

Project: Proposed Residential Development,
Coolcarron, Fermoy, Co. Cork

Project No: 19074

Document Title: Preliminary Construction & Environmental Management
Plan

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1.0 Introduction

Cumnor Construction Ltd. are applying for planning permission for 250 houses, 86 duplex apartments, a crèche and all associated site development works at Coolcarron, Fermoy, Co. Cork. Walsh Design Group (WDG) was appointed by Cumnor Construction to produce this Preliminary Construction and Environmental Management Plan as part of the planning application.

The purpose of the Preliminary Construction and Environmental Management Plan (CEMP) is to outline the construction measures to be implemented on site to prevent any potential impacts on the surrounding environment. Accordingly, the CEMP identifies the main objectives and procedures which are required to ensure the construction related activities on the development site are executed in a safe and controlled manner and to minimise disruption and impacts on the neighbouring land owners, the existing estate as the phases progress and amenities in the area.

The objective of this submission is therefore to identify the potential issues which are relevant to the project, to address these issues and to provide solutions which are satisfactory to all concerned.

1.1. Project Details & Primary Contacts

The CEMP will be a dynamic document and will be an everyday reference guide, to include monitoring and incident reports within the appendices. Site personnel will use the CEMP to avoid, reduce and or compensate for the environmental impacts of the project work.

This preliminary CEMP will provide details to the planning authority of the intended construction practice for the development. Further, detailed methodologies for some measures outlined in this preliminary CEMP are to be refined in the full, Main Contractor's CEMP following appointment.

The CEMP:

- Provides details of the project and a map of the location of all associated works accompanying the planning application.
- Provides a practical plan for the implementation of the measures detailed within the planning application for the development.
- Clarifies the roles and responsibilities of staff and contractors/developer(s) or third parties involved in measures.
- Provides contact details for all personnel involved in implementation of measures outlined in this CEMP.
- Identifies monitoring procedures for proposed measures throughout the lifetime of the construction phase.
- Includes pro forma documents for:
 - Incident Notification forms to be maintained throughout the duration of the project
 - Environmental Complaints Record Sheet to be maintained throughout the duration of the project.
 - Review of Environmental Commitments

The primary contacts in relation to operational matters; and environmental measures, as outlined in the CEMP, are detailed in Table 1. The actual individuals for each role will be listed when Contractors, Sub-Contractors and Consultants for the construction phase have been appointed.

Contact	Contact Details	Position / Role
Applicant/Developer		
Cumnor Construction Ltd.	Appointed PSCS	Developer/Project Supervisor
Environmental Measures		
	Appointed Engineer	Engineering Consultant
	Appointed Architect	Architect/Designer
	Appointed Consultant	Planning Consultant
	Appointed Consultant	Traffic Consultant
	Appointed Consultant	Landscape Consultant
	Appointed Consultant	Ecologist

Table 1: Primary Contacts

2.0 Project and Construction Details

2.1. Development Site

This site is 11.56ha in total area and is currently laid out as agricultural pasture land. It is located just South of Fermoy town on the eastern side of the R639 Fermoy to Rathcormac road, see Figure 1. The site generally slopes gently downwards from west to east and there is an existing open drainage channel along the eastern boundary. Where the proposed entrance road to the development meets the R639 the ground level is 57.57m but within the site the high point is 56.99m in the southwest corner and this falls to a low point of 51.11m in the northeast corner (all levels are to Malin Head datum).



Figure 1: Site boundary superimposed on satellite image (Google Earth)

The southern boundary of the site is shared with agricultural land. The western boundary is shared with private dwellings at the southern end and an ESB facility and commercial properties at the northern end. An existing lay-by and weigh station is situated adjacent to the proposed development entrance, beside the R639. The northern boundary is shared with the St. Coleman's sports ground and the eastern boundary is shared with land, beyond the drainage channel that is currently forested.

There are no records of any flooding in this area of Fermoy in the OPW's floodinfo.ie database of maps and the development lies outside all flood zones shown in the Local Area Plan for the Fermoy Municipal District.

2.2. Construction Details

The proposed works involve the construction of 250no. dwelling houses, 86 duplex apartments, 1 crèche and all associated ancillary development works including Roads, footpaths, wastewater network, wastewater pumping station, surface water network, surface water attenuation tanks and outfalls, water supply infrastructure, public lighting, landscaping and amenity areas in accordance with the planning application drawings and documents.

The proposed gravity wastewater sewer would be constructed as one network falling to a Type 3 pumping station in the east of the site. Effluent will be pumped via rising main from there to a stand-off discharge manhole adjacent to the existing Irish Water infrastructure in the R639. See WDG drawing no. 19074-P-002-1 and 002-2 for the layout of the wastewater network.

The proposed water mains in the development would also connect to the existing main in the R639, see WDG drawings no. 19074-P-003-1 and 003-2 for the water main layout.

The overall surface water drainage system has been designed in 6 separate networks (numbered 2-7) due to the topography of the site and the proposed street layout. All networks are designed to discharge an attenuated flow of surface water into the existing open drainage channels in the site which in turn, eventually discharge to the River Blackwater in Fermoy.

The drainage channel which forms the eastern boundary of the site has a very gentle fall from south to north and continues north past the St. Coleman's sports ground. Before the channel reaches College Road it is currently channelled under an astro-turf playing pitch owned by the Loreto Convent in an old stone culvert. It is proposed to partially divert the flow in the drainage channel, before the stone culvert, into a new 750mm diameter pipe flowing westward across the northern end of the St. Coleman's sports ground to Devlin Street where it will connect to an existing manhole and the 900mm diameter surface water sewer downstream, see WDG drawings no. 19074-P-002-3 and 19074-P-304.

The site will be accessed via one main junction with the R639. See MHL drawings for details of the proposed junction.

The main objective of this CEMP is to minimise the impact of the construction process on the receiving environment. Included below are the main elements and tasks involved in the construction of the site and the proposed management process of same.

Main tasks to be completed are:

- Site clearance including the removal of any existing scrub/vegetation;
- Set up Site Offices and Contractors Compound;
- Secure the construction site and erect signage;

- Excavation to formation level of access roads and site plots;
- Storage of excavated soil for landscaping or removal of soil in excess of the needs of the proposed development to a licensed/operator land fill;
- Provision of services (including foul sewer connection and storm attenuation tank and outfall);
- Construction of proposed dwelling houses and completion of landscaping and amenity areas.

Topsoil will be stripped and stored on site to be reused in the landscaping works.

Excavation work will be completed by heavy track machinery with suitable material moved by dumper trucks to designated storage areas on-site.

Unsuitable material will be stored separately and if necessary will be carted off site to designated dumping areas, with all required licenses applied for. This will be done in accordance with the "Waste Management Acts 1996-2011."

All bulk excavation will be undertaken in accordance with current Health and Safety Legislation and Building Regulations.

All excavations for service runs will be undertaken in accordance with Building Regulations and Health and Safety standards.

Any excavation for service runs that are required outside the site will be undertaken with the consent of Local Authorities (e.g. laying of the foul and storm water drains, etc.), with all associated road opening licenses granted.

It is proposed to construct the development in 5 phases generally progressing from the south to the north of the site, as shown in Figure 2. In terms of the Delivery of the Phases of Development the following will be the key stages in each phase:

Stage 1a – Site Set Up

This task will take up to c. 3-5 weeks to complete, depending on the size of the phase, with approximately up to 5 staff employed and will involve installation of construction phase surface water swales and settlement ponds, site clearance, set up site offices and contractors compound and secure the construction site and erection of signage for site security purposes.

Stage 1b – Setting out of sites and provision of services

Given the significant work involved in the provision of drainage services this stage will involve significant work and is estimated to take between 6-10 weeks per phase and will run in tandem with phase 1c below and will involve up to 20 construction staff. This will involve the laying of new sewers, water mains, electrical, telecoms and lighting ducts within the site and the setting out of footpaths, lighting and roadways as well as the buildings and their boundaries. As part of any works (i.e. provision of services) along the public areas/roads in the vicinity of the site, it will be ensured that the surface of the roads/areas will be reinstated to the satisfaction of Cork County Council.

The wastewater treatment plant will necessarily be constructed in Phase 1 and be operational before any dwellings on the site are occupied.

The surface water sewer including gullies, attenuation tanks, aquabrakes and outfalls shall be completed for each phase prior to any dwellings being occupied and runoff from all hardstanding areas shall be accommodated in the surface water network. The new works proposed, to lay a new 750mm dia. pipe to link the drainage channel north of the site westward to the existing public sewer in Devlin Street, shall also be completed in Phase 1 of the development.

Stage 1c – Construction of Residential Units

The construction of the residential units will, to a certain degree respond to the demand/sale of the units involved, however there is a strong demand for housing in Cork and it is anticipated that the construction progress will reflect this strong demand and that the units in each phase will be constructed/completed over a 1-2 year period (depending on phase size) and will involve up to 60 construction staff (depending on the number of units being constructed at any one time).

It is envisaged that the housing units will generally be developed on a sequential basis starting with the southern portion of the site and moving towards the north with each phase. This phasing will allow the construction compound and access to be provided in the northern part of the site without impacting on the constructed/completed units.

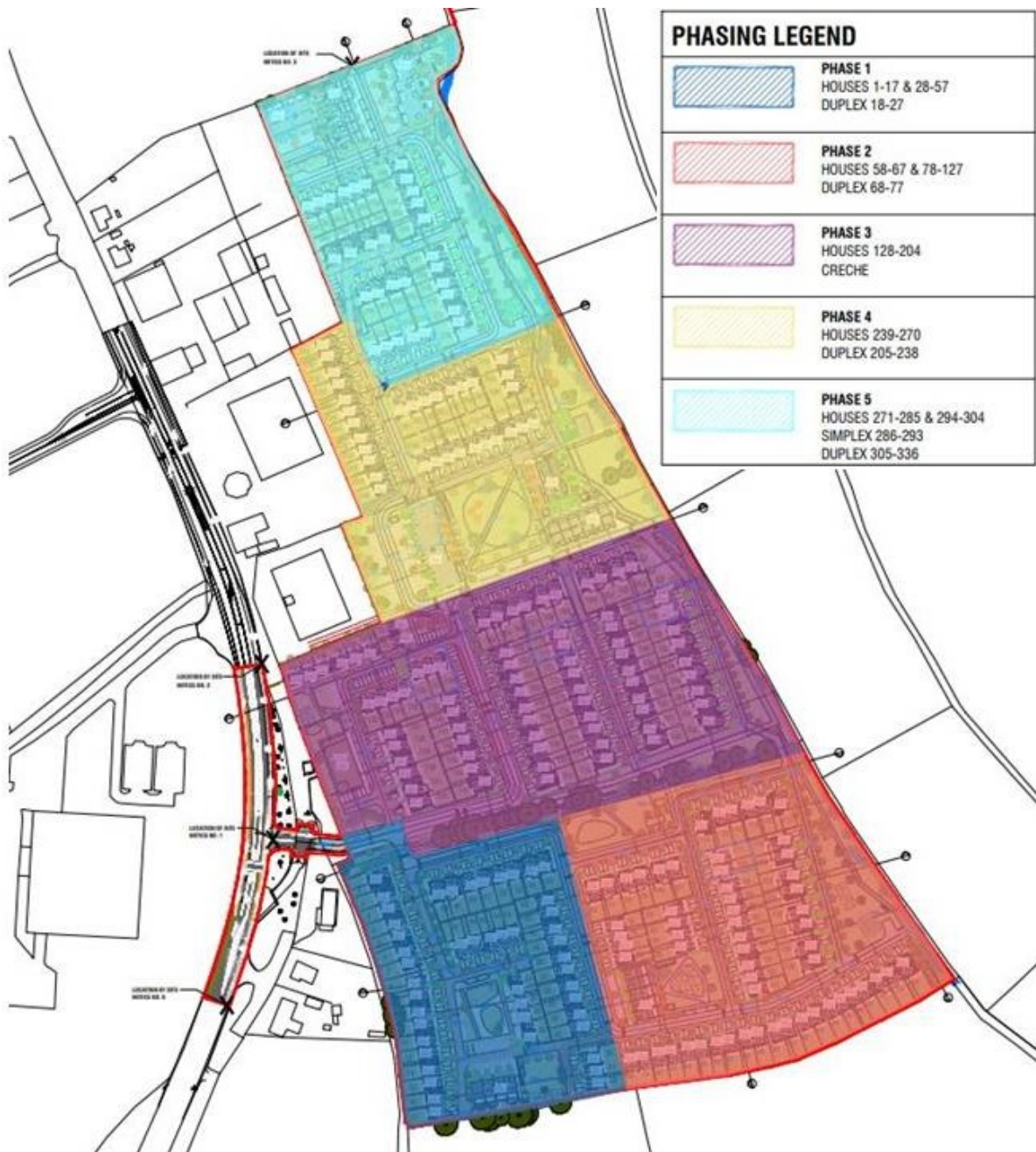


Figure 2: Construction Phasing – see GCA drawing PL02 for more detail

Traffic management measures will be implemented to ensure staff construction traffic is managed properly. Parking for construction staff cars will be within the site and contain holding areas to prevent queuing on the public road.

3.0 Construction Management Details

3.1. Construction Traffic Management

It shall be the responsibility of the Developer and their appointed PSCS to implement and oversee a Construction Site Traffic Management Plan (CSTMP). The following list is a preliminary estimation of the daily traffic movements that will be generated by construction on the site:

- **Construction Workers / Site Staff** - Maximum number 60/day, generating 140 traffic movements.
- **Net Importation of fill material** - As required, less than 20 loads /day, generating 40 truck movements
- **General Construction materials delivery (truck/ Van)** - On average 15 number/day, generating 30 traffic movements
- **Construction Waste Removal** - When required, less than 40 loads/day, generating 80 truck movements

It is recommended that the PSCS follow the guidance provided by the HSA in preparing the CSTMP. The HSA guidance document (Figure 3) and online fillable forms provide a framework of 6 main headings around which a full and detailed CSTMP can be formed. The headings are as follows:

1. **Information** – general site and responsible personnel information,
2. **Training** – proof of training or provision of training for relevant staff,
3. **Temporary Works** – Details of all temporary works relating to site traffic,
4. **Hazards** – Identification of hazards and risk assessments for same,
5. **Controls** – actions taken to mitigate risks identified,
6. **Resources** – equipment required to implement the plan i.e. hoarding, barriers, lighting signs etc.



Figure 3: HSA Construction Site Traffic Management Plan Guidance

The CSTMP shall outline issues which are relevant to the project and to provide solutions which are satisfactory to all concerned. The issues which we believe to be important are as follows:

- Proposed Traffic Routes – Planning and Management of same;
- Construction traffic logistics;
- Planning and management of expected traffic flow rates;
- Planning and management of delivery times;
- Site access and egress;
- Maintenance of public roads;
- Communication with local authorities and neighbours.

There are specific traffic management issues which the applicant can control. These are listed as follows:

- Extensive and thorough site rules for site traffic. This is issued to all sub-contractors at pre-appointment stage and shall ensure that they are contractually bound;
- Detailed delivery routes and times as a part of the rules which are in accordance with this traffic management plan – the options for delivery routes are limited by the fact that there will only be one entrance to the development site and traffic will approach on the R639 from the North (Fermoy) or the South (Rathcormac/M8 Cork).
- Gated access and egress will be established at the entrance to the development site allowing in only authorised traffic which has arrived at the appointed time and by the appointed route;
- Approved contractor parking for all construction related personnel – this will be provided internally within the secured development site area.

The rules regarding access routes, clearways, minimum road width, parking near hydrants, etc. will be relayed to all site staff. Any driver who breaches the rules will be noted and reported to their employer and any driver who consistently or knowingly breaks the rules will be refused further access to the site.

Signage will be erected along emergency vehicle routes, and critical areas such as assembly points and means of escape will be kept clear.

To ameliorate/mitigate impacts on the surrounding area and in order to mitigate noise levels emanating from the site, all site development and building works will be carried out only between the hours of 07.00 to 18.00 Mondays to Fridays inclusive, between 08.00 to 14.00 on Saturdays and not at all on Sundays and Public Holidays. Any deviation from these times shall be submitted to Cork County Council for approval.

3.2. Planning and Management of Delivery Times

In relation to deliveries to the site, all large deliveries will have to be notified to site management at least 24 hours in advance. No large deliveries will be allowed to the site during peak traffic times for the area. All deliveries must enter the site at the designated

entrance and report to the site security man who in turn will contact the relevant persons to take charge of unloading, etc.

3.3. Site Access and Egress

Access and egress to the site will be controlled by the developer and their appointed main contractor. The access for construction traffic for the development will have to be via the single junction with the R639. As development progresses and dwellings are occupied the traffic management plan and the location of the site compound will need to be continuously reviewed in order to minimise disruption to residents. The developer will provide information on the requirements of the site traffic access rules to all stakeholders, which will include the following:

- The prescribed access routes. The route identified shall be monitored and updated as required by construction sequencing and shall be followed at all times by drivers entering and exiting the site;
- No site access permitted before 7.00am;
- No site access permitted after 6.00pm;
- Strictly no parking on any access road to the site;
- Minimise disruption to any developed/occupied phases;
- No vehicle may park on or around any footpaths in the adjoining areas;
- Caution must be exercised entering and leaving the site;
- All vehicles must stop at the security barrier;
- All instructions from the developer or development staff must be obeyed;
- Vehicles leaving the site must do so only at an appropriate break in the traffic, and must not force their way into traffic;
- Only vehicles with specific business on the site can enter the site, once permission has been granted by the developer and / or his staff;
- Heavy vehicle drivers must check their tyres for lodged stones, and remove them prior to returning to the public roads;
- Site speed limit proposed is 10 kph.

3.4. Maintenance of the Public Road

For the duration of the construction period there will be a power washer and wheel wash located inside the main entrance to the site. This will wash the wheels and undercarriages of all vehicles leaving the site to ensure no debris leaves the site on vehicles. Adequate provision will be made on site for drainage of this area. All truck drivers must also inspect their vehicles before they leave the site for stones caught in their tyres or any other debris.

There will be parking spaces at the site compound, reserved for staff, clients and visitors. This will be located adjacent to the site compound. On street parking will not be acceptable under any circumstances.

Unauthorised entry will not be permitted and will be prevented by a security system which will be in operation during construction.

The wastewater sewer, potable water supply and electrical and telecoms ducting shall require connections to existing infrastructure in the public realm. Works within public areas will be given priority, in terms of available staff and traffic management, to ensure that this component of the overall development is completed as expeditiously as possible, so as to minimise disruption. As part of any works (i.e. provision of services) within public roads/areas in the vicinity of the site, it will be ensured that these roads/areas will be re-instated to the satisfaction of Cork County Council.

3.5. Surface Water Management

3.5.1. Construction Phase

It is expected that surface water run-off from site activities will be controlled by limiting the site top soil strip to individual phases as the construction phases progress. All site runoff associated with the construction stage will generally be directed to settlement ponds or percolate to ground during each of the construction phases. However, where construction works take place near surface water gullies in the existing surface water network, standard environmental controls will be implemented by the building contractor and overseen by the Consulting Engineers. These controls will follow best practice as recommended by CIRIA 2010 and ISO 14001:2015 – Environmental Management Systems.

The proposed measures include the following:

- To ensure that there will be no contamination of surface water, any excess excavated material will be immediately removed (i.e. either used within the development for landscaping or removed to a licenced fill facility);
- The short term storage and removal/disposal of excavated material will be planned and managed such that the risk of pollution from these activities is minimised;
- Silt fencing will be erected and maintained in place during the construction phase and until such time as the integrity of the re-instated ground/material has been fully established;
- The silt fencing will be checked twice daily during construction and once per day thereafter to ensure that it is working satisfactorily until such time as the re-instated ground/material has been fully established;
- Sediment traps (such as earthen berms and/or settlement ponds) and/or silt fences will be provided to prevent run-off from the site;
- Drainage channels beside construction roads will flow into settlement ponds or swales in series to allow primary and secondary settlement of sediment. Each swale series will have an outfall manhole directly downstream in which final settlement can take place and the outfall can be monitored. Outfall manholes will be regularly emptied of sediment during periods of heavy rainfall. These measures will prevent run-off from the site and total suspended solid levels in all discharge shall be in compliance with the Quality of Salmonid Water Regulations (SI 293:1988);
- Through all stages of the construction phase the contractor will ensure that good housekeeping is maintained at all times and that all site personnel are made aware of the importance of the freshwater environments and the requirement to avoid pollution of all types;
- The storage of oils, hydraulic fluids etc. will be in a bunded facility with filling and take off points within the bunded area in accordance with current best practice;

- The pouring of concrete, sealing of joints, application of water proofing paint etc. will be completed in the dry to avoid pollution of the freshwater environment. As grout / cementitious materials are highly toxic to aquatic life all such works must be contained in complete isolation of all waters and storm water systems.

3.5.2. Operational Phase

During the operational phase, surface water run-off at the site will be collected by 6 new surface water sewer networks. These networks will discharge attenuated flows of surface water runoff to the existing drainage channels and onwards to the existing Cork County Council infrastructure downstream. The following measures will be put in place to ensure the protection of surface waters from contamination:

- The storm drainage calculations shall ensure that the proposed storm drainage networks are appropriately sized to serve the new development as proposed;
- A cleaning and maintenance schedule will be implemented for the proposed storm drainage system during the operation phase. Each gully will be fitted with silt traps to be emptied as part of the silt management and maintenance schedule;
- The proposed storm network will be inspected following construction to ensure that no cross connection between the proposed foul and storm network exists;
- The storm drainage system will be cleaned appropriately and inspected prior to being fully commissioned i.e. before being allowed to discharge to receiving waters. Water sampling of the receiving waters upstream and downstream of the proposed outfall will be undertaken before construction commences and for a period of 6 months following the completion of the development to ensure that the proposed water quality controls (both for the construction and operational phases) are appropriate and operating satisfactorily;
- There will be bunding of any domestic heating oil tanks to prevent possible spillage runoff.
- Hydrocarbon interceptors shall be installed upstream of the attenuation tank in each of the 6 surface water networks to further protect the quality of the surface water discharged.

4.0 Environmental & Waste Management Strategy

Walsh design group (WDG) have produced a preliminary Construction & Demolition Waste Management Plan (CDWMP) that accompanies this planning application for the proposed residential development at Coolcarron, Fermoy, Co. Cork.

The appointed Main Contractor for the development will produce a detailed CDWMP when the construction methodology for each element of the development has been finalised. That plan will be a live document, subject to regular review during the construction phases. This preliminary CDWMP will form the basic framework on which that detailed CDWMP can be developed.

The preliminary CDWMP outlines how waste will be managed during the construction phase of the development. The objective of the CDWMP is to ensure that the development's construction and demolition (C&D) waste is managed in accordance with applicable legislation, local authority plans and policies and regional waste management targets.

For further detail read the preliminary CDWMP that accompanies this application as a stand alone document.

5.0 Implementation & Monitoring

5.1. Implementation (including Roles & Responsibilities)

Cumnor Construction Ltd. and their appointed PSCS will be responsible for the development and the implementation of the construction and environmental management plan and the measures and monitoring outlined therein. The implementation and monitoring (including Roles & Responsibilities) associated with the proposed development are outlined in Table 2. The actual individuals for each role will be listed when the Main Contractor, Sub-Contractors and Consultants for the construction phase have been appointed.

Works/Environmental Commitment	Reference Source to Commitment	Method by which Commitment will be met	Indicative Timeline for Implementation
Site Set Up & site clearance & security of the construction site and erection of signage for site security purposes.	Section 3 of CEMP.	Implemented by Developer & Main Contractor	c.3 months from commencement
Site Set Up & site clearance and set up site offices and contractors compound (at the north-eastern corner of the site	Section 3 of CEMP.	Implemented by Developer & Main Contractor	c.3 months from commencement
Secure the construction site and erection of signage for site security purposes.	Section 3 of CEMP.	Implemented by Developer & Main Contractor	At commencement stage
Setting out of sites and provision of services	Section 3 of CEMP.	Implemented by Developer & Main Contractor & overseen by Consulting Engineers.	Throughout construction period
Traffic management measures 4. Security/Gated access	Section 4 of CEMP.	Implemented by Developer & Main Contractor	Throughout construction period
Maintenance of Public Road	Section 4.4 of CEMP.	Implemented by Developer & Main Contractor	Throughout construction period
Measures to ensure protection of surface waters from contamination	Section 4.5 of CEMP.	Overseen by the Ecologist & implemented by the Developer & Main Contractor	Throughout construction period
Environmental & Waste Management including Disposal of Waste and Waste Handling Procedures	Section 5 of CEMP.	Implemented by Developer & Main Contractor	Throughout construction period
Construction of Residential Units:	Section 3 of CEMP.	Implemented by Developer & Main Contractor & overseen by Consulting Engineers	Throughout construction period

Table 2: Implementation Table

The appointed PSCS by Cumnor Construction Ltd. will maintain a record of compliance with environmental/management commitments included in CEMP and review compliance in accordance with the form provided in Appendix A. The PSCS will record any refinements to measures proposed or additional measures required which will be integrated into the CEMP. Any incidents which may impact on environmental receptors will be recorded on an 'Incident Notification Form'. Any complaints received will be recorded on the forms provided in Appendix B- 'Environmental Complaints Record Sheet'. The Incident Notification Form and Environmental Complaints Record will also identify any corrective actions required, which will then be integrated into the CEMP.

5.2. Monitoring Procedures

The PSCS will maintain a record of compliance with environmental/management commitments and all monitoring forms and records will be available for review by authorised personnel of Cork County Council on request.

6.0 Dust Minimisation

In order to ensure that no dust nuisance occurs, a series of measures will be implemented. Site access shall be regularly cleaned and maintained as appropriate. Hard surface areas shall be swept to remove mud and aggregate materials from their surface while any un-surfaced areas shall be restricted to essential site traffic only. Furthermore, any area that has the potential to give rise to fugitive dust must be regularly watered, as appropriate, during dry and/or windy conditions. Scaffolding will be erected around the site during construction along with hoardings at ground level. Mesh netting will be erected around the scaffolding during construction as a safeguard measure to minimise dust emissions from the site.

Vehicles on site shall have their speed restricted, and this speed restriction will be enforced rigidly. Vehicles delivering or removing material with dust potential shall be enclosed or covered with tarpaulin at all times to restrict the escape of dust.

All vehicles exiting the site shall make use of a wheel wash facility prior to entering onto public roads, to ensure mud and other wastes are not tracked onto public roads. Public roads outside the site shall be regularly inspected for cleanliness, and cleaned as necessary. The roads will be monitored throughout the works and a road sweeper will be employed when required for the duration should the roads become dirty.

Furthermore, during the movement of the soil both on and off-site, trucks will be stringently covered with tarpaulin at all times. Before entrance on to public roads, trucks will be adequately inspected to ensure no potential for dust emissions.

At all times, the procedures put in place will be strictly monitored and assessed. The dust minimisation plan will be reviewed at regular intervals during the construction phase to ensure the effectiveness of the procedures in place and to maintain the goal of minimisation of dust through the use of best practise and procedures.

Weekly dust monitoring will be carried out using a handheld Microdust Pro- Automatic dust monitoring unit. The measures will continue for the duration of the enabling works and the bulk dig which are the periods in which most dust would be created on site.

7.0 Noise Management

Noise arising from the construction phase will be limited principally to plant operations and traffic movements to and from the site. Worst-case construction noise levels will be within the required threshold limits included in British Standard 5228:2009 and the National Roads Authority Guidelines for the Treatment of Noise and Vibration (2004).

British Standard BS5228:2009 – Noise and vibration control on construction and open sites: Part 1 – Noise outlines a range of measures that can be used to reduce the impact of construction phase noise on the nearest noise sensitive receptors. These measures will be applied by the contractor where appropriate during the construction phase of the proposed development:

- Ensuring that mechanical plant and equipment used for the purpose of the works are fitted with effective exhaust silencers and are maintained in good working order;
- Careful selection of quiet plant and machinery to undertake the required work where available;
- Machines in intermittent use will be shut down in the intervening periods between work;
- Ancillary plant such as generators, compressors and pumps will be placed behind existing physical barriers, and the direction of noise emissions from plant including exhausts or engines will be placed away from sensitive locations, in order to cause minimum noise disturbance;
- Handling of all materials will take place in a manner which minimises noise emissions;
- A complaints procedure will continue to be operated by the contractor throughout the construction phase and all efforts should be made to address any noise issues at the nearest noise sensitive properties;
- Where construction activity takes place in the vicinity of residential properties, it will be restricted to the stipulated hours of operation identified above.

The PSCS shall monitor the management procedures during construction and ensure that all possible measures are being undertaken to keep noise and vibration to a minimum.

Appendix A

Monitoring of Construction & Environmental Commitments

Ref No.	Construction & Environmental Commitments	Action Taken	Further Action Required
1	Secure the construction site and erection of signage for site security purposes		
2	Approved contractor compound and parking for all construction related personnel.		
3	Planning and management of delivery and construction traffic & maintenance of public roads.		
4.	Excavation and Soil Distribution Plan		
5.	Monitoring and handling of construction waste and maximise recycling of waste materials		
6.	Monitoring of working hours and noise levels to avoid any adverse impact on adjoining residential areas		
7	Monitoring and recording of compliance with environmental/management commitments		

Appendix B

Environmental Complaints Record Sheet

Environmental Complaints Record Sheet.	
Complaint Number	
Date and time of receipt of complaint:	
Name of Complainant	
Address of Complainant:	
Contact Number for Complainant:	
Nature of Complaint:	
Date acknowledgement sent:	
Investigation results (use attachments as necessary)	
Action taken (use attachments as necessary)	
Follow up communication	
Further action required	
Actioned by:	
Due completion date:	

Confirmation of Completion

Summary of how complaint has been addressed:

Signed by Project Manager:

Date:
