Road North and A2030 Goldsmith Avenue, Fratton Way, Rodney Road, A2030 Velder Avenue and A2030 Eastern Road. A loop of Airport Service Road, Robinson Way and Anchorage Road will also be required to access construction locations on or adjacent to the southbound carriageway of the A2030 Eastern Road. This routing will also apply to other abnormal loads that are heavier that the A2030 Eastern Road bridge weight restriction.

3.5.7.3.

3.5.8. SECTION 9 – MOORINGS WAY TO BRANSBURY ROAD

3.5.8.1. Due to the 50t weight limit on the Eastern Road bridge south of the A27, cable drum delivery vehicles will route through Portsmouth to gain access to Section 9. Access to Joint Bays in Section 9 from Portsmouth Cargo Terminal will be via A3 Commercial Road, A3 Marketway, A3 Anglesea Road, A2030 Winston Churchill Avenue, A2030 Victoria Road North, A2030 Goldsmith Avenue, Fratton Way, Rodney Road and A288 Milton Road. At the A288 Milton Road / A2030 Velder Avenue / Rodney Road traffic signal junction cable drum delivery vehicles will be required to turn right, which is a prohibited manoeuvre, and will therefore need to be undertaken with support of escort vehicles. This routing will also apply to other abnormal loads that are heavier than the A2030 Eastern Road bridge weight restriction.

3.5.9. SECTION 10 – EASTNEY (LANDFALL)

3.5.9.1. Due to the 50t weight limit on the Eastern Road bridge south of the A27, cable drum delivery vehicles will route through Portsmouth to gain access to Section 10. Access to Joint Bays in Section 9 from Portsmouth Cargo Terminal will be via A3 Commercial Road, A3 Marketway, A3 Anglesea Road, A2030 Winston Churchill Avenue, A2030 Victoria Road North, A2030 Goldsmith Avenue, Fratton Way, Rodney Road, A288 Milton Road and Bransbury Road. At the A288 Milton Road / A2030 Velder Avenue / Rodney Road traffic signal junction cable drum delivery vehicles will be required to turn right, which is a prohibited manoeuvre, and will therefore need to be undertaken with support of escort vehicles. This routing will also apply to other abnormal loads that are heavier than the A2030 Eastern Road bridge weight restriction.

3.6. SECTION SPECIFIC CONSTRAINTS AND ISSUES

3.6.1.1. Table 6 details the specific constraints and issues identified. The individual CTMPs will include specific detailed mitigation in relation to these constrains and issues that will be agreed with the relevant highway authorities.

Table 6 - Cable Route Section Specific Issues and Constraints

Section	Description	Mitigation stage	Proposed mitigation
1	Geometry of Broadway Lane junction with Day Lane and Day Lane	Design / Construction	Junction modification, provision of passing bays, traffic management and construction traffic marshalling
1	Geometry of A3 Portsmouth Road / Dell Piece West /	Design / Construction	Temporary Junction modification, traffic management and construction traffic marshalling

Section	Description	Mitigation stage	Proposed mitigation
	Catherington Lane traffic signal junction for abnormal loads		
1	A3 Portsmouth Road / Lovedean Lane	Design / Construction	Temporary Junction modification, traffic management and construction traffic marshalling
1	Lovedean Lane / Day Lane	Design / Construction	Temporary Junction modification, traffic management and construction traffic marshalling
2	Anmore Road open cut trench crossing	Design	Traffic management/diversions
2	Anmore Road access to haul roads / HDD site due to narrow carriageway width	Design / Construction	Temporary junction design/traffic management/construction traffic marshalling
3	Mill Road narrow width / on-street parking	Construction	Temporary suspension of on-street parking to allow abnormal load deliveries
4	Farlington Road 7.5 tonne weight restriction and geometry	Construction	Suspension of weight restriction / traffic routing
5	Farlington Road 7.5 tonne weight restriction and geometry	Construction	Suspension of weight restriction / traffic routing
6	A2030 Eastern Road Zetland Field access	Design / Construction	Left turn in left turn out junction and / or construction traffic marshalling
6	A2030 Eastern Road / Fitzherbert Road traffic signal junction	Design / Construction	Temporary Junction modification, traffic management and traffic marshalling of all construction traffic vehicles.
7	A2030 Eastern Road access Farlington sports fields	Design / Construction	No right turn out from car park to Eastern Road / construction traffic marshalling

Section	Description	Mitigation stage	Proposed mitigation
9	Eastern Avenue 5 tonne vehicular weight restriction	Construction	Suspension of weight restriction
9	Kingsley Road / Locksway Road on-street parking	Construction	Temporary suspension of on-street parking to allow abnormal load deliveries
9	Ironbridge Lane too narrow for rigid HGVs	Construction	Hand carting of materials from Laydown Area.
8,9,10	A2030 Eastern Road bridge 50t weight restriction	Construction	Vehicle routing

3.7. HGV IMPACT REDUCTION

3.7.1.1. The programme will be developed to minimise the overall impact on the road network, by taking account of seasonal peak traffic, events and the impact of reassigned traffic as a result of concurrent works as far as is practicable. The impact of HGV construction traffic on the local community will be required to be mitigated. Mitigation could include, where practicable, restriction of movements at certain times of day, maximising loads to reduce vehicular trips, using local suppliers to reduce vehicular mileage, reusing bulk aggregate delivery HGVs for waste spoil removal, consolidation of deliveries and the use of smaller plant to minimise working widths where constraints require.

3.7.1.2. Where sections of the highway have an insufficient width for construction, HGVs should pass without reversing or overrunning the verge or footways especially on the narrow rural roads and residential roads. HGV movements will be controlled and managed where required to ensure conflicts do not arise or are minimised wherever possible. Special measures will be detailed in the individual CTMPs to mitigate the impact to pedestrians on roads that do not have footways, especially the rural roads.

3.7.1.3. Wheel washing facilities will be provided where required and public roads in the vicinity will be monitored to ensure that they are not contaminated with debris that could become a hazard and will be required to have road sweeping arrangements on call. Dust suppression from the works and movement of vehicles will also be required to be provided.

3.8. COMMUNICATION OF CONSTRUCTION TRAFFIC MOVEMENTS

3.8.1.1. A targeted strategy will be developed to inform the community and road users of upcoming works which may be undertaken through newsletters, road signage and websites (including providing updates to various travel apps/websites). Information could include;

- Duration of works;
- Timing of the works;
- Number of construction movements; and
- Complaint procedure.

3.8.1.2. Further details in relation to the required communication strategy in connection with the construction of the Onshore Cable Corridor are provided within the Framework Traffic Management Strategy (REP1-068).

3.8.1.3. This includes details of how residents and businesses located on AIL routes will be given at least ten days' notice prior to such movements occurring, which will also be applicable to the delivery of Transformers to the Converter Station.

3.9. CONSTRUCTION WORK SIGNAGE

3.9.1.1. A works signage strategy (including wayfinding across the project for staff) relevant to the works to be undertaken will be agreed with the relevant authorities in the individual CTMP's, to communicate the construction vehicle routes to access the temporary accesses, laydown areas and compounds. The use of communications technology to ensure efficient staff movements will be explored.

3.9.1.2. Regular reviews of this strategy will be undertaken in conjunction with the relevant Local Highway Authority so it can be modified if necessary. This process will fall within under the responsibility of the road safety and liaison officer identified in Section 7.3.

4. CONSTRUCTION WORKFORCE

4.1. OVERVIEW

4.1.1.1. The Proposed Development is expected to have a maximum of 150 construction workers for Converter Station plus 50-60 construction workers for construction of the Onshore Cable Route at the peak construction year. It is anticipated that up to six construction gangs will be working concurrently along sections of the Onshore Cable Route, and construction may also take place at up to three HDD locations simultaneously. Mitigating the number of vehicular trips generated by construction staff travelling to and from their place of work and between work site locations is a key objective of the individual CTMPs.

4.2. CABLE ROUTE CONSTRUCTION WORKERS

4.2.1.1. Up to six construction worker gangs working on the Onshore Cable Route will be permissible at any one time on the highway, in addition to those at up to three HDD locations. The Converter Station will act as the main site compound for all construction workers associated with the Onshore Cable Route. This means that construction workers will generally travel to the Converter Station at the start of each day before being transported to site via minibus or works van where practicable, noting that opportunities to reduce construction worker vehicle trips included in Section 4.3.

4.3. STAFF TRAVEL PLANNING STRATEGY

4.3.1.1. This Framework CTMP provides a framework to enable the production of the individual CTMPs. Measures to encourage the use of sustainable modes will be encouraged and promoted in the individual CTMPs. Examples of potential mitigation and management measures include:

- Minibuses / construction LGVs will be provided to transport staff to sites as required from the construction compound at the Converter Station. Consolidating all trips to one location will aid the promotion of travel to work by sustainable modes, for example, it could provide greater potential for car sharing options;
- A shuttle bus service(s) will operate between the main local transport hubs (for example Havant Railway station and Waterlooville town centre) and local hotels where construction workers are accommodated to avoid the need for workers to drive to the Converter Station Area construction compound. This service will be kept under review during the construction period to ensure that is providing an effective mitigation of private car trips.

- Parking will be controlled and prevented at construction sites to ensure construction workers do not park inappropriately on surrounding roads causing nuisance to residents. This will be managed by construction workers being transported to site via minibus / works LGV either directly from local accommodation or Converter Station Area compound wherever practicable;
- Parking will be controlled at HDD compounds through provision of a small suitable parking area to allow for construction workers with atypical shift patterns
- Information boards will be used at the construction compounds detailing public transport information to encourage sustainable travel and to hubs where collection by minibuses is possible;
- Secure cycle parking will be provided at construction compounds;
- Welfare facilities at work sites such as canteens will reduce the need to travel during the working day; and
- Sustainable travel measures, including car sharing, will be encouraged.

4.3.1.2. A Framework Construction Worker Travel Plan is contained within Appendix 6.

4.4. WORKER COMMUNICATION STRATEGY

4.4.1. WORKER INDUCTION

4.4.1.1. All construction workers will complete a staff induction meeting to familiarise them with requirements of the construction process. As part of this induction an information pack will also be provided to all workers, which will include the following information relevant to construction travel and traffic:

- Permitted HGV routes;
- HGV timing restrictions;
- Site rules for the Converter Station and all other construction locations;
- Driver behaviour requirements;
- Traffic incident management plan; and
- CTMP Contact information (emergency and non-emergency).

5. TEMPORARY SITE ACCESSES

5.1. OVERVIEW

5.1.1.1. Locations for site access to haul roads and compounds from the public highway are required. These will be designed to ensure they are safe and delay and impact to the public is minimised.

5.2. DESIGN, MANAGEMENT AND MITIGATION

5.2.1.1. Any site access will be designed taking into account existing constraints including speed limit, highway width, traffic restrictions, traffic flows and visibilities. In some cases where geometry and sight lines are limited it may be necessary to temporarily reduce the speed limit in proximity to the entrance via a Traffic Regulation Order. Each access will be designed to comply with the appropriate design guidelines (DMRB, HCC/PCC design standards). A typical temporary construction access layout is shown on Drawing AQ-UK-DCO-TR-LAY-001 included in Appendix 7 for locations where access will be achieved from the back of footway or edge directly from the edge of carriageway.

5.2.1.2. This typical access layout provides a 12.0m setback from the edge of footway / carriageway to access gates (which would open inwards) to allow adequate space to prevent a construction HGV from blocking back onto the highway. At the access gates themselves, a 6.0m wide access track is provided, which reflects the low number of construction traffic generated at each location and the unlikelihood that two-way access would be needed at any one-time.

5.2.1.3. Heras style fencing will be provided between the access gate and highway, setback at least 2.0m from the highway to ensure visibility splays are maintained. These visibility splays are to be accordance with Manual for Streets 2 where 85th percentile vehicle speeds on the main carriageway are less than 37mph. In all other cases DMRB visibility splay standards will be required unless agreed with the Highway Authority.

5.2.1.4. Details of vehicle crossover construction will be confirmed with the Highway Authority during detailed design and any protection of apparatus will be agreed with the statutory undertake in advance of any works.

5.2.1.5. All vehicles will enter and exit via a site access in forward gear, other than in exceptional circumstances, in which case any reversing required will only be undertaken with the aid of a traffic marshall and vehicle warning equipment. Layouts will ensure that vehicles can be checked and rejected if necessary off the public highway or in an area that is demarcated from the public highway. All site accesses will be laid out to avoid vehicles queuing back on to the highway.

5.2.1.6. Parking of private vehicles of the construction work force will be only permitted within a specifically designated location within the Converter Station Area.

5.2.1.7. Any temporary construction access junction required on the A2030 Eastern Road will be required to operate on a left-in / left-out basis to avoid construction vehicles from crossing the carriageway.

5.2.1.8. The final design of all highway accesses is to be required to be agreed with the relevant highway authority before the commencement of works in relation to the relevant phase of works which the access is required in connection with, and a plan of the accesses anticipated to be required is contained within Appendix 4.

5.3. SITE ACCESS LOCATIONS

5.3.1.1. The following site accesses have been identified through the proposed design for the Onshore Cable Corridor, all of which are identified on the Access and Rights of Way (AROW) Plans (REP1-016)

5.3.2. SECTION 1 LOVEDEAN (CONVERTER STATION)

5.3.2.1. A site access which will become a permanent access will be situated on Broadway Lane just south of the junction with Day Lane. This will provide access to the Converter Station and the fields between the Converter Station and Anmore Lane (as shown in Appendix 2) via an internal haul road. This is shown as point AC/1/a, AC/1/b and AC/1/c on the AROW Plans (REP1-016).

5.3.3. SECTION 2 – ANMORE

5.3.3.1. The site access in Section 1 and internal haul road will be utilised as the access point. There will be a required crossing of Broadway Lane between Anmore Lane and Edney's Lane. However, construction traffic will not be allowed to use this road owing to its narrow nature and geometry which is only suitable for small vehicles. The crossing of Broadway Lane is shown as points AC/1/d and AC/1/e on the AROW Plans (REP1-016).

5.3.4. SECTION 3 – DENMEAD/KINGS POND MEADOW

5.3.4.1. An access will be required from Anmore Road to the agricultural fields to the north and south into Kings Pond Meadow via an existing gate. This southern access will be utilised as an entry and exit for the HDD-5 compound. This is shown as points AC/2/a and AC/2/b on the AROW Plans (REP1-016).

5.3.5. SECTION 4 - HAMBLEDON ROAD TO FARLINGTON AVENUE

5.3.5.1. An access will be made from B2150 Hambledon Road north-west of the junction with Soake Road in Kings Pond Meadow.. Access may be required to the north and south of B2150 Hambledon Road at this location, depending upon the final alignment of the Onshore Cable Route and its construction methodology. This is shown as points

AC/3/a and AC/3/b on the AROW Plans (REP1-016).

5.3.5.2. An access may also be required from the B2150 Hambledon Road into the Billy's Lake public open space car park. This however would only be required if use of the existing car park access is deemed impracticable during construction of the Onshore Cable Route. This is shown as point AC/3/c on the AROW Plans (REP1-016).

5.3.5.3. An access will be required to the triangular plot of land that may serve as a Laydown Area on A3 London Road opposite No. 200 and 208 London Road, Waterlooville. This is shown as point AC/4/a on the AROW Plans (REP1-016).

5.3.5.4. The car park on the southside of Portsdown Hill Road near Hilltop Crescent will be utilised for construction purposes and will require the height restriction barrier to be removed. This is shown as point AC/6/a on the AROW Plans (REP1-016).

5.3.6. SECTION 5 – FARLINGTON

5.3.6.1. An access will be required into the Portsmouth Water land to the south of Evelegh Road as shown in point AC/6/b on the AROW Plans (REP1-016).

5.3.7. SECTION 6 – ZETLAND FIELD & SAINSBURY'S CAR PARK

5.3.7.1. An access to the works in Zetland Field will be required as shown on point AC/7/a on the AROW Plans (REP1-016).

5.3.7.2. There will be a construction compound in the Sainsbury's car park for the reception pit of Trenchless solution under the south coast railway embankment from Farlington Playing Fields. However, this access will be made from within the Sainsbury's car park (private).

5.3.8. SECTION 7 – FARLINGTON JUNCTION TO AIRPORT SERVICE ROAD

5.3.8.1. The Farlington Playing Fields construction works will be assessed from A2030 Eastern Road and the Farlington Playing Fields access road which is not adopted public highway.

5.3.8.2. The HDD compound at the land adjacent to Kendall's Wharf will utilise the existing access to the land at point AC/8/a as shown on the AROW Plans (REP1-016).

5.3.8.3. Access to the sports pitches south of the Tudor Sailing Club may also be required at points AC/8/b and AC/8/c as shown on the AROW Plans (REP1-016)

5.3.9. SECTION 8 – EASTERN ROAD (ADJACENT TO GREAT SALTERNS GOLF COURSE) TO MOORINGS WAY

5.3.9.1. Access may be required for the area of greenspace located immediately south of the Harvester Restaurant car park, as shown on point AC/8/d on the AROW Plans (REP1-016).

5.3.9.2. If the final alignment of the Onshore Cable Route uses Milton Common, to the contractor may use the East Solent Coastal Partnership (ESCP) compound that will

be used as part of the current sea defence works in this area, if this is no longer required by ESCP. This will be accessed from the A2030 Eastern Road south of the Langstone Harbour viewing car park once their works are completed in October 2022 and is shown on point AC/9/a on the AROW Plans (REP1-016).

5.3.9.3. Should the Onshore Cable Route alignment use the western and southern boundary of Milton Common an additional construction access will also be required at point AC/9/d on the A2030 Eastern Road as shown on the AROW Plans (REP1-016).

5.3.10. SECTION 9 – MOORINGS WAY TO BRANSBURY ROAD

5.3.10.1. Should the Onshore Cable Route alignment use the western and southern boundary of Milton Common a construction access will also be required at point AC/9/b on Moorings Way as shown on the AROW Plans (REP1-016)

5.3.10.2. The route through Milton Common or the University of Portsmouth playing fields to Longshore Way requires access from Moorings Way where it meets Sanderling Road and Furze Lane and from Longshore Way. This is shown as points AC/9/c, AC/9/e and AC/10/a on the AROW Plans (REP1-016).

5.3.10.3. The car park to the rear of the Thatched House public house from Locksway Road will be utilised for construction access to HDD-2

5.3.10.4. A construction access from Kingsley Road to the common land south of the allotments will also be required for HDD-2 as shown on points AC/10/b and AC/10/d on the AROW Plans (REP1-016).

5.3.10.5. The car park access from Bransbury Park from Bransbury Road will be utilised and require the height restriction barrier to be removed.

5.3.11. SECTION 10 – EASTNEY (LANDFALL)

5.3.11.1. The existing car park off Fort Cumberland Road, which is the Landfall and ORS will be utilised for construction access as shown on point AC/10/c on the AROW Plans (REP1-016)

6. REQUIRED HIGHWAY INTERVENTIONS

6.1. OVERVIEW

6.1.1.1. The planning stage has identified interventions at the following locations will be required to facilitate the construction of the Proposed Development:

- Section 1 at the Converter Station access, Day Lane and Lovedean Lane; and
- Section 3 on Anmore Road to access Kings Pond Meadows

6.1.1.2. The individual CTMPs may identify further interventions that alleviate narrow/constrained roads and junctions with geometry that cannot accommodate the manoeuvring of larger vehicles. This will allay any safety concerns regarding visibility and sight lines. Traffic management measures will be implemented to ensure general traffic can continue to flow safely and effectively around the construction sites related to both the Converter Station and Onshore Cable Route, as well as ensuring construction vehicles can access the relevant worksites safely and with limited delay.

6.1.1.3. This Framework CTMP provides an overview of the interventions that have been identified at this stage. The individual CTMPs will include detail design and independent safety auditing. All will require approval by the relevant Highway Authority.

6.2. INTERVENTIONS IDENTIFIED

6.2.1.1. The following measures will be required.

6.2.2. SECTION 1 – LOVEDEAN (CONVERTER STATION AREA)

Converter Station Access Junction

6.2.2.1. The geometry of the Broadway Lane/Day Lane junction has been identified as a constraint by the design team, third parties during consultation and the abnormal load contractor (as shown in Appendix A of the Supplementary Transport Assessment (REP1-142).The geometry of the junction cannot be eased owing to the location of existing electrical cable jointing. Therefore, to provide a permanent access junction and facilitate construction there will be an upgrade of the junction of Broadway Lane and Day Lane, which will include the construction of a Haul Road and temporary holding area that ‘smooths’ the corner for large vehicles.

6.2.2.1. As can be seen in drawing AQD-WSP-UK-OS-DR-Z-200215, the proposed Haul Road and temporary holding area comprise a new link to be provided between Day Lane, east of the existing bend, and at Broadway Lane, south of the existing bend. This will provide a managed facility for vehicles entering the Site during the Construction Stage with vehicle movements across Broadway Lane able to be marshalled. This link also accommodates HGV / abnormal load movements and would be retained as a permanent feature (unadopted) to allow future access for such vehicles where required in connection with the operation and maintenance of the Converter Station. However, as is stated in paragraph 1.2.11.3 of the Transport Assessment (APP-448), HGV, Abnormal Loads or AILs will only be required to travel to the Converter Station site in the event of major equipment failure.

6.2.2.2. General verge / vegetation cutting back will be required on all sides of Broadway Lane within the bounds of the highway to ensure that adequate visibility splay requirements are met, with all required land falling within the Order Limits, as confirmed by drawing AQD-WSP-UK-OS-DR-Z-200215, included in Appendix 2 and the Indicative Landscape Mitigation Plan (APP-281). The power to carry out such works is included within Paragraph 10 of the Draft Development Consent Order (Examination reference: APP-019).

6.2.2.3. It should be noted that the proposed Haul Road is to be gated at both the junction with Day Lane and the junction with Broadway Lane, with construction vehicles only being able to gain access via dedicated traffic marshall.

6.2.2.4. In order to discourage vehicles from entering and exiting the Converter Station from the south during the Operational Stage (construction traffic movements will not be permitted to make use of this route under traffic marshall control), the following design alterations have been included:

- A ‘no right turn’ sign will be placed on the Converter Station access approximately 10m from the junction with Broadway Lane to inform drivers that this movement is prohibited; and
- The radii on the southern side of the access road has been reduced from 10m to 1m to discourage vehicles from turning left into the Site from Broadway Lane.

6.2.2.5. It is also proposed that four passing bays be implemented on Day Lane to resolve potential conflicts which may occur due to construction related HGV’s meeting ordinary traffic on this link. The locations of the proposed passing bays can be seen in drawing No. AQ-UK-DCO-TR-LAY-008 included in Appendix 7.

6.2.2.6. In addition to these design features, an access strategy document will be produced for the Operational Stage that defines how maintenance vehicles should access the Converter Station. This will include an access route plan, which will follow the same principles as the construction traffic route included within the CTMP.

Management of HGVs on Day Lane

6.2.2.7. Three main methods of construction vehicle management will be used for mitigating the impacts of movements of construction vehicles on Day Lane. These three methods are as follows:

- Introduction of passing bays on Day Lane;
- Strategic management of arrivals and departures of HGVs;
- Use of traffic marshals and traffic marshals to control traffic on Day Lane .

6.2.2.8. A plan contextualising these three methods of construction traffic management on Day Lane has been included in Plate 6 for reference, and each is discussed further in turn.

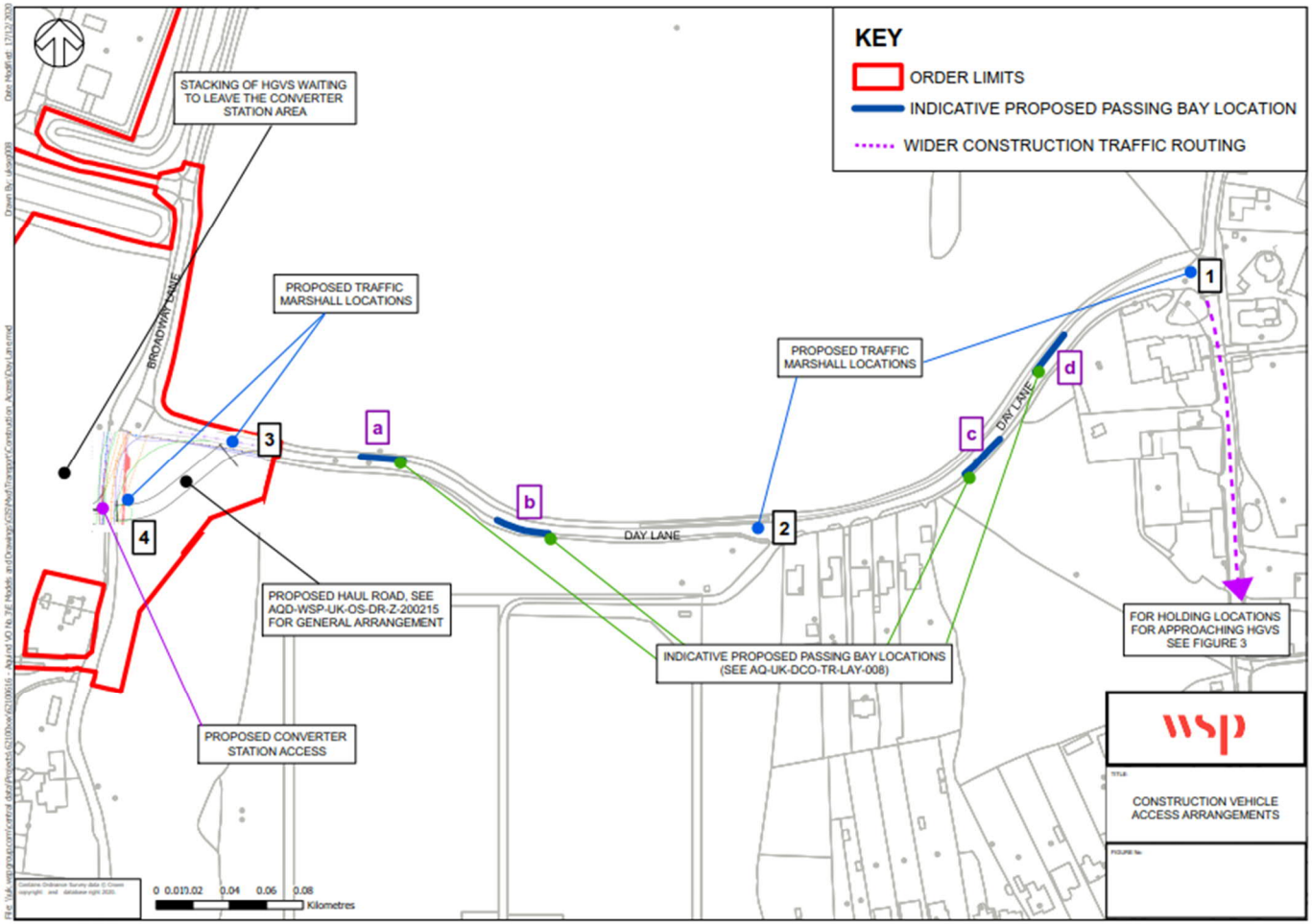


Plate 6 - Proposed construction traffic management on Day Lane - will be replaced with full page image when issued as PDF

Passing Bays

6.2.2.9. As can be seen in Plate 6, four passing bays are proposed to be implemented on Day Lane to ensure the safe passing of vehicles on this link. These are discussed further in paragraph 6.2.2.5.

Strategic management of arrivals and departures

6.2.2.10. The management strategy for all HGVs exiting the Converter Station Area includes the stacking of HGVs when exiting the site. It is proposed that during peak construction, the traffic marshall located at the exit of the Converter Station Area to manage HGV exits from the site, allowing vehicles to leave only in a convoy of three HGVs. Once three HGVs are ready to leave, all three vehicles are released together in a convoy travelling eastbound on Day Lane. This strategy decreases the total amount of time HGVs are travelling eastbound on Day Lane, and thus decreases the potential for conflicts with both general traffic and arriving HGVs. In order to ensure the exiting convoy does not conflict with the arrival of HGVs, all banksmen and traffic marshals will be made aware by radio contact when a convoy is to be released.

6.2.2.11. In terms of HGV arrivals at the Converter Station Area associated with construction of the Converter Station, their management will be dealt with by way of a requirement to pre-book an arrival time at the Converter Station Area and 'check-in' on approach to confirm that their arrival slot is still available. This will allow HGV arrivals to be coordinated in order to avoid times when HGVs will be departing.

6.2.2.12. There are sufficient locations within a 20 minute drive time of the site to allow HGVs to wait within appropriate areas in order to check-in and await their delivery slot. These locations are mainly laybys located on the Strategic Road Network,

6.2.2.13. It is proposed that HGVs will pull into pre-identified laybys in order to 'check-in' with the banksmen at the Converter Station Area ahead of their arrival slot. The arriving vehicle will be given authorisation by the banksmen / traffic marshalls to leave their check-in location and access the Converter Station Area only if vehicles are not due to exit the Converter Station Area. Once this authorisation has been given, no HGVs will be permitted to leave the Converter Station Area until the dispatched HGV has arrived. Should the arriving HGV be likely to conflict with a departing convoy, the approaching HGV will be held at their check-in point until the departing HGVs have cleared the banksman at the eastern end of Day Lane. Approaching HGVs will also be held should another approaching HGV have just been cleared for arrival and be travelling to Day Lane from their 'check-in' point. This will eliminate the potential for conflicting HGV movements to occur on Day Lane.

6.2.2.14. This management strategy will ensure that HGVs arriving at the Converter Station can be scheduled to avoid times when departing HGVs are leaving. At the same time, if HGVs are known to be arriving at the Converter Station Area, departing HGVs can be held on site until such as the incoming HGVs have arrived.

6.2.2.15. Whilst HGVs are travelling to/from the Converter Station Area along Day Lane, general background traffic can be held at the access, through the use of “Stop/Go” boards. This strategy can also be used on Lovedean lane at the junction of Day Lane / Lovedean Road. Adopting this strategy will ensure that the free flow of traffic is maintained for the travelling public, whilst allowing for a flexible approach to traffic management when there is the need to control movement and allowing a procedure to be able to deal with any unforeseen circumstances that may arise.

6.2.2.16. Alongside the HGV’s approaching the Converter Station Area which are associated with construction in the Area itself, HGV’s will also be arriving at the Converter station Area from both the Onshore Cable Corridor. The travel of these HGV’s will be also be actively manged through contact with the Converter Station Area. These HGVs will be held at their position either on the Onshore Cable Corridor, and only be cleared for approach to the Converter Station Area when their arrival will not conflict with other HGVs exiting or arriving.

Use of Banksmen and Traffic Marshalls

6.2.2.17. The proposed location of banksmen and traffic marshalls on Day Lane is set out in Plate 6 and the roles of the banksmen / marshalls at each location can be summarised as follows:

- **Location 1**: Will use STOP/GO boards to halt general traffic on Lovedean Lane at the Day Lane / Lovedean Lane junction for the time period between a convoy of HGV’s being released from the Converter Station Area and when these vehicles exit Day Lane at this junction;
- **Location 2**: Will coordinate with Locations 3 and 4 to prevent the release of a convoy of HGV’s from the Converter Station Area when a resident of the private properties on Day Lane has left their property and is travelling westbound on Day Lane with the potential to collide with such convoy. Banksman 2 will also warn residents wishing to exit should a convoy of HGV’s already have been released from the haul road which has yet to have passed the property in question. Preference will always be given to residents wishing to leave their properties over the exit of a HGV convoy, with residents only being held should a convoy already have been released when they wish to depart;
- **Location 3**: Will use STOP/GO boards to temporarily halt vehicles travelling eastbound on Day Lane prior to the proposed haul road access in order to allow a convoy of HGV’s to exit safely; and

- **Location 4**: Is to be located at the Broadway Lane entrance of the proposed haul road and will temporarily halt traffic on Broadway Lane when a construction vehicle (or convoy of such vehicles) is travelling across the highway between the Converter Station Area entrance and the haul road.

6.2.2.18. All banksmen / traffic marshalls will remain in contact with one another at all times via telecommunication devices as to ensure a coordinated approach to HGV management on Day Lane.

Lovedean Lane

6.2.2.19. A section of approximately 50 metres length of Lovedean Lane between the junction with Day Lane and New Road has also been identified as an area that may not be wide enough for two HGVs to pass as shown on swept path analysis included in Appendix 6. In this location the road has no defined edge and the verges are earth and unrestrained. A centre line has not been provided. South of New Road, Lovedean Lane enters the residential conurbation and has a hard kerb edge increasing the effective width and a centre line is provided. For the identified narrower section, similarly as described above for Day Lane, regular 'siding' will take place and cutting back of the verge within the highway boundary to ensure the maximum carriageway width is available. The section is short and straight and drivers could be expected to priority work as they would on any narrow road or when an obstruction is met.

6.2.3. SECTION 3 – DENMEAD/KINGS POND MEADOW

Anmore Road

6.2.3.1. The width and curvature of Anmore Road between Mill Road and the proposed temporary construction access into Kings Pond Meadow may lead to conflicts between construction HGVS and private vehicles, which can be mitigated through the provision of a vehicle management strategy. Construction traffic travelling to the proposed access point on the south side of the carriageway on Anmore Road (AC/2/a) will travel via B2150 Hambledon Road, Mill Road and Anmore Road.

6.2.3.2. As it set out in the Access and Rights of Way Plans (REP1-016), a temporary access point (AC/2/a) is proposed on the south side of the carriageway on Anmore Road. The proposed temporary access point (AC/2/a) is to be located in the vicinity of an existing farm access gate on the south side of the carriageway on Anmore Road, which is currently in place directly opposite the entrance to Hillcrest. This temporary access point (AC/2/a) will align with typical layout set out in drawing AQ-UK-DCO-TR-LAY-001 included in Appendix 7.

Proposed Vehicle Management Strategy

6.2.3.3. To ensure that construction access can be safely achieved it is proposed that a

vehicle control system is implemented on Anmore Road using STOP/GO boards. This is considered appropriate given the low number of HGVs that will be required to access this location per day. The system would also only be operational when HGVs are arriving or leaving the site, with traffic able to use Anmore Road as normal at all other times. It is proposed that the STOP/GO boards would be operational between the construction access and east of 126 Anmore Road. The STOP/GO board locations are approximately 150m apart, and thus accounting for the time in which it would take for an HGV to clear this distance and complete the turn into / out of the access, general traffic being held by banksmen are unlikely to be delayed for more than 1-2 minutes.

6.3. TRAFFIC MANAGEMENT

6.3.1.1. Traffic management will be required for the construction of the entire Onshore Cable Route on the highway network and this will be laid out to the requirements of the TSRGD 2016 Chapter 8. The Framework Traffic Management Strategy (REP1-068) details the requirements for traffic management in connection with the construction on the Onshore Cable Route.

7. MANAGEMENT OF ROAD SAFETY

7.1. OVERVIEW

7.1.1.1. This section details strategy and measures that will be taken to ensure road safety is maintained during the Construction Stage. Highway condition is related to road safety and therefore included in this section.

7.2. EXISTING COLLISION RECORD

7.2.1.1. The existing collision record has been assessed in the Supplementary Transport Assessment (REP1-142), taking account of the construction traffic routes to / from the Converter Station Area, Onshore Cable Corridor and wider highway network that may be impacted by construction of the Proposed Development. No issues in relation to the existing highway layout or geometries were identified as part of this assessment.

7.3. LIAISON, MONITORING AND MITIGATION

7.3.1.1. Near misses or collisions resulting in personal injury from construction traffic associated with the Proposed Development will be monitored throughout the programme to identify areas for improvements. A road safety and liaison officer will be appointed and be responsible for continuous monitoring of traffic management and signage. As part of regular reviews to be undertaken with the highway authority, they will make improvements where necessary within the confines of Temporary Traffic Regulation Orders ('TTRO's) and other general construction traffic / directional signage. They will also respond to public concerns and contact details will be provided.

7.3.1.2. The road safety and liaison officer will also be responsible for the continual monitoring of traffic management measures required to facilitate construction of the Onshore Cable Route to ensure the proactive management of road safety. It will be ensured there is sufficient road signage to warn the public and inform construction related traffic to ensure compliance and route choice. There will also be contact telephone numbers for members of the public to raise concerns and the provision of a website will be explored. Receptors that attract vulnerable people will be updated on a regular basis (e.g. schools) as necessary.

7.3.1.3. If during the construction localised mitigation measures are required these will be agreed with the relevant highway authorities and incorporated in to the individual CTMPs.

7.4. HIGHWAY CONDITION

7.4.1.1. Highway condition is closely related to road safety and construction traffic, particularly HGVs can have a negative impact to road condition. Therefore, it is proposed before and after construction pavement condition surveys are undertaken and to assess whether construction activities have resulted in worsening road conditions. These will be undertaken on permitted construction traffic routes and at the location of temporary construction access locations The highway condition surveys would include the following:

- A photographic record of the condition of the extents of roads identified above as impacted by construction works or traffic routes;
- A summary table giving a brief description of visible defects where identified;
- A drawing indicating the approximate location of photographs / defects on plan;
- A short statement outlining the methodology and provide a summary of the findings;
- A meeting with HCC / PCC on site to agree findings of the report and make any reasonable adjustments; and
- A post works report covering the same information and identifying new defects.

7.4.1.2. Weekly conditions surveys will also be produced during the works programme to identify areas that are worsening and will become a hazard to other road users that require immediate action. Where remedial works is required, these will be completed in agreement with the relevant highway authority.

8. ENFORCEMENT OF HGV MOVEMENTS

8.1. OVERVIEW

8.1.1.1. For a CTMP to be effective a robust monitoring process is required to ensure compliance. This section provides details of management techniques that will be used. To ensure effective management, the principal contractor will appoint a dedicated staff member as responsible for the monitoring and enforcement of construction traffic movements to and from the Proposed Development, using the tools and measures identified in this section.

8.2. CONSTRUCTION STAFF INDUCTION

8.2.1.1. All construction staff would complete a staff induction meeting to familiarise all workers with requirements of the construction process. As part of this induction an information pack will also be provided to all contractors, which will include the following details:

- Permitted HGV routes;
- HGV timing restrictions;
- Site rules for the Converter Station and all other construction locations;
- Driver behaviour requirements;
- Traffic incident management plan; and
- CTMP Contact information (emergency and non-emergency).

8.3. HGV ROUTE SIGNAGE

8.3.1.1. Temporary route signage will be installed at key locations on the local highway network to direct construction traffic along permitted routes agreed with the relevant highway authority and as included in Section 3 of this CTMP.

8.3.1.2. The design and locations of these signs would be agreed with the local highway authority prior to installation and would be used to denote routes to and from the Converter Station and cable route construction locations. This would include routes to temporary off-carriageway vehicle access locations where appropriate.

8.3.1.3. As stated in Section 7.3, regular reviews will be undertaken with the Highway Authority to allow route signage to be updated if necessary.

8.4. CONSTRUCTION VEHICLE IDENTIFICATION

8.4.1.1. All construction vehicles associated with the Proposed Development will be identifiable through the use of a dedicated nameplate located on the outside of the vehicle. This will allow vehicles to easily be identified on the local highway network and at site access locations.

8.5. ENFORCEMENT AND CORRECTION MEASURES

8.5.1.1. All incidences of non-compliance with measures contained within the CTMP will be investigated by the principal contractor and documented on a Complaints Register, which will include time, date and nature of complaint and the action taken to resolve it. The contractor will also hold meetings with the local highway authorities and relevant stakeholders (e.g. parish councils) and review / update individual CTMPs where is it is considered necessary to implement additional mitigation measures.

8.5.1.2. In addition, the Applicant will ensure that contractor behaviour and performance is monitored and enforced, and where appropriate that corrective measures are utilised to resolve issues and improve performance.

8.6. INDIVIDUAL CTMPS

8.6.1.1. This Framework CTMP will form the basis for individual CTMPs to be produced. These will be approved by the relevant Highway Authority. The individual CTMPs will provide details of:

- Construction vehicle routing;
- A highway condition survey of all routes proposed and accesses;
- Details of road closures / traffic management measures;
- Specific details regarding abnormal loads;
- Details of the interventions to the highway that are required to enable construction works (permanent or temporary) and reinstatements;
- Specific details regarding traffic management and construction management of vehicle movements such as temporary signage, requirements for a banksman or escort vehicles, wheel washing etc;
- Details of monitoring and enforcement measures, including contact details for the member of staff responsible for these tasks; and
- Details of construction staff travel arrangements / travel plan.

8.6.1.2. The works will be broken down into a number of phases. . This will result in a number of individual CTMPs being prepared to cover different phases and also stage of works which could include:

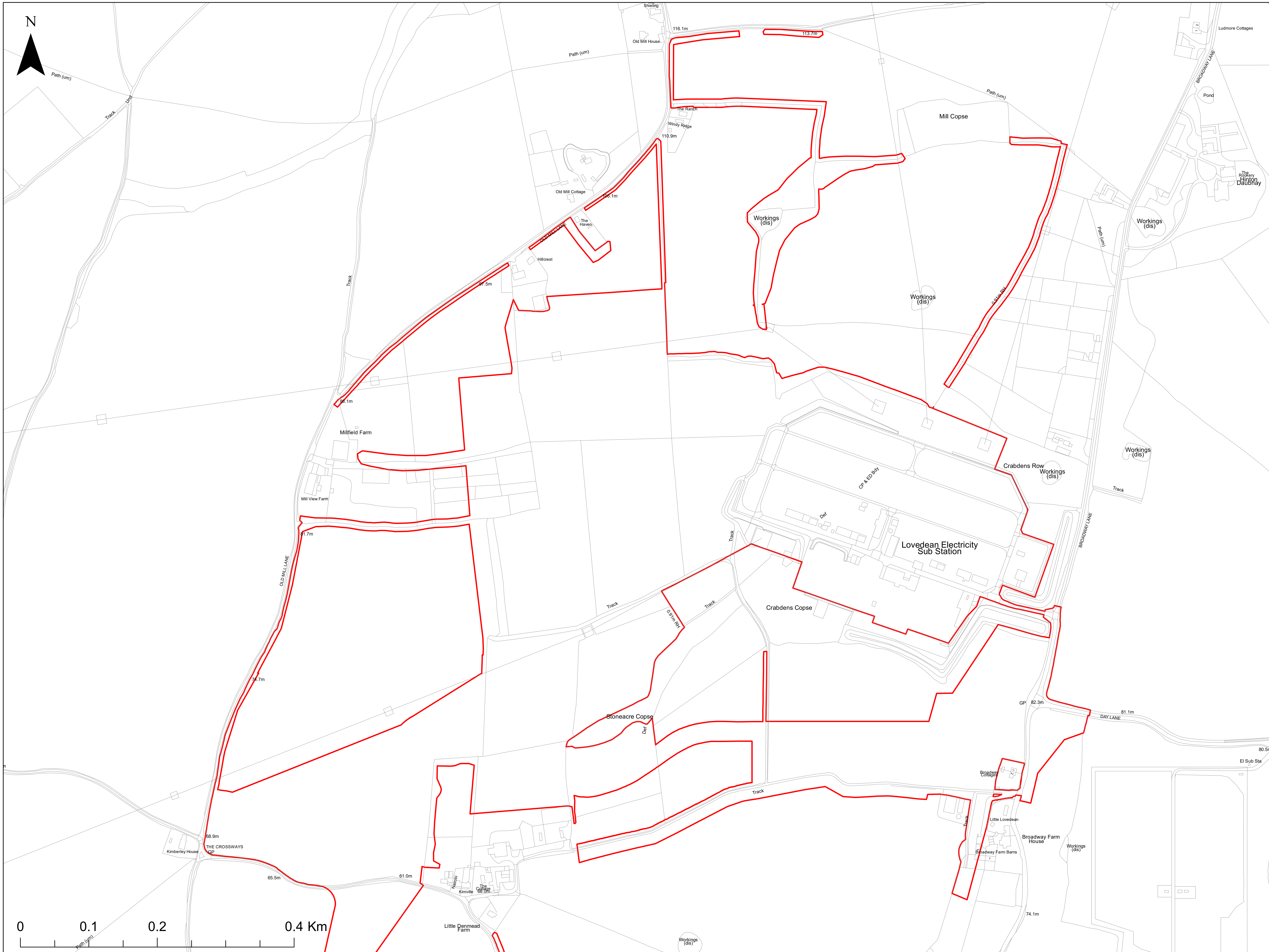
- Enabling and permanent works; and
- Specific works including Landfall, landfall head house, the Onshore Cable Route, construction compounds, HDD, Trenchless Solutions at the south coast railway, and the Converter Station works.

8.7. COMPLIANCE AND MONITORING

8.7.1.1. Several key points of contact will be made for the project who will liaise with relevant planning/highway authority and ensure coordination between contractors for all the section of works during the entire construction programme. This will facilitate a clear communication channel to ensure compliance.

8.7.1.2. The individual CTMPs will provide details of the monitoring process and who is responsible with contact details. These will be developed and agreed with the relevant Highway Authority.

Appendix 1 – Order Limits



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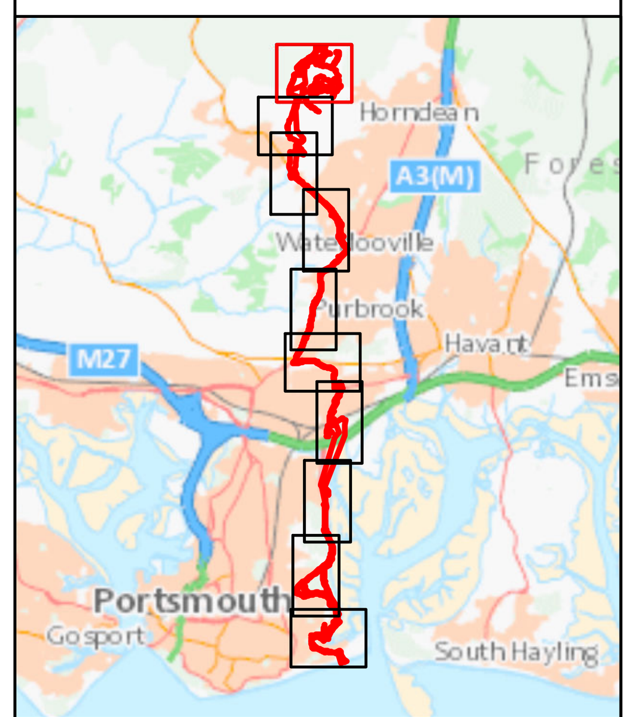

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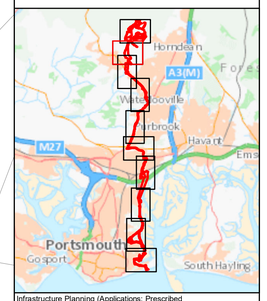

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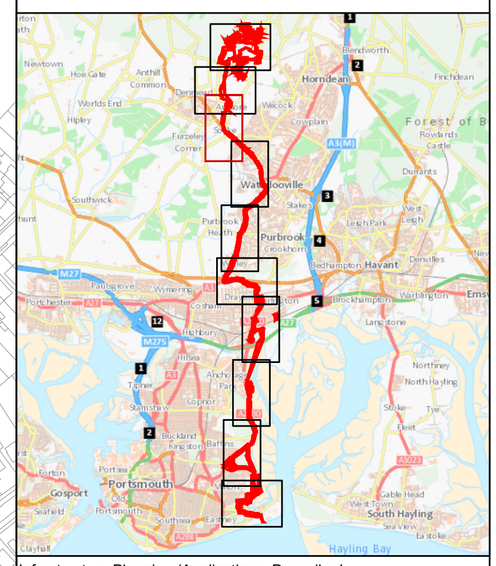

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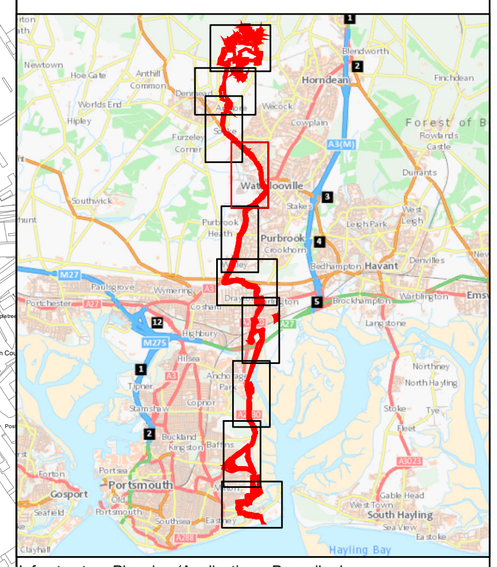

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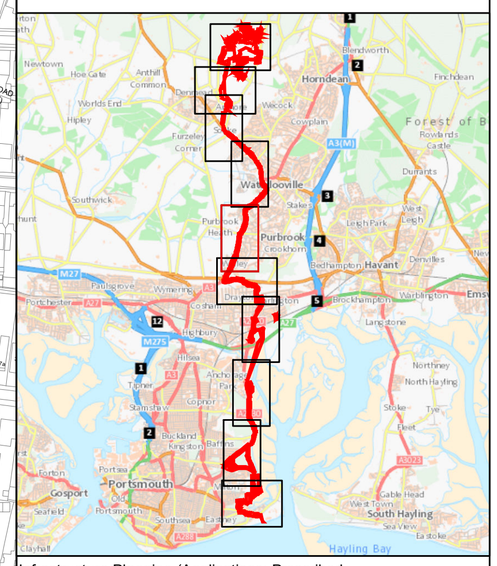

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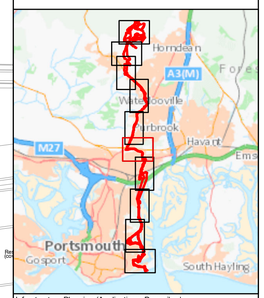

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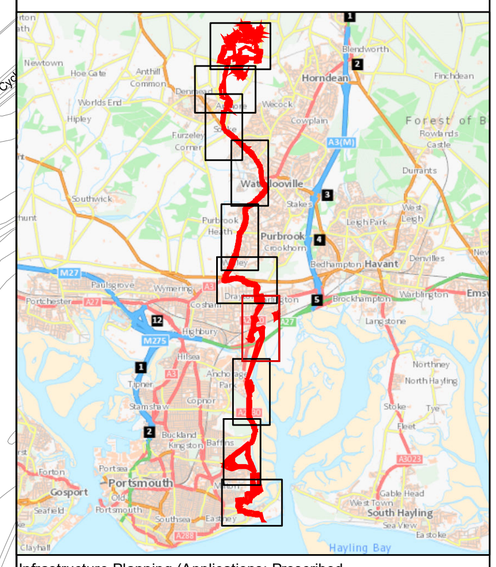

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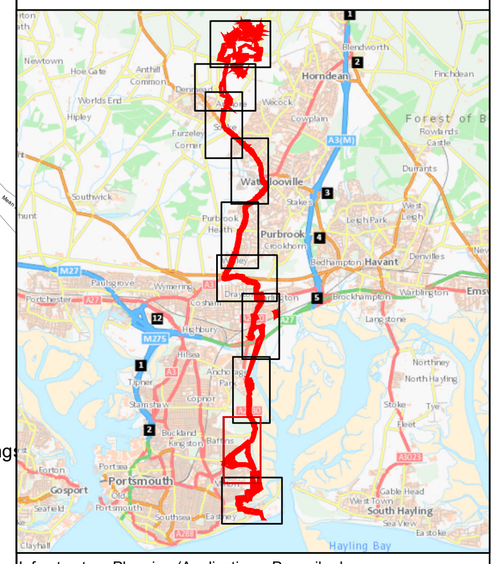

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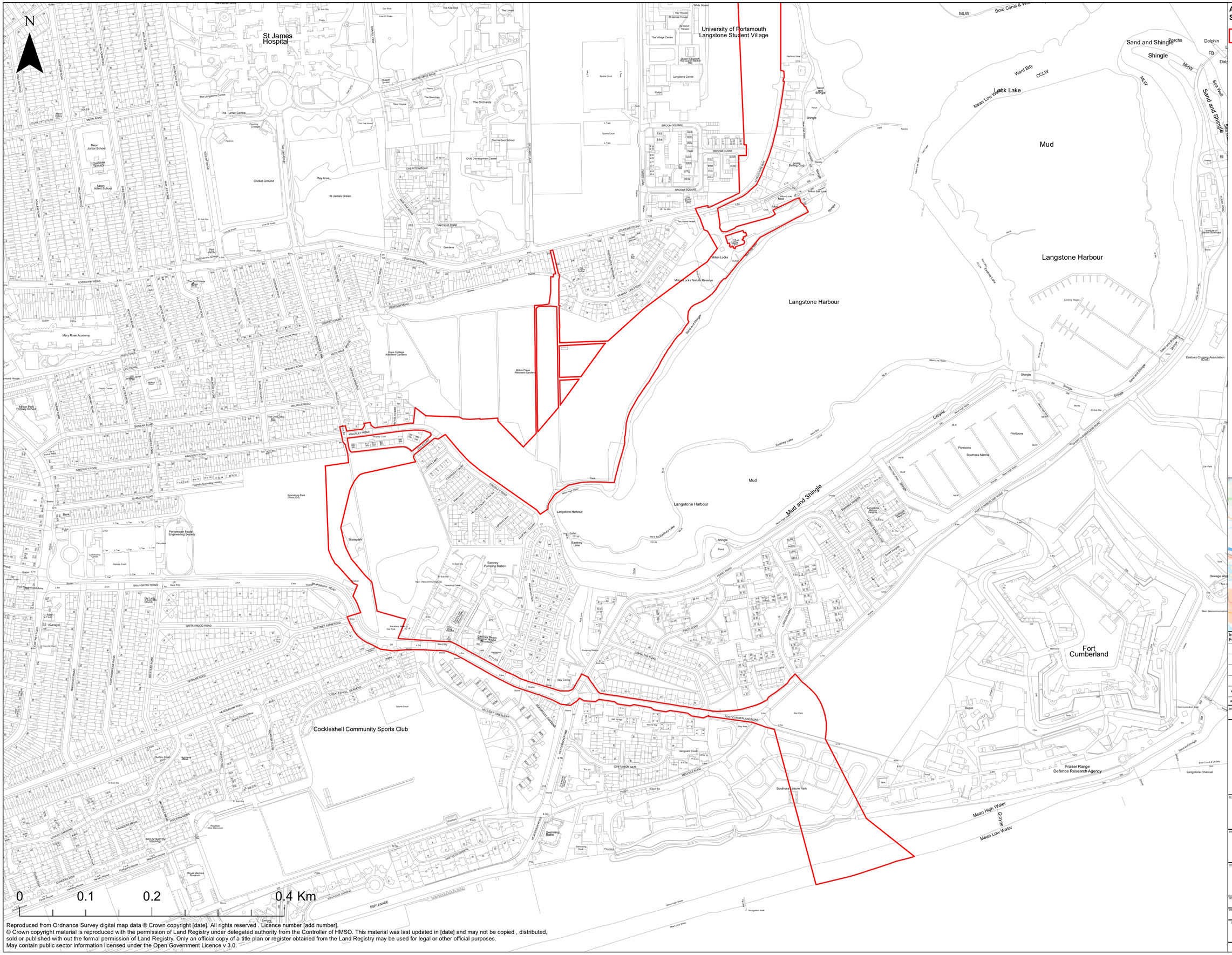

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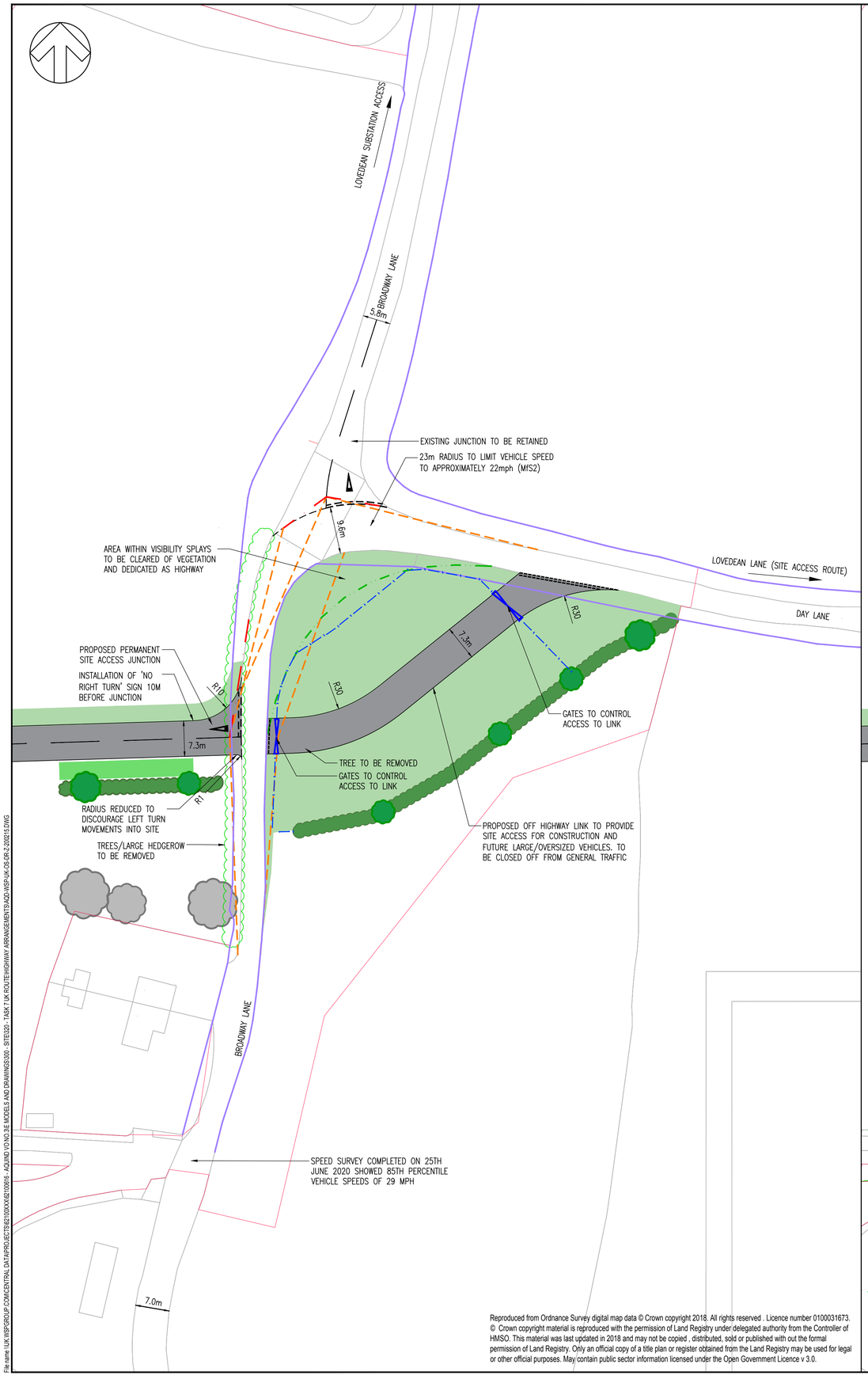
DRAWING NO: REV NO. 01

Appendix 2 – Converter Station Access Drawing



NOTES

1. ALL DIMENSIONS SHOWN ARE IN METRES UNLESS OTHERWISE STATED.
2. CONFLICTING INFORMATION SHOWN ON THE ENGINEER'S DRAWINGS OR DISCREPANCIES BETWEEN THE INFORMATION GIVEN BY THE ENGINEER AND THAT PROVIDED BY OTHERS MUST BE REFERRED TO THE ENGINEER BEFORE THE WORKS COMMENCE.
3. MANUAL FOR STREETS (MfS) AND MANUAL FOR STREETS 2 (MfS2) STANDARDS HAVE BEEN ADOPTED TO EVALUATE APPROPRIATE VISIBILITY AND SPEEDS. THIS STANDARD IS TYPICALLY APPLIED TO URBAN AREAS BUT FOR THESE ELEMENTS IS MORE SUITABLE FOR MINOR RURAL ROADS THAN DMRB STANDARDS.
4. 85TH PERCENTILE SPEEDS OF 31mph MEASURED SOUTHBOUND JUST BEFORE BEND TO NORTH OF ACCESS, AND 29mph MEASURED NORTHBOUND SOUTH OF THE ACCESS.
5. 45m SSD BASED ON MfS TABLE 7.1
6. ARTICULATED LORRY / LOW LOADER VEHICLE MOVEMENTS INTO ACCESS JUNCTION AND EXISTING SUBSTATION JUNCTION WILL TAKE UP WIDTH OF CARRIAGEWAY SO WILL REQUIRE CONTROL.

KEY

- DEVELOPMENT CONSENT ORDER BOUNDARY
- HIGHWAY BOUNDARY / ASSUMED HIGHWAY BOUNDARY
- 45m FORWARD VISIBILITY
- 2.4m x 45m VISIBILITY SPLAY
- 2.4m x OUTSIDE OF BEND VISIBILITY SPLAY
- MAXIMUM VISIBILITY WITHOUT PARKING
- MAXIMUM VISIBILITY WITH PARKING
- PROPOSED FENCING
- PROPOSED GATE

KEY TO HEALTH AND SAFETY SYMBOLS

SERVICES SHOWN ON RECORD MAPPING WITHIN PROPOSED WORKS:
- 132kV POWER CABLES
- 11kV OVERHEAD POWER LINES
- GAS
- POTABLE WATER
- TELECOM SERVICES

SERVICES KEY

DISCLAIMER NOTE

INFORMATION ON THE LOCATION AND SIZE FOR EACH SERVICE HAS BEEN BASED ON RECORD INFORMATION PROVIDED BY THE RELEVANT SERVICE COMPANIES. THE POSITIONS SHOWN ARE INDICATIVE ONLY AND MAY NOT BE COMPLETE. THE PRESENCE OF SERVICES ON SITE SHOULD BE VERIFIED PRIOR TO ANY CONSTRUCTION WORK OR INTRUSIVE INVESTIGATIONS.

- EXISTING GAS PIPE
- EXISTING HIGH VOLTAGE (OVERHEAD)
- EXISTING EXTRA HIGH VOLTAGE (U/G)
- EXISTING VODAFONE CABLE
- EXISTING BRITISH TELECOM (U/G)
- EXISTING POTABLE WATER PIPE

Infrastructure Planning (Applications: Prescribed Forms & Procedure) Regulations 2009 - Regulation 5(2)(i)

REV	DATE	BY	DESCRIPTION	CHK	APP
04	18/09/2020	AVI	AMENDED AS PER HCC COMMENTS	CW	CW
03	30/04/2020	AVI	ADDITION OF LANDSCAPE MITIGATION DETAILS AND ADDITIONAL VISIBILITY SPLAYS	CW	CW
02	31/10/2019	MFB	UPDATED DRG FRAME & ADDED TREE LOCATIONS	CW	CW
01	19/09/2019	MFB	FIRST ISSUE	CW	CW

DRAWING STATUS: SUBMISSION FOR APPROVAL

Grosvenor House, 2 Grosvenor Square, Southampton, SO15 2BE, UK
T+ 44 (0) 2380 101 700
wsp.com

CLIENT: AQUIND

PROJECT: AQUIND Interconnector

TITLE: BROADWAY LANE SITE ACCESS JUNCTION - OPTION B GENERAL ARRANGEMENT

SCALE AT A1:	CHECKED:	APPROVED:
1:500	CW	CW

PROJECT No:	DESIGNED:	DRAWN:	DATE:
62100616	MFB	MFB	19/09/2019

DRAWING No: AQD-WSP-UK-OS-DR-Z-200215 REV: 04

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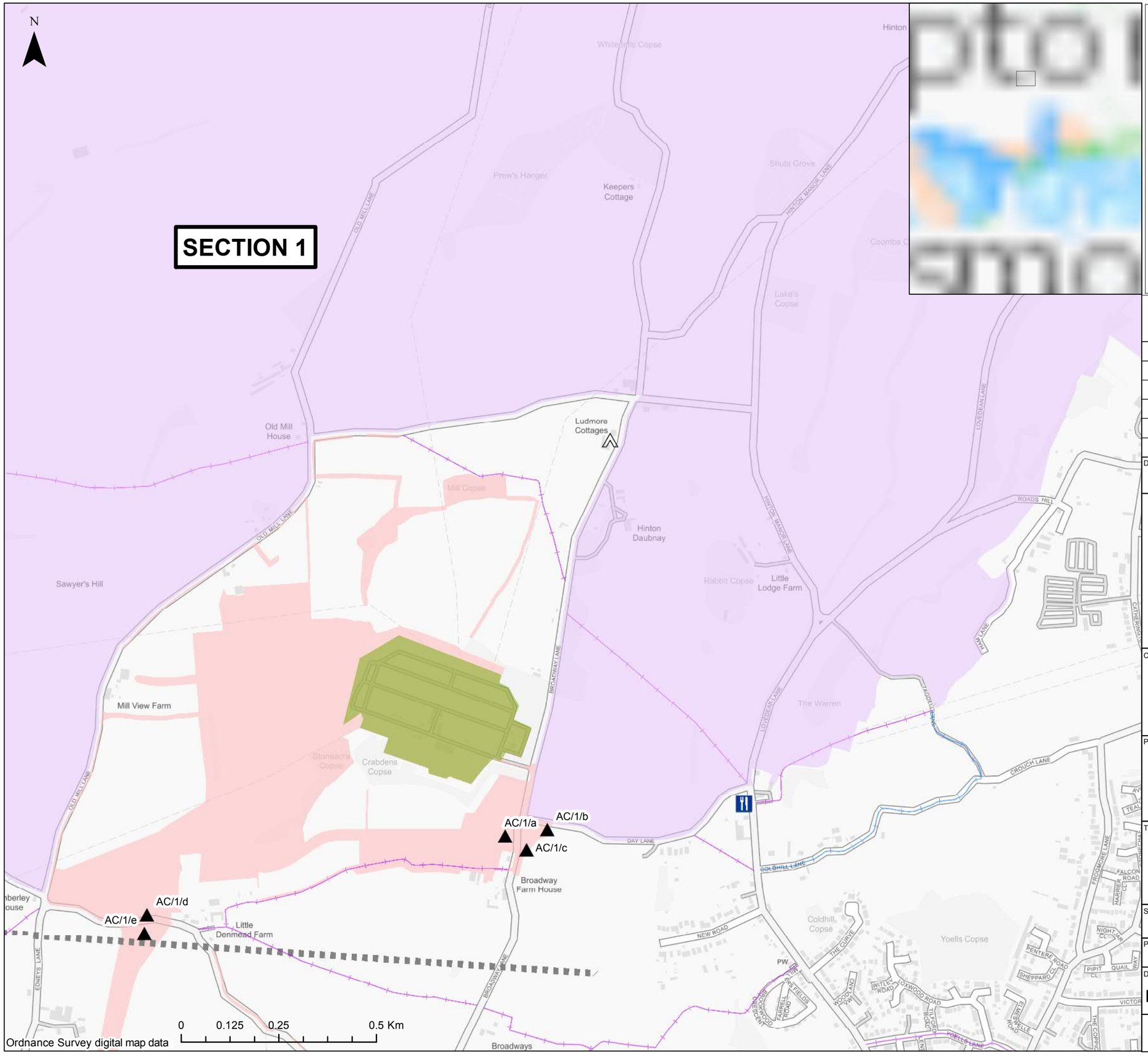
Appendix 3 – Construction Programme

Indicative Programme

Key Task	2021			2022			2023			2024		
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
HDD and Landfall Construction (Onshore)												
Onshore HVDC Route Construction / Cable Installation												
Converter Station Commissioning												

Appendix 4 – Sensitive Receptors and Temporary Access Locations



AQUIND Interconnector

South Downs National Park

Access Point

TYPE

Campsite

Pub

Public Rights of Way

BOAT

Footpath

Section Breaks

Order Limits

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(i)

REV	DATE	BY	DESCRIPTION	CHK	APP
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02	18/09/2020	SG	REVISED ORDER LIMIT	CW	CW
01	13/11/2019	SG	FIRST ISSUE	CW	CW

DRAWING STATUS: FINAL

WSP House, 70 Chancery Lane, London, WC2A 1AF, UK,
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wsp.com

CLIENT: AQUIND

PROJECT: AQUIND Interconnector

TITLE: CTMP Sensitive Receptors - Section 1

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PROJECT NO:	DESIGNED:	DRAWN:	DATE:
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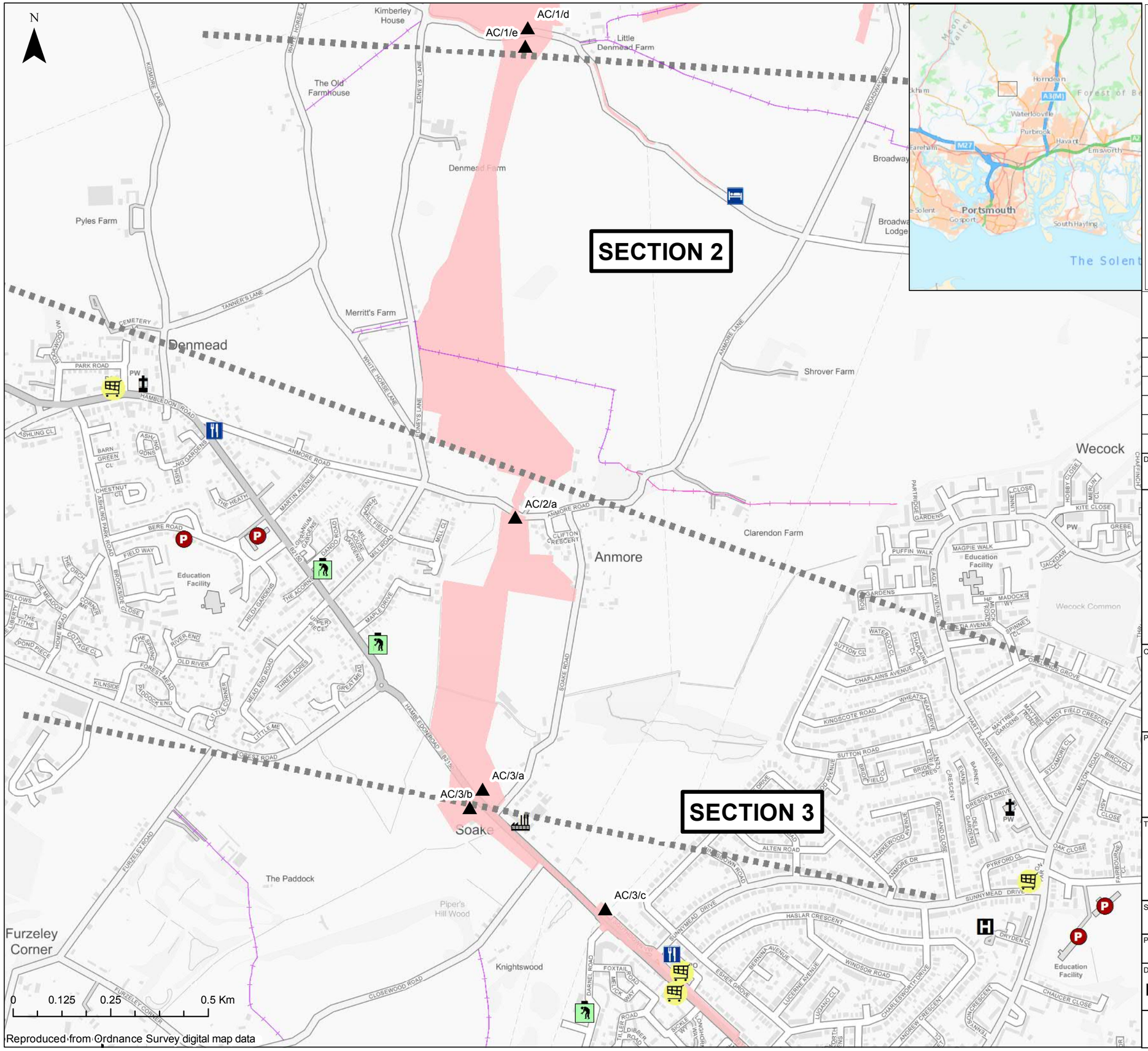
DRAWING NO: EN020022-ESAPPENDIX-22.1.F.1

REV.NO. 02



AQUIND Interconnector
Access Point

TYPE
B&B
Campsite
Caravan Park
Care Home
Church
Community Centre
Education
Guesthouse
Industrial Estate
Leisure
Lifeboat Station
Marina
Medical Group
Pub
Retail
Scout Hut

Order Limits
Public Rights of Way
Bridleway
Footpath
School Type
Primary

Section Breaks

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(i)

REV	DATE	BY	DESCRIPTION	CHK	APP
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01	13/11/2019	SG	FIRST ISSUE	CW	CW

DRAWING STATUS:
FINAL

WSP House, 70 Chancery Lane, London, WC2A 1AF, UK,
T+ 44 (0) 020 7314 5000
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CLIENT:
AQUIND

PROJECT:
AQUIND Interconnector

TITLE:
Sensitive Receptors and Access Points
Section 2/3

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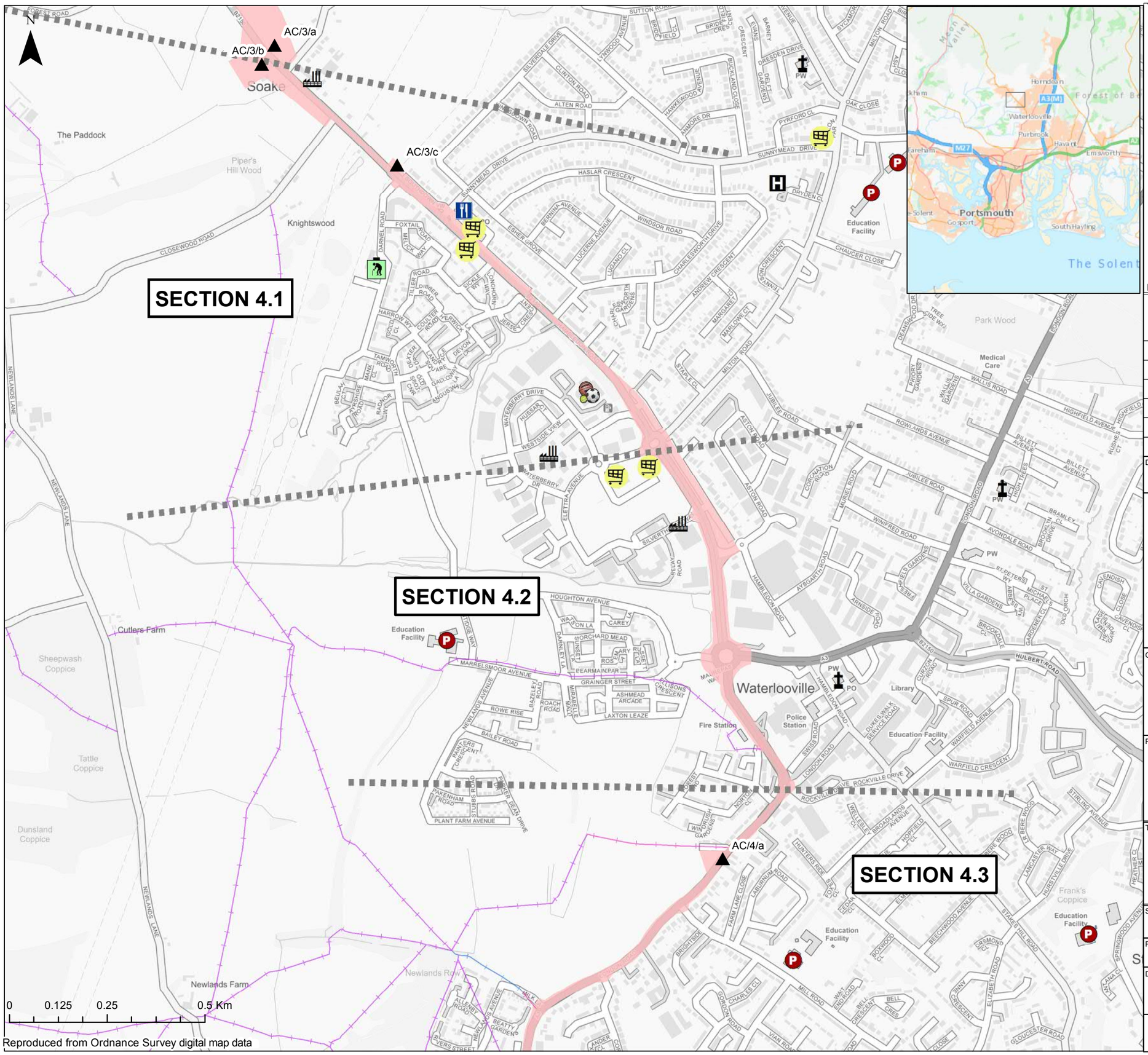
REV.NO. 02



Access Point

TYPE

- Care Home
- Church
- Industrial Estate
- Leisure
- Medical Group
- Pub
- Retail

Order Limits

Public Rights of Way

- Bridleway
- Footpath
- Restricted Byway
- Primary
- Secondary

Section Breaks

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(i)

REV	DATE	BY	DESCRIPTION	CHK	APP
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01	13/11/2019	SG	FIRST ISSUE	CW	CW

DRAWING STATUS: FINAL

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CLIENT: AQUIND

PROJECT: AQUIND Interconnector

TITLE: Sensitive Receptors and Access Points Section 4.1 / 4.2 / 4.3

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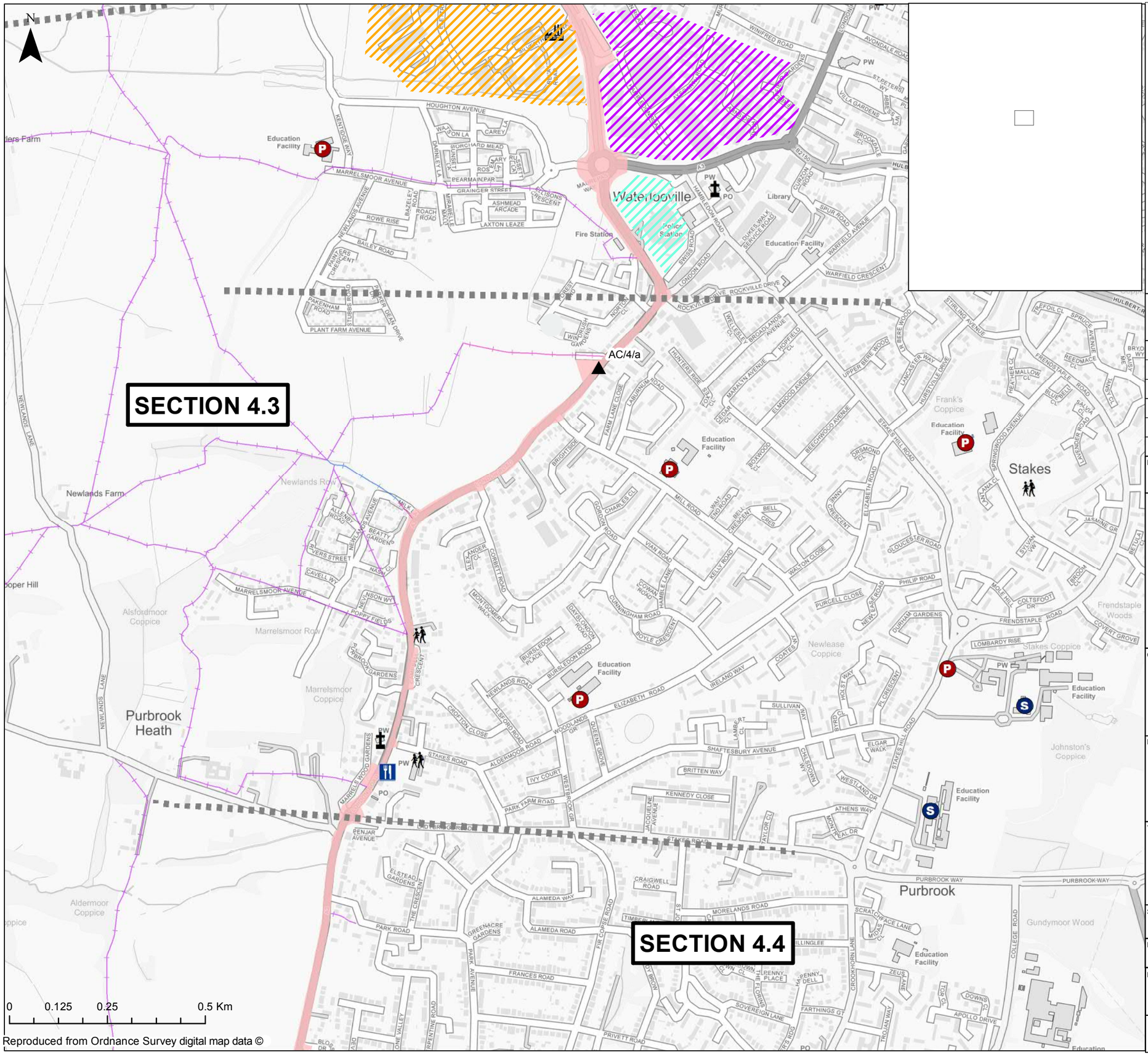
DRAWING NO: EN020022-ESAPPENDIX-22.1.F.3 REV.NO. 02



Reproduced from Ordnance Survey digital map data ©

AQUIND Interconnector

Access Point

TYPE

Church

Community Centre

Industrial Estate

Pub

Asda Waterlooville

Waterlooville Industrial Estate

Waterloo Park Industrial Estate

School Type

Primary

Secondary

Public Rights of Way

BOAT

Bridleway

Footpath

Restricted Byway

Section Breaks

Order Limits

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(i)

REV	DATE	BY	DESCRIPTION	CHK	APP
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02	18/09/2020	SG	REVISED ORDER LIMIT	CW	CW
01	13/11/2019	SG	FIRST ISSUE	CW	CW

DRAWING STATUS: FINAL

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CLIENT: AQUIND

PROJECT: AQUIND Interconnector

TITLE: Sensitive Receptors and Access Points
Section 4.3 / 4.4

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PROJECT NO:	DESIGNED:	DRAWN:	DATE:
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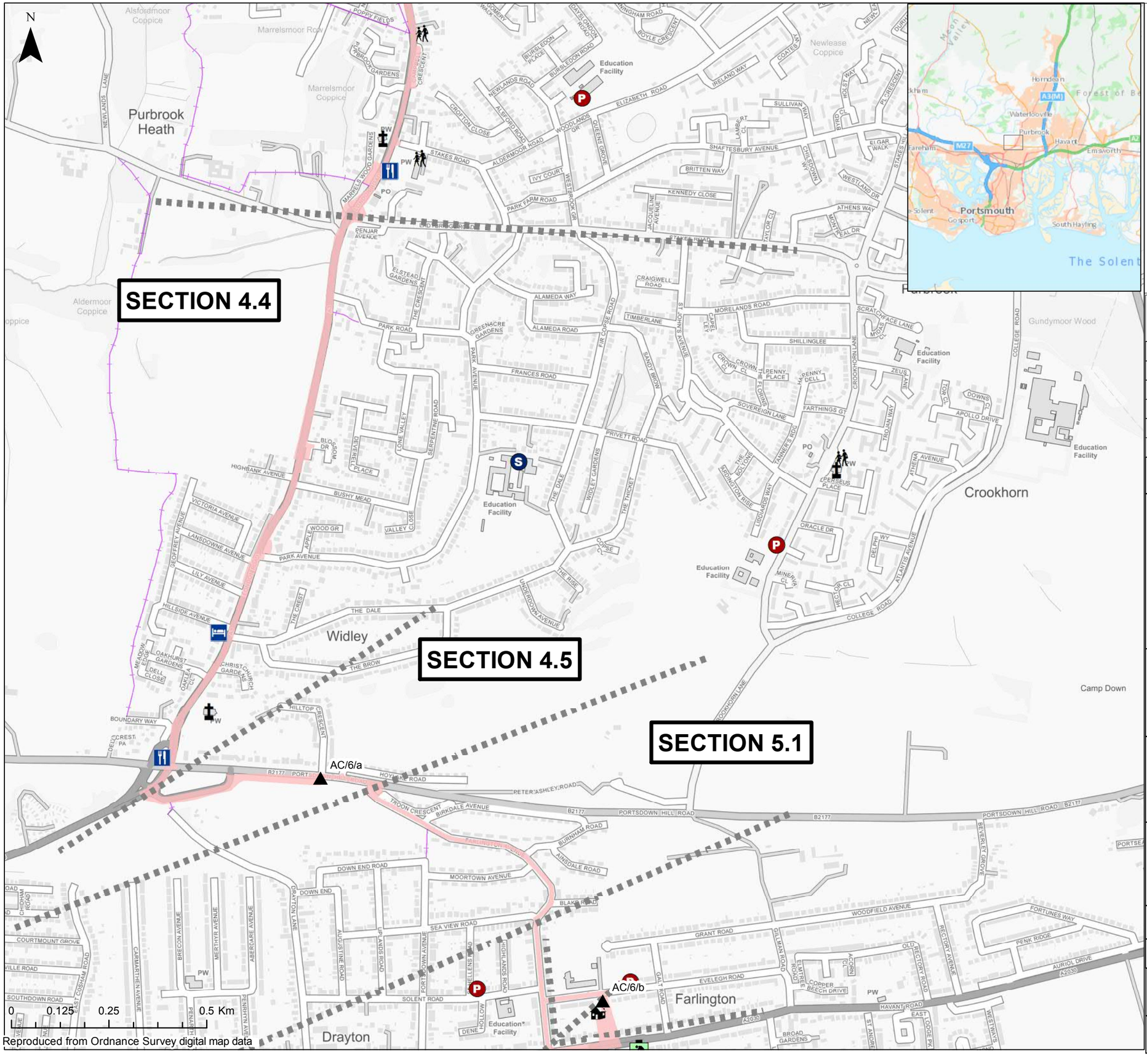
DRAWING NO: EN020022-ESAPPENDIX-22.1.F.4

REV.NO. 02



Access Point

TYPE

Care Home

Church

Community Centre

Guesthouse

Pub

Scout Hut

Section Breaks

Order Limits

School Type

Primary

Secondary

Public Rights of Way

Footpath

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(i)

REV	DATE	BY	DESCRIPTION	CHK	APP
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01	13/11/2019	SG	FIRST DRAFT	CW	CW

DRAWING STATUS:

FINAL

WSP House, 70 Chancery Lane, London, WC2A 1AF, UK,
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CLIENT:

AQUIND

PROJECT:

AQUIND Interconnector

TITLE:

Sensitive Receptors and Access Points
Section 4.4 / 4.5 / 5.1

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PROJECT NO:	DESIGNED:	DRAWN:	DATE:
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DRAWING NO:	REV.NO.
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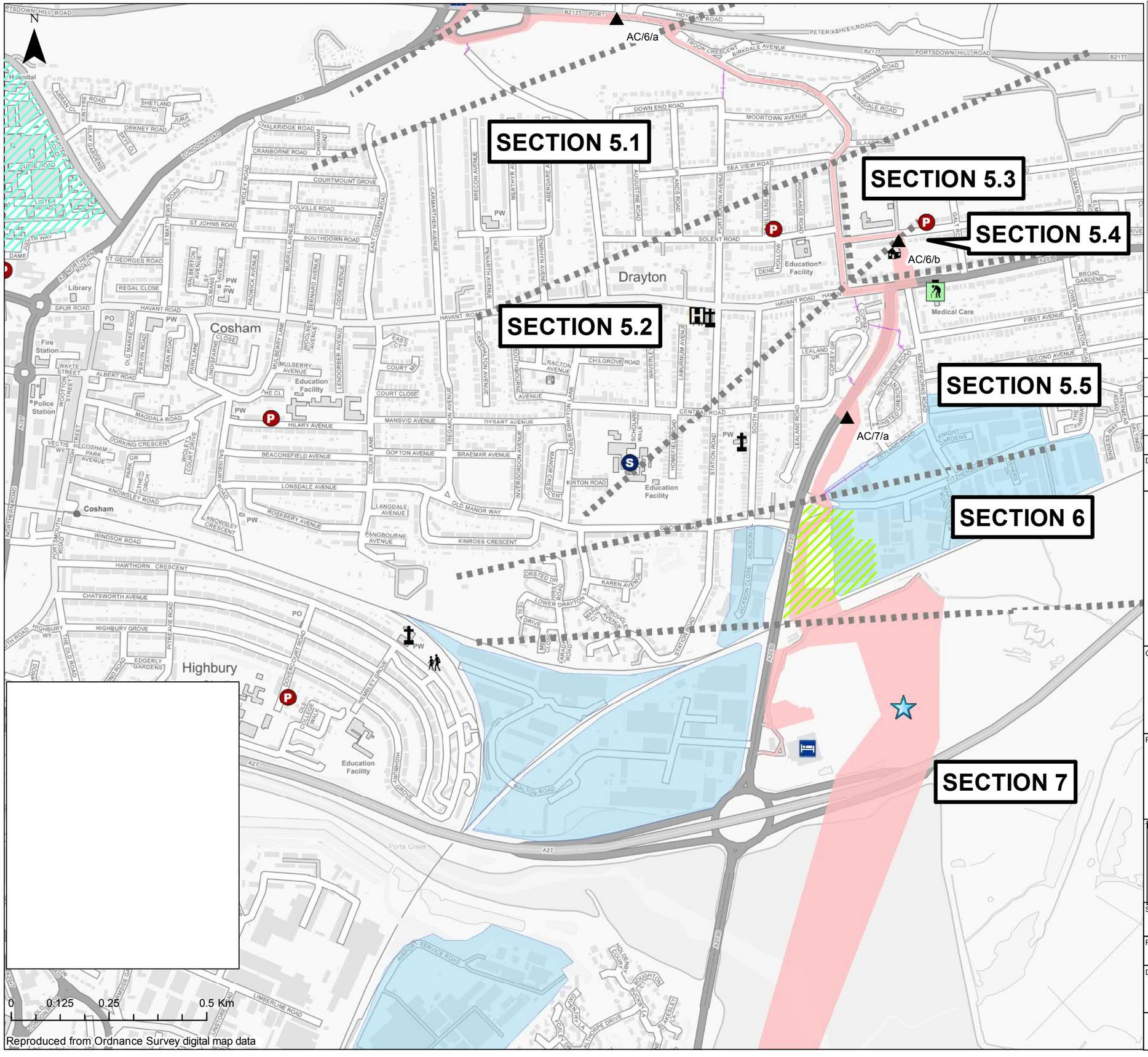

TYPE

- Access Point
- Care Home
- Church
- Community Centre
- Guesthouse
- Medical Group
- Pub
- Scout Hut
- Victorious Music Festival
- Section Breaks
- Order Limits
- Public Rights of Way
- Footpath
- Industrial Estate
- School Type
- Primary
- Secondary
- Queen Alexandra Hospital
- Sainsburys

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(i)

REV	DATE	BY	DESCRIPTION	CHK	APP
03	21/12/2020	SG	RECEPTOR AMENDMENTS	CW	CW
02	18/09/2020	SG	REVISED ORDER LIMIT	CW	CW
01	13/11/2019	SG	FIRST ISSUE	CW	CW

DRAWING STATUS: FINAL

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CLIENT: AQUIND

PROJECT: AQUIND Interconnector

TITLE: Sensitive Receptors and Access Points
Section 5.1 / 5.2 / 5.3 / 5.4 / 5.5 / 6 / 7

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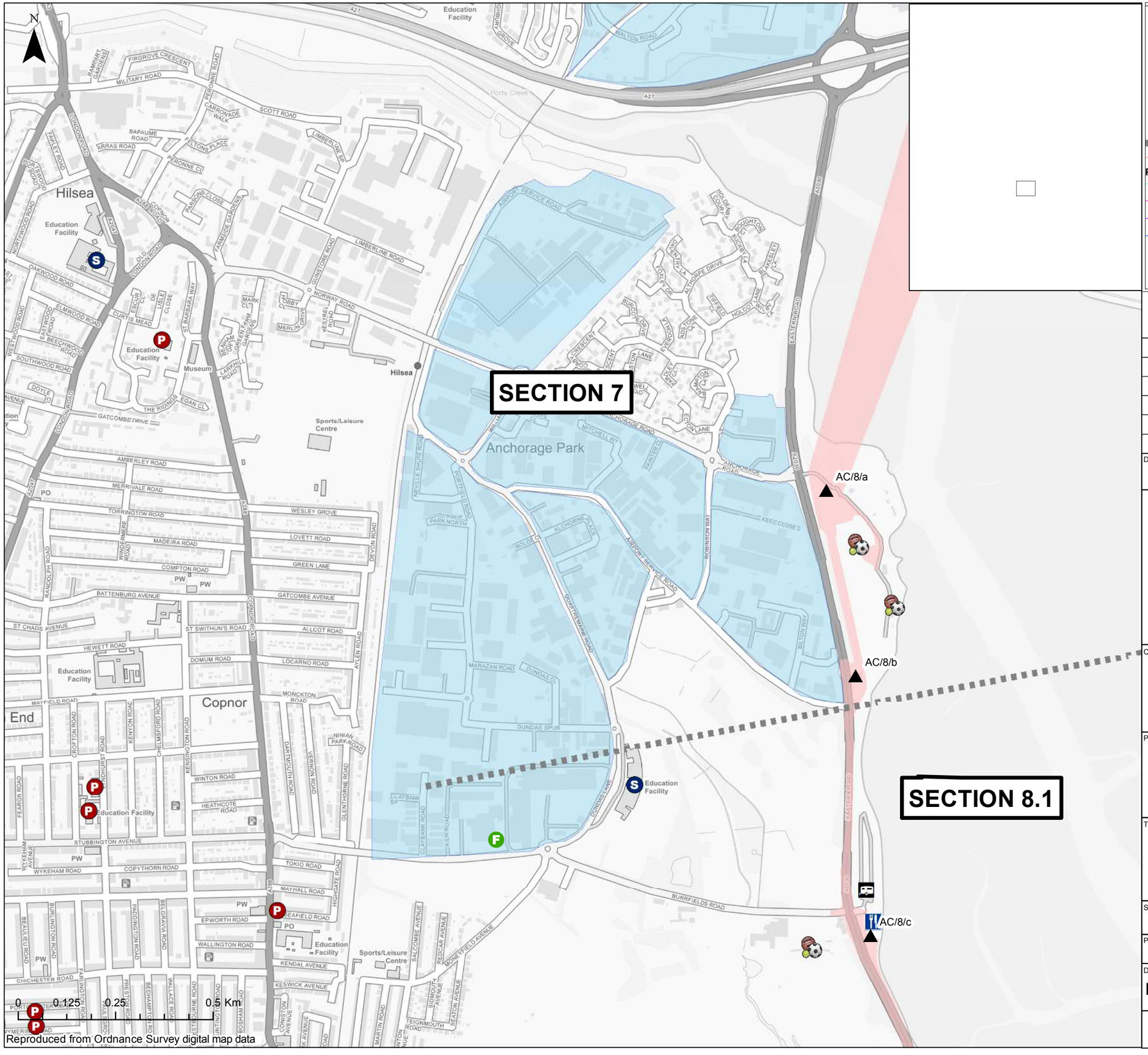

Access Point

TYPE

Caravan Park

Leisure

Pub

Section Breaks

Order Limits

Public Rights of Way

BOAT

Bridleway

Footpath

Restricted Byway

School Type

Nursery

Primary

Middle Deemed Primary

Secondary

Middle Deemed Secondary

Further Education

All Through

Other Educational Facility

Industrial Estate

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(i)

REV	DATE	BY	DESCRIPTION	CHK	APP
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02	18/09/2020	SG	REVISED ORDER LIMIT	CW	CW
01	13/11/2019	SG	FIRST ISSUE	CW	CW

DRAWING STATUS: FINAL

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CLIENT: AQUIND

PROJECT: AQUIND Interconnector

TITLE: Sensitive Receptors and Access Points Section 7 / 8.1

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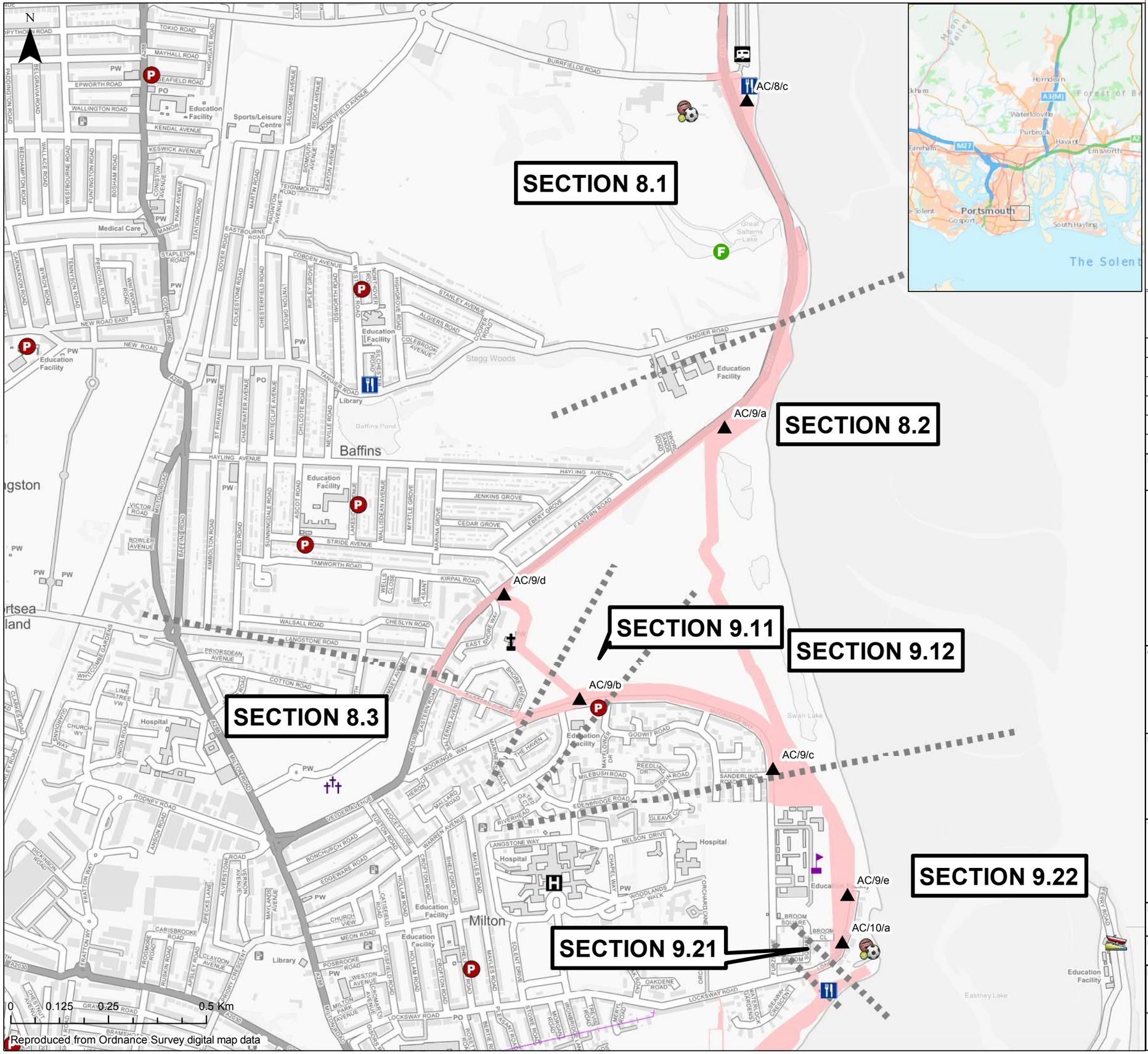
DRAWING NO: EN020022-ESAPPENDIX-22.1.F.7 REV.NO. 02



Access Point
Section Breaks
Order Limits
Public Rights of Way
Footpath
TYPE
Caravan Park
Cemetery
Church
Education
Leisure
Lifeboat Station
Medical Group
Pub
School Type
Primary
Secondary
Further Education

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(i)

REV	DATE	BY	DESCRIPTION	CHK	APP
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01	13/11/2019	SG	FIRST ISSUE	CW	CW

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WSP House, 70 Chancery Lane, London, WC2A 1AF, UK,
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CLIENT: AQUIND

PROJECT: AQUIND Interconnector

TITLE: Sensitive Receptors and Access Points
Section 8.1 / 8.2 / 8.3 / 9.11 / 9.12 / 9.21 / 9.22

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PROJECT NO:	DESIGNED:	DRAWN:	DATE:
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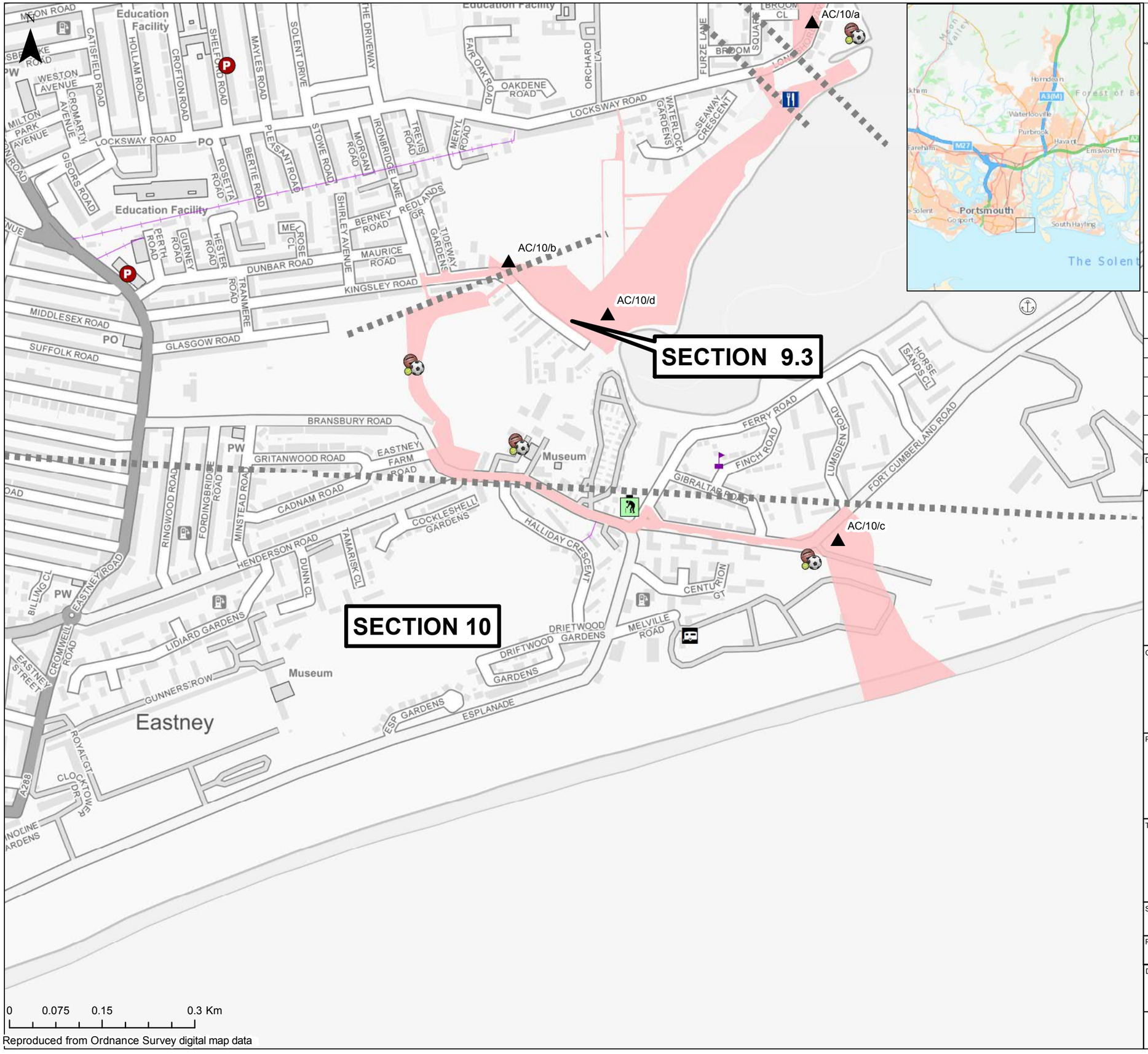

Access Point
Education
Section Breaks
Public Rights of Way
Footpath
Order Limits
School Type
Primary

TYPE
Caravan Park
Care Home
Leisure
Marina
Pub

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(i)

REV	DATE	BY	DESCRIPTION	CHK	APP
02	18/09/2020	SG	REVISED ORDER LIMITS	CW	CW
01	13/11/2019	SG	FIRST ISSUE	CW	CW

DRAWING STATUS: FINAL

WSP House, 70 Chancery Lane, London, WC2A 1AF, UK,
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wsp.com

CLIENT: AQUIND

PROJECT: AQUIND Interconnector

TITLE: Sensitive Receptors and Access Points Section 9.3 / 10

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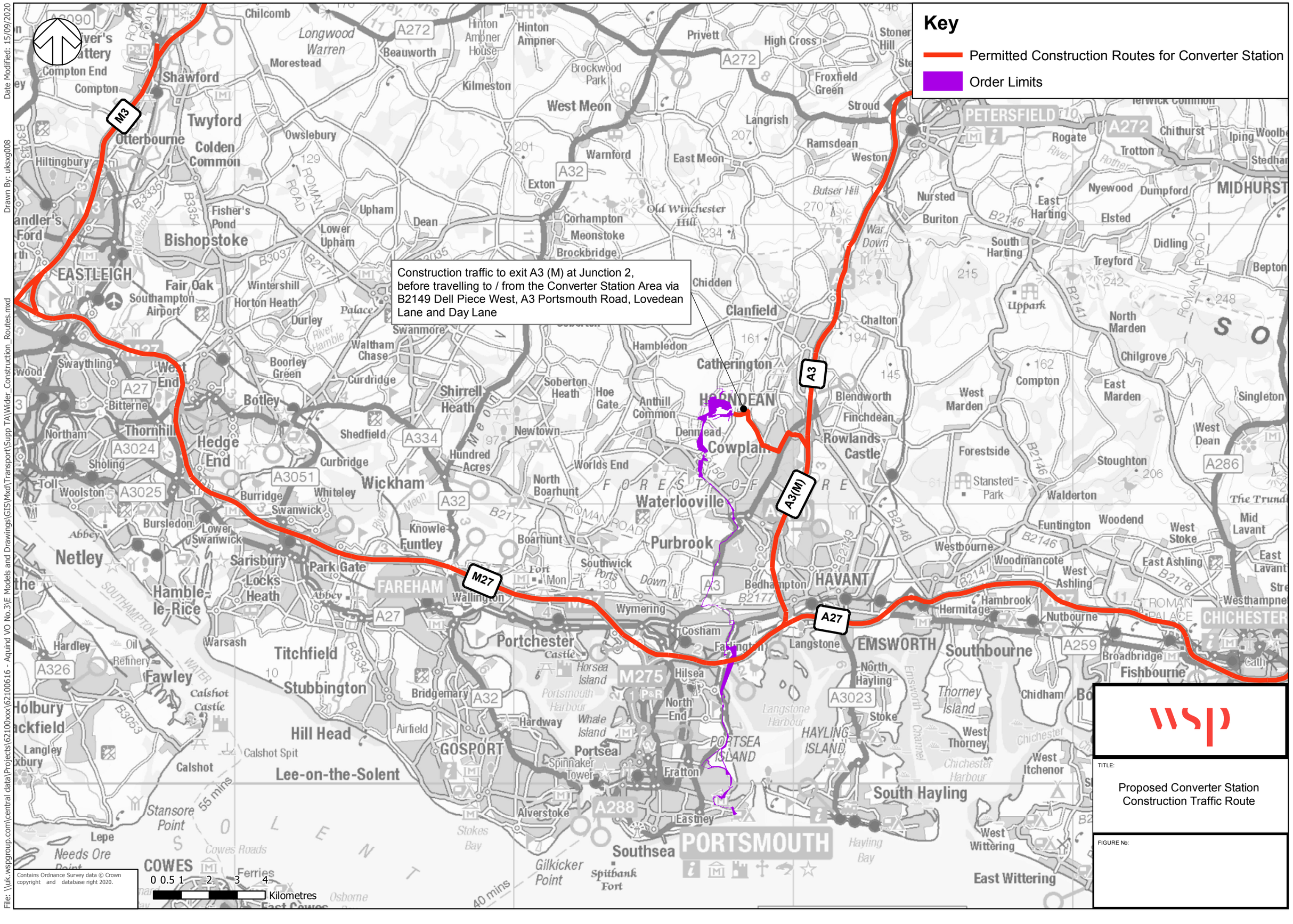
PROJECT NO:	DESIGNED:	DRAWN:	DATE:
EN020022	SG	SG	18/09/2020

DRAWING NO: EN020022-ESAPPENDIX-22.1.F.9
REV.NO. 02

Appendix 5 – Construction Traffic Routes



Date Modified: 15/09/2020

Drawn By: uksxg008

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wsp

TITLE:

Proposed Converter Station Construction Traffic Route

FIGURE No:

Appendix 6 – Framework Construction Worker Travel Plan

AQUIND Limited

AQUIND INTERCONNECTOR

Framework Construction Worker Travel Plan

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

Document Ref: 6.3.22.2

PINS Ref.: EN020022

AQUIND Limited

AQUIND INTERCONNECTOR

Framework Construction Worker Travel Plan

PINS REF.: EN020022

DOCUMENT: 6.3.22.2

DATE: OCTOBER 2020

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DOCUMENT

Document	Framework Construction Worker Travel Plan
Revision	002
Document Owner	WSP UK Limited
Prepared By	S. Gander
Date	01 October 2020
Approved By	C. Williams
Date	06 October 2020

CONTENTS

TABLES

PLATES

1. INTRODUCTION

1.1. INTRODUCTION

1.1.1.1.1 This Framework Construction Worker Travel Plan (CWTP) has been prepared by WSP on behalf of AQUIND Limited, the Applicant for the AQUIND Interconnector - an electricity interconnector between France and UK (the "Project"), in support of the Promoter's application for a Development Consent Order (DCO) (the "Application") in respect of the components of the Project located in the UK, the UK Territorial Waters and UK Exclusive Economic Zone (the 'Proposed Development'). Such components include the Onshore Components, comprising the Converter Station Area, the Onshore Cable Corridor and the Landfall, and the Marine Components.

1.1.1.1.2 The Framework CWTP relates to construction stage of the Converter Station Area and Onshore Cable Route of the Proposed Development.

1.1.1.1. The Framework CWTP applies to the construction workforce for the Onshore components of the Proposed Development, using the Converter Station Area as the primary construction compound. For the purposes of assessment within the Transport Assessment and Supplementary Transport Assessment, together with this Framework CWTP, it has been assumed all workers associated with the construction of the Onshore Components of the Proposed Development will start and finish their working day at the Converter Station Area. This provides a robust assessment of impacts associated with constructer worker trips.

1.1.1.2. This document is an Appendix to the Framework Construction Traffic Management Plan (FCTMP). It is a requirement of the draft Development Consent Order that appointed contractors will have to prepare their own final Construction Traffic Management Plans and this will necessitate preparation of final CWTP.

1.1.1.1.3 The Framework CWTP details the tasks involved in developing initiatives for the Travel Plan, including management and co-ordination, which are set in the context of clear objectives to increase use of sustainable travel options and reduce single-occupancy car trips to and from the Proposed Development.

1.2. BENEFITS OF A WORKPLACE TRAVEL PLAN

1.2.1.1.1 This Framework CWTP is a requirement of the planning application process, to support the aims of sustainable development and to help mitigate the transport demands and potential traffic impacts of the construction of the Converter Station and Onshore Cable Route.

1.2.1.1.2 Travel Plans establish a number of key benefits that extend to employees and the broader local area. These key benefits include:

- Improved quality of life for employees - through adopting healthier lifestyles e.g. replacing short car journeys with walking and cycling;
- Improved local air quality - through reduced traffic congestion in the local community, as a result of the use of alternative modes of the private car for many local journeys;
- Less vehicle congestion on local roads - as a result of fewer cars attempting to depart and access the construction site; and
- Cost savings for car sharers - by sharing journeys with colleagues, employees can benefit from sharing the financial and time cost of making these journeys.

1.2.1.1.3 By identifying an appropriate package of measures and ensuring a consistent approach to delivering a CWTP, a number of stakeholders will experience the benefits.

1.3. TRAVEL PLAN DOCUMENT STRUCTURE

1.3.1.1.1 This Framework CWTP is set out in a further seven chapters:

- **Chapter 2** outlines the site access opportunities including current walking, cycling and public transport links, and the development proposals;
- **Chapter 3** sets out the Travel Plan vision and objectives;
- **Chapter 4** sets out the Travel Plan management strategy;
- **Chapter 5** outlines the Travel Plan measures;
- **Chapter 6** details the Travel Plan implementation action plan;
- **Chapter 7** presents targets and monitoring; and
- **Chapter 8** concludes the Travel Plan.

2. DEVELOPMENT PROPOSALS AND ACCESSIBILITY

2.1. INTRODUCTION

2.1.1.1.1 This chapter outlines the development proposals and reviews the existing transport conditions near the proposed construction site. Details of the existing walking and cycling networks, and public transport services are presented, along with a brief description of the local highway network.

2.2. SITE LOCATION

2.2.1.1.1 The proposed site location for the construction of the Converter Station is located within agricultural land in proximity to the village of Lovedean, Hampshire. Lovedean is located approximately 13.5km to the north of Portsmouth city centre.

Figure 2.1 – Site location

2.2.1.1.2 The Converter Station Area spans a number of small fields divided by hedgerows.

2.2.1.1.3 Individual farm properties are situated to the north, west and south of the Converter Station Area, connected by rural lanes. The existing Lovedean substation, associated pylons and overhead lines are dominant elements in the landscape of the proposed location and immediate surrounding area. It is located approximately 180m – 200m from the South Downs National Park boundary at its closest point, to the north and west.

2.3. PROPOSED DEVELOPMENT

2.3.1.1.1 The Applicant is proposing to construct and operate the Project.

2.3.1.1.2 The Project comprises a new marine and onshore High Voltage Direct Current ('HVDC') power cable transmission link between Normandy in France and Eastney, Hampshire, converter stations in both England and France and infrastructure necessary to facilitate the import and export of electricity between the high voltage alternating current ("HVAC") electricity transmission networks both countries.

2.3.1.1.3 The Onshore Components of the Proposed Development comprise the Converter Station, the Onshore Cable Corridor and the Landfall.

2.3.1.1.4 The UK Converter Station is proposed to be located adjacent to the existing National Grid Electricity Transmission ('NGET') substation, north-west of the village of Lovedean within the administrative boundary of Winchester City Council ('WCC').

2.3.1.1.5 The proposed Onshore Cable Route will travel through the administrative boundaries of WCC, Havant Borough Council ('HBC') and PCC, reaching the proposed Landfall location at Eastney, a district in the south-east of Portsmouth.

2.3.1.1.6 Car parking for a maximum of 206 persons engaged with the construction of the Onshore Components is proposed to be provided at the Converter Station Area, ensuring adequate facilities for all personnel. Whilst it is expected the measures in the CWTP, the framework for which is detailed in this document, will mean the number of persons parking vehicles at the Converter Station Area will be less, it is necessary to include provisions to accommodate all personnel so as to ensure no impediment to the timely construction of the Onshore Components.

2.3.1.1.7 Working hours for the Converter Station will be 08:00-18:00 Monday to Friday and 08:00-13:00 on Saturdays. For the Onshore Cable Route, general working hours will be 07:00-17:00 Monday to Friday and 08:00-13:00 on Saturdays.

2.4. PROPOSED CONSTRUCTION ACCESS TO THE CONVERTER STATION SITE

2.4.1.1.1 The proposed access to the Converter Station for the Construction and Operational Stages will be taken from Broadway Lane via a new proposed access junction. The proposed design of this junction can be seen in Appendix C of the Supplementary Transport Assessment (STA).

2.4.1.1.2 As well as the proposed access junction, a gated highway link is proposed between Day Lane, east of the existing bend, and at Broadway Lane, south of the existing bend. This will provide a managed facility for Heavy Goods Vehicles (HGVs) and Abnormal and Indivisible Loads (AILs) which are required to enter the site during the construction stage with vehicle movements across Broadway Lane able to be marshalled. Further information regarding the proposed marshalling of this link can be found in Section 3.4 of the STA. The proposed highway link also provides for abnormal load movements and would be retained as a permanent feature (unadopted) to allow future access with such vehicles should it be required during the operational stage. General verge / vegetation clearance will be required on all sides of Broadway Lane to ensure that adequate visibility splay requirements are met, with all required land falling within the proposed Order Limit.

2.4.1.1.3 Construction worker trips by car to and from the Converter Station will all be required to us the follow permitted route:

- A3(M) Junction 2 – B2149 Dell Piece West – A3 Portsmouth Road – Lovedean Lane – Day Lane – Broadway Lane.

2.4.1.1.4 These routes are described briefly in the following paragraphs.

A3(M)

2.4.1.1.5 The A3(M) is a dual carriageway subject to national speed limit which routes to the east of the study area, it merges with the A27 at Havant and continues onto Guildford and London. Converter Station traffic will exit the A3(M) at Junction 2 (Horndean).

B2149 DELL PIECE WEST

2.4.1.1.6 Dell Piece West is a section of road between A3 (M) Junction 2 and Lakesmere Road. The route is subject to national speed limit and has narrow footway provision on its northern carriageway. After passing the Morrisons roundabout the speed limit reduces to 40 mph and a wide shared use footway/cycleway is provided on the northern carriageway.

A3 PORTSMOUTH ROAD

2.4.1.1.7 A3 Portsmouth Road routes for approximately 2.6km from A3 London Road to the junction with B2149 Dell Piece West. The road is subject to a 30mph speed limit and has footway provision on both sides of the carriageway. Residential properties are located on both sides of the carriageway but are separated from traffic by wide footways / shared-use paths.

2.4.1.1.8 There are bus stops located on either side of the road however only 4 bus stops are located along the construction traffic section of the road. Two bus stops are located on either side of the road approximately 100m from the junction with B2149 Dell Piece West and two bus stops are located either side of the road outside the junction with Keydell Avenue.

LOVEDEAN LANE

2.4.1.1.9 Lovedean Lane routes from A3 (Cowplain) to Downhouse Road for approximately 4.3km, providing access mainly to residential properties. Footways are provided up until the route leaves Lovedean and Coldhill Lane. The speed limit along this route is 30mph until Lovedean Lane passes Day Lane, here the speed limit is extended to 60mph. No bus stops are located along this route.

DAY LANE

2.4.1.1.10 Day Lane is a rural lane with a length of approximately 630 metres and connects Lovedean Lane to Broadway Lane. The lane is subject to a 60mph speed limit and has no footway provision or bus stops.

2.5. PUBLIC TRANSPORT

BUS

2.5.1.1.1 The nearest bus stops which are served by bus routes with timetables that align with the proposed working hours for the Converter Station and Onshore Cable Route are located on Blackbird Close. This stop is served by First Bus route Number 7 which provides a suitable arrival time to be used at the start of the day. At a typical walking speed of 4.8km/h, the stop will comprise of a 30-minute journey by foot from the site, via Day Lane, Lovedean Lane and Day Lane.

2.5.1.1.2 A summary of all bus routes accessible from the Converter Station are shown in Table 1 below.

Table 1 - Local Bus Services

Service No.	Route	Start / Finish Times Monday-Friday	Start / Finish Times Saturday	Nearest bus stop from Converter Station
7 / 7C	Portsmouth City Centre – Cosham – Waterlooville – Wecock Farm	Bus arrival time at start of day: 06:20, 07:30 Bus departure times at end of day: 17:33, 18:43	Bus arrival time at start of day: 07:20 Bus departure times at end of day: 13:33, 13:53	Blackbird Close 30-minute walk
8	Clarence Pier – City Centre – Cosham – Waterlooville - Clanfield	Bus arrival time at start of day: 06:26, 07:14 Bus departure times at end of day: 17:38. 18:38	Bus arrival time at start of day: 07:16 Bus departure times at end of day: 13:39	A3 Portsmouth Road, 33-minute walk
39	Havant – Purbrook – Waterlooville – Wecock Farm	Bus arrival time at start of day: 06:37, 07:17 Bus departure times at end of day: 17:35, 18:38	Bus arrival time at start of day: N/A Bus departure times at end of day: 13:35	Blackbird Close, 30-minute walk

RAIL

2.5.1.1.3 Bedhampton Railway station is located approximately 10.4km south-east from the construction site but has no direct bus route from the station to the site or a cycle route.

2.5.1.1.4 Havant Railway station is also located approximately 12.3km south-east from the construction site. This could be accessed using bus service 39, which starts and ends at Havant bus station which is a six minute walk from the railway station. A summary of destinations that can be reached from Havant railway station are shown in Table 2.

Table 2 - Destination available from Havant Railway Station

Destination	Frequency	Travel Time
Portsmouth	4-5 per hour	16-21 minutes
Southampton	3-4 per hour	38-56 minutes
Chichester	3-5 per hour	10-20 minutes
Brighton	2 per hour	60-74 minutes
Guildford	2-3 per hour	44-56 minutes
London Waterloo	2 per hour	83-100 minutes

2.6. CYCLE ACCESS

2.6.1.1.1 The closest Sustrans route in proximity to the site is National Cycle Network (NCN) Route 222, which is approximately 24km long and provides a connection between Portsmouth and Petersfield. The route is located approximately 2.8km to the south-east of the construction site on A3 Portsmouth Road, connecting into Petersfield in the north and Waterlooville and Portsmouth tot the south.

2.6.1.1.2 In addition to the NCN 222, other roads around the Converter Station are suitable for cycling, including Lovedean lane, Milton Road, Day Lane and Broadway Lane.

3. TRAVEL PLAN VISION AND OBJECTIVES

3.1. TRAVEL PLAN VISION

3.1.1.1.1 The overarching vision for the development and implementation of the Framework CWTP is outlined below:

"The proposed construction of the Proposed Development will accommodate employees and visitor journeys through a variety of integrated and sustainable transport options, with people able to access travel information on demand to make informed travel choices."

3.1.1.1.2 This vision will assist in guiding the development, implementation and evolution of this Framework CWTP helping to ensure employee and visitor journeys can be undertaken through a variety of integrated and sustainable travel options and thereby minimising the volume of single-occupancy car trips to and from the Converter Station Area. As a result, this will reduce traffic impacts on the surrounding highway network, reduce traffic congestion, improve air quality and enhance the operational road safety of the surrounding highway network.

3.2. TRAVEL PLAN OBJECTIVES

3.2.1.1.1 In pursuit of the vison set out above, the Framework CWTP will be guided by specific objectives as outlined below:

- To manage the volume of single-occupancy car travel and the impact on local roads and communities;
- To ensure the site is accessible by sustainable transport options; and
- To facilitate informed travel choices, by ensuring both employees and visitors have access to real-time on demands travel information.

3.2.1.1.2 These objectives will help define and shape the package of measures to be introduced, collectively helping to achieve the vision statement.

4. TRAVEL PLAN MANAGEMENT

4.1.1.1.1 A Travel Plan Co-ordinator (TPC) will be identified who is responsible for implementing and promoting the CWTP.

4.1.1.1.2 The role will initially mean planning for all agreed deliverables to be established, integrated and available for use by employees and visitors as intended. More generally the role of TPC will encompass:

- Maintaining day-to-day responsibility for delivering the plan, including the agreed programme of measures;
- Acting as the main point of contact for queries relating to visitor and employee travel and liaising with transport service providers as required;
- Monitoring the plan to determine progress against the objectives, and preparing a concise annual monitoring report summarising modal outcomes for employee and visitor travel; and
- Working in partnership with the Applicant and its contractors and other local employers to explore area-wide travel planning opportunities

4.1.1.1.3 The TPC will be a part-time position and will be appointed by the Applicant prior to occupation of the construction site.

5. TRAVEL PLAN MEASURES

5.1. INTRODUCTION

5.1.1.1.1 This Framework CWTP has been developed to provide a range of measures to facilitate and encourage sustainable travel at the development.

5.1.1.1.2 Promoting car sharing, public transport and cycling will play a vital role in achieving a desirable outcome. Whilst many employees and visitors are likely to access the site using their own private vehicles, there remains opportunities to support car sharing.

5.1.1.1.3 The section presents travel planning measures proposed for the site, in four specific areas, and concludes by summarising how each element directly support the Framework CWTP objectives. The four areas are summarised in Figure 5-1 and presented in further detail throughout this section.

Figure 5-1- Travel planning approach

5.2. TRAVEL INFORMATION AND ADVICE

TRAVEL INFORMATION NOTICE BOARD

5.2.1.1.1 A travel information board will be created for the site that draws together multi-modal travel information into a single place for employees and visitors to view. The notice board will be placed in an area visible to employees and will be regularly updated by the TPC. The notice board will include bus service and rail connections, car sharing opportunities and parking information.

5.2.1.1.2 This will represent a primary means of promoting sustainable travel options to all site users. The notice board will also promote information relating to new travel initiatives that may be introduced, transport service improvements and timetable where appropriate.

PROMOTION EVENTS

5.2.1.1.3 The promotion of sustainable travel throughout the year will be undertaken through involvement in national activities such as 'Ride to Work Week' and car sharing awareness events. These events will be advertised on the travel information notice board to actively encourage uptake. The coordination of these events will be facilitated by the TPC.

5.3. MANAGING CAR BASED TRAVEL

PARKING CONTROLS

5.3.1.1.1 Parking will be controlled through the provision of parking permits for construction worker vehicles. This will limit the number of construction workers driving to the site through the provision of a maximum of one permit for every 1.5 construction workers as an average across the construction work force. This will encourage the use of car / vehicle sharing (see Paragraph 5.3.1.1.4), which is considered normal behaviour for construction workers travelling to site from nearby accommodation or home locations. It will be for the appointed contractor to confirm the size of the work force prior to construction commencing in order to determine the number of available permits.

5.3.1.1.2 The contractor will also be responsible for ensuring that construction workers do not park inappropriately on surrounding roads causing nuisance to residents. This will also be prevented by construction workers who do not car share being transported to site via minibus / works LGV either directly from local accommodation or Converter Station Area compound.

CAR SHARING

5.3.1.1.3 Promoting shared car journeys will be facilitated through the limited provision of car parking permits and through advertising opportunities to partake in the car share scheme on the travel information board and promoted to staff by the TPC. Given the likelihood of many construction workers being accommodated in nearby hotels and other rental accommodation it is considered that car / vehicle sharing would occur between construction works as a matter of course.

PROMOTING ACTIVE TRAVEL

5.3.1.1.4 Information on local walking and cycling routes will be promoted to staff via the travel information notice board. Secure cycle parking facilities will also be provided at the Converter Station compound

CYCLE TO WORK SCHEME

5.3.1.1.5 Cycle to work schemes are a popular initiative for employees to source a bicycle and cycling equipment as a tax-free benefit. Cyclescheme is one such provider in the UK. The scheme is based on a tax-efficient salary-sacrifice arrangement and allows employees to be loaned bikes and accessories through their employer, with costs typically over 12-18 months, before purchasing the bike for a small sum at the end of the hire period. The scheme allows employees to spend up to £1,000 on bikes and equipment, tax-free, potentially saving a significant proportion of the overall value. The TPC will notify employees of cycle to work schemes available to them.

5.4. PROMOTING PUBLIC TRANSPORT

5.4.1.1.1 Timetabling information for local bus and rail services will be included on the travel information notice board and will be regularly updated by the TPC.

5.4.1.1.2 Given the distance from the nearest train station to the construction site, it is anticipated that rail will not be a chosen mode of travel. However, as is set out in Section 4.3 of the Updated Framework CTMP, the Applicant will operate a shuttle bus services between the main local transport hubs (Havant Railway Station and Waterlooville town centre) and local hotels where construction workers are to be accommodated. This shuttle bus is intended to avoid the need for all workers to drive to the construction compound. This service will be kept under review through-out the construction period in order to ensure that it is providing effective mitigation of private car trips.

5.5. SUMMARY

5.5.1.1.1 This chapter has highlighted a variety of travel planning measures to be introduced at the Converter Station Area to encourage the use of sustainable transport options by employees and visitors. Some measures focus on raising awareness and providing travel information and advice so individuals can make informed choices on how to access the site and not otherwise assume car-based travel is the only viable option.

5.5.1.1.2 Other measures are designed to then actively encourage individuals to use these modes, ensuring the Framework CWTP remains proactive in achieving its stated objectives over time. This includes investing in supporting infrastructure and services and rewarding sustainable travel patterns.

5.5.1.1.3 The TPC will provide a focal point for overseeing delivery and responding to changing travel demands over time with either revised or additional measures where benefits become apparent, and where investment can be focussed to achieve the most benefit.

6. IMPLEMENTATION ACTION PLAN

The site management will ultimately be responsible for implementing the measures set out within this Travel Plan. The measures will be implemented by the appointed TPC, who will assume day-to-day responsibility.

Table. 6-1. Implementation Action Plans

Travel Plan Measures	Delivery Date / Trigger	Delivery Responsibility
Appointment of TPC	Prior to initial occupation of construction site	Site Management
Full Travel Survey Undertaken	6 months post occupation of construction site	TPC
Provision of Shuttle Bus	Provided continuously through-out construction	TPC
Travel Information Notice Board	From occupation of construction site, and to be regularly up- dated through-out occupancy	TPC
Promotional events	One month after occupation of construction site, and at regular intervals through-out occupancy	TPC
Control of Car Parking and Promotion of car sharing	From occupation of construction site, and at regular intervals through-out occupancy	TPC
Provision of timetabling information	From occupation of construction site, to be updated when appropriate	TPC
Cycle to work scheme	From first occupation of construction site	Employer

7. TARGETS AND MONITORING

7.1. TRAVEL PLAN TARGET

7.1.1.1.1 The measures presented by this Framework CWTP will ensure both employees and visitors are made aware of different travel options to access the Converter Station Area, and that sustainable travel options are actively promoted. The success of the measures set out in this Framework CWTP will be assessed through a series of specific, measurable, achievable, realistic and time-bound (SMART) targets.

7.1.1.1.2 When considering the targets set out for these purposes, and the subsequent monitoring of these targets, it is important to note the temporary nature of the construction site. As the proposed construction of the convertor will only be short term, it is not feasible to implement the type of long-term targets that would be typically included in a workplace travel plan. Therefore, all included targets are intended for short-term implementation and monitoring.

7.1.1.1.3 Due to the nature of the specialist construction skills workers required for the project, it is determined that these workers may travel from further afield than typical construction workers. Therefore, it has been determined the use of Census Data relating to the method of travel to work will not be a representative example of workers modal share. To provide a robust and representative method of determining initial travel modal shares it is assumed that all workers will drive to the site with a private car occupancy rate of 1.0.

7.1.1.1.4 Therefore, due to the limited public transport opportunities close to the site and the distance travelled by the workers, the most appropriate measures for reducing trip generation are the control of car parking and subsequent promotion of car sharing and provision of a shuttle bus service to / from Havant railway station, Waterlooville town centre and local hotel accommodation. As such, the following framework targets are considered appropriate for the Converter Station Area,:

- A limit on the provision of parking permits at the Converter Station to a maximum of 1 permit per 1.5 construction workers to promote car sharing and limit the number of single occupancy vehicle trips made to the Converter Station;; and
- 10% of construction workers traveling to the site by shuttle bus.

7.1.1.1.5 The modal share target for use of the shuttle bus can be adjusted dependent on the results from the Full Travel Survey undertaken six months post occupation of the construction site.

7.2. MONITORING

7.2.1.1.1 The Framework CWTP target, and construction workers modal travel splits will be monitored by the TPC through the undertaking of travel surveys at 6 months, 1 year and 2 years into the construction stage. This will enable monitoring/ potential adjustments in respect of the use of the shuttle bus to be made to the final CWTP to reduce single occupancy vehicle travel to/from the site.

8. CONCLUSION

8.1. SUMMARY

8.1.1.1.1 This Framework CWTP has been prepared by WSP on behalf of the Applicant in support of the DCO Application to construct and operate an electricity interconnector between France and UK, known as AQUIND Interconnector. The Framework CWTP relates to construction stage of the Onshore components of the Proposed Development and specifically the following:

- The Onshore Cable Route consisting of two HVDC Circuits between Landfall in Eastney and Lovedean Converter Station;
- A Converter Station and associated electrical and telecommunications infrastructure in Lovedean; and
- HVAC Cables, and associated infrastructure connecting the Converter Station to the Great Britain electrical transmission network, the National Grid, at Lovedean Substation.

8.1.1.1.2 The Framework CWTP applies to the construction workforce for each of the Onshore components of the Proposed Development, nothing that the Converter Station will form the main compound for all construction works. This means that all construction workers will start and end their working day at the Converter Station.

8.1.1.1.3 CWTP's will be iterative documents, managed and implemented by a Travel Plan Co-ordinator (TPC), to provide relevant information relating to initiatives and measures aimed to reduce single occupancy car trips generated by the construction site.

8.1.1.1.4 Due to the nature of the specialist construction skills workers required for the project, it is determined that these workers will travel from further afield than typical construction workers. Therefore, due to the limited public transport opportunities close to the site and the distance travelled by the workers, the most appropriate measures are the use of limited car parking permits and subsequent promotion of car sharing and provision of a shuttle bus service to / from Havant railway station, Waterlooville town centre and nearby hotel accommodation where construction workers are residing..

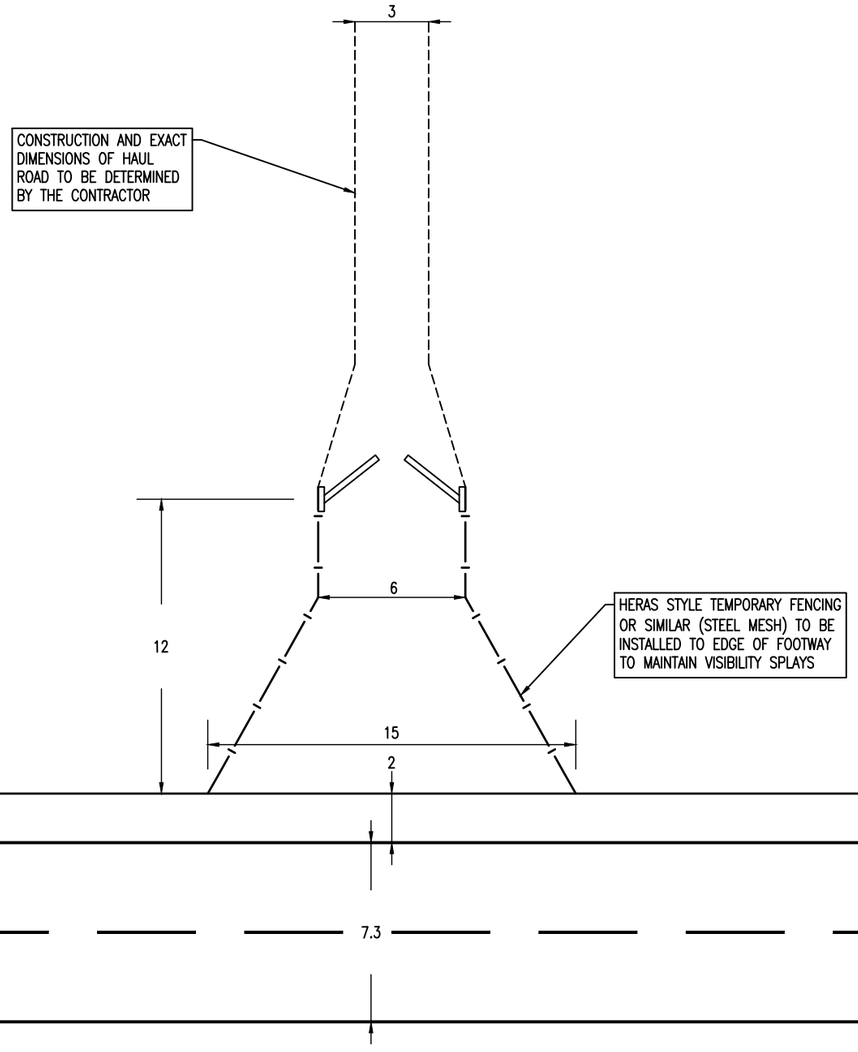
8.2. CONCLUSION

8.2.1.1.1 The Framework CWTP has considered the sustainable transport initiatives and measures that can be implemented to promote a reduction in single occupancy car use to the proposed Converter Station Area during the construction stage. Having regard to the nature of the proposals, and the specialist workers required for construction, this Framework CWTP includes measures to limit car movements to a maximum of 1 trip per 1.5 employees through provision of limited car parking permits and a target of a 10% shift towards travel by shuttle bus. The final CWTP will be actively managed and monitored by a TPC.

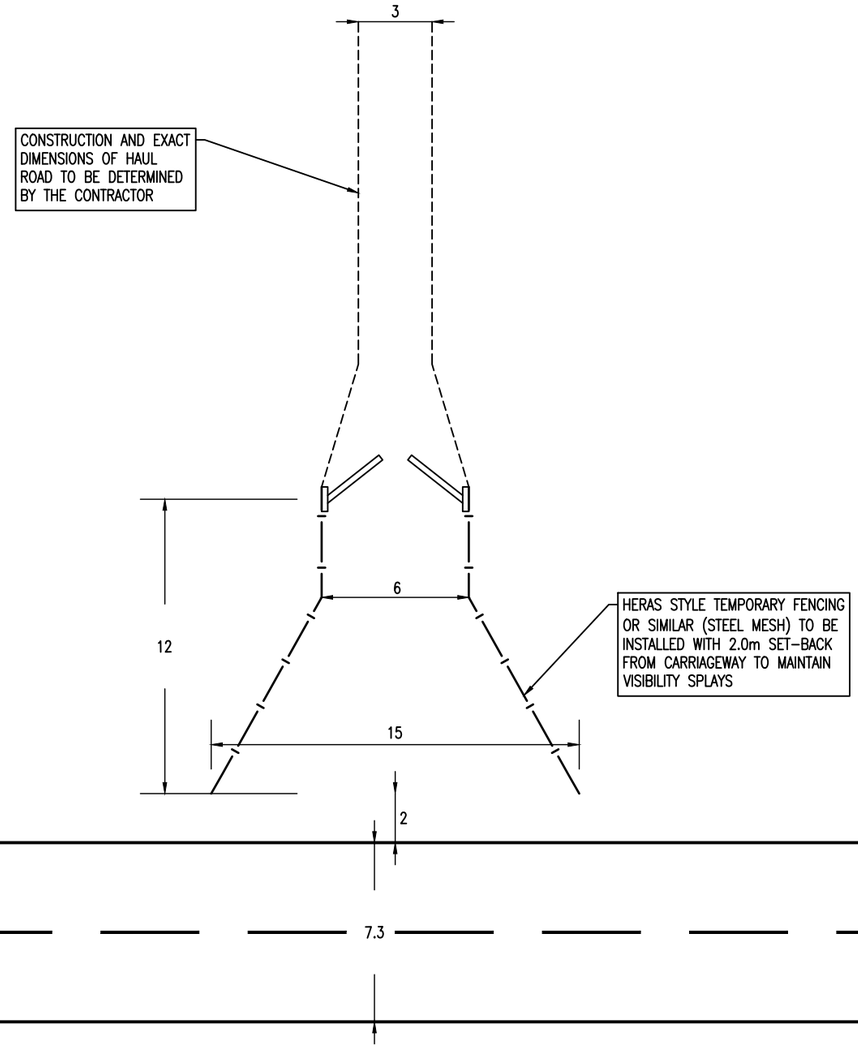
8.2.1.1.2 It is therefore concluded that the Framework CWTP provides a sustainable access strategy for the proposed development.

Appendix 7 – Example Construction Access Layout

CONSTRUCTION ACCESS WITH FOOTWAY



CONSTRUCTION ACCESS WITHOUT FOOTWAY



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NOTES:

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3. FOR ACCURATE ADVICE A DETAILED DESIGN SHOULD BE CARRIED OUT AT THE APPROPRIATE DESIGN STAGE, THEREFORE, USE OF THE INFORMATION IS ENTIRELY AT YOUR OWN RISK.
4. ACCESS GATES WILL BE MANAGED AT ALL TIMES TO PREVENT VEHICLES FROM BLOCKING CARRIAGEWAY.
5. WHEEL WASHING FACILITIES WILL BE AVAILABLE PRIOR TO EXITING THE SITE IN ACCORDANCE WITH THE FRAMEWORK CONSTRUCTION TRAFFIC MANAGEMENT PLAN.
6. VISIBILITY SPLAYS ARE TO BE IN ACCORDANCE WITH MANUAL FOR STREET 2 PRINCIPLES MEASURED AT 2.0M FROM EDGE OF CARRIAGEWAY WHERE 85TH PERCENTILE VEHICLE SPEED ARE LESS THAN 37mph. IN ALL OTHER CASES DMRB VISIBILITY SPLAYS STANDS WILL BE REQUIRED UNLESS AGREED WITH THE HIGHWAY AUTHORITY.
7. DETAILS OF VEHICLE CROSSOVER CONSTRUCTION TO BE CONFIRMED DURING DETAILED DESIGN.
8. ANY PROTECTION FOR APPARATUS WILL BE AGREED WITH THE STATUTORY UNDERTAKER IN ADVANCE OF ANY WORKS.

KEY:

CONSTRUCTION HAUL ROAD

CONSTRUCTION FENCING / HOARDING

PROPOSED CONSTRUCTION ACCESS GATE (OPENS INWARDS TO SITE)

REV	DATE	BY	DESCRIPTION	CHK	APP
B	18/12/2020	AMS	CONSTRUCTION ACCESS WITHOUT FOOTWAY OFFSET INCREASED TO 2M AND NOTES UPDATED	CW	CW
A	11/11/2020	AVI	FIRST ISSUE	CW	CW

DRAWING STATUS: S2 - FOR INFORMATION

wsp
Grosvenor House, 2 Grosvenor Square, Southampton, SO15 2BE, UK
T+ 44 (0) 2380 101 700
wsp.com

CLIENT: AQUIND

ARCHITECT: -

PROJECT: AQUIND

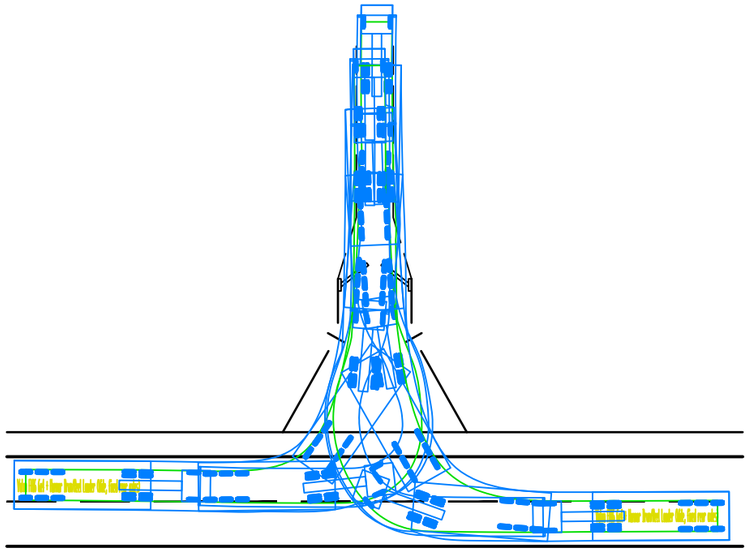
TITLE: TYPICAL CONSTRUCTION ACCESS LAYOUT

SCALE @ A3:	CHECKED:	APPROVED:
1:250	CW	CW

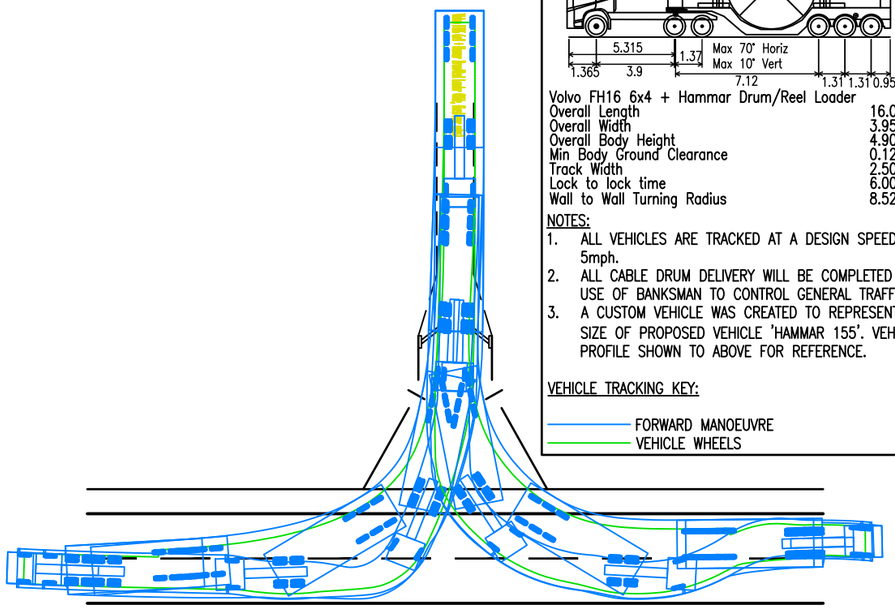
PROJECT No:	DESIGNED:	DRAWN:	DATE:
62100616	AVI	AVI	December 20

DRAWING No: AQ-UK-DCO-TR-LAY-001 REV: B

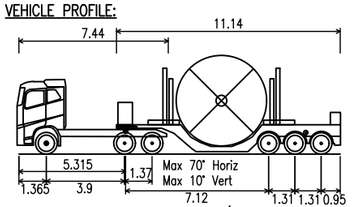
CONSTRUCTION ACCESS WITH FOOTWAY ENTRY INTO SITE



CONSTRUCTION ACCESS WITH FOOTWAY EXIT FROM SITE



VEHICLE PROFILE:



Volvo FH16 6x4 + Hammar Drum/Reel Loader

Overall Length	16.005m
Overall Width	3.950m
Overall Body Height	4.902m
Min Body Ground Clearance	0.122m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	8.520m

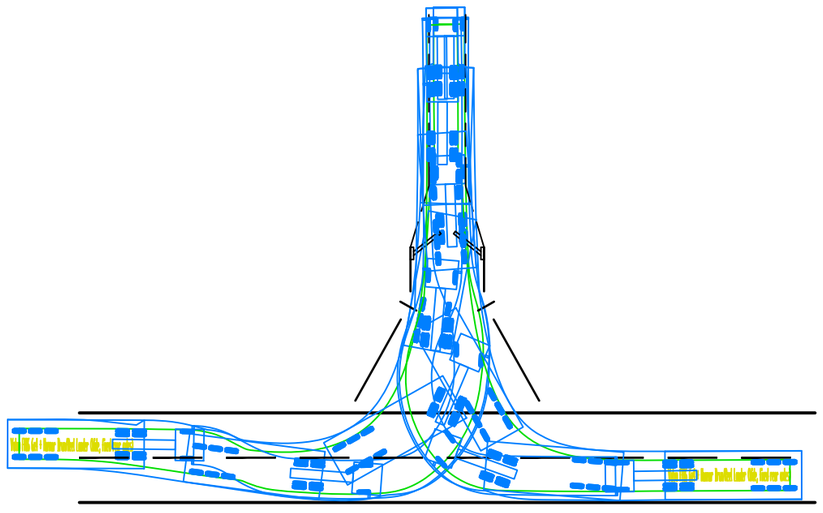
NOTES:

1. ALL VEHICLES ARE TRACKED AT A DESIGN SPEED OF 5mph.
2. ALL CABLE DRUM DELIVERY WILL BE COMPLETED WITH USE OF BANKSMAN TO CONTROL GENERAL TRAFFIC.
3. A CUSTOM VEHICLE WAS CREATED TO REPRESENT THE SIZE OF PROPOSED VEHICLE 'HAMMAR 155'. VEHICLE PROFILE SHOWN TO ABOVE FOR REFERENCE.

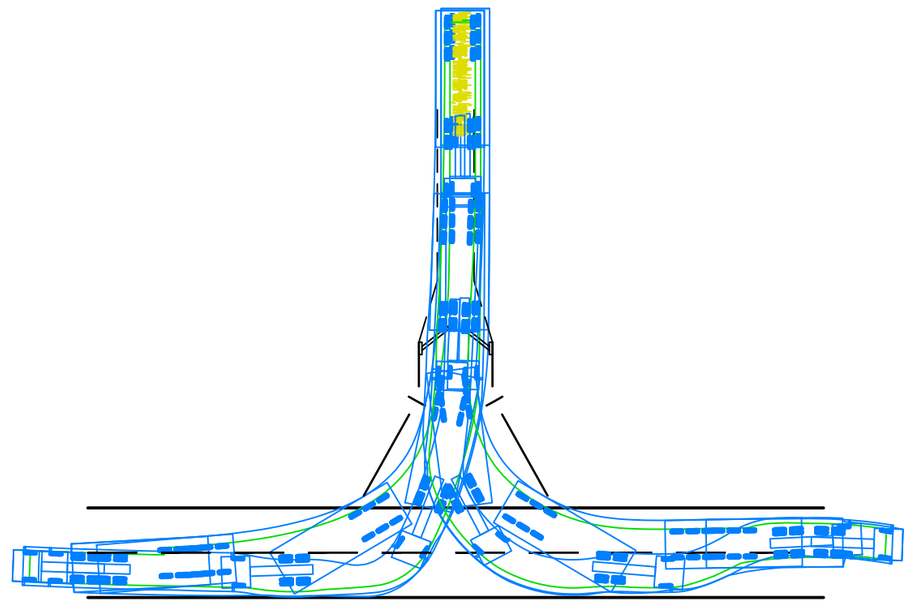
VEHICLE TRACKING KEY:

FORWARD MANOEUVRE
VEHICLE WHEELS

CONSTRUCTION ACCESS WITHOUT FOOTWAY ENTRY INTO SITE



CONSTRUCTION ACCESS WITHOUT FOOTWAY EXIT FROM SITE



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5. WHEEL WASHING FACILITIES WILL BE AVAILABLE PRIOR TO EXITING THE SITE IN ACCORDANCE WITH THE FRAMEWORK CONSTRUCTION TRAFFIC MANAGEMENT PLAN.
6. VISIBILITY SPLAYS ARE TO BE IN ACCORDANCE WITH MANUAL FOR STREET 2 PRINCIPLES MEASURED AT 2.0M FROM EDGE OF CARRIAGEWAY. THIS REFLECTS THE LOW SPEED NATURE OF VEHICLES EXITING THE CONSTRUCTION ACCESS.
7. DETAILS OF VEHICLE CROSSOVER CONSTRUCTION TO BE CONFIRMED DURING DETAILED DESIGN.

KEY:

CONSTRUCTION HAUL ROAD

CONSTRUCTION FENCING / HOARDING

PROPOSED CONSTRUCTION ACCESS GATE (OPENS INWARDS TO SITE)

REV	DATE	BY	DESCRIPTION	CHK	APP
A	11/11/2020	AVI	FIRST ISSUE	CW	CW

DRAWING STATUS: S0 - WORK IN PROGRESS

wsp

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T+ 44 (0) 2380 101 700
wsp.com

CLIENT: AQUIND

ARCHITECT: -

PROJECT: AQUIND

TITLE: CONSTRUCTION ACCESS LAYOUT SWEPT PATH ANALYSIS OF CABLE DRUM DELIVERY VEHICLE

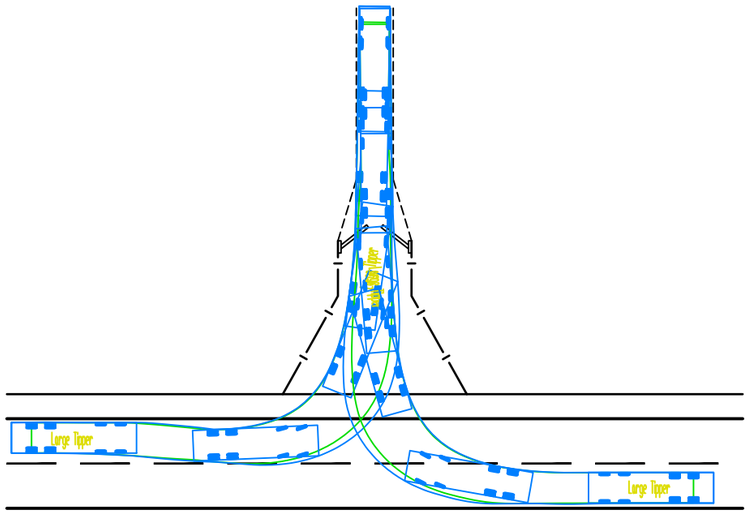
SCALE @ A3:	CHECKED:	APPROVED:
1:500	CW	CW

PROJECT No:	DESIGNED:	DRAWN:	DATE:
62100616	-	AVI	November 20

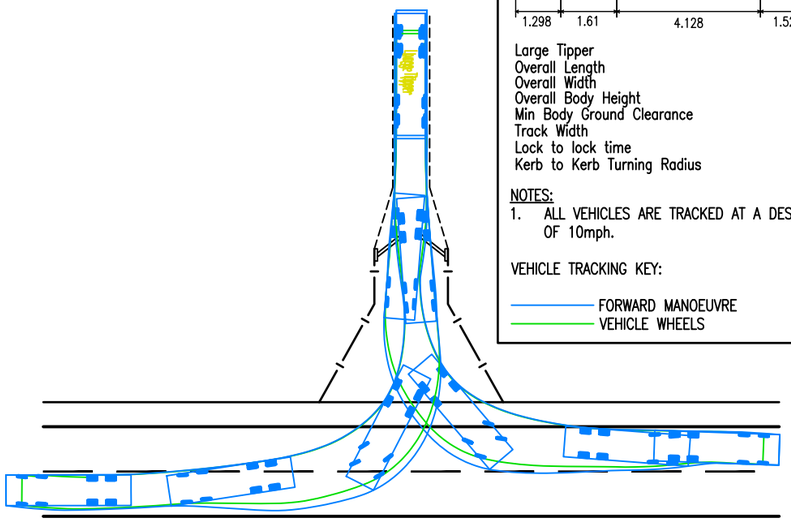
DRAWING No: AQ-UK-DCO-TR-LAY-002

REV: A

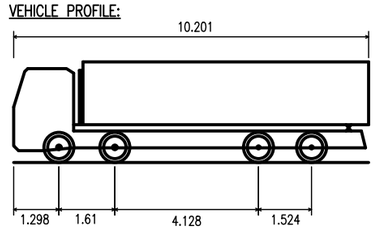
CONSTRUCTION ACCESS WITH FOOTWAY ENTRY INTO SITE



CONSTRUCTION ACCESS WITH FOOTWAY EXIT FROM SITE



VEHICLE PROFILE:



Large Tipper	
Overall Length	10.201m
Overall Width	2.495m
Overall Body Height	2.890m
Min Body Ground Clearance	0.341m
Track Width	2.471m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	11.550m

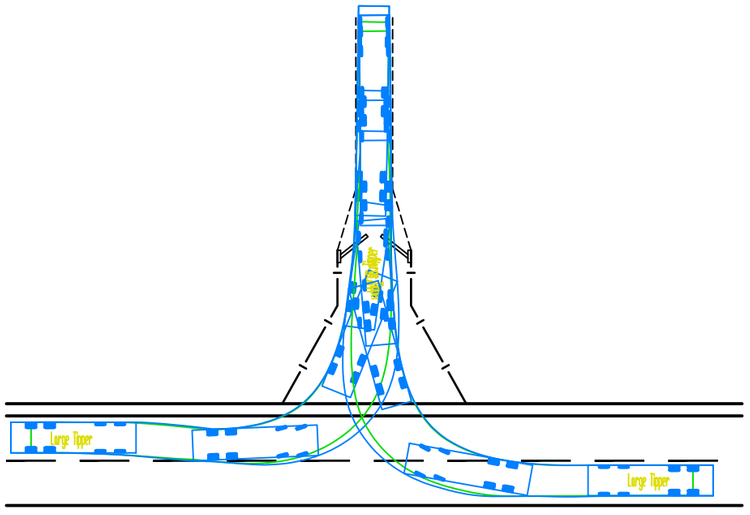
NOTES:

1. ALL VEHICLES ARE TRACKED AT A DESIGN SPEED OF 10mph.

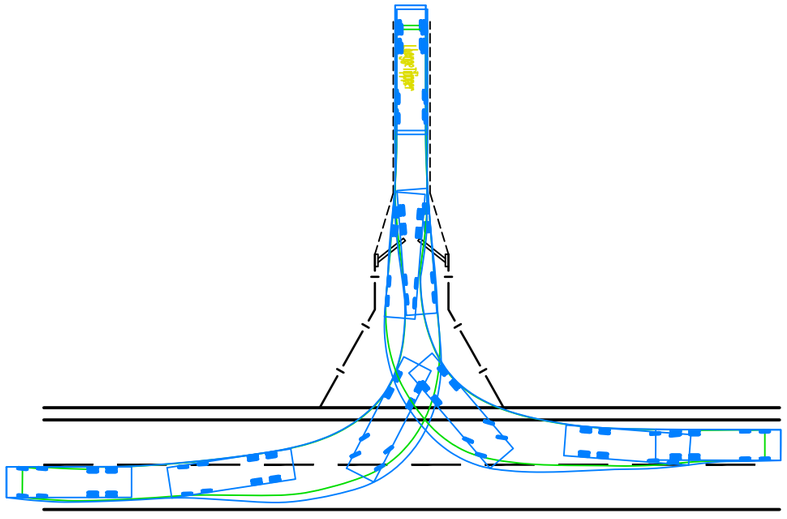
VEHICLE TRACKING KEY:

FORWARD MANOEUVRE
VEHICLE WHEELS

CONSTRUCTION ACCESS WITHOUT FOOTWAY ENTRY INTO SITE



CONSTRUCTION ACCESS WITHOUT FOOTWAY EXIT FROM SITE



NOTES:

DO NOT SCALE

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. THIS PROVISIONAL PRELIMINARY DESIGN IS FOR GUIDANCE PURPOSES ONLY.
3. FOR ACCURATE ADVICE A DETAILED DESIGN SHOULD BE CARRIED OUT AT THE APPROPRIATE DESIGN STAGE, THEREFORE, USE OF THE INFORMATION IS ENTIRELY AT YOUR OWN RISK.
4. ACCESS GATES WILL BE MANAGED AT ALL TIMES TO PREVENT VEHICLES FROM BLOCKING CARRIAGEWAY.
5. WHEEL WASHING FACILITIES WILL BE AVAILABLE PRIOR TO EXITING THE SITE IN ACCORDANCE WITH THE FRAMEWORK CONSTRUCTION TRAFFIC MANAGEMENT PLAN.
6. VISIBILITY SPLAYS ARE TO BE IN ACCORDANCE WITH MANUAL FOR STREET 2 PRINCIPLES MEASURED AT 2.0M FROM EDGE OF CARRIAGEWAY. THIS REFLECTS THE LOW SPEED NATURE OF VEHICLES EXITING THE CONSTRUCTION ACCESS.
7. DETAILS OF VEHICLE CROSSOVER CONSTRUCTION TO BE CONFIRMED DURING DETAILED DESIGN.

KEY:

CONSTRUCTION HAUL ROAD

CONSTRUCTION FENCING / HOARDING

PROPOSED CONSTRUCTION ACCESS GATE (OPENS INWARDS TO SITE)

REV	DATE	BY	DESCRIPTION	CHK	APP
A	11/11/2020	AVI	FIRST ISSUE	CW	CW

DRAWING STATUS:
S0 - WORK IN PROGRESS

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Grosvenor House, 2 Grosvenor Square, Southampton, SO15 2BE, UK
T+ 44 (0) 2380 101 700
wsp.com

CLIENT: AQUIND

ARCHITECT: -

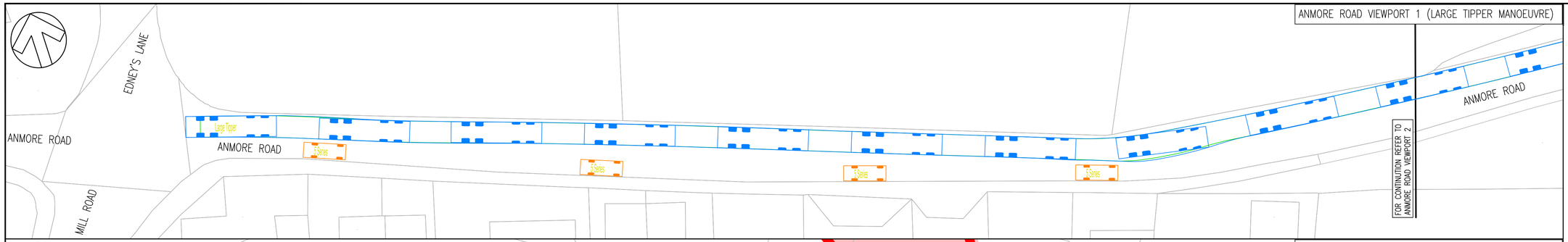
PROJECT: AQUIND

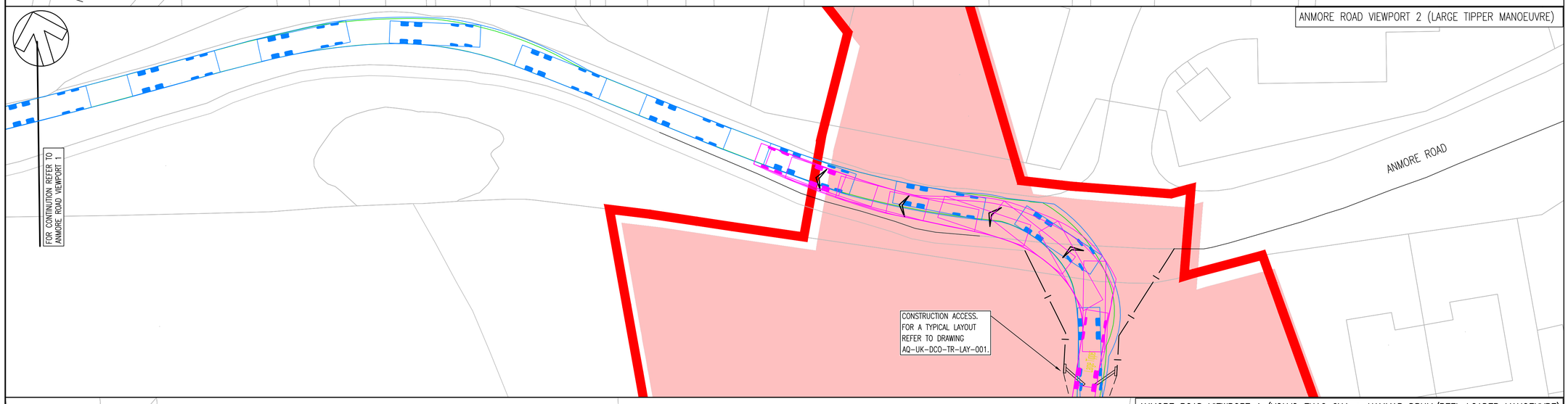
TITLE:
CONSTRUCTION ACCESS LAYOUT
SWEPT PATH ANALYSIS OF LARGE TIPPER

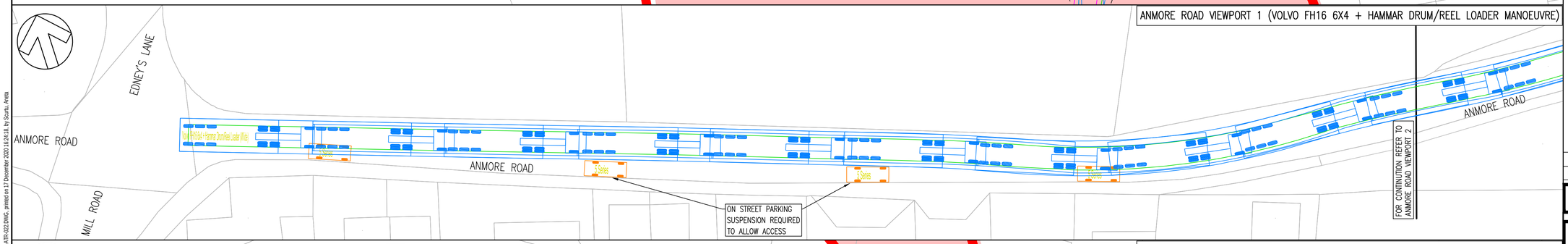
SCALE @ A3:	CHECKED:	APPROVED:
1:500	CW	CW

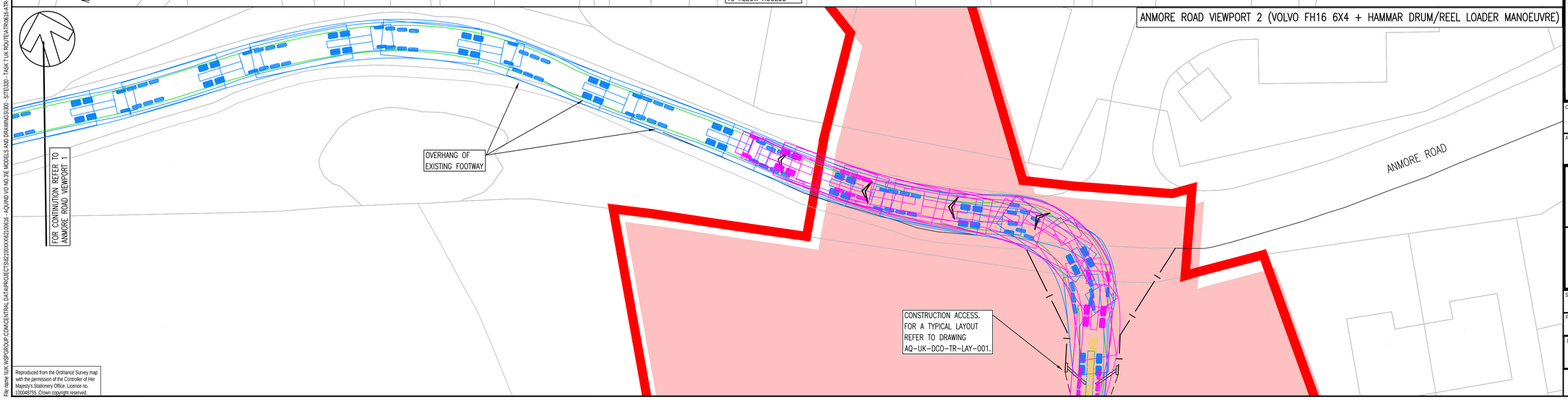
PROJECT No:	DESIGNED:	DRAWN:	DATE:
62100616	-	AVI	November 20

DRAWING No:	REV:
AQ-UK-DCO-TR-LAY-003	A





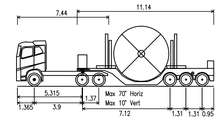




DO NOT SCALE

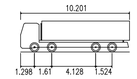
NOTES:

1. ALL VEHICLES ARE TRACKED AT A DESIGN SPEED OF 10mph.
2. A CUSTOM VEHICLE WAS CREATED TO REPRESENT THE SIZE OF PROPOSED VEHICLE 'HAMMAR 155'. VEHICLE PROFILE SHOWN BELOW FOR REFERENCE:



Volvo FH16 6x4 + Hammar Drum/Reel Loader

Overall Length	16.005m
Overall Width	3.950m
Overall Body Height	4.902m
Min Body Ground Clearance	0.122m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	8.520m



LARGE TIPPER

OVERALL LENGTH	10.201m
OVERALL WIDTH	2.495m
OVERALL BODY HEIGHT	2.890m
MIN BODY GROUND CLEARANCE	0.341m
TRACK WIDTH	2.471m
LOCK TO LOCK TIME	6.00s
KERB TO KERB TURNING RADIUS	11.550m

VEHICLE TRACKING KEY:

FORWARD MANOEUVRE
REVERSE MANOEUVRE
INDICATIVE LOCATION OF ON-STREET PARKING (PROFILE SHOWN BELOW):

5 Series

Overall Length	4.750m
Overall Width	1.800m
Overall Body Height	0.329m
Min Body Ground Clearance	0.325m
Track Width	1.700m
Lock to Lock Time	4.00 sec
Kerb to Kerb Turning Radius	6.200m

ADDITIONAL ITEMS:

ORDER LIMIT

UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT LOCAL AUTHORITIES OR STATUTORY BODIES, IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS ARE ISSUED AS PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR AND / OR EMPLOYER COMMENCE WORK PRIOR TO APPROVAL BEING GIVEN, IT IS ENTIRELY AT THEIR OWN RISK

REV	DATE	BY	DESCRIPTION	CHK	APP
A	17/12/2020	AMS	FIRST ISSUE	CW	CW

DRAWING STATUS: S2 - FOR INFORMATION

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wsp.com

CLIENT: AQUIND

ARCHITECT: -

SITE/PROJECT: AQUIND

TITLE: SWEPT PATHS OF CABLE DRUM DELIVERY VEHICLE AND A LARGE TIPPER JOINT BAY 2 / 3: WITHIN FIELDS AT KINGS POND MEADOWS

SCALE @ A1:	CHECKED:	APPROVED:
1:250	CW	CW

PROJECT NO:	DESIGNED:	DRAWN:	DATE:
62100616	AMS	AMS	December 20

DRAWING No: 0616-ATR-022 REV: A