

Construction Traffic Management Plan (CTMP)

CONSTRUCTION PHASE

Health and Safety

| | | | |
|---------------------------|---|--------------|------------|
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| ABB Reference No.: | 1JNL570514 | | |
| Customer: | IFA2 | | |
| Location: | IFA2 Site Offices, Vulcan Way, Fareham PO13 9FW | | |
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| 23/06/2017 | All | Initial Report – Rev A | GG |
| 30/06/2017 | All | Review of entire report– Rev B; reformatted and additional information added | GG |
| 07/08/2017 | All | Revised in line with comments from NG and ABB – Rev C | GG |
| 24/08/2017 | All | Revised for AIL | GMK |
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1.0 Introduction

National Grid IFA2 Limited (NG IFA2 Ltd) and Réseau de Transport d'Electricité (RTE) to seek consent to construct, operate and maintain a new electricity interconnector which would connect the British and French electricity networks in Hampshire and Normandy. This interconnector, known as Interconnexion France-Angleterre 2 (IFA2) would enable the import and export of power between the two countries. IFA2 would be the second Anglo-French high voltage electricity transmission interconnector. An electrical interconnector has operated since 1986 between Sellindge, Kent and Les Mandarins, Pas de Calais (IFA1). In the UK, IFA2 would comprise onshore and offshore components.

IFA2 is a high voltage direct current (HVDC) electricity interconnector that will allow the transfer of electrical power between the UK and France via subsea cables. The IFA2 is a turnkey project comprising the HVDC converter system, including overall system responsibility for the IFA2 HVDC transmission system and its compatibility with the national grids and all required civil works activities with the exception of site preparation works in Tourbe and Daedalus.



IFA2 Tourbe - Daedalus HVDC Interconnector

The UK side of the IFA2 interconnector will be located at Daedalus Airfield, between Stubbington and Lee-on-the-Solent on the new business park development area known as Daedalus East, just to the north of Vulcan Way. The project duration is summer 2017 – winter 2020.

This plan describes the access / egress arrangements for vehicles onto the **IFA2 Converter Station** during the construction phase; this will include the movement of vehicles in and around site and the off-loading to stores and materials. The main aim of this document is to show how we intend to keep disruption and nuisance from the construction activities to both local communities and the environment to a minimum.

It should be noted that other development projects are planned close to the IFA2 site will be ongoing during the lifetime of the project.

It is intended that the CTMP is a standalone live document that will be updated and modified as agreed with the relevant authorities and the client as the project progresses and as details are clarified prior to the start of works on site. The CTMP may also need modification to reflect other developments in the area whose current details are uncertain but, subject to their programmes and progress, may have a cumulative effect on the public highway network at the time of construction of the project.

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The plan will be reviewed monthly and revised as necessary to allow for the development of the site and the surrounding area. This will be undertaken by the site manager and health and safety manager with the responsibility for logistics with assistance from the project manager and project safety advisor.

This CTMP proposes mitigations for minimising disruption to existing users on the public highway network caused by construction and associated decommissioning works for the project. These include managing construction both heavy goods vehicles (HGVs), light goods vehicle (LGVs) and abnormal indivisible loads (AILs) traffic along the main access routes to and from the IFA2 Converter station site compound.

This CTMP sets out the strategy and measures to be adopted within the project in respect to construction traffic in order to:

- Facilitate site access points and routes for the delivery of construction materials and equipment;
- Provide temporary access routes within site working areas where necessary
- Carry out construction activities within prescribed times as may be required within the planning consent.
- Maintain communication with local authorities and residents throughout construction activities and monitor the conditions of the highway surfaces
- Manage amendments to the cycle path adjacent to the site
- Manage the egress of vehicles from the site

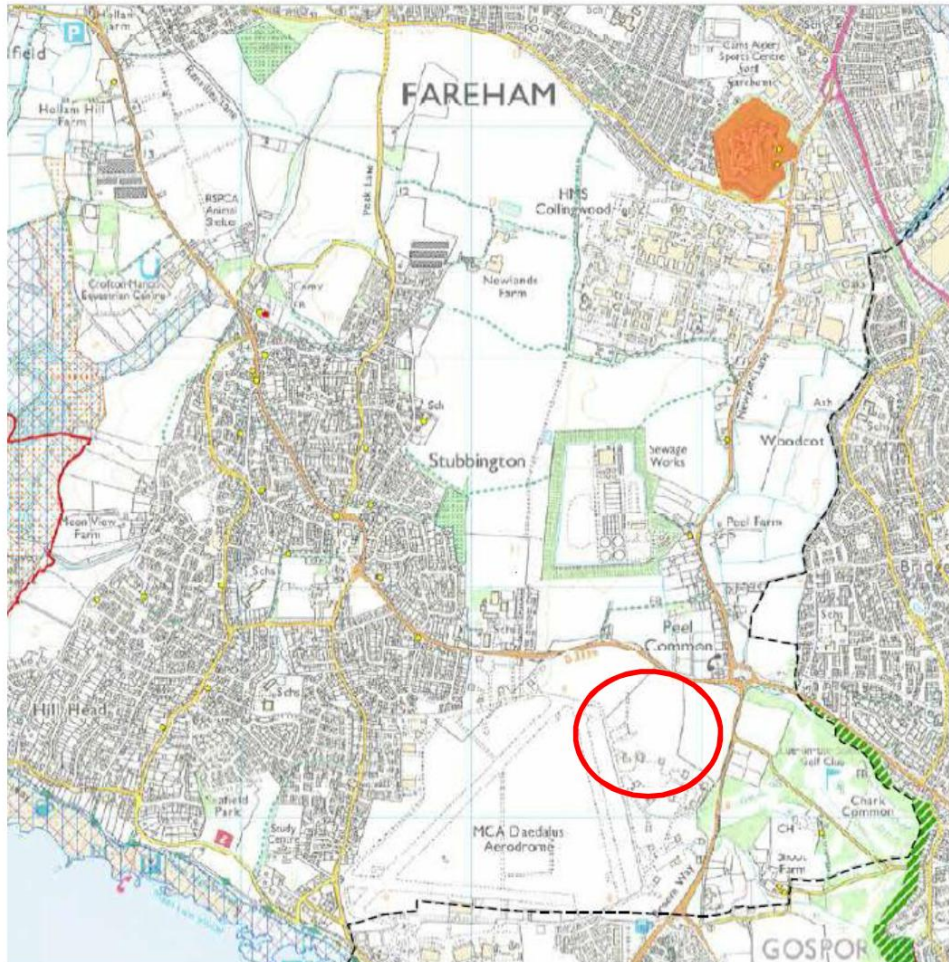
The main content of the CTMP has been informed by the Environmental Statement that accompanied the planning application.

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2.0 Project Location and Traffic Route

The Daedalus Airfield site is approximately 750m to the north of Lee-on-Solent, 1km to the east of the village of Stubbington, approximately 1.5km inland from Southampton Water.



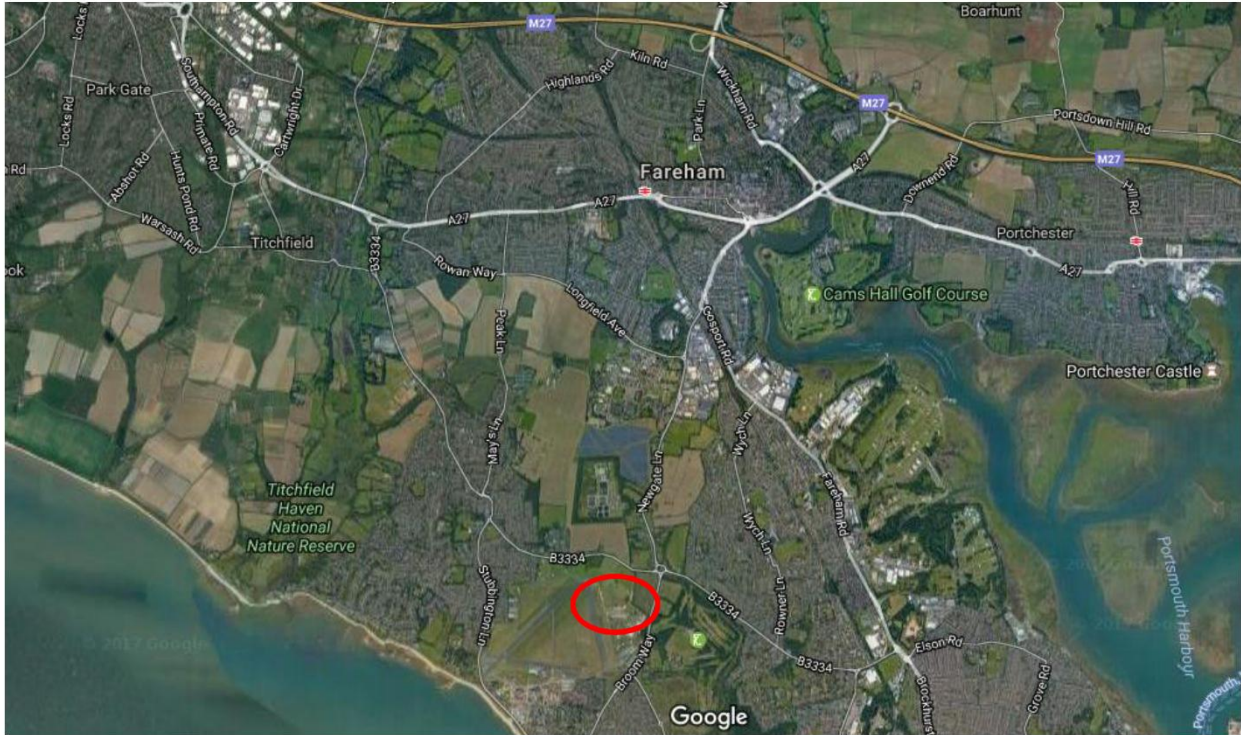
Proposed Converter Station location

The location of the converter station itself is on a mixture of semi-improved grassland and arable field in the north east of Daedalus Airfield bordered by Gosport Road (B3334) to the north, Vulcan way to the south and Broom Way (B3385) to the east.

Currently, the site operates as a commercial airfield with all related features such as aircraft hangars, flight control tower, aircraft refuelling and on-site engineering facilities, outdoor parking and a main runway running on a north-east to south-west orientation.

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Location of proposed IFA2 Converter Station against surrounding area and highway network

2.1 Project Traffic Route Map

Construction traffic proposal is to approach and leave work sites via planned access routes, utilising main roads, depending on the type of vehicle and origin and destination of particular materials.

It is ABB's proposal for construction traffic to access the site using the main road network from Fareham, and then to enter Deadalus East from Broom Way via Spitfire Way, and then onto Vulcan Way. Once on Vulcan Way, access to site will be through a gated access point specifically constructed north of the carriageway.



Indicative site entrance and hoardings arrangement

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The main construction vehicle route on the Local Highway Network is:

Main Route

1. **From Junction 11 of the M27**
2. **Eastern Way - A27 Gosport Road to A32 Quay Roundabout**
3. **A32 Gosport Road**
4. **New Gate Lane (B3385) to Peel Common Roundabout**
5. **Broom Way (B3385).**
6. **Spitfire Way onto Vulcan Way**

Route 2

1. From Junction 9 of the M27
2. A27 Western Way (Southampton Road)
3. Rowan Way
4. Longfield Avenue
5. New Gate Lane (B3385) to Peel Common Roundabout
6. Broom Way (B3385)
7. Spitfire Way onto Vulcan Way

[See Appendix A]

The A27 is a major road – the majority is a dual carriageway with two lanes in either direction – that extends from Whiteparish, Wiltshire to the west to Pevensey, East Sussex in the east. East of Portsmouth the A27 serves as the primary trunk road on the south coast and provides access to built up areas. The relevant section extends towards the Daedalus site south from junction 11 of the M27 for approx 1.8km. The speed limit changes 70mph to 40mph after the Delme Roundabout.

The relevant section Gosport Road (A32) continues approx. 850m from the A27 in the north to Newgate Lane in the south. It is a dual carriageway with two lanes in either direction with a 30mph speed limit.

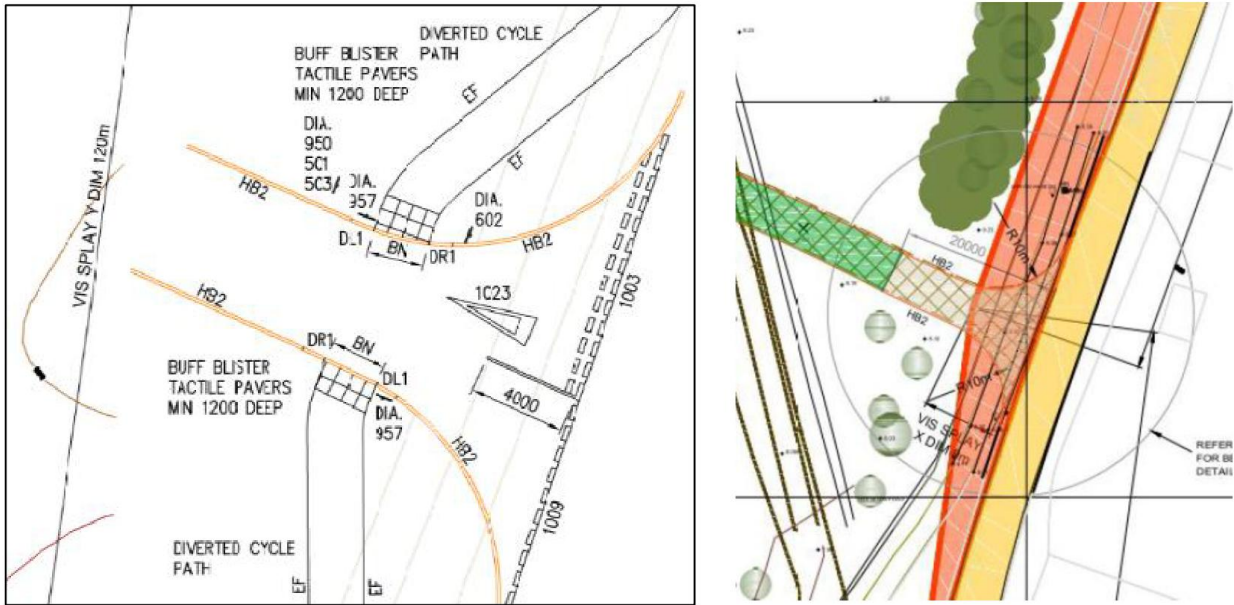
Newgate Lane (B3385) stretches for approx. 2.9km from Gosport Road in the North to Peel Common roundabout in the south. The road is made up of a single carriageway with one lane in either direction. The road has variable speed limits 40 and 30 mph applying in rural areas and built up locations respectively.

Vulcan Way (off Spitfire Way), Broom Way (B3385) is the main site access. A new bellmouth will be created north of this junction for the site egress part way through the project until then Spitfire Way will be both the access and egress. It will be designed such that it can facilitate all vehicle movements exiting the works, and also to accommodate Abnormal Indivisible Load (AIL) movements should (in the unlikely event) that this is required. It is envisaged that any works for this new temporary exit point and tying in new bellmouth into existing road will cause minimal disruption to traffic flow while under traffic management. The construction works involved with the bellmouth will be subject to a Traffic Regulation Order. An application will be submitted to the Hampshire County Council street works team detailing detailing the purpose and nature of works, any lane restrictions necessary in order to surface the bellmouth. It is envisaged that there will be traffic light control for circa 1 week to complete the surfacing tie-in works necessary.

During the construction period, it our intention that the bellmouth onto Broom Way will be used as an exit only due to the potential hazard to pedestrians and cycle path users posed by traffic turning right into the site at a location where no dedicated right turn lane is planned; this is discussed further within the Traffic Management Documentation.

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Bellmouth Details Extracts



Proposed location of new access road and bellmouth



Access onto Spitfire Way

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Right turn lane off Broom Way onto Spitfire Way

All vehicular traffic to the site will be via the recently constructed Spitfire Way, off Broom Way (above) via the dedicated right turn lane (assuming access from the north).

The works and compound area will then be accessed via a newly constructed temporary access off Vulcan Way; this will be constructed across the existing ditch, that will also need to be piped and backfilled.



Site Compound, Car Park and Laydown Area

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ABB aim to construct a similar access to that shown below on Vulcan Way, as the temporary access; a concrete apron will prevent detritus from being dragged onto the highway at this location, which will need to be used as both access onto and off site until the S278 Works on Broom Way has been completed and ready for use.



Temporary Site Access

Early site access during the enabling works will be as below, which is in the South West corner of the project boundary. Parking during this phase of the project will be along Vulcan Way.



Site entrance (for early works period only)

Staff will access the site using either private vehicles or vans; the following vehicle types are also expected on the site:

- Light Goods Vehicles (LGVs);
- Heavy Goods Vehicles (HGVs);
- rigid truck;
- articulated lorries;
- low loaders;

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- mobile cranes; and
- AIL and transport vehicle for transformer by road

A more detailed breakdown can be found in Appendix C – Vehicle Movements.

All suppliers will use the approved traffic/access routes and deliveries will be organised during working hours (outside peak hours where practicable) and outside of any restrictions, this includes HGVs, to prevent increasing local peak hour congestion.

At the manned access gate to site, we will check in any deliveries that arrive, a waiting bay area will be installed within the site boundary shortly after the site entrance; delivery drivers will wait until a banksman is available to escort around site or adequate direction is given.

For the construction of the works, the stone and concrete suppliers are yet to be procured; consideration will be given to reduce the distances required for each vehicle to travel between supplier depots and site location [supplier routes to be added to Appendix A].

3.0 Site Works

The project involves the construction of a new converter station and associated civil works.

The site activities shall include; for the purpose of this CTMP:

- Survey Works – ecological, UXO, topographical, etc.
- Construction of access road to site compounds
- Delivery of plant and equipment for construction works
- Delivery of materials for construction works
- Travel to and from work by staff/operatives
- Travel to site by visitors etc.

To gain access from public highways to the construction sites and work areas, access points will be required. Site access point will be from Broom Lane (B3385) onto Spitfire Way to Vulcan Way. Site egress to be by means of temporary haul route in the form of a stone road



Proposed One Way System – Plan View

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The movement of vehicles in and out of site will be via a proposed one way system to reduce the risk to other road users due to vehicles entering site crossing oncoming traffic. Once the S278 bellmouth is constructed onto Broom Way, there will be one entrance and one exit; the new exit will be onto Broom Way which will be left turn only (out onto Broom Way). It is the intention that the project will seek to formalise this in due course, concentrating on the expected benefits that the one way route might bring. Also signage to prevent traffic from inadvertently turning right once completed i.e. no entry signs (to be agreed with Highways & FBC).



Proposed Site Egress back on to Broom Way, left turn only

As discussed earlier, vehicles will turn off Broom Way by turning right using the filter lane in the centre with signage on Broom Way with the message 'IFA2 Site Next Right', appropriate location TBC.

In agreement with the authorities, a barrier will be installed to a lane in the bellmouth to prevent access off Broom Way.

A security gate / barrier will be positioned at the exit with signage (possibly vehicle actuated) installed to provide adequate warning of the possible presence of pedestrians or cyclists crossing the bellmouth.

Across the pedestrian/cycle path junction, signage will be provided to ensure that vehicles do not wait in the way of passing pedestrians or cyclists; consideration of road markings will be given during the planning of the S278 works.

Emergency Routes

In the event of an emergency, access to site will be via Spitfire and Vulcan Way; if necessary, the new bellmouth could be used for emergency access to site or the compound. Current emergency routes will be detailed and displayed on the notice board.

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Access Road and the site egress onto Broom Way, left turn only exit

3.1 Project Working Hours

Project working hours Monday – Friday 08:00 -18:00

Project working hours Saturday – 08:00 -13:00

Project working hours Sunday – N/A

To minimise congestion on the public road network, deliveries or movements through congested highways may be requested to operate outside of peak times (or even if outside of normal works hours if necessary). Approval for all out of hours working will be gained prior to any out-of-hours works commencing. A request will be sent to Fareham Borough Council by ABB two weeks in advance if any out of hours working is foreseen as necessary and only where unavoidable.

Even though we do not envisage any works outside normal hours, Where working outside normal hours is planned, the local Environmental Health Officer and occupiers of nearby residential or other sensitive properties who are likely to be affected will be informed, giving sufficient notice.

3.2 Schools and Rush Hours

Due to number of school children using the cycle path and footway between Lee-on-the-Solent and the local schools on Gosport Road, the right turn off Broom Way will be limited to the Spitfire Way turn only. Access via a right turn without a right turn lane would only add an additional hazard as vehicles take opportunities to cross onto the site access though gaps from traffic.

Listed below is a non-exhaustive list of local schools and nurseries along the possible construction traffic route:

Off A27, Western Way

Fareham Academy
St Judes Catholic Primary School

Off A32, Gosport Road

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Redlands County Primary School

Off B3334, west

Crofton Secondary School
Baycroft School
Acorn Pre School

Off B3334, east

Peel Common Junior School

ABB, along with their contractor, Morgan Sindall, will have to provide consideration to the construction traffic during peak times to ensure that the road safety and journey times are not significantly impacted.

3.3 Road Condition

A road condition dilapidation survey shall be carried out by MS/ABB prior to any CDM work activities taking place in order to establish existing road conditions – pre and post adjacent contractors' work on Spitfire and Vulcan Way and Broom Way adjacent to access and egress (also 100m further south along Broom Way and the length of road on Broom Way to Newgate roundabout).

The full extent of this survey will be agreed with relevant stakeholders. A baseline survey will be undertaken prior to construction. The road condition shall then be monitored throughout the contract and any necessary remedial works shall be agreed in consultation with IFA2.

3.4 Public Highway and Traffic Management Signage

All construction traffic will be routed so as to minimise so far as reasonably practicable disturbance and inconvenience to local residents and road users.

Appropriate road signs will be provided and maintained by the Traffic Management Contractor to guide construction traffic into and out of the site working areas.

The traffic management contractor will be required to co-ordinate temporary signing with other concurrent works to avoid conflict, confusion and clutter of signs.

3.5 Access Point Signing

Prior to the commencement of construction activities the attached detailed traffic management layouts, showing the proposed temporary signing, will be installed as required in agreement with FBC and IFA2.

3.6 Signing of Road Works

The temporary signing of road works will be in accordance with Chapter 8 of the Traffic Sign Regulations and General Directives. During the construction of the site access points, temporary traffic signal control or stop and go signs may also be required while plant and site operatives are working in the carriageway and highway verges.

3.7 Construction Traffic Exclusion Zones

There are no known exclusion zones for any construction traffic. No current weight limits will be adhered to. All vehicles to follow prescribed construction traffic route. We will maintain contact with local authority to be aware of local road works schemes. All abnormal load vehicle routes will be planned and agreed, well in advance of any deliveries being made (10 weeks minimum), with the Local Authority and Highways England through the submission of a EDSAL Special Order application.

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4.0 Site Hazards with Vehicle Movements

Specific hazards associated with the vehicle movements include;

- Access and egress off public roads leading to site compound
- Restricted parking (during early works order)
- Other users on the access road.
- Pedestrians/cyclists
- General Public
- High winds.
- Street furniture
- Abnormal Loads

See Appendix E for more detail.

4.1 Vehicle Access and Egress

All traffic accessing site will have to strictly follow site rules. Site rules and a one-way system map will be sent to all suppliers in the form of a Driver Flash Card (Appendix C). Organisations delivering abnormal loads to site will be required to survey the access route in advance, taking into consideration weight and height restriction etc. These will also be controlled by specific traffic movement plans developed by specialist contractors in advance and approved by the ABB Project Manager and interested third parties. Specific site rules appertaining to vehicle movement when on site (e.g. speed limit 10mph) will also be fixed to site entrance hoarding/fencing.

Wheel washing facilities may be made available (subject to site road conditions) that can be utilised prior to exiting the site to control the spread of debris onto public roads. Road sweeper facilities will also be available when needed (i.e. on-call), especially during periods of significant vehicle movements and during wet weather.

On particularly dry and windy days, a bowser with a facility to dampen the dusty road surface will be used to control the spread of dust and debris, especially to prevent dust clouds blowing across the adjacent airfield. All vehicles transporting soil, loose and or dusty materials will be fully sheeted to reduce the risk of air pollution and blown dust.

4.2 CDM Area Traffic Movements and Pedestrian Segregation

Traffic movements within the CDM areas will be as per a site Plant and Vehicle Management Plan (PVMP) which will be developed prior to the construction of the main site works (i.e. anticipated late 2017/early 2018). Where necessary, barriers and signage will be positioned at suitable points within working areas in order to establish clear pedestrian segregation; this will change during the construction period subject to the planned works and free areas available for plant/pedestrian movement.

Where there is an unavoidable interface with pedestrians, plant and vehicle marshals/ vehicle banksmen will lead HGV's and other plant to and from work places in a safe manner whilst maintaining segregation between vehicles and pedestrians, subject to relevant and approved RAMS.

There will be a 10 mph speed limit on access roads where pedestriains are **segregated but 5mph within all areas in accordance with PVMP**. Private vehicles will not be allowed to site roads; these will need to park in the site car park for visitors and construction workers adjacent to the site compound / offices. Reverse parking rule to be enforced at all times.

4.3 Management of Deliveries & Traffic Control

Specific restrictions on traffic movements may be agreed with the Fareham Borough Council and Highways England; any further additional control measures shall be included in this plan.

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Where deliveries require traffic to be controlled to allow vehicles to gain access or exit the converter station compound the site team shall ensure compliance with Chapter 8 of the Traffic Signs Manual and NRSWA 1991, when carrying out this activity. Any individuals carrying out traffic control duties shall hold a valid NRSWA authorisation and wear a high visibility jacket or top with long sleeves and long high visibility trousers.

Where reasonably practicable, advance notification of materials and equipment to be delivered to site shall be provided to the site team 2 weeks prior. This notification shall include details of the company, the date and time of the delivery, the type and size of the vehicle, and an itemised list of material or equipment. Deliveries of large items of equipment requiring mechanical offload must be coordinated with the relevant parties. The site team shall ensure that all deliveries are made at pre-arranged times, when his personnel, or appropriate subcontractors, are present to accept such deliveries. The site team will not accept delivery of materials on behalf of contractors other than by prior arrangement.

Local residents and neighbours, who may be affected by large vehicle movements, shall be kept informed via the IFA2 communications team and appropriate actions shall be taken to mitigate the impact of these vehicle movements, especially on particularly days. Transport briefings will be issued to all plant and material suppliers to ensure the appropriate routes and timings are complied with. Deliveries to site shall be planned, coordinated and managed and reasonable care will be taken so there is minimal stopping or queuing on the public highway. Copies of toolbox talks communicated to drivers.

It is anticipated that the transformers will be the largest pieces of equipment to arrive on site. They will be Abnormal Indivisible Loads (AIL) due to the weight (circa 400T) divided over many axles. The vehicle will be highly manoeuvrable with all-wheel steer, but will be much slower than normal traffic (say 5-10 mph) and will be escorted.

These deliveries will only take place after seeking approvals and having agreement with the Hampshire County Council and Highways England (and the Police). These deliveries will be timed to avoid the predictable peak traffic periods. These convoys will comprise of no more than two abnormal vehicles. These will be escorted by the haulage contractor and the Police in line with 'Self-Escorting of Abnormal Loads and Abnormal Vehicles' Code of Practice by the Highways Agency.

All movements of abnormal loads will be in accordance with the following legislation:

- Abnormal Indivisible Loads is Part II of the Road Traffic Act 1988
- Road Vehicle (Construction & Use) Regulations, 1986
- Road Vehicle (Authorisation of Special Types) (General) Order 2003 (the latter commonly referred to as S.T.G.O.)

4.4 Transformer Deliveries

It is ABB's intention to bring in the 4 No transformers by sea in order to mitigate the potential disruption to road traffic.

Whilst the strategy to deliver the transformers is still under development, the latest proposal is to ship the units to the Port of Southampton, from where it will be collected via barge and transported to the Lee-on-the-Solent HCA controlled slipway where the units will be offloaded onto an AIL and use local roads to site.



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The exact route to site is still to be determined due to the complexities of the current plans in the vicinity of the Hovercraft museum, Marine Parade West, and to the general area immediately to the south of Daedalus airfield.



Subject to agreement with the HCA, the preferred route will be to take the transformers through the Hovercraft Museum, using the existing concrete road network through the industrial area between the former Royal Navy training centre buildings / industrial units, in order to reach the newly constructed Daedalus Drive (see below).

This route will mitigate contact with and disruption to the public road network in the local area, and will mostly affect the local industrial area (already used to the occasional large loads with boat movements).



Once onto Daedalus drive, the route will continue onto Broom Way joining it at the junction adjacent to the CEMAST building. This route is anticipated to minimise contact with local traffic and should facilitate a short duration (approximately 500m only) on the trunk road through to Lee-on-the-Solent (see route below)

The preferred route will take a left turn off Broom Way onto Spitfire Way and then a relatively sharp right onto Vulcan Way. Although it is understood that the AIL will get around this corner with the use of the all-wheel steer capability, this cannot be confirmed until a full swept path analysis has been carried out following a planned survey in September in 2017. Should this prove to be an issue, then the new S278 access off Broom way and the temporary access track passing the site compound, will be utilised.

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Whilst the above route is the current preferred option, other options being considered as contingencies are:

1. Access onto Daedalus Drive via the new junction planned at Ross House junction; the route will follow the preferred route once beyond the Coastguard Training Centre.
2. Take the transformers along Stubbington Lane, onto Gosport Road, and then onto Broom Way at the Peel Common roundabout, cutting the corner or taking the inside lane at roundabouts (under escort) to manoeuvre around to mitigate street furniture removal.
3. Transport on public roads by motorway and local public highway from Southampton or Portsmouth Port (should Lee-on-the-Solent slipway be impracticable).

5.0 Public Highway Traffic Management

The following mitigation measures have been identified:

- Safe routes to and from the site will be agreed with ABB and with other stakeholders. All construction vehicles shall use approved access routes;
- The site team shall ensure that measures to manage and control the deposition of dust and dirt on the public road network are included in any mitigation arrangements;

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- ABB shall ensure the provision and application of appropriate signage warning other motorists of the presence of construction vehicles;
- Abnormal Load Traffic (ALT) and other loads where it is deemed necessary by the respective haulage contractor shall include appropriate approved vehicle escort;
- The respective Abnormal Load haulage contractor shall initiate all necessary arrangements with respect to the control of affected traffic, including the stopping of opposite direction traffic, to allow the safe negotiation of all pinch points along the planned route to the site;
- All abnormal deliveries will be agreed with Hampshire County Council and Highways England to determine traffic management arrangements for construction vehicle movements.
- ABB shall monitor and ensure that mitigation measures necessary are being implemented. Lighting, signage and guarding shall be positioned to be compliant with Chapter 8 of the Traffic Signs Manual and NRSWA 1991 and take into consideration the adjacent airport requirements.

Signage shall conform to Chapter 8 of Traffic Signs Manual and be secured against being blown over or put out of position by the wind or passing traffic. A daily inspection of the signage shall be conducted by an individual qualified to New Roads and Street Works [NRSWA], Monitoring Signing, Lighting and Guarding to ensure that the signage has not been moved or damaged or become dirty, including if the site is left unattended for a period of time.

Traffic management schemes, alterations to pedestrian//cycling footways, formally agreed with local authority and Section 278 process for approval.

6.0 Other Traffic Management Issues

6.1 Public Transport & Cycle Routes

There are a couple bus services on the way towards the site access routes but are not directly affected as none of our accesses/egresses infringe on any bus stops.

Only services 21 and 21A will cross the main construction vehicle route (see below). These are operated by First in Hampshire and provide an hourly link between Fareham town centre and Stubbington. The route proceeds along Newgate Lane where a bus stop is located approximately 220m north of the Daedalus site at Peel Common bus stop. Operating hours for both routes are within the hours of 0630-1930.

The Solent Ranger X4 and X5 services travel along Warsash Road, with the X5 covering west of Lock Road whilst the X4 travels along Warsash Road from Abshot Road to Common Lane, east of the Hook Lane junction. There are stops located along the length of the road however they are all over 2km from the Chilling site. This should not be affected by the Daedalus converter station works.

At the southern end of the Daedalus airfield the Solent Ranger X5 also passes on Stubbington Lane. The service runs once every 30 minutes from Southampton to Gosport Ferry. The nearest stop is on Marine Parade West, approximately 1.85km from the site, again not affected.

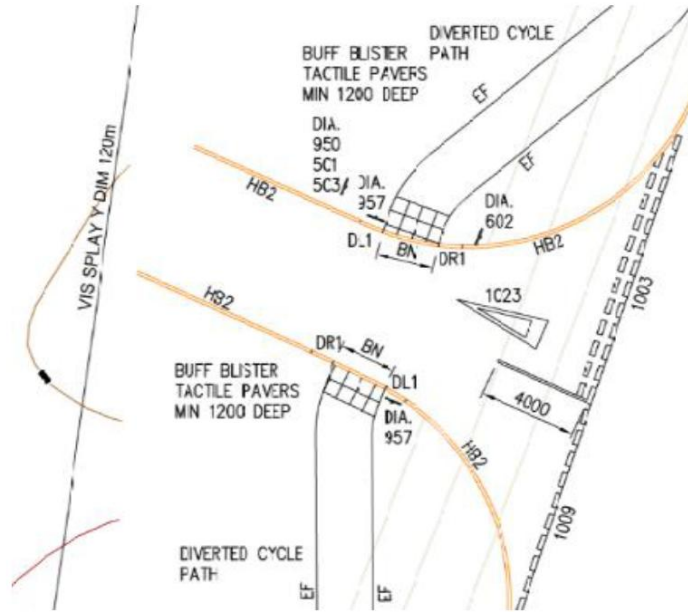
As mentioned earlier, the bulk of the vehicle deliveries will be planned where reasonably possible outside peak traffic periods – commuter and school traffic – to avoid causing delays on the public transport network.

There are a number of cycle routes in the vicinity of the Daedalus site. Broom Way (B3385) features a segregated pedestrian/cycle path on the western side of the carriageway. At the Peel Common roundabout segregated pedestrian/cycle paths continue along Gosport Road (B3334) to the west and Rowner Road (B3334) to the east towards Gosport. There is a signal controlled toucan crossing of the Gosport Road located just to the west of the junction with Marks Road. This facilitates access from the shared use path on the southern side of the road to the Crofton School on the northern side, west of Marks Road.

The cycle path will be maintained and diverted at the proposed new site exit point onto Broom Way. This potential hazard will be included in the site induction for regular staff and operatives and in the Driver Flash Card induction to make everyone who is on site aware of the potential hazard of crossing cyclists. There will also be additional signage.

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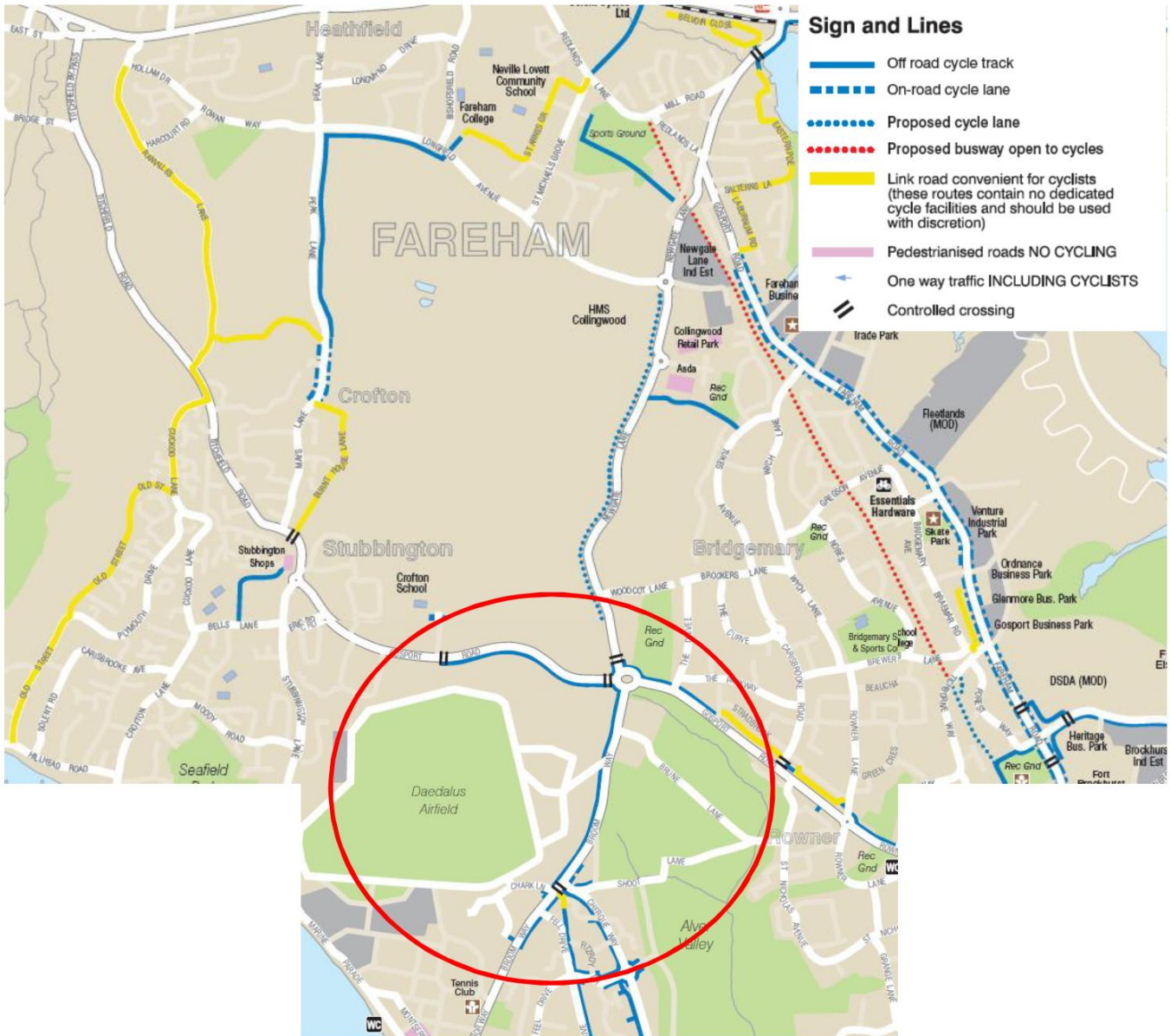
New S278 Bellmouth off Broom Way



Bus services 21 and 21A

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Hampshire Cycling Routes (Fareham) – off road cycle track extends south along Broom Way

6.2 Communications Strategy for Traffic Management

Fareham Borough Council residents affected by the works have already been contacted by IFA2 to inform them about the scope of the construction works. A table of hazards and mitigation measures have been listed in Appendix E to explain how the increased risk caused by increased vehicle movements will be reduced.

Morgan Sindall / ABB intend to register the project with the Considerate Constructors Scheme where the project will be monitored by independent experienced professionals within the industry on criteria in line with their code of practice – Appearance, Community, Environment, Safety and Workforce. If passers-by wish to comment, scheme administration’s contact numbers will be clearly displayed.

Point of contact for local community/ wayleaves issues (including nuisance reporting) will be through National Grid IFA2 Hotline Number on 0800 0194 576, info@ifa2@interconnector.com

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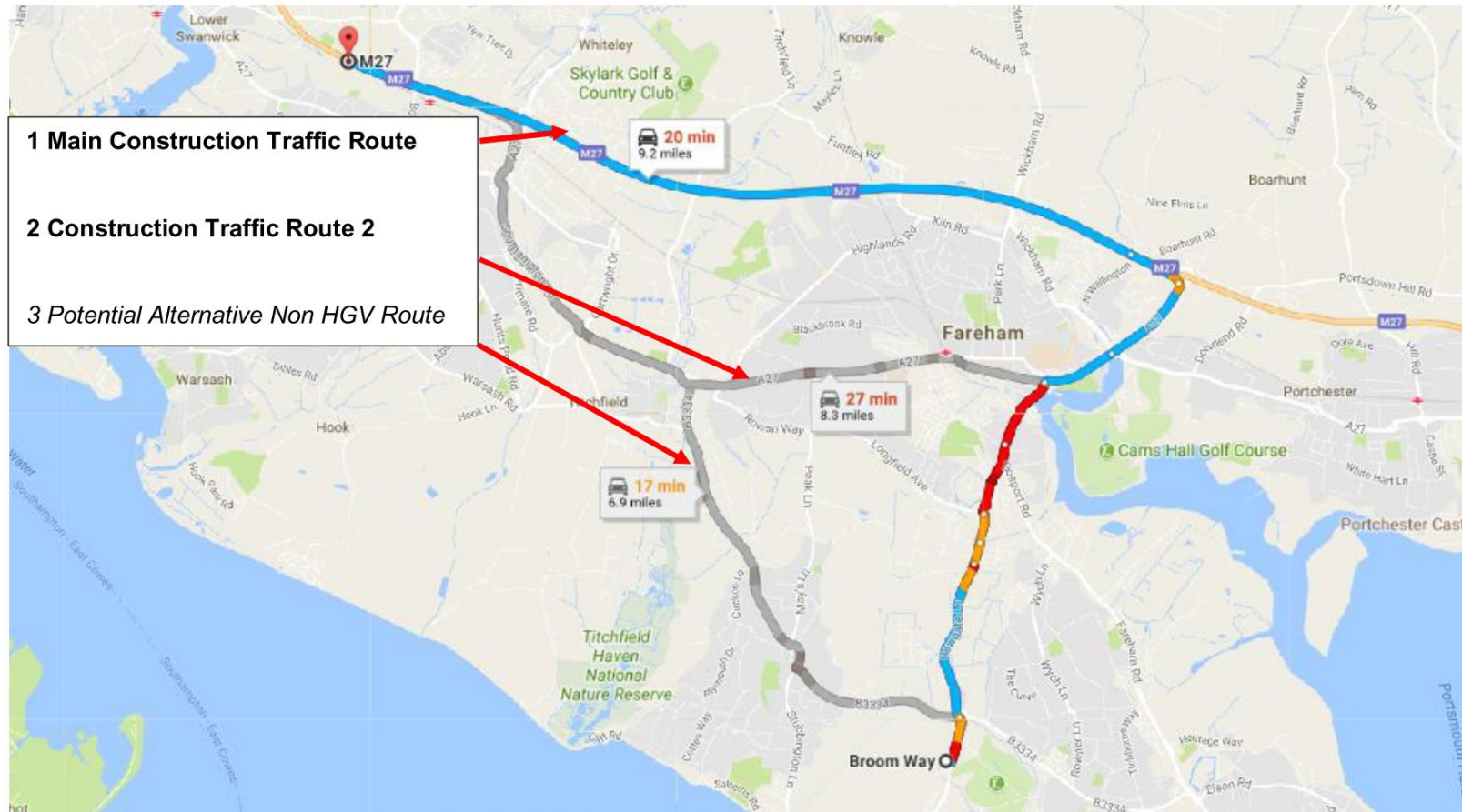
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7.0 Appendices

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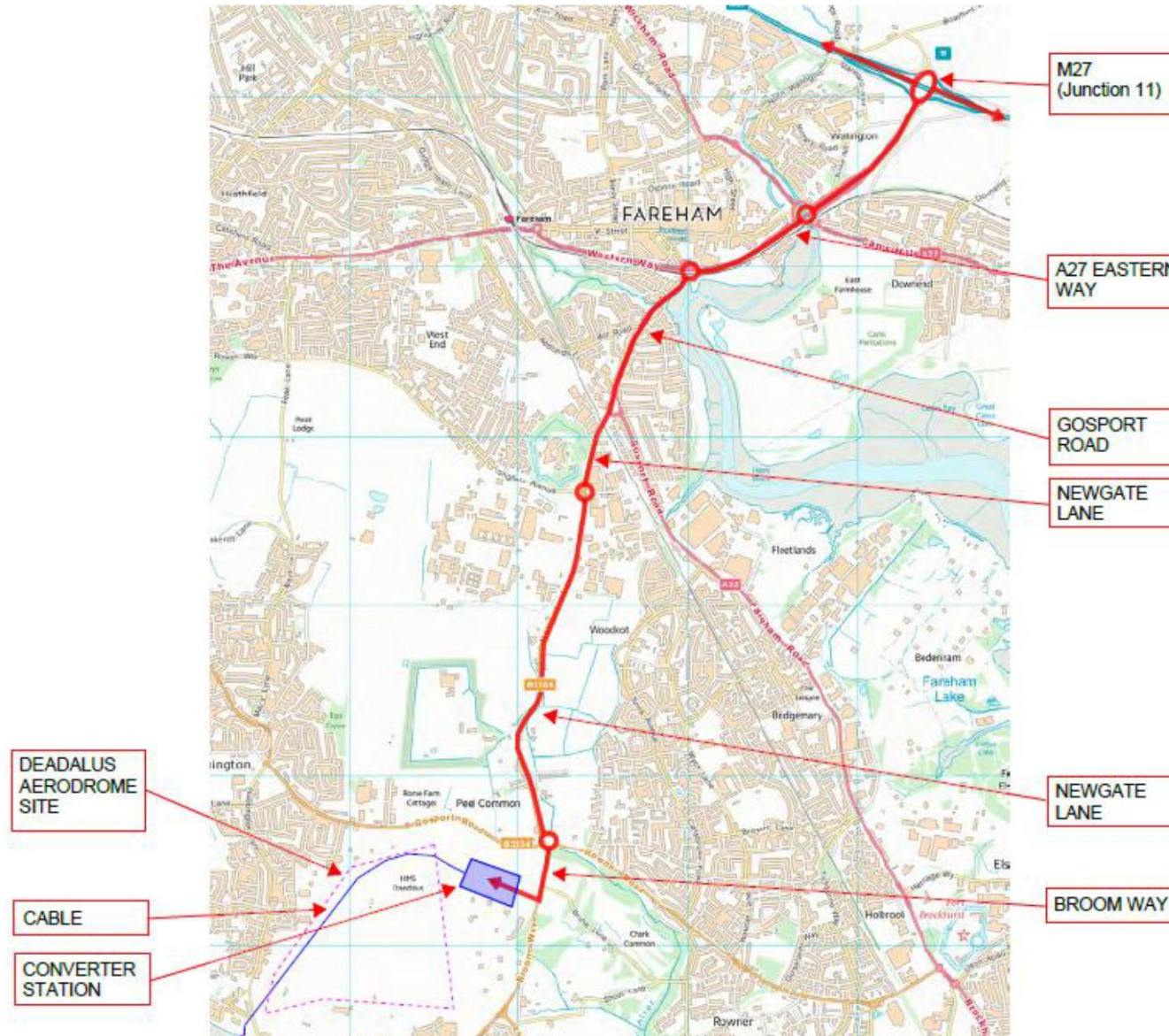
7.1 Appendix A – Traffic Routes



Supply chain journey routes to be added when confirmed

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7.2 Appendix B – Vehicle Movements

The predicted traffic generation data for the construction of the Proposed Development for a two year period from January 2018 to December 2020 (based on the proposed construction programme).

Baseline Construction Vehicle Route Observed Annual Average Daily Traffic (AADT) Flows (2015)

| Road Link | 24hr AADT Total Traffic | 24hr AADT HGVs | 24hr AADT % HGVs |
|--------------------------|-------------------------|----------------|------------------|
| Eastern Way | 54582 | 2926 | 5.4% |
| A32 Gosport Road | 49960 | 3282 | 6.5% |
| B3385 Newgate Lane North | 21468 | 778 | 3.6% |
| B3385 | 23450 | 646 | 2.8% |
| Broom Way | 16141 | 475 | 2.9% |

Future Estimated Construction Vehicle Route (AADT) Flows (2019)

| Road Link | 24hr AADT Total Traffic | 24hr AADT HGVs | 24hr AADT % HGVs |
|--------------------------|-------------------------|----------------|------------------|
| Eastern Way | 51789 | 1510 | 2.92% |
| A32 Gosport Road | 50796 | 1755 | 3.46% |
| B3385 Newgate Lane North | 28287 | 446 | 1.58% |
| B3385 | 21763 | 318 | 1.46% |
| Broom Way | 8690 | 89 | 1.02% |

Traffic Data was extracted from the Hampshire County Council Sub-Regional Transport Model (STRM)

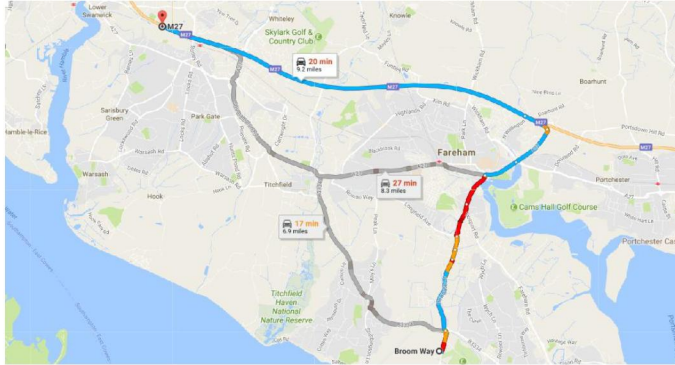

See Chapter 14 of Environmental Statement (and appendices 14A – C) or visit Fareham Borough Council (IFA2 case tracker) website:

<https://www.fareham.gov.uk/casetracker/casetracker.asp?a=1&public=Y&caseid=149740> for more detailed information.

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7.3 Appendix C – Driver Flash Card

| IFA2 HVDC CONVERTER STATION | |
|--|--|
| <p>Site Address: IFA2 Site Offices, Vulcan Way, Fareham PO13 9FW Main Site Contact No: Site Manager/H&S Manager/ Yard TBC YARD Opening Times: 0730-1800 Mon-Fri (Yard Closes at 1300 on Sat)</p> <p>Main Traffic Route to Site: From Junction 11 of the M27 >> Eastern Way - A27 Gosport Road to A32 Quay Roundabout >> A32 Gosport Road >> New Gate Lane (B3385) to Peel Common Roundabout >> Broom Way (B3385) >> Spitfire Way >> Vulcan Way</p> | |
|  | |
|  | |
| <p><u>DRIVER FLASH CARD INDUCTION</u></p> <p><i>This flash card has been produced to ensure your safety and the safety of others whilst undertaking work activities on this project. Please ensure you read and understand all the information supplied and undertake all your activities in accordance with these rules.</i></p> <p style="text-align: center;">DO you have any difficulties reading and/or speaking English?</p> <p><i>If any of the information provided is unclear then please raise your concerns with the nominated site contacts prior to commencing work.</i></p> <p style="text-align: center;">Site Access and Egress</p> <ul style="list-style-type: none"> · Wait at entrance for security to confirm the purpose of your trip. All visitors must report to the site security on arrival and sign in · Ensure the vehicle hazard warning beacons are functional when entering the site. Hazard lights/orange beacons should be on when driving around site. · You will be escorted to and from site by nominated personnel and under the control of an appointed Plant & Vehicle Marshall · Reverse parking policy is in use on this project. · Where necessary, turning areas made available to ensure vehicles can manoeuvre safely · Delivery drivers will be marshalled to site lay down area. Only unstrap/unchain the load when you have confirmed with the MS representative that you are at the correct unloading area. · When you exit your vehicle beware of uneven ground conditions and watch your step · LEFT ONLY when exiting the works onto Broom Way; beware of crossing cyclists and pedestrians at the junction. <p style="text-align: center;">Working At Height Including Access to Lorry Loads</p> <ul style="list-style-type: none"> · All work that involves access the bed of a lorry or trailer or to climb to affix chains or slings is considered working at height and requires control measures by means of permanent attachment/fall arrest or suitably fixed handrails, toe boards, stairs or platforms, air bags, etc No driver or operative will be allowed entry to site without suitable measures in place. | |

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Personal Protective Equipment

Whenever, you enter an operational site or work area, the following PPE must be worn at all times when leaving the vehicle. All PPE must be inherent Flame Retardant (FR) where possible.

- Overalls or coveralls (FR)
- Hi-viz vest or jacket
- Safety Boots, with midsole, protective toe caps and ankle protection - rigger boots are not permitted
- Head Protection
- Eye protection
- Gloves suitable for the task



Additional PPE may be required dependent on the work activity being undertaken or as highlighted on your site specific risk assessment. i.e. hearing protection when in noisy areas.

Site Speed Limits

- A Site Speed Limit of **10mph** has been implemented for vehicles, plant and machinery. However, in some cases this speed limit may be reduced (to 5 mph) to ensure the safety of personnel, property or equipment. Any deviations to this speed limit will be clearly highlighted on site and must be obeyed at all times.



Mobile Phones

- The use of mobile phones and hands free devices are strictly prohibited at all times when operating any vehicle or item of plant and machinery. Anyone observed using a mobile phone whilst operating any vehicle will be asked to leave site immediately and the matter will be reported for further investigation.

Operational Sites, Work Areas & Site Demarcation

- ABB operational sites and work areas will be demarcated by the working party for the safety of themselves and others. Prior to entering you will be briefed on the site hazards and asked to sign onto the point of work risk assessment, stating that the hazards and control measures have been briefed and fully understood.
- Only enter under the direct supervision of an appointed Plant & Vehicle Marshall. Follow all instructions given to you for your own safety. When entering site you may observe cones and rope, Heras fencing or other temporary markers that clearly demarcate the working area.

Accident, Incident, Near Miss & Hazard Reporting

- If you are involved in, or observe, any accident, incident, near miss or hazard whilst working on any ABB site, you must report the event to a member of the Project Management Team as soon as reasonably practicable. This will enable us to offer prompt medical assistance where necessary and/or implement suitable control measures as appropriate to prevent a similar

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7.4 Appendix D – Traffic Management Inspection Sheet

| Date | Location | Signage | Traffic Lights | Cones & Barriers | Security/ Position/ Condition | Comments | Checked by [Print Name] | Signature |
|------|----------|---------|----------------|------------------|-------------------------------|----------|-------------------------|-----------|
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7.5 Appendix E – Hazard identification and control measures

| Key hazard identified | Significant risk and who may be harmed | Control measures |
|---|--|---|
| Restricted site access | Striking pedestrians and operatives. | Establishment of segregated vehicle and pedestrian route onto and off the site. Signage will be displayed at entrance and exit warning unauthorised persons that they will not be allowed access a construction site/ entering a CDM area. Gate men will be employed to control these access and egress points. |
| Restricted road and pedestrian access around the site | Striking site personnel and temporary / permanent structures. | Establishment of segregated vehicle and pedestrian routes around the site. Establish warning signs. |
| Site visitors | Being struck by vehicles. | Establishment of segregated vehicle and pedestrian routes around the site. Visitors must wear high visibility garments whilst out on site. All visitors must be accompanied at all times after receiving briefing from gate man and visitor induction by site manager. |
| Steep gradients | Overturning vehicles – driver/personnel injury. | Select appropriate vehicles for site conditions. During access construction keep gradients to a minimum. |
| Vehicles reversing in confined areas | Striking site personnel and other vehicles. | Where possible provide one way route through the site to eliminate reversing. Vehicles must have visual warning light on at all times. Vehicles must have audible alarm warning when reversing. Trained banksman must be in attendance. |
| Vehicles being unloaded adjacent to the site gates | Injury to passing pedestrians. | Temporary road barriers must be erected when gates are left open. Banksman to be in attendance. |
| Site personnel | Site personnel being struck by vehicles. | Establishment of segregated vehicle and pedestrian routes around the site Pedestrian routes must be identified by blue netting and signage etc. Operatives must wear high visibility garments whilst out on site. All site personnel must undergo a site safety induction before starting on site, which will cover vehicle segregation and site rules. |
| Vehicles entering and leaving site | Striking pedestrians, cyclists, site personnel and other vehicles. | Security to control and monitor incoming and outgoing vehicles. All vehicles to be controlled by trained and competent banksmen. One way system. No vehicles, on exit from site, to turn right and cross oncoming traffic. Turn left only rule. Site hoarding/ Heras fencing erected around the exposed sections of the project to deny access to the general public. Full site perimeter to be made secure. |
| Vehicles picking up mud on wheels | Leaving mud on the highways causing road traffic accidents and accidents to pedestrians. | Outgoing site vehicles must enter the wheel wash before leaving site. Excessive mud on wheels to be removed by jet wash. |

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| | | Drivers to check wheels for excessive mud before leaving site. Road sweepers to attend site to sweep main agreed traffic route, when necessary. |
| Dust pollution from vehicle movements | Reducing visibility on nearby roads and airfield | Wheel wash facilities may be available on site |
| Vertical edges | Falling of vehicles and vehicle loads. Injury to site personnel | Road barriers must be installed to vertical edge. Timber baulks to be positioned at least 1m back from edge. Controlled speed limit. |
| Concrete pumps overturning | Injury to pedestrians and site personnel | Ensure all outriggers are positioned correctly. |
| Obstructions and services | Overturning of vehicles. Damage to installed structure. | Highlight obstructions and services. |
| Noise and vibration and emissions | Effects on site personnel and pedestrians. | Vehicles to be regularly inspected and maintained. |
| Drivers lacking competence | Out of control vehicles. Striking site personnel and damage to structures | All site drivers to have a current certificate of training achievement and to be competent, checked by site manager at induction. Drivers to receive suitable supervision and monitoring. |
| Vehicle arrival and departure | Site congestion. Striking site personnel and pedestrians. Causing road traffic accidents. Vehicle drivers being struck by another vehicle or load. | Security to control and monitor incoming and outgoing vehicles. Drivers must wear mandatory PPE when out on site. All drivers to be issued with Driver Flash Card with site rules. Site working hours to be communicated to all drivers. . |
| Speeding vehicles | Striking pedestrians and other vehicles. Fear and intimidation. | All vehicles to observe the site speed limits. All drivers to be issued with drivers rules. Speed humps installed where necessary. |
| Loading and unloading of vehicles | Striking site personnel. | All loads to be unloaded under the supervision of a trained and competent banksman. |
| Disruption to the local traffic and highways | Causing congestion and possible road traffic accidents. | Vehicles to use the designated approach roads and aim to ravel outside local peak traffic periods. |
| Non site vehicles entering the site | Striking pedestrians, site personnel and other vehicles. | Security to monitor incoming and outgoing vehicles. Signs to be displayed on approach to site roads. |

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Specific detailed drawings (marked up Site Traffic Management layouts)

Site Traffic Management Layout to be revised once site layout finalised and planning approved & construction sequence agreed.



Considerations to be included:

Key

- Pedestrian walkways with
 - Barriers
 - Crossings
 - Signage
- Traffic routes with
 - One-way systems
 - Speed limits
 - Signage
 - Storage areas / layout areas
- Specific detailed drawings
 - Site entrance
 - Restricted traffic route points
 - Restricted entrances
- Other prompts / consideration
 - General access / security
 - Vehicle / pedestrian segregation routes
 - Safety signage and speed limits
 - Overhead obstructions
 - Delivery vehicle loading / unloading and holding areas
 - Delivery schedules
 - Crossing points
 - Parking
 - Site plan / where plan will be displayed
 - Information instruction and training
 - Co-ordination and co-operation of adjacent projects

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