



Preliminary Construction Traffic Management Plan

Gas Turbine Power Generation Station Phase 2 at Kilshane, Co. Dublin

May 2026

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This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015 and BS EN ISO 14001: 2015)

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1. Introduction

1.1 Purpose and Objectives

This Preliminary Construction Traffic Management has been prepared by Waterman Moylan Engineering Consultants as part of a planning documentation for the Proposed Kilshane Phase 2 Development in Dublin 11.

The purpose of this preliminary plan is to address how construction traffic will access and egress the development site. In addition, this report assesses the potential traffic impacts on the surrounding road network during the construction phase and proposes measures to manage these impacts.

This document set out guidelines for the preparation of the Construction Traffic Management Plan and the Construction Mobility Management Plan. It is important to note that it is the responsibility of the main contractor to prepare and submit the aforementioned plans to Fingal County Council for approval prior to the commencement of construction activities.

1.2 Site Location

The site is located at Kilshane, Dublin 11, just west of the N2 Primary Road, approximately 300m west of the R135 and is located approx. 2 km north-west of the M50.

The site is bound to the north by the Phase 1 which has received a notification to grant permission under Reg. Ref. FW25A/0523E. The remaining lands surrounding the site are largely comprised of agricultural fields, with the businesses and commercial/industrial sheds appearing in the wider vicinity east and west of the site.

The subject development forms part of a larger landholding pertaining to Kilshane Energy. The overall landholding is bound to the west of the site is a small-scale haulage premises (PD Flaherty Logistics). Beyond the M2 to the east are areas of commercial / logistics development including Quantum Distribution Park and Dublin Airport Logistics Park, beyond which lies further greenfield lands and Dublin Airport. Huntstown Quarry, Huntstown Power Station and anaerobic digestion facility are located further to the south of the site.

Figure 1 below shows the location of the subject development.

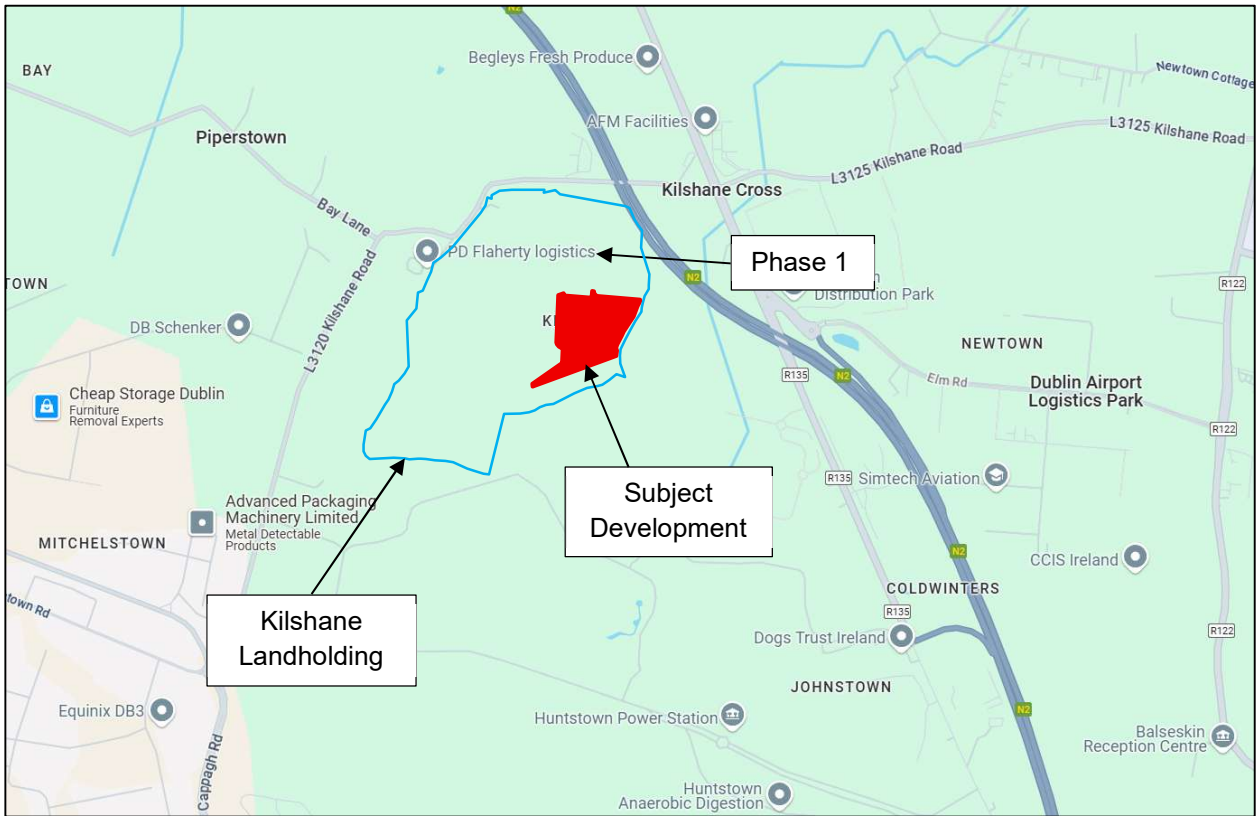


Figure 1 | Site Location (Source: Google Maps)

2. Proposed Development

2.1 Description of the Development

The site is located at Kilshane, Dublin 11, just west of the N2 Primary Road, approximately 300m west of the R135 and is located approx. 2 km north-west of the M50.

The site is bound to the north by the Phase 1 Development which has received a notification to grant permission under Reg. Ref. ABP-317480-23. The remaining lands surrounding the site largely comprise agricultural fields, with the businesses and commercial/industrial sheds appearing in the wider vicinity east and west of the site.

The proposed development will consist of the following:

- 2 additional gas turbines producing 340MW each
- 400kV GIS building and associated compound
- Increasing diesel storage from 5000t to 15000t
- Extension to administration building
- Access roads
- Electrical substation

Vehicular access to the subject development will be provided via a new roundabout, connecting to the internal road to be provided in Phase 1 which is located immediately north of the subject site. This phase has received a notification to grant permission under Reg. Ref. ABP-317480-23. The permitted roundabout will also serve as the primary access point for pedestrians and cyclists.

The development access point is shown in **Figure 2** below:

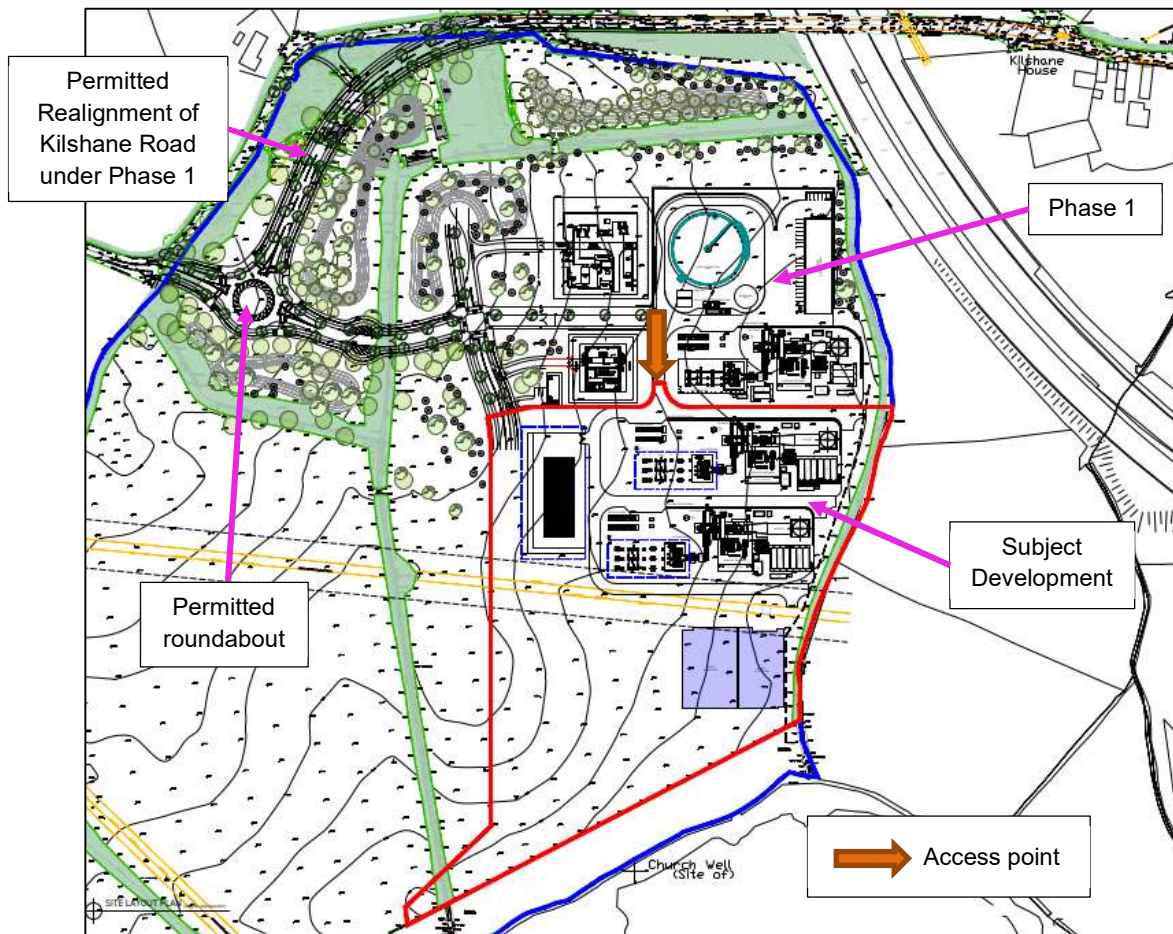


Figure 2 | Proposed Development – Site Access Point

2.2 Construction Programme

It is anticipated that construction of the proposed development will commence in 2027 for completion in 2029.

2.3 Construction Traffic

The construction period for the subject development is expected to overlap with Phase 1 which has received a notification to grant permission under Reg. Ref. ABP-317480-23. According to the TTA prepared by Waterman Moylan Consulting Engineers *report No. 21-099r.011B* attached to the Planning Application for the Phase 1 development, the construction phase is expected to occur from 2025 to 2028. The proposed subject development's construction phase will occur from 2027 to 2029.

During the construction of Phase 1, the site will accommodate approximately 200 construction staff. Once Phase 2 construction commences, staffing levels are expected to increase by an additional 50 personnel, bringing the total number of construction staff on-site to 250 during the peak overlapping period.

Combined estimates for construction staff and daily HGV deliveries covering both phases have been used to determine the upper limit of construction-related traffic to and from the site.

- **Number of construction staff:** 250 people.

- **Number of daily HGV deliveries:** 5-10 increasing to 22 for stone deliveries and large concrete pours.

Access from the site to existing public transport in the surrounding area is precarious and unsafe with no provision of continued footpaths. Consequently, it is anticipated that staff will primarily commute to and from the site by personal vehicles, carpooling, or shuttle buses. During the construction phase, it is estimated that staff movements will generate approximately 100 trips during both the AM and PM peak hours.

It is assumed that construction activities will take place over a 10-hour working day, operating between 08:00 and 18:00, Monday to Friday. Construction workers are expected to arrive on site before 08:00 and depart between 17:00 and 18:00. Based on this schedule, it is estimated that approximately 80% of construction staff will arrive before 08:00, while 50% will leave after 17:30.

In order to carry out a conservative assessment of the surrounding road network during the construction phase, it has been assumed that, on the busiest construction day (assuming a maximum of 250 staff and 22 HGV trips for stone deliveries and large concrete pours), the site will:

- a) attract 20 inbound car trips in the AM peak hour and generate 50 outbound car trips in the PM peak hour.
- b) attract/generate 22 inbound and 22 outbound HGV trips daily with 2 inbound and 2 outbound during the AM and PM peak hours. The HGV trips are expressed in PCU (1 HGV = 2.5 PCU)

3. Primary Haul Routes

3.1 Background

For the preliminary construction traffic management plan, there is no designated site for the excavated material to fill. This will be organised by the designated Contractor before construction. For the purposes of this Preliminary Construction Traffic Management Plan, haul routes to the N2 have been established.

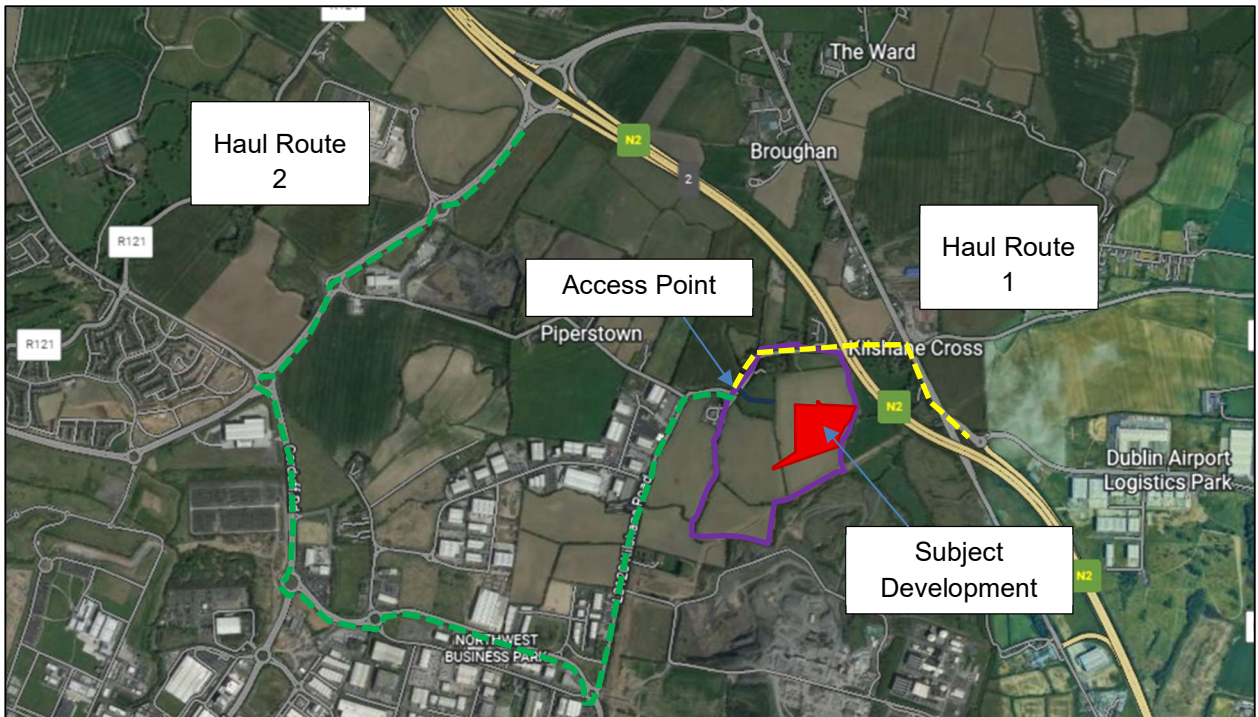


Figure 3 | Vehicular routes from the N2

3.2 Route Assessment

3.2.1 Haul Route 1

Haul route 1 is the shortest route from the site to the N2 measuring 1.2 km and it is relatively flat route with an exception of the N2 overpass. The haul route has a good quality carriageway measuring 7.5m along Kilshane Road with a pinch point towards Kilshane Cross Junction and on the N2 Overpass Bridge.

Route	Advantages	Disadvantages
Route 1	<ul style="list-style-type: none"> Shortest Route Generally flat route Little pedestrian movements in the area 	<ul style="list-style-type: none"> Traffic Congestion at Kilshane Cross Junction Pinch Points along Kilshane Road and N2 Overpass N2 access is only for N2 South and access to N2 north is significantly longer travel distance.

Table 1 | Haul Route 1 – Advantages/Disadvantages

3.2.2 Haul Route 2

Haul Route 2 is approximately 12km connecting to the N2 to the north of the proposed site. This haul route is significantly longer when compared to Haul Route 1. This route is longer due to the road network around the proposed development. Using Bay Lane would reduce the haul route distance however Bay Lane carriageway is approximately 3.5m and too narrow for HGVs to use daily. Bay Lane also lacks road markings, pedestrian pathways or street lighting.



Figure 4 | Bay Lane

Therefore, the proposed haul route travels further south along Kilshane Road through Northwest Business Park to Corduff Park Road which connects to the N2. Corduff Road is a dual carriageway approximately 17m wide with pedestrian and cyclist pathways on both sides of the road separated by a grass verge.

Route	Advantages	Disadvantages
Route 2	<ul style="list-style-type: none"> Wider roads with fewer pinch points Connecting to both north and south directions for the N2 Less traffic congestion (avoids the busy Kilshane Cross Junction) 	<ul style="list-style-type: none"> Longer haul route More pedestrian interference More junction interference Haul route through Northwest business park

Table 2 | Haul Route 2 – Advantages/Disadvantages

3.3 Construction Traffic Access

A temporary access road with a 7m carriage width has been proposed for construction traffic as shown in **Figure 5** below.

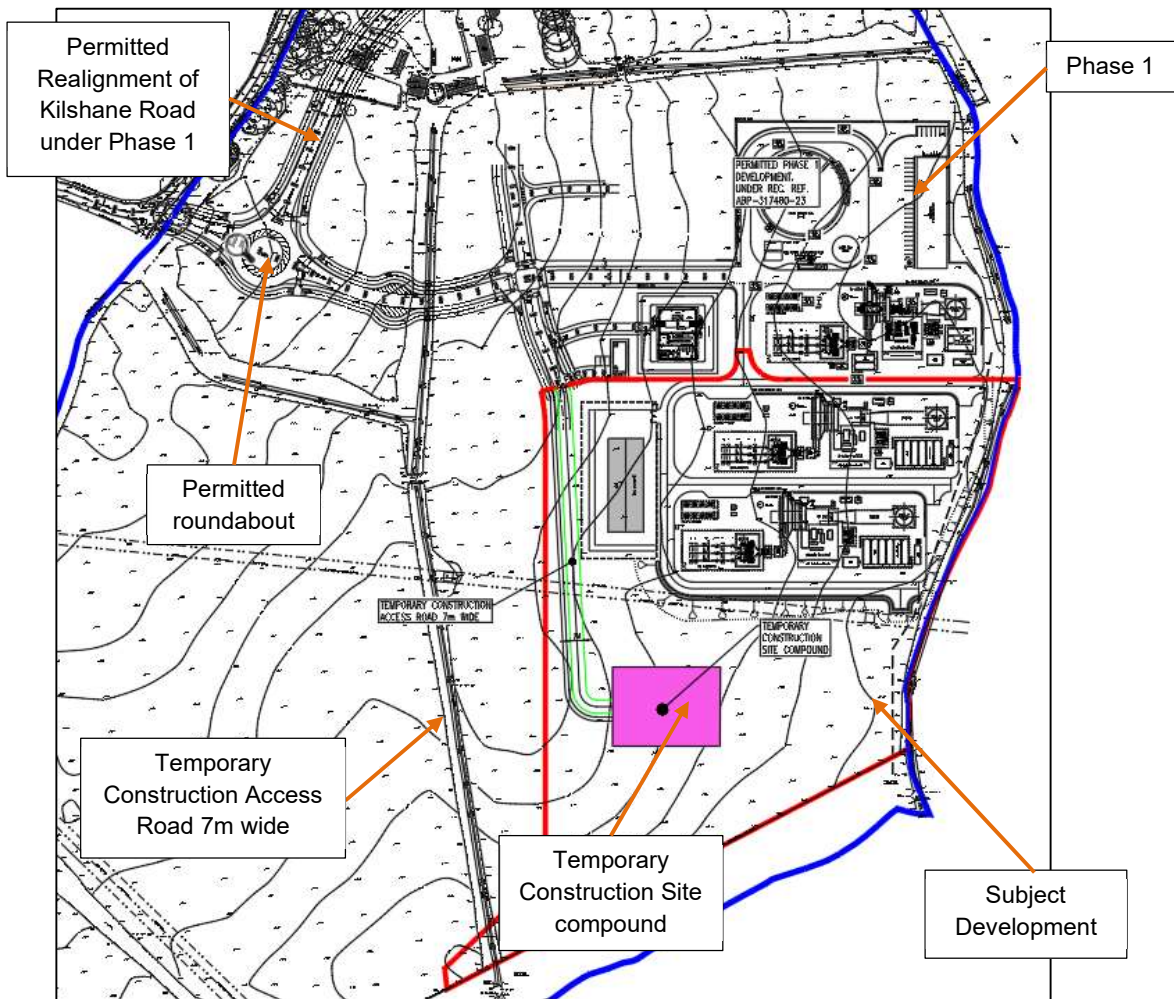


Figure 5 | Construction Traffic Access

3.4 Parking During Construction

According to the TTA attached as part of the planning documentation (*Waterman Moylan Document No. 25-046r.002*), access from the site to existing public transport in the surrounding area is precarious and unsafe with no provision of continued footpaths. Consequently, it is anticipated that staff will primarily commute to and from the development by car.

A construction car park will be established at the commencement of the construction phase will serve as a parking area for vehicles belonging to the workforce. This will be situated within the construction site, thereby preventing any impact on the surrounding development area. No parking allowed on Kilshane Road or the surrounding developments.

4. Site Accessibility

4.1 Local Bus Network

There are no public transport services operating directly on Kilshane Road. The nearest bus stops are located on the R135. Additionally, there are bus stops located on the Mitchelstown Road at the Northwest Business Park, situated to the east and southwest of the site. Details on current bus services and walking routes to/from the site are provided below:

- “Suncourt” bus stop (Stop 101121) on the R135. This is 950m (approx. 13 min walk) away from the existing site entrance. This stop is served by bus routes 103 & 105X in a southbound direction only.
- “Kilshane Cross” bus stops numbers 105621 and 134321 on the R135. This is 2.0km (approx. 27 min walk) away from the existing site entrance. This stop is served by bus routes 103 & 105X in a northbound direction only.
- Northwest bus stops numbers 7680 and 7676 on the Mitchelstown Road at Northwest Business Park, serve route 40E in both directions and are 1.6km (approx. 22 min walk) away from the existing site entrance.

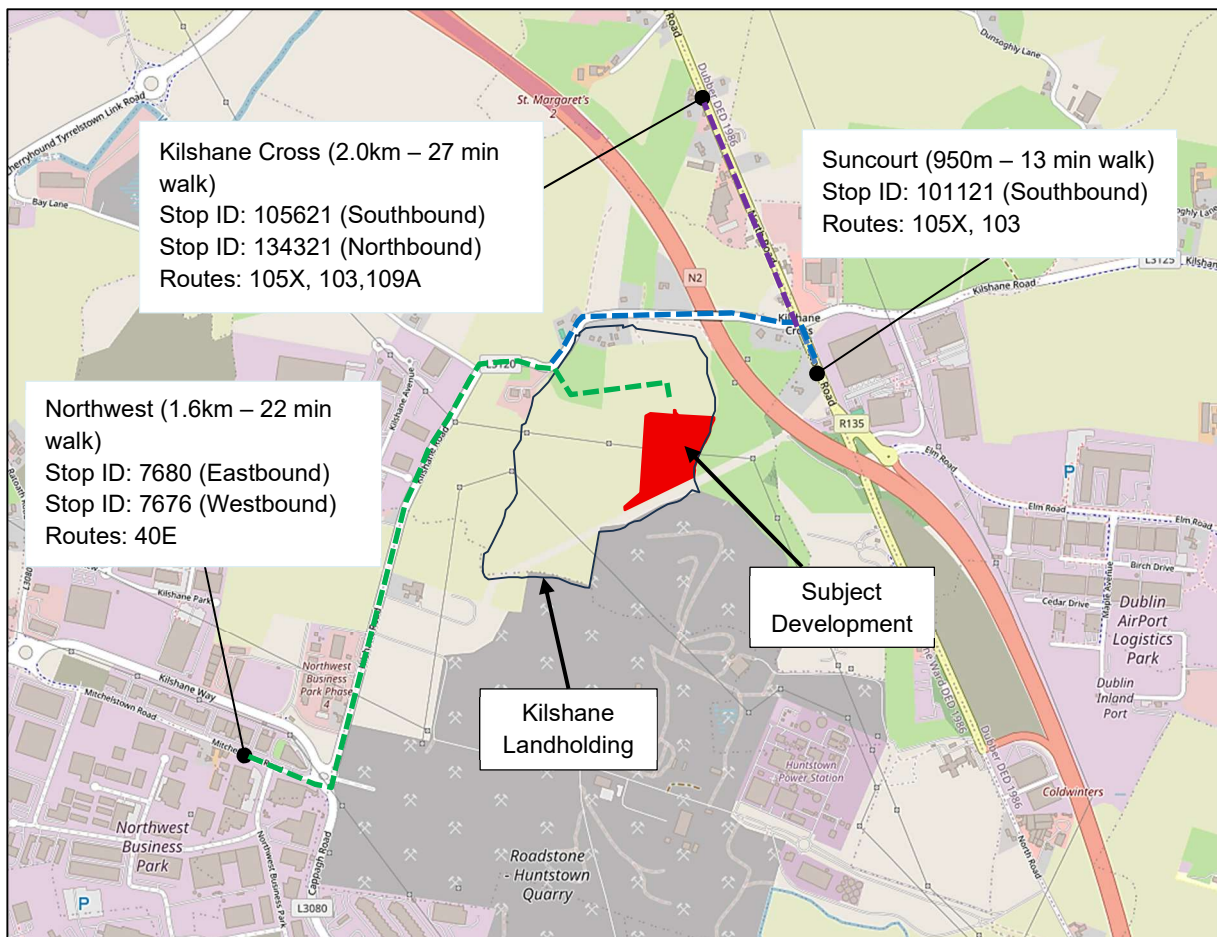


Figure 6 | Bus Network – Walking distance from development to Bus Stops

The bus routes and their frequencies are provided in **Table 3** below. The times indicated in the table are based on the timetable for each bus stop.

Route	Direction	Weekday Frequency	Saturday Frequency	Sunday Frequency
103	Beresford Place -Ratoath via Ashbourne	Every 20 minutes from 9:01 to 23:52	Every 30 minutes between 06:23 and 12:17 Every 20 minutes between 12:17 and 18:20 Every 30 minutes between 18:20 and 23:53	Every hour between 07:25 and 12:25 Every 30 minutes from 12:25 to 18:59 Every hour from 18:59 to 23:53
	Ratoath – Townsend via Ashbourne	20 minutes from 06:39 to 21:29 Every 30 minutes from 21:29 to 00:59	Every 30 minutes from 07:39 to 13:19 Every 20 minutes from 13:19 to 19:59 Every 30 minutes from 19:59 to 00:53	Every hour
105X	Dublin – Fairyhouse Road via Ratoath	At 17:54, 18:11 and 18:39	No service	No service
	Fairyhouse Road – Dublin via Ratoath	At 07:39, 07:54 and 08:09	No service	No service
109A	Dublin Airport – Kells via Navan	Every hour	Every hour	Every hour
	Kells to Dublin Airport via Navan	Every hour	Every hour	Every hour
40E	Broombridge Luas - Tyrrelstown	Every 30 minutes from 06:22 to 23:30	Every 30 minutes from 07:30 to 23:30	Every 30 minutes from 07:50 to 23:30
	Tyrrelstown -Broombridge Luas	Every 30 minutes from 05:37 to 22:45	Every 30 minutes from 06:40 to 22:55	Every 40 minutes from 07:15 to 23:30

Table 3 | Local Bus Routes and Frequencies

4.2 Pedestrian and Cycle Facilities

There are no dedicated pedestrian walkways along Kilshane Road in the vicinity of the subject development. However, there is a pedestrian footpath, on the northern side of the road closer to the N2 east over the N2 flyover for approximately 380m.

There is no dedicated cycle infrastructure along Kilshane Road.

The absence of dedicated cycling and pedestrian infrastructure along Kilshane Road significantly reduces the likelihood that construction staff will use these modes as their primary means of commuting to the site.

5. Environmental Effects

5.1 Potential impacts

There is potential for construction traffic to generate noise and dust effects on the surrounding road network. Construction deliveries to and from the site by heavy good vehicles will impact on noise levels, whilst dust will result from vehicles travelling along site roads and from general earthwork activities.

There is also potential for traffic congestion, particularly during the construction of the upgraded junction and also due to increased construction traffic on the road network which will also perform turning movements in areas that impact traffic.

There is potential for inappropriate parking, particularly along Rathmullan Road, whilst vehicles are waiting to access the site. There is also potential for workers to park on the surrounding residential roads.

A number of construction traffic movements will be undertaken by heavy goods vehicles, though there will also be vehicle movements associated with the appointed contractors and their staff.

There is potential for construction traffic to have a moderate negative effect on the surrounding environment. However, these effects will be of short-term duration (i.e. one to seven years).

To assess the impact of construction-related traffic flows, this section estimates the number of trips to and from the construction site, estimates the potential distribution of traffic, and assesses the likely effects on the existing road network.

5.2 Measures to Minimise Nuisance

The measures, which are proposed to be operational at this site will include: -

- Use of a properly designed access and egress to minimise impact on both external traffic and local amenity.
- Check on each arriving and departing vehicle at the site entrance from the public street.
- Use of banksman, where necessary, to control exit of construction vehicles onto public road.
- Issue of instructions and maps clearly setting out the construction traffic route to the site to each sub-Contractor to ensure that all contractors are clearly briefed on the route to/from the site.
- Ongoing assessment of the route for construction traffic to and from the site and prompt action when issues are identified.
- Working hours of 07:00-18:00 Monday – Friday and 08:00-14:00 Saturday or as otherwise may be agreed with Fingal County Council.

5.3 Site Control Measures

The designated and operational on-site control measures, which will be established and maintained at this site, will include:

- Designated hard routes through site.
- Each departing vehicle to be checked by banksman.
- Wheel wash facility (in required) at egress point.
- Provision and facilities to cover lorry contents, as necessary.

- Controlled loading of excavated material to minimise risk of spillage of contents.
- Spraying/damping down of excavated material on site by dedicated crews.
- Facility to clean local roads if mud or spillage occurs.

5.4 Control of Mud and Dust

The main consideration will be to combat mud and dust at source so as not to let it adversely affect the surrounding areas. The objective will be to contain any mud or dust within the site, which is large enough for comprehensive control measures.

The main problems, which may arise during the early part of construction, will be controlled by the measures described above and by the following measures:

- The use of hardcore access route to work front.
- Channelling of departing vehicles through the wheel wash.
- Sweeping of public streets adjacent to egress from site.
- Ongoing monitoring during working hours.

5.5 Control of Noise

Site deliveries will be confined to working hours and an allocated offloading location will be utilized for all deliveries. Measures for the control and monitoring of noise and vibration during construction, including measures to mitigate noise, are set out in Section 11 of the accompanying Waterman Moylan report No. *25-046r.004 Preliminary Construction Environmental Management Plan*.

5.6 Waste

Construction waste arising from the construction stage of the development will be managed in accordance with the details set out in Section 6 of the accompanying Waterman Moylan report No. *25-046r.004 Preliminary Construction Environmental Management Plan*.

6. Management Plans

6.1 Standards

Insofar as the construction of this development may impact on the surrounding road network, the development and associated roadworks shall be undertaken in compliance with the requirements of Fingal County Council and any other requirements that the Council may impose during the course of the works.

6.2 Project Team

It shall be the duty of the Project Team to provide the Main Contractor in good time with all necessary designs, details, drawings, and specifications so that the Contractors can, in conjunction with the Project Team, prepare detailed proposals and programmes for the execution of the works.

The proposals shall be submitted to Fingal County Council and shall incorporate any requirements included in the conditions of the planning permission for the development.

It shall also be the duty of the Project Team to ensure that the Contractors proposals are reasonable and that they are implemented in a safe and competent manner.

6.3 Main Contractor

It is the responsibility of the Main Contractor, in conjunction with the Project Team, to prepare a detailed Construction Traffic Management Plan and a detailed Construction Mobility Management Plan before construction begins. These plans may be integrated into a single document or into two separate documents.

The main constructor will be in charge of the management and control of vehicular movement within the construction site as well as on the access roads.

In addition, the following responsibilities should be coordinated by the personal of the Main Contractor:

- Adequate signposting will be located on-site to ensure the safety of all road users and construction workers.
- All heavy vehicles spilling solid material on the road must cover the material to prevent dust being thrown onto the road.
- All vehicles should wash their wheels, when necessary, when leaving the site to prevent dust being thrown onto the road.
- Hoarding will be set up around the perimeter to prevent pedestrian access.
- A material storage zone will also be provided in the Construction Compound area. This storage zone will include material recycling areas and facilities.

The Contractor will be obliged to ensure that any sub-contractors engaged on the site are made fully aware of the required mitigation measures and that they are properly implemented as part of any works that they undertake

The Contractor shall ensure that all HGVs drivers serving the site receive a toolbox talk, outlining the preferred haul routes and outlining the importance that drivers to adhere to the posted speed limits. Construction workers and other site staff should also receive a toolbox talk, informing them on measures undertaken to ensure car parking management during construction.

The Main Contractor may decide to provide a shuttle service to and from site, if deemed necessary.

The Main Contractor will be responsible for applying for road opening licences. Any excavation on the public road, including for drainage, water supply and other utility connections, will require a separate Traffic Management Plan.

Special HGVs require an Abnormal Load Permit. The Main Contractor will be responsible for applying for any required Abnormal Load Permit through Fingal County Council's Traffic Division.

The Main Contractor will inform residents, nearby industrial developments and commercial outlets of any traffic disruptions in advance, including prior to road opening for service connections or any dates with an increased number of deliveries scheduled.

6.4 Construction Traffic Management Plan

A detailed Construction Traffic Management Plan will be prepared and agreed with Fingal County Council before commencing works on site, which must describe the following (but not limited to):

- Dedicated construction transport routes, which will be identified and agreed upon with Fingal County Council before the commencement of construction activities on site, following the indication in Section 3 above.
- A dedicated "construction site" access/egress system to be implemented during the construction phase.
- Manage the entry and exit of heavy vehicles to and from the site, with a detailed description of operations during this time, including the assignment of staff to assist pedestrians and traffic flow during heavy vehicle movements on the roads.
- Define schedules for the entry and exit of materials and machinery to limit the generation of noise on the network to specific time slots.

6.5 Construction Mobility Management Plan

The Main Contractor as part of their site set up arrangements, shall appoint a Coordinator responsible for the implementation of a Construction Mobility Management Plan, which must describe the following (but not limited to):

- Encourage staff to avoid using of their cars and use alternative modes of transport in order to reduce the number of cars on the road and the need of car parking spaces.
- Provide an extensive information service for public transport options and routes at a public location(s) within the development for construction workers.
- Update the public transport information adjacent to the development on an ongoing basis.
- Advise company staff of tax incentives for public transport and bicycles. For those wishing to cycle to and from the site, dedicated cycle parking will be provided for the duration of the works within the site. Shower facilities and lockers will also be provided.
- A shuttle service to/from the parking will be provided if required.

6.6 Monitoring of the Management Plans

The responsibility for monitoring and reviewing the plan will be borne by the Main Contractor. The principal indicators that will be subject to monitoring are as follows (but not limited to):

- Status of complaints received about the passage of Heavy Goods Vehicles.

- Level of compliance with management plans by the main contractor and subcontractors working on site.
- Changes in modal split – both ‘usual’ and ‘occasional’ modes used.
- Cycle Parking on site: Include the state of the bike racks and that there are no abandoned bikes without owners.
- Number of car parking permits issued.
- Others that may be important.

It is recommended that within three months of the start of construction, and then every six months thereafter, the Main Contractor meets with Fingal County Council, to assess and review the progress of the management plans and to agree on targets for the next six months.

7. Summary

This Preliminary Construction Traffic Management Plan has been prepared by Waterman Moylan Engineering Consultants as part of a planning documentation for the Proposed Kilshane Phase 2 Development in Dublin 11.

The report presents a comprehensive evaluation of the various aspects pertaining to the traffic flow to and from the construction site, including an assessment of the transportation routes that will be accessible to heavy goods vehicles.

It also includes an assessment of the environmental impact in the surrounding area and potential measures to minimise it.

Finally, this Preliminary Construction Traffic Management Plan provides guidance to the Main Contractor who will be responsible for preparing the detailed Construction Traffic Management Plan and detailed Construction Mobility Management Plan to ensure that construction traffic to and from the subject development can be accommodated on the surrounding road network without significant impact on other road users.

Preliminary Construction Traffic Management Plan
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UK and Ireland Office Locations

