



# Environmental Impact Assessment Report

Volume 4

Appendix 27.2 Traffic Management Plan

# TOBIN

**Codling Wind Park** 

**Onshore Transmission Infrastructure** 

Traffic Management Plan

(construction phase)



**BUILT ON KNOWLEDGE** 

Document Control Sheet					
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#### 1. INTRODUCTION

This Traffic Management Plan (TMP) supports the consent application for the Codling Wind Park (CWP) Project, an offshore wind farm located in the Irish sea approximately 13 - 22 km off the east coast of Ireland, at County Wicklow. The CWP Project is being developed by Codling Wind Park Limited (CWPL) (hereafter 'the Applicant').

The TMP is relevant to the management of the existing road network within and in proximity to the onshore development area during the construction of the OTI. It has been prepared to ensure that appropriate controls are in place to manage construction traffic generated during the construction phase.

The commitments included within the Environmental Impact Assessment Report (EIAR) are the minimum commitments that the appointed contractor shall follow. Any changes which may occur in the planning process and in the detailed construction programme can be incorporated, as can inputs from the appointed contractor, the detailed design team, and the Applicant.

The TMP will be implemented by the Applicant and its appointed contractor and will be secured through conditions of consent. It will be a live document which will be updated as project development progresses and a revised version will be submitted to the local authority, prior to the start of construction.

#### 1.1 OBJECTIVES

The primary objectives of this TMP are to:

- Outline minimum traffic management measures to be undertaken at site access / egress locations during the construction phase of the OTI and landfall, including approaches to such access / egress locations, and
- Demonstrate to the Applicant, appointed contractor and suppliers the need to adhere to the relevant guidance documentation for such works.

The TMP shall address the following issues which are explained in detail in this report:

- General provisions,
- Site access and egress,
- Routing of construction traffic,
- Site specific temporary traffic measures,
- Enforcement of the TMP, and
- Emergency procedures during the construction phase.

#### 1.2 IMPLEMENTATION OF THE TMP

The appointed contractor shall be delegated responsibility for the implementation of the TMP and to implement measures to monitor the effectiveness of the TMP. The appointed contractor shall liaise regularly and update the Applicant on all issues relating to construction traffic management. Additionally, lines of communication will be confirmed with the local authority and relevant stakeholders.

The appointed contractor will be responsible for developing and adopting the final construction traffic management measures for the TMP. The appointed contractor will ensure that all



relevant environmental legislation is complied with and that all mitigation measures are adhered to, to minimise construction traffic management risks to the surrounding area.

In order to ensure that environmental awareness and compliance is communicated effectively at the start and throughout the construction phase, this TMP will be communicated to all site personnel, including management staff, operatives, and sub-contractors. The key elements of this TMP will form part of the site induction which will be mandatory for all employees, contractors and visitors attending the site.



#### 2. THE PROJECT

The Codling Wind Park (CWP) Project is located in the Irish sea approximately 13 - 22 km off the east coast of Ireland, between Greystones and Wicklow Town and covers an area of 125 km<sup>2</sup>. The Offshore Export Cable Corridor (OECC) connects the Array Site with the landfall and OTI on the Poolbeg Peninsula.



Figure 2-1 Location of the array site

#### 2.1 PROJECT DESCRIPTION

This TMP applies to the OTI for the CWP Project. The OTI comprises the transition joint bays (TJBs), onshore export cables, the onshore substation, and the Electricity Supply Board Networks (ESBN) network cables to connect the onshore substation to the Poolbeg 220kV substation. This TMP also addresses the landfall area (landward of the high water mark (HWM), where the offshore export cables are brought onshore and connected to the onshore export cables at TJBs (hereafter, these works are referred to as the 'OTI').

A ten year planning permission is being sought for the CWP Project, with an operation lifetime of 25 years. The 25 year operational lifetime shall commence on full commercial operation of the project.

The EIAR submitted with the planning application describes the development in more detail.

The onshore development area on the Poolbeg Peninsula is provided in Figure 2-2.

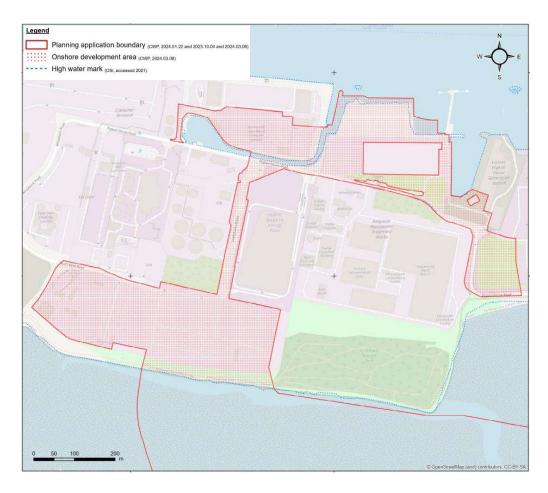


Figure 2-2 Onshore Development Area

#### 2.1.1 Onshore Transmission Infrastructure

#### Landfall

The landfall (landward of the HWM), on the southern edge of the Poolbeg Peninsula is where the offshore export cables will be brought onshore and where they are connected to the onshore export cables in three TJBs.

#### **Onshore Export Cables**

From the landfall, the onshore export cables will be installed in a tunnel that will be routed north, approximately 0.7 km across Poolbeg Peninsula, to the onshore substation located on the south bank of the River Liffey.

There will be 3 temporary tunnel compounds/ tunnel shafts along the length of the tunnel to facilitate two tunnel drives:

- Temporary tunnel compound 1 (located within temporary construction compound A) launch shaft;
- Temporary tunnel compound 2 (located where the Shellybanks Road meets the Pigeon House Road) reception shaft;
- Temporary tunnel compound 3 (located within the onshore substation site) launch shaft;

#### **Onshore Substation**

The onshore substation will be a gas insulated (GIS) switchgear design, where the high voltage equipment is designed to be insulated and cooled by pressurised gas.

In summary the onshore substation will include:

- Perimeter structures including upgraded revetements and coastal retaining walls
- Land reclamation for the ESB building
- Raised site platform
- One GIS building
- One ESB GIS building
- One ESB MV building
- Three Shunt reactors (incorporated within the GIS building)
- One Statcom building
- Three Harmonic filters
- Upgrades to the existing access road from Pigeon House Road to the site entrance
- New bridge to provide vehicle access across the cooling water discharge channel
- New internal access road layout within the site boundary
- Car parking
- Drainage infrastructure
- Security and lighting

#### **ESBN Network Cables**

The onshore export cables will connect from the onshore substation to the Poolbeg 220kV substation, which will then transfer the electricity onwards to the Irish Electricity Grid. The ESBN network cables will consist of two separate sections, with two distinct installation methods:

- Section A which consists of cables installed by means of a standard open cut trench arrangement; and
- Section B which consists of cables installed by means of HDD.

Section A will be approximately 265 m in length from the onshore substation site to a Horizontal Directional Drill (HDD) compound, which will be located within construction compound C (Compound C). Section B will be approximately 135 m in length from the HDD compound to the Poolbeg 220 kV substation.

There will be 2 temporary HDD compounds required to facilitate the installation of the HDD:

- Temporary HDD compound 1 (located within Compound C); and
- Temporary HDD compound 2 (located within the boundary of the Poolbeg 220kV substation site).

#### **Temporary Construction Compounds**

There will be four temporary construction compounds (Compounds A-D) located within the onshore development area. These will be used over the course of the construction phase. Refer to **Figure 2-3**Compound A

Compound A will be used as a support area and storage facility for the landfall works and will also be used to support the installation of the onshore export cables. It is located south of the Dublin Waste to Energy facility, will have an area of 19,800 m2 and will be accessed from the Shellybanks Road.

#### • Compound B

Compound B will provide an additional temporary construction compound/laydown area for general cable route and onshore substation construction activities. It is located south-west of the Dublin Waste to Energy facility, consists of an area of 32,300 m2 and will be accessed from the Shellybanks Road.

#### • Compound C

Compound C, required to facilitate the onshore substation and ESBN networks cable works, will be located within lands to the south east of the onshore substation site, adjacent to the former Pigeon House Hotel. Compound C will have an area of 3,500 m2 and will be accessed from Pigeon House Road via a new temporary access road.

#### Compound D

Compound D will provide a temporary construction compound/laydown area for the construction of the permanent access bridge. Compound D, located adjacent to Hammond Lane metal recycling facility, will have an area of 360 m2 and will be accessed from Pigeon House Road.

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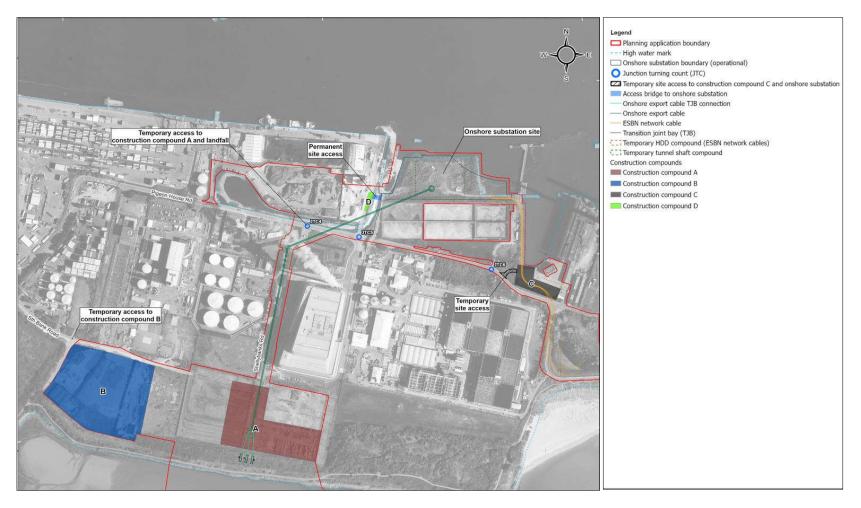


Figure 2-3 Onshore development area – onshore export cable, tunnel (Extracted from Drawing No. CWP-TOB-ENG-08-01-MAP-0981)

#### 2.1.2 Overview of the existing Road Network

The onshore development area is located on the Poolbeg Peninsula. The main road network that will be used by vehicles associated with OTI are:

- National Road Network
  - o M50
- Regional Road Network
  - o R131:
  - o R802.
- Local Road Network
  - South Bank Road;
  - Whitebank Road:
  - Pigeon House Road;
  - Shellybanks Road.

#### 2.1.2.1 Junction Overview

Refer to Figure 3-1 for junction location details.

The R131 includes the East Wall Road to Junction 1.

South of Junction 1 is the Tom Clarke Bridge over the River Liffey along the East Link Bridge via the toll plaza to the South Bank Road at Junction 2 (Sean Moore Road Roundabout).

Junction 3 is located on South Bank Road, with a priority T-junction to Pigeon House Road.

Junction 4 is located on Pigeon House Road, with a priority T-junction to Shellybanks Road to the to Compound A and the landfall site. Junction 5 is located on Pigeon House Road, with a crossroad to private access to the Dublin Waste to Energy facility and to Ecocem Ireland.

Junction 6 will be located on Pigeon House Road, with a priority T-junction to a private access. The new temporary access road entrance into the onshore substation.

#### 2.1.3 Construction Phase Haul Routes

The CWP Project will comply with the Dublin City Council (DCC) 5+ axle requirements for Dublin City and heavy goods vehicles management strategy. Heavy Vehicles (HVs) will access the onshore development area via the Dublin Tunnel & East Link Bridge. The haul route to the site is via the national and regional road network, which has sufficient width to accommodate two-way passing typical construction vehicles (i.e. HVs).

On accessing the Poolbeg Peninsula, HVs will then access:

- The onshore substation, Compound C & Compound D areas from the Pigeon House Road (using Junctions 5+6); and
- Compound A and landfall areas from the Shellybanks Road via the Pigeon House Road (using Junction 4); and



• Compound B from the Southbank Road (through Junction 3).

To facilitate the transport of materials at the onshore substation site, a one-way system will be implemented accommodate construction traffic movements. Construction vehicles will be accessing the site via the new temporary access and egress the site using the bridge over the cooling water channel and turning right onto the Pigeon House Road.

#### 2.1.3.1 Abnormal Indivisible Loads

There will be Abnormal Indivisible Loads (AILs) associated with the development of the OTI, such as tunnelling equipment, piling rigs, mobile cranes and three transformers being installed in the statcom building at the onshore substation site. The Dublin Tunnel will be used where the height restriction allows. Any plans to transport AILs into the onshore development area during the construction phase will be undertaken in liaison with DCC as part of the implementation of the TMP for the project

#### 2.1.4 PROPOSED SITE ENTRANCES

New site entrances proposed include:

- A temporary site access road located at Pigeon House Road to access the onshore substation site and Compound C during the construction phase; and
- The western access bridge across the cooling water discharge channel.
   This will be used as an egress location from the onshore substation site during the construction phase. Once the site is operational, this bridge will be used for both access and egress.

The site entrances are shown in **Figure 2-4**.

The junctions have been designed in accordance with the Design Manual for Urban Roads and Streets – (DMURS, May 2019) from the Department of Transport, Tourism and Sport.

The visibility at the temporary site access complies with the requirements of a 2.4 m 'x-distance' setback with a 'y-distance' of 45 m, distances required for a major road with a design speed of 50 km/h.

The junction at the western access bridge will be a yield junction with 11 m wide and 4 m road tapers wide where the road enters the onshore substation site. The visibility at the junction complies with DMURS requirements for a design speed of 15 km/h, with a 2.4 m 'x-distance' setback and a 12 m 'y-distance' in both directions without any obstructions.

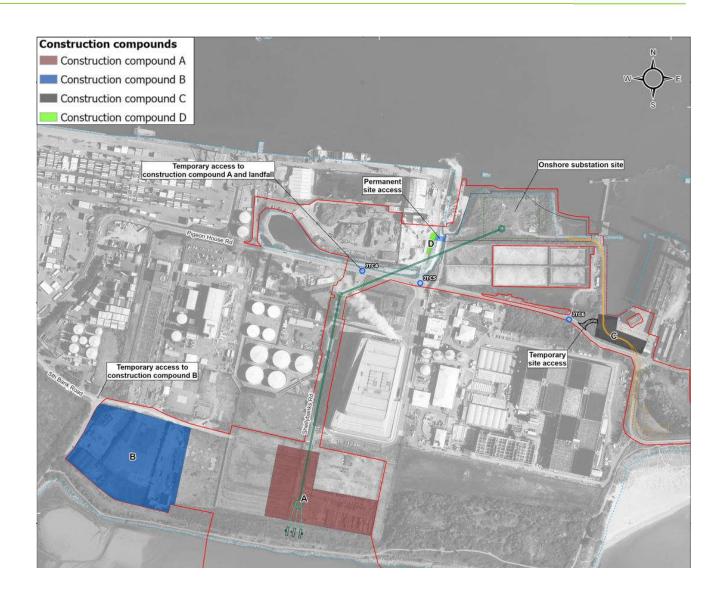


Figure 2-4 Site Accesses Map (Extracted from Drawing No. CWP-TOB-ENG-08-01-MAP-0981)

#### 3. CONSTRUCTION PHASE

#### 3.1 CONSTRUCTION PROGRAMME

Given the nature of the proposed project, the construction phase will generate the greatest impacts on traffic in the vicinity. The proposed construction is expected to start in 2026 and finish in 2029.

The proposed construction can be broken down into 4 no. main phases as presented in **Chapter 4 Project Description** in the EIAR. There will be overlap between these:

- 36 months Onshore substation construction and commissioning,
- 12 months Landfall works (Phase 1);
- 12 months Landfall works (Phase 2);
- 24 months Onshore export cable installation.

#### 3.2 CONSTRUCTION PHASE WORKING HOURS

Construction operations shall generally be undertaken between the standard working hours, 07:00 hrs and 19:00 hrs on weekdays and between 07:00 hrs and 14:00 hrs on Saturdays. There will be a requirement for some 24/7 works such as tunnel installation for the onshore export cables and HDD works for the ESBN network cables.

Specific activities may require to occur outside the standard working hours such as a specific construction delivery. Any such out of hours working will be agreed in advance with DCC and any affected stakeholders will be informed, prior to these activities.

#### 3.3 CONSTRUCTION PHASE TRAFFIC

#### 3.3.1 CONSTRUCTION VEHICLES

The construction phase for the OTI will result in additional traffic on the roads in the vicinity of the onshore development area. This additional construction traffic will include the following:

- Construction worker vehicles, e.g. cars or vans (light vehicles);
- AlLs carrying equipment such as tunnelling equipment, transformers, and piling rigs;
- Mobile Cranes;
- HVs carrying conventional earthworks equipment such as an excavator, a roller, stone crusher, forklifts, etc.;
- HV's carrying:
  - o conventional construction materials for the site, e.g. excavated materials, infill material, other aggregates, concrete, steel structures, rebar, cladding, etc.;
  - Other materials such as electric cabling, inverter stations and other electrical equipment for the onshore substation.

With the exception of the AILs, the proposed HVs will typically be rigid vehicles (i.e. concrete trucks, dump trucks, delivery vehicles) or maximum legal articulated vehicles within normal vehicle loading.

#### 3.3.2 CONSTRUCTION STAFF LEVELS

During the construction programme, the number of staff will vary according to construction activities. There will be peaks and troughs in the numbers, with a larger workforce during the general site works.

For the proposed traffic generated, 3 scenarios were considered as part of the traffic and transport assessment (TTA):

- Scenario 1: HV peak movements for the construction phase (Month 5);
- Scenario 2: LV peak movements for the construction phase (Month 21);
- Scenario 3: Average LV and HV for the construction phase.

Construction workers will generally travel to Compound A via light vehicle (i.e. car or small van), and it was considered as conservative approach that each staff member will arrive in a single occupancy, i.e. 1 person per vehicle.

All light vehicles will arrive at the onshore development area via Junction 4, and it is assumed they will park within the at Compound A and walk to their respective work locations.

#### 3.3.2.1 Future development of a Travel/Mobility Plan

The Applicant and appointed contractor will encourage sustainable modes of transport to the site. A Travel/Mobility Plan will be developed by the appointed contractor and reviewed in advance of the commencement of construction with DCC.

#### 3.3.3 CONSTRUCTION VEHICLES TRAFFIC GENERATION

For the 3 scenarios analysed, the estimated traffic generated are:

- Scenario 1 will generate daily 250 additional HV and 67 LV two-way movements;
- Scenario 2 will generate daily 60 additional HV and 168 LV two-way movements; and
- Scenario 3 will generate daily 54 additional HV and 63 LV two-way movements.

As outlined in **Chapter 27 Traffic and Transport** of the EIAR, the 3 scenarios analysed indicates that the proposed development traffic will not exceed local road network capacity.

The junction assessments indicate 5 no. junctions (i.e. Junction 2, Junction 3, Junction 4, Junction 5, and Junction 6) are currently below the desirable capacity of 0.85 and will remain below capacity with the proposed development during the construction phase.

Junction 1 presented an RFC of 0.85 during baseflow traffic in 2026. The committed development traffic increased the RFC from 0.85 to 0.9 and 0.92 during morning and evening peak hours, respectively. Therefore, the existing junction is currently near capacity.

Including the onshore development there will be a temporary increase in RFC to 0.89 and 0.92 during construction in the morning and evening peak hours. Therefore, comparing the three scenarios during the construction phase against the committed development traffic the increase in RFC is slight from 0.86 up to 0.89 in the morning peak hour, and from 0.89 up to 0.92 in the evening peak hour, resulting in a maximum increase in delay of 4 seconds.

Details of the traffic generated, its distribution, and the impact assessment are presented in **Chapter 27 Traffic and Transport** of the EIAR.



#### 3.3.4 CONSTRUCTION HAUL ROUTE

#### 3.3.4.1 TYPICAL CONSTRUCTION TRAFFIC DELIVERIES

The CWP Project will comply with the DCC 5+ axle requirements for Dublin City and heavy goods vehicles management strategy.

HVs will access the onshore development area via the Dublin Tunnel & East Link Bridge, passing through regional road R131 and accessing Junctions 3-6, following the Sean Moore Road Roundabout. The proposed haul routes for HVs to/from the onshore development area are shown in **Figure 3-1**.

The haul routes have been reviewed and are considered suitable to accommodate the two-way passing delivery vehicles anticipated at the site in terms of alignment, condition, and width. It is not anticipated that any works will be required on the regional and national road network for the purpose of deliveries.

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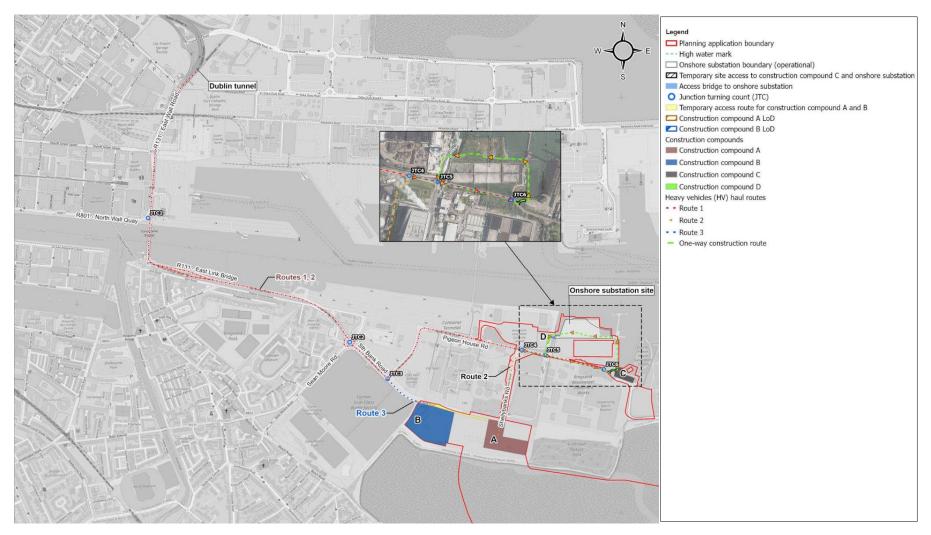


Figure 3-1 Haul Route Map - Typical Construction Vehicles (Extracted from Drawing No. CWP-TOB-ENG-08-01-MAP-0979)



#### 3.3.4.2 ABNORMAL INDIVISIBLE LOADS (AIL)

There will be Abnormal Indivisible Loads (AILs) associated with the development of the OTI, such as tunnelling equipment, piling rigs, mobile cranes and three transformers being installed in the statcom building at the onshore substation site.

The Dublin Tunnel will be used where the height restriction allows. Any plans to transport AILs into the onshore development area during the construction phase will be undertaken in liaison with DCC as part of the implementation of the TMP for the project

AlLs such as the transformers could be delivered to the Hammond Lane quayside or a Roll on Roll Off facility on the northern side of Dublin Port & then transported into the onshore substation site.

A swept path analysis has been undertaken to confirm that the transformers can be transported from quayside to the onshore substation via the new access bridge on the western boundary. A Self-Propelled Modular Transporter (SPMT) will be used. Please refer **Annex A** of this **TMP**.

#### 4. CONSTRUCTION PHASE TRAFFIC MANAGEMENT PLAN

The following are the commitments made at the planning stage of the CWP Project which shall be reviewed and finalised by the appointed contractor and the Developer and agreed with the local authority and relevant stakeholders, prior to works commencing on site:

- Engagement with Local Authority;
- General provisions;
- Site access & egress;
- Routing of construction phase traffic;
- Site specific temporary traffic measures:
  - Traffic management logistics;
  - Traffic management speed limits;
  - Traffic management signage;
  - Road closures;
  - o Timings of material deliveries to site;
  - Road cleaning.
- Enforcement of traffic management plan; and
- Emergency procedures during the construction.

#### 4.1 ENGAGEMENT WITH LOCAL AUTHORITIES

Specific construction activities may require temporary traffic management plans, temporary road diversions, permissions for works outside of standard construction working hours and the movements of AILs. These activities will be undertaken in consultation with the local authority (DCC).

Liaison will be undertaken with An Garda Siochána, during the delivery phase of AILs.

#### 4.2 GENERAL PROVISIONS

The following mitigation measures shall be included in future developments of this TMP and implemented during the construction phase of the OTI:

- Traffic movements will be limited to 07:00 19:00 Monday to Friday and 07:00 14:00 Saturday, unless otherwise agreed in writing with Dublin City Council;
- HV movements will be managed through TMOs during peak road network hours (including morning school hours) from 07:45 - 08:45 and 17:30 - 18:30 Monday to Friday;
- The CWP Project will comply with the DCC 5+ axle requirements for Dublin City and heavy goods vehicles management strategy;
- No parking shall be permitted along the access route for unloading or activities that
  result in blockages of access routes, parking is provided at the construction compounds
  for all construction traffic. Such vehicles will be immediately requested to move to avoid
  impeding the works and traffic on the road network;
- The appointed contractor shall liaise with the management of other construction projects and the local authority to co-ordinate deliveries;

- Where reasonable the appointed contractor shall schedule deliveries in such a way that construction activities and delivery activities do not occur during peak traffic flows or run concurrently;
- Measures to avoid queuing of construction traffic on the adjoining road network including turning space and queuing of convoy HVs will be provided within the site (i.e. one-way internal access track loop system at the onshore substation site);
- The appointed contractor will liaise with DCC regarding HV deliveries to the onshore development area on the days of any major events, that have the potential to increase traffic volumes on the existing road network in the vicinity;
- Wheel wash equipment will be used on site to prevent mud and stones being transferred from site to the public road network to be provided by appointed contractor;
- Activities generating dust will be minimised where practical during windy conditions.
   Loads will be covered on arrival and departure from site, where required. Other measures are outlined in the Construction Environmental Management Plan (CEMP);
- Clear construction warning signs will be placed on the public road network to provide advance warning to road users to the presence of the construction site and slower moving vehicles making turning manoeuvres;
- Access to the construction site will be controlled by on site personnel and all visitors will be asked to sign in and out of the site by security / site personnel and site visitors will all receive a suitable Health and Safety site induction;
- Security gates will be sufficiently set back from the public road, so that vehicles entering the site will stop well clear of the public road;
- The approach to the site access will accommodate queuing and passing of vehicles clear of the public road.

The final TMP at a minimum include a provision by the appointed Contractor, for details of intended construction practice for the development, including:

- Traffic Management Co-ordinator a competent traffic management co-ordinator will be appointed for the duration of the project and this person will be the main point of contact for all matters relating to traffic management;
- Delivery Programme DCC will be consulted in relation to the programme of deliveries in advance of the deliveries to site;
- Information to locals local residents in the area will be informed of any upcoming traffic related matters, e.g. temporary lane/road closures (if required).. Information will include the contact details of the Applicant's representative, who will be the main point of contact for all queries from the public or local authority during normal working hours. An "out of hours" emergency number will also be provided;
- Pre and Post Construction Condition Survey a pre-condition survey of roads on approach to the onshore development area will be carried out prior to construction commencement to record the condition of the road. A post construction survey will be carried out after works are completed. The timing of these surveys will be agreed with DCC:
- Liaison with Local Authorities liaison with DCC, including the roads and transport section and An Garda Siochána, during the delivery phase of the AILs;

- Travel/Mobility Plan for construction workers a travel plan for construction staff and sub-contractor construction staff;
- Temporary traffic signs As part of the traffic management measures, temporary traffic signs will be put in place; and

#### 4.3 SITE SPECIFIC TEMPORARY TRAFFIC MEASURES

The CWP Project won't generally require traffic management measures as the majority of works are within defined site boundaries and won't interact with the road networks.

However, there may be some temporary requirements, to close the Shellybanks Road and temporary traffic management plans would be put in place to facilitate access, via the South Bank Road in those instances.

#### 4.3.1 ROAD CLOSURE

In advance of any required road closure, the appointed contractor shall consult and comply with the Local Authority (DCC), Roads Authority, An Garda Síochána and other Emergency services to agree a suitable diversion route, on South Bank Road, prior to implementing a road closure.

#### 4.3.1.1.1 Lane Closure

Any potential requirement for a lane closure will be controlled by an active traffic management system (i.e. temporary traffic signals or Stop & Go/Téigh discs). The operation of a manual 'Stop & Go/Téigh' system will be undertaken by trained personnel, wearing suitable high visibility garments. The operators of this type of system will be in verbal contact (i.e. walkie talkie) and preferably inter-visible. At these locations queue lengths will be estimated initially with onsite measurements to determine the necessary warning distance for approaching drivers. The signage shall be adjusted as necessary when the actual impact on traffic flows is established.

The optimum traffic lane width shall be 3.3 m, with a minimum width of 3.0 m. Reduction of the temporary traffic lane width below these parameters may result in the requirement for marshalling of larger vehicles (i.e. HV and buses) or alternatively implementing a diversion route for traffic, which shall be approved by the Roads Authority following consultation with the Local Authority, An Garda Síochána and other Emergency Services.

Where roadworks impede access onto the road network, the road users shall be instructed on how to egress the property at times when a shuttle system is in operation. The appointed contractor shall provide a TMO at accesses where the motorist is having difficulty following the instructions.

Where reasonably practicable, consideration will be given to the possibility of removing the traffic management measures in order to deal with:

- Particularly high traffic volumes due to sporting or other events;
- Adverse weather conditions;
- Emergency access; or
- Times when work is not in progress.

If the night-time or weekend Temporary Traffic Management (TTM) measures varies from daytime plan, a separate TTM will be prepared to be approved by the Roads Authority.

On completion of the works, the traffic management measures are to be removed when the road is safe and free from obstructions, all reinstatement of road surfacing is completed and all permanent signs, road markings and other items are in place.

#### 4.3.2 TRAFFIC MANAGEMENT OPERATIVES

The appointed contractor as a minimum shall employ the following traffic management systems and logistics to facilitate the safe transport of materials to and from the proposed development.

#### 4.3.2.1 TRAFFIC MANAGEMENT OPERATIVES (TMOs)

No pinch points are present on the public road during the delivery of materials from the sources on the haul routes to the site access on the Pigeon House Road. Due to the works at the site access, it is not envisaged that TMOs and TTM would be required there during average construction traffic activity. The road has adequate width for vehicles to turn into the site and advanced warning signage is proposed. During peak construction activities, the appointed contractor may require TTM (i.e. stop/go system) at the site access to facilitate movement of construction vehicles off site if in convoy.

TMOs will be required within the onshore substation and construction compounds to manage the movement of HVs within the internal layout, in particular during peak construction activities.

#### 4.3.3 TRAFFIC MANAGEMENT SPEED LIMITS

Once a temporary speed limit is deemed appropriate by the appointed contractor to facilitate the construction phase activities along the public roads serving the CWP Project, the appointed contractor shall liaise with DCC for obtaining a temporary speed limit. Adherence to posted/legal speed limits will be emphasised to all staff, suppliers, and contractors.

#### 4.3.4 TRAFFIC MANAGEMENT SIGNAGE

Signage for temporary traffic measures shall be provided in accordance with the Department of Transport, Tourism and Sport - Chapter 8 - Temporary Traffic Measures and Signs for Roadworks - August 2019.

Clear construction warning signs shall be placed at adjacent roads and the entrances, to advise the general public of the presence of construction sites and activities.

#### 4.3.5 ROAD CLEANING

Regular visual surveys of the road network in the vicinity of the onshore development area will be carried out. Where identified/required, the appointed contractor shall carry out road sweeping operations, employing a water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use. Appointed contractor shall avoid dry sweeping of large areas.

It shall be a requirement of the work contract that the appointed contractor will be required to provide wheel cleaning facilities, and any other necessary measures to remove mud and organic material from vehicles. In addition, the cleaning of delivery lorries such as concrete delivery lorries shall be carried out at the temporary construction compounds as outlined in the CEMP.

#### 4.4 ENFORCEMENT OF TRAFFIC MANAGEMENT PLAN

The appointed contractor will further develop this TMP in consultation with the Applicant, local authority and relevant stakeholders. The appointed contractor will agree and implement an appropriate way of monitoring the effectiveness of the plan. All project staff and material suppliers will be required to adhere to the TMP.

Inspections/spot checks will also be carried out by the appointed contractor to ensure that all project staff and material supplies follow the agreed measures adopted in the TMP.

#### 4.5 EMERGENCY AND INCIDENT RESPONSE

Every effort will be made to prevent health and safety emergencies and environmental incidents during the construction and operational phase of the CWP Project.

The appointed contractor will be responsible for developing a detailed Emergency Response and Cooperation Plan (ERCoP) for the proposed onshore construction works, to cover health and safety emergencies as well as environmental emergencies, as part of the H&S Plan.

This ERCoP will be activated in the event of an emergency such as an accident, fire, spillage, collapse etc. and will provide details on who is required to be notified, first aid facilities and closest hospitals. The ERCoP will also include details of all personnel inducted and authorised to work on the site as well as next of kin contact details and relevant medical information.

In the event of an emergency, the HSSE Manager and Project Manager will be notified immediately and will determine the scale of the emergency and the requirement for the assistance of emergency services. Works will cease in the area of the incident and contact will be maintained with the emergency services to direct them to the scene of the incident as required.

As part of the ERCoP, an evacuation drill will be carried out on a regular basis to make all personnel aware of the procedure to be followed in the event of an emergency where a full site evacuation is required. Emergency muster point(s) will be identified at suitable locations in the construction compounds and the ERCoP will outline the persons responsible for checking names at the safety muster points. Records will be maintained of such drills.

The ERCoP must include contact names and telephone numbers for the relevant local authorities (all sections/departments) including ambulance, fire brigade, An Garda Siochána and the HSA. Reporting of environmental emergencies to the local authority will be required as well as other relevant stakeholders such as IFI, NPWS or the EPA.

In terms of construction traffic management the following aspects shall be accounted for:

- On being notified of a priority condition for the CWP Project or neighbouring sites, all
  construction vehicles will be directed to give right of way to emergency vehicles until the
  need for priority access has passed; and
- On being notified of a priority condition for the CWP Project, priority access will be provided for emergency services, to gain ready access to the onshore development area; and
- On being notified of a priority condition at neighbouring sites, priority access will be provided for emergency services, to gain ready access to areas in the vicinity of the onshore development area, including the Shellybanks Road.



#### 5. CONCLUSION

The TMP is a living document and shall be developed through the detailed design and construction phase with ongoing consultation with DCC, An Garda Síochána, Emergency Services and other stakeholders.

This TMP has thus far been developed to the planning stage, so that the necessary steps are taken throughout the planning proposals to support an efficient, safe transportation operation, with the least possible impact upon vulnerable road users and traffic along the haul roads or close to the proposed project.



### ANNEX A SWEPT PATH

