MWP

Environmental Impact Assessment Report (EIAR)

Volume 3: Appendix 3 Traffic Management Plan (TMP)

Dernacart Wind Farm 110kV Substation and Grid Connection

Statkraft Ireland

October 2024



TRAFFIC MANAGEMENT PLAN

Dernacart Wind Farm 110kV Substation and Grid Connection

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MWP, Engineering and Environmental Consultants

Address: Park House, Bessboro Road, Blackrock, Cork, T12 X251, Ireland www.mwp.ie



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1. Introduction

This Traffic Management Plan (TMP) outlines the procedures to be implemented during the construction and operation and maintenance of Dernacart Wind Farm 110kV Substation and Grid Connection.

The proposed substation development site is located in County Offaly within the townland of Barranaghs. The site is situated in a rural lightly populated area approximately 1.3 kms southwest of Garryhinch village, approximately 3 kms northeast of Mountmellick town and approximately 6 kms southwest of Portarlington town.

The proposed access track and underground electrical cabling from the Dernacart windfarm to the substation is also to be sited entirely within the townland of Barranaghs and traverses through commercial forestry plantation, scrub and peatland.

The proposed underground 110kV grid connection cable will connect the proposed 110kV Dernacart Wind Farm substation at Barranaghs to the consented 110kV substation at Bracklone, Co. Laois. The grid connection cable is to be installed solely within the public road network, and will have a length of circa 10.85 kms that crosses over the administrative areas of Offaly County Council and Laois County Council passing through the townlands of Barranaghs, Garryhinch, Annamore in County Offaly and Coolnavarnoga, Coolaghy, Kilbride, Ballymorris, Cooltederry and Bracklone in County Laois.

The location of the proposed development is shown in Figure 1-1.



Figure 1-1: Location of Proposed Development

A full description of the proposed development, development lands and all associated project elements is provided in Chapter 2 Description of Proposed Development of the EIAR for the proposed development.

The proposed underground grid connection route extends from the proposed substation site to the permitted Bracklone substation site along the existing R423, L50183, L71762, L3153, R419, L3158 and R420 public roads, which are shown in Figures 1-2 and 1-3.





Figure 1-2: Proposed Development Local Road Network Map West



Figure 1-3: Proposed Development Local Road Network Map East

The aim of the TMP is to provide a safe working environment for construction workers and efficient passage of traffic and other road users through the proposed development site. The procedures to be implemented by the contractor will include the provision of facilities for the safe passage of pedestrian and vehicular traffic and measures to separate them from the construction work.

The contractor will ensure traffic management controls are in accordance with the *Department of Transport (DoT)* Guidance for the Control and Management of Traffic at Road Works and Department of Transport (DoT) Traffic Signs Manual Chapter 8: Temporary Traffic Measures and Signs for Roadworks.

This TMP is for planning purposes only and is a 'live document' that will be updated at construction stage by the appointed contractor. In addition, the appointed contractor will further discuss, adapt, and improve the project traffic management regime in consultation with the roads department of Laois County Council and Offaly County Council through the road opening and road closure licence processes, if required.



In the event An Bord Pleanála (ABP) decides to grant permission for the proposed development, the final TMP will address the requirements of any relevant planning conditions, including any additional mitigation measures which are conditioned by the planning authority. Prior to works commencing, the final TMP for construction traffic using the public road will be produced by the appointed contractor and agreed with the Councils. Key to the implementation of the final TMP is the dedication of an on-site construction manager nominated by the contractor. All site personnel are required to ensure compliance with the requirements of the site's TMP.

2. Project Parameters

2.1 Project Staging

The total construction time frame for the proposed development is a period of approximately 16 months. The 16 month construction time frame consists of the following;

- The construction time frame for the Substation and Windfarm Collector Cable and associated access road is approximately 16 months. It is anticipated that these works will be undertaken in parallel; and
- The grid route is approximately 10.85km long with an expected 75m of works to be completed each day. The overall construction time frame for the UGC is approximately 30 weeks to allow for installation of jointing bay, communication chambers, HDD and cable installation.

It is also anticipated that works could be undertaken in tandem with the consented Dernacart Wind Farm construction works.

It is envisaged that the proposed development will commence in 2025, with a 16 months construction period. The start date is dependent on planning being granted, receipt of a grid connection offer from EirGrid, funding and all permits being in place. A framework programme of works is outlined in Table 2.1 and Table 2.2 below.

Stage	Activity	Estimated Duration
Phase 1	Pre-construction activities, Site preparation and Enabling works including construction of new site entrance	4 weeks
Phase 2	Temporary Drainage systems and Substation Access Track construction	6 weeks
Phase 3	Substation Compound excavation and formation	6 weeks
Phase 4	Windfarm collector cable and access road	12 weeks
Phase 5	Trenching, ducting and cabling	4 weeks
Phase 6	Hard standings	4 weeks
Phase 7	Control buildings construction	16 weeks
Phase 8	Electrical Infrastructure installation and other electrical works	6-8 weeks
Phase 9	Security fencing	2 weeks
Phase 10 Facility commissioning, removal and reinstatement of drainage system and si demobilisation		8 weeks
Total		16 months

Note: Phases are likely to overlap and will not be completed in isolation resulting in estimated total programme duration of approximately 16 months.

Table 2.1 Outline Substation and Windfarm Collector Cable Construction Programme



Stage	Activity	Estimated Duration
Section 1	Section within the R423 to L50183	8-10 Weeks
Section 2	Section with the L50183 and L71762 to L3152	6 Week
Section 3	Section within the L3152 to R419	3 Weeks
Section 4	Section within the R419 to L3158	2-3 days
Section 5	Section within the L3158 to R420	8 Weeks
Section 6	Section within the R420 to Bracklone Substation	3 Weeks
Total		30 Weeks



All construction and delivery vehicles will be subject to the standard axle weight requirements set out under Road Traffic Regulations and therefore the loadings from construction traffic will not exceed the relevant standards.

2.2 Construction Works

A full description of the construction works is provided in Chapter 2 of the EIAR for the proposed development.

2.2.1 Grid Connection Works

The underground cable required to facilitate grid connection will be laid beneath the surface of the site and public road using the following typical methodology:

- The area where excavations are planned will be surveyed, prior to the commencement of works, with a cable-avoiding tool (CAT) and all existing underground services will be identified;
- A team consisting of two tracked excavators, two dumpers and a tractor and stone cart with side-shoot will dig the trench for and lay approximately 100m of the underground cable ducting per day;
- The excavators will open a trench at the edge of the road surface, the trench will be a maximum of approximately 600 mm wide and 1,250 mm deep;
- Construction material including aggregate and cement will be delivered to the work area and stockpiled at the proposed construction compound, or locally with the consent of local landowners and the planning authority, where required;
- Clay plugs will be installed at 50 metres intervals to prevent the trench becoming a conduit for surface water runoff;
- Cable joint pits will be located at approximately 500 metres intervals, or as otherwise required by ESB requirements along the proposed cable route, each joint pit will be approximately 2.6 metres x 8 metres in size and contain a communications chamber, an earth link box and a cable joint bay, all of which will be located in the road edge and accessible for cable pulling and future maintenance;
- The excavated material will be loaded into the dumper trucks to be transported to a licensed waste facility, and site designated materials storage areas to be reused as backfilling material where appropriate;
- Once the trench has been excavated, a base layer of blinding will be installed by the tractor and cart and compacted by the excavators;
- The ducting along with marker strips will then be placed in the trench as per relevant specifications;
- Blinding will be installed to approximately 75 mm above the cable ducting and compacted;

- The remainder of the trench will be backfilled with granular material and compacted; and
- The trench will be surfaced as per the road surface specifications of the local public road.

2.2.2 Temporary Compound

A temporary construction compound will be provided at the proposed substation site, and will include materials' storage/laydown areas, parking and staff facilities.

Temporary construction materials' storage for the grid connection route along the public road network may be provided at existing site locations convenient to the works' locations, as the 10.85 kms route works progress, which would be subject to the pre-approval of the planning authority prior to the works.

2.2.3 Access

Construction access for the proposed temporary construction compound, windfarm collector cable, substation and the associated proposed access road/track between the proposed substation and Dernacart Wind Farm, is via the proposed substation access on the north side of the R423, location to the south of the substation site.

Access between the proposed construction compound and the underground grid connection route would be via the proposed substation access on the R423 and the public road network along the grid connection route.

2.2.4 Construction Hours

The proposed construction hours are 7.00 a.m. to 7.00 p.m., Monday to Friday and 7.00 a.m. to 1.00 p.m. on Saturdays. On occasion, the working day may extend outside normal working hours when critical elements of the works need to be advanced.

2.2.5 Staff

The expected peak staff would be up to 40 construction personnel, which would generate approximately 30 car and van trips, both to and from the site each working day.

Canteen facilities for personnel would be provided on-site at the temporary compound. Site personnel would travel to site prior to 8.00 a.m. and depart from site from 6.00 p.m., on weekdays, outside the peak traffic hours.

It is envisaged that the construction crew for the proposed grid connection works would include up to 10 construction personnel, which are included in the foregoing expected peak construction staff.

2.2.6 Delivery Vehicles

All construction excavated material for the proposed windfarm collector cable, substation and the associated proposed access road/track between the proposed substation and Dernacart Wind Farm would be retained onsite.

The 16 months construction would require the importation of a total of up to 11,584 loads of construction materials plus the removal of 814 loads from the grid connection works along the public road network to a licensed waste facility. All construction materials would be transported using standard heavy vehicle delivery trucks with capacities of 10 m³ and 20 tonnes, and 8 m³ for concrete trucks. The peak daily imported loads would occur during the six weeks' substation formation and access road/track works. The proposed construction works heavy vehicle loads are provided in Table 2-3.



	Total Number of Heavy Vehicle Loads				
Works	Total Construction (16 months)	Peak Daily	Highest Hour		
Substation, WF Collector Cable and Access Road/Track (16 months)	9,911	183 ⁽¹⁾	18 ⁽¹⁾		
Grid Connection (30 weeks)	2,487	15	2		
Total (16 months)	12,398	183 ⁽¹⁾	18 ⁽¹⁾		

Note ⁽¹⁾: During six weeks' substation formation and access road/track works.

Table 2-3: Proposed Construction Works Heavy Vehicle Loads

2.2.7 Delivery Vehicle Routes

The potential material sources for the proposed development construction are detailed in Chapter 2 Description of the Proposed Development of the EIAR, and include suppliers located in the northeast, east, south, southwest and west of the proposed development site.

It is envisaged that the delivery of construction materials would be typically circa 50% via the R423 east of the proposed substation access, and circa 50% via the R423 west of the proposed substation access, but could be up to 100% via either direction during specific periods of construction.

2.3 Duties and Responsibilities

The following parties will have an input into traffic management and will be kept informed by the contractor of developments in relation to traffic management:

- Contractor;
- Project Supervisor Construction Stage (PSCS);
- Project Supervisor Design Process (PSDP);
- An Garda Síochána;
- Road Engineers for Local Authorities; and
- Emergency Services.

2.3.1 Contractor

The contractor shall consult with An Garda Síochána, the emergency services and all relevant parties listed above during the preparation of traffic management proposals. The contractor as part of their role as PSCS will coordinate the implementation of the developed traffic management. Where any issues arise with the traffic management plan, they shall consult with the relevant parties to revise the traffic management plan to each parties satisfaction.

2.3.2 An Garda Síochána

An Garda Síochána shall have final authority with regard to day-to-day traffic control. The contractor will comply with all directions, instructions and requirements of An Garda Síochána.



2.3.3 Road Engineers for Local Authorities

Road Engineers for Laois County Council and Offaly County Council are primarily engaged in the maintenance and management of the road network and its services in the area of the cable route. In respect of all works on, under, and above the road network, they are empowered as officers of the Roads Authority to issue directions to undertakers of all works in relation to timing, the manner in which works are carried out, reinstatement and satisfactory completion (this empowerment is exerted through the Road opening and closure licences processes). The contractor will ensure to work with the Roads Department of the Local Authorities at all times.

2.3.4 Emergency Services

In relation to accidents occurring on, or caused by, the works, the contractor will provide all necessary assistance to deal with any emergency to An Garda Síochána, Ambulance Services and Fire Brigade services. The contractor will consult with the emergency services regarding the traffic proposals for work in public areas/on public roads.

In the event that emergency services need to travel past the works area where a lane closure is active, the existing traffic management system, be it stop/go or traffic lights, may need to be cancelled and priority given to the emergency vehicle. If the emergency is located along the works area, the contractor will allow the emergency services to pass the works area by removing machinery from the road in an orderly fashion and allowing the emergency services pass under the supervision of the team leader. If required, steel road plates will be available at the works area to span the trench in the event of an emergency.

2.3.5 Local Residents

The following measures will be used to communicate the necessary information to the households along the local road to be used as a haul road:

- Information signs will be erected in advance of the construction/traffic management works;
- A information flyer drop will be carried out to advise households along the local road leading to the site in relation to the programme of construction works; and
- Contact details for a Liaison Officer will be provided so that any concerns can be easily communicated to the Developer.

Complaints will be entered into the site complaints log and the relevant site environmental officer will arrange to meet with those affected. The situation will be acted upon immediately and reviewed by the Project Manager.

2.4 Procedures

2.4.1 Traffic Control Tools

The contractor will use a range of traffic control tools including temporary traffic lights, stop/go boards, two-way radios, safety barriers, cones, signage etc. Each crew on site will have personnel on site trained in Signing, Lighting and Guarding/Health and Safety at Road Works. Communication/Instruction of the TMP will be from the Project Manager and communicated to site personnel with the relevant training.

2.4.2 Lane Width Restrictions

Where lane width restrictions are necessary due to the construction of the cable route, the contractor will advise the relevant Road Authority of the following details:



- Reasons for lane width restrictions;
- Details of restricted width of traffic lane;
- Details of associated signage and warnings to motorists and pedestrians, including road markings;
- Details of proposed system of public communications and public liaison; and
- Temporary footways.

2.4.3 Public Notices

Public notices in respect of road traffic management tools are the responsibility of the Roads Authority who will undertake to publish such notices.

2.4.4 Communications

The employer is committed to providing a high level of communication to the general public and business community regarding the extent and duration of the project. The contractor will co-operate with the employer in this regard.

The employer/contractor will advise to the public of the following:

- Commencement and duration periods for the works;
- Current and proposed lane closures or other traffic management tools;
- Alternative routes; and
- Provision for access/egress.

In the event of potential conflicts arising from construction activities, such conflicts shall be resolved, if possible, in consultation with the Roads Authority, the contractor and where necessary An Garda Síochána.

2.5 Traffic Management and Control Procedures

2.5.1 General

• Excavation, backfilling and reinstatement of trenches in roads will be completed within the shortest possible time frame.

2.5.2 Access for Residents

- The contractor shall make provision for safe access at all times to private residences in proximity to the construction works.
- Steel plates or stone will be made available to allow access to residential properties where necessary. This will be done in co-operation/communication with local residents in the area.
- The contractor will inform local residents of the programme of works in their area and local access will be maintained where possible.



2.5.3 Access to Commercial/Business/School Properties

• The contractor shall make provision for safe access to commercial, business and school premises for all users, including staff, customers, the general public and for deliveries.

2.5.4 Pedestrian Safety

- The contractor shall ensure that throughout the course of the works its operations do not put pedestrians at any risk.
- Where the construction work necessitates the restriction or partial closure of a pedestrian walkway where they may exist, the contractor shall provide adequate safety barriers, signposts, lighting and temporary surfacing (if applicable) to ensure safe passage for pedestrians.
- Where the construction work necessitates the closure of a pedestrian walkway, the contractor shall provide a safe and reasonable alternative. The contractor shall provide adequate safety barriers, signposts, and lighting (if applicable) to direct pedestrians and ensure their safe passage.
- With respect to pedestrians, the contractor shall refer to and observe the requirements of the latest version of the Department of Transport (DoT) Traffic Signs Manual Chapter 8: Temporary Traffic Measures and Signs for Roadworks.

2.5.5 Signage

- All sign faces are to be retro-reflective material to Class Ref 2 of EN 12899. The colours, chromaticity and luminance factors shall be as specified in Specification TS4.
- Signage shall be inspected at least twice daily by the contractor so as to ensure that it is in place, secure and appropriately fitted with warning lights as required.

2.5.6 Cleanliness of Roads

• The contractor will provide sufficient resources on site, including road sweeping equipment, to ensure the cleanliness of the road network.

2.5.7 Operator Training

- The contractor will provide training to operatives in the traffic control systems being used on site. The importance of transport management, the safety of motorists, pedestrians and site staff shall be emphasised to all construction staff.
- There must be at least one competent person with the valid and relevant Construction Skills Registration (CSR) or Construction Skills Certification Scheme (CSCS) Card on site at all times when work is being carried out on roads.

2.5.8 Emergency Crew

• The contractor's emergency contact telephone number shall be displayed at the contractor's site office and shall be notified to the Local Authority Roads Engineer, Utility companies and the Emergency Services Providers. This telephone will be manned by the contractor's Project Manager or by an authorised deputy capable of making decisions in an emergency situation.



- The contractor shall set up an emergency crew, led by an experienced foreman or an engineer, for dealing with emergencies arising as a result of the works on roads outside of normal working hours. The emergency crew shall be available to respond to an event seven days a week.
- The contractor will issue the emergency crew with contact details for the emergency services and the utility companies, in the event that they are required.

2.6 Traffic Management Plan

It is envisaged that a system of single lane closures will be implemented along the cable route in the public roadway. This is to ensure the cable route can be constructed safely to protect construction workers and members of the public.

The type of closure required for construction works is subject to change. Prior to works commencing, a final Traffic Management Plan (TMP) for construction traffic using the public road will be produced by the appointed contractor and agreed with Laois County Council and Offaly County Council. The contractor will apply to Laois County Council and Offaly County Council for a Road Opening Licence (ROL), prior to works commencing and follow the relevant procedures set out in the latest version of the *Department of Transport (DoT) Guidance for the Control and Management of Traffic at Road Works* and *Department of Transport (DoT) Traffic Signs Manual Chapter 8: Temporary Traffic Measures and Signs for Roadworks.* Any specific conditions set out in the grant of the Road Opening License (ROL) will be complied with.

2.6.1 Single Lane Closures

Single lane closures will be implemented as the construction of the cable trench progresses along the cable route. It is envisaged that approximately 75 metres will be constructed each day and, therefore, single lane closures will move with the works. The single lane closure will be controlled by way of either a stop-go system, or by temporary traffic lights. The contractor will ensure that procedures and works for single lane closures are in accordance with the *Department of Transport (DoT) Guidance for the Control and Management of Traffic at Road Works*. Temporary traffic management and roadwork signs will be in accordance with and *Department of Transport (DoT) Traffic Signs Manual Chapter 8: Temporary Traffic Measures and Signs for Roadworks*.

It is envisaged that the local roads will have single lane closures during the construction of the cable route.

2.6.2 Road Crossings

The grid connection route crosses other roads and accesses at junctions, including along Canal Road, for a potential construction works' duration of one to two days at junctions. Temporary construction traffic management arrangements in accordance with the *Department of Transport (DoT) Traffic Signs Manual Chapter* 8: Temporary Traffic Measures and Signs for Roadworks will be provided.

Where the cable route is planned to cross the local public roads or private, the contractor will decide on the best method for controlling traffic.

Steel plates or stone will be made available to allow access to accesses and junctions. This will be done in cooperation/communication with local residents in the area.

A road safety and courtesy protocol will be implemented for the duration of construction. All companies delivering to site will have to sign up to this protocol as part of their supply contract. The protocol will consist of restricted delivery hours, speed limits along roads and site. Fundamental to the protocol is courtesy for other road users. In this vehicles will always give way to oncoming residential traffic and will always slow down or stop as appropriate for pedestrians and cyclists.



2.6.3 Road Closures

Road closures and traffic diversion are not proposed and would only be necessary where single lane closure are not permitted by the planning authority (ABP), or approved by Laois County Council and Offaly County Council. A road closure will be controlled by way of diversions but local access will be accommodated on the route where possible with all residents on the route informed of the programme for a road closure. The appointed contractor will ensure that procedures and works for closures are in accordance with the *Department of Transport (DoT) Guidance for the Control and Management of Traffic at Road Works.* Temporary traffic management and roadwork signs will be in accordance with the *Department of Transport (DoT) Traffic Signs Manual Chapter 8: Temporary Traffic Measures and Signs for Roadworks.*

2.6.4 Joint Bays

It may be necessary that joint bays on the cable route are required to be left open overnight for pulling cables through the ducts and jointing the cables together. Joint bays will be individually assessed to determine what type of traffic management system will be required at each location. Safety barriers or fencing will be erected around each open joint bay with either a priority yield or temporary traffic light system utilised to safely navigate vehicles around.

The contractor will ensure traffic management controls are in accordance with Chapter 8 of the *Traffic Signs Manual 2019* and the *Department of Transport (DoT) Guidance for the Control and Management of Traffic at Road Works.*

2.6.5 Working Hours

Works along public roads will be carried out from 7.00 a.m. to 7.00 p.m., Monday to Friday and 7.00 a.m. to 1.00 p.m. on Saturdays. On occasion, the working day may extend outside normal working hours when critical elements of the works need to be advanced. No work will take place on Sundays or bank holidays unless pre approved by the Local Authority.

Working hours will be confirmed at the outset of the project and any changes in hours will be agreed with the Local Authority.

2.6.6 Personnel Vehicles

For the grid connection route, site operatives who's vehicles are not required for the construction works will park their vehicles at the contractor's main site temporary compound which will be located within the proposed substation site.

2.6.7 Schedule of Control Measures for Heavy Goods Vehicles

The mitigation measures outlined below will be implemented so as to minimise the impacts of construction phase traffic associated with the project.

- Ensure a strict protocol for Heavy Goods Vehicle (HGV) drivers to follow designated haulage routes;
- Advance warning should be given to the local residents and road users for specific times when peak volumes of HGV traffic may occur;
- A maximum speed limit would be imposed for HGVs on the local road network during the construction phase;



- A well planned and executed delivery programme avoiding peak traffic on typical days will be ensured (i.e. local school start and finish times);
- A road sweeping vehicle will be provided, as required, to remove any mud that is deposited on the road network; and
- Enforcement of existing regulatory markings and signage would be implemented.

2.6.8 Site Access/Materials Haulage Routes

Construction access for the proposed temporary construction compound, windfarm collector cable, substation and the associated proposed access road/track between the proposed substation and Dernacart Wind Farm, is via the proposed substation access on the north side of the R423, location to the south of the substation site.

Access between the proposed construction compound and the underground grid connection route would be via the proposed substation access on the R423 and the public road network along the grid connection route.

The potential material sources for the proposed development construction are detailed in Chapter 2 Description of the Proposed Development of the EIAR, and include suppliers located in the northeast, east, south, southwest and west of the proposed development site.

It is envisaged that the delivery of construction materials would be typically circa 50% via the R423 east of the proposed substation access, and circa 50% via the R423 west of the proposed substation access, but could be up to 100% via either direction during specific periods of construction.

Concrete and aggregate materials will be sourced from authorised facilities. The following quarries in County Laois and County Offaly are in proximity to the proposed site and are potential source to be used, but this will be confirmed by the appointed contractor:

Quarry Name	Product Type	Distance from site (km)
Kisaran Portlaoise	Concrete	14 kms south
Carroll Quarry	Aggregates, sand and gravel	24 kms southwest
Arkil Ltd	Sand and gravel	25 kms northeast
Callan Sand and Gravel Ltd	Sand and gravel	26 kms northeast
Flanagan Concrete Limited	Concrete	26.5 kms northeast
Roadstone Ltd, Allen Quarry	Aggregates for concrete, hardcore, earthworks / fill	29.7 kms northeast
Hanlon Concrete Products	Concrete	33 kms northeast
Roadstone Ballyadams	Readymix concrete	24 kms southeast
Kerwin Limestone Ltd., Killeaney Quarry	Farm drainage, earthworks/ fill	25 kms southwest
Boley Pit, Shiel sand and gravel Ltd.	Fine sand, coarse sand, pebble, natural gravel, graded aggregate	25.5 kms southwest
Ballysaxhills Pit, Kilsaran The Curragh	Ready-mix concrete and aggregates. Fine sand, coarse sand, pebble, natural gravel, crushed gravel, graded aggregate	33 kms east
Ballinaguilsha Quarry, Loughnane Concrete (Birr) Ltd.	Aggregates for concrete, hardcore, farm drainage, earthworks/ fill	38 kms west
Lisduff Quarry, Dowling Quarry Ltd.	Aggregates for concrete, hardcore, farm drainage, earthworks/fill	43 kms southwest
Table 2.4	Potential Materials Sources	



The use of local quarries, where possible, will reduce impacts on traffic and the environment. Laois County Council and Offaly County Council will be notified of the selected quarry/quarries and the proposed materials' haulage route(s), which will be agreed with the Councils prior to the commencement of development.

2.6.9 Permitted Dernacart Wind Farm and Bracklone Substation

Access for the permitted Dernacart Wind Farm is via the N80, north of Mountmellick, and the L2092 Local Road on the east side of the N80. The expected haul routes for construction materials for the permitted Dernacart Wind Farm identified in its EIAR are located west of the subject proposed substation and underground grid connection route, via the N80. The proposed turbine haul route is via the M6 Motorway, located to the north, and the N80.

The permitted Dernacart Wind Farm EIAR identified increased traffic volumes during construction on the N80 and L2092 roads, with predicted increases in AADT volumes on the N80 of 1.12% at Dernacart and 0.93% at Tullamore. There would be no additional cumulative increase in these predicted traffic volumes, with the subject proposed development, as the Dernacart Wind Farm EIAR included the construction of a substation and underground grid connection to the Bracklone substation.

The permitted Bracklone Substation planning RFI response indicates a maximum of 30 HGV deliveries to site per day during construction, and an average of 30 construction staff. The existing access road and its R420 junction will be upgraded as part of the permitted works. A Traffic Management Plan will be developed and implemented by the appointed construction contractor. The peak highest cumulative development increase in daily vehicle volumes on the R420, with the subject proposed development construction and the permitted Bracklone Substation peak construction, is 2.0%.

2.6.10 Road Pavements Monitoring

Heavy vehicle traffic volumes generated by the proposed development construction could result in damage to existing and proposed road pavements on public roads, including at vehicle turning, accelerating and decelerating locations. Road pavements would be regularly monitored and reinstated in accordance with the requirements of Laois County Council and Offaly County Council.

2.6.11 Operational Stage

A detailed description of the proposed operational phase is provided in Chapter 2 Description of the Proposed Development of the EIAR.

The proposed development will have up to two operational staff and will generate negligible operational traffic volumes. Occasional traffic will be generated by routine inspection and maintenance.

2.6.12 Decommissioning

The grid cable and substation will remain a permanent part of the national grid infrastructure and, therefore, decommissioning is not expected.