REPORT

Construction Environmental Management Plan

Project Title: Proposed Large-Scale Residential Development at Elmfield, Ninth Lock Road, Clondalkin, Dublin 22.

CLIENT	DOCUMENT REFERENCE	DATE
Thornmeadow Developments Limited	257501.0875WMR03	21/08/2026

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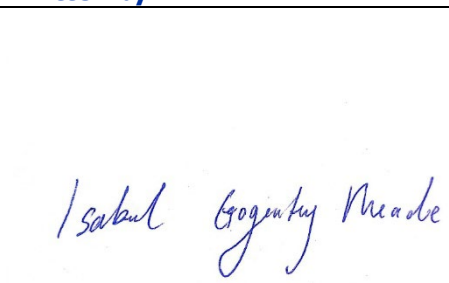
Signature		
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Date	21/08/2026	21/08/2026

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1. INTRODUCTION

AWN Consulting, a Trinity Consultants Team, has prepared this Construction Environmental Management Plan (CEMP) on behalf of Thornmeadow Developments Limited (the Client) for the proposed Large-scale Residential Development (LRD) comprising the demolition of the existing warehouses and structures on site and the construction of a mixed-use residential-led development comprising a total of 408 no. residential units and 1 no. childcare facility (the Proposed Development) located on lands at the Securispeed Logistics site, Elmfield, Ninth Lock Road, Clondalkin, Dublin 22 (the site).

This CEMP explains the construction techniques and methodologies which will be implemented during construction of the Proposed Development.

The CEMP mitigation measures will be implemented to ensure that pollution and nuisances arising from site clearance and construction activities is prevented where possible and managed in accordance with best practice environmental protection.

The CEMP will be implemented and adhered to by the Main Contractor and will be overseen and updated as required if site conditions change by the Project Manager, Environmental Manager, Environmental Clerk of Works and Ecological Clerk of Works where relevant. All personnel working on the site will be trained in the implementation of the procedures.

The Main Contractor will provide a further detailed CEMP to include any subsequent planning conditions relevant to the Proposed Development and set out further detail of the overarching vision of how the Main Contractor of the Proposed Development manage the site in a safe and organised manner.

This CEMP has been prepared to account for activities at the site during the excavation and construction phases of the Proposed Development.

The main issues that have been considered within this document are as follows;

- Description of works;
- Construction programme and phasing;
- Site logistics;
- Workforce;
- Public relations and community liaison;
- Construction traffic and access; and
- Safety, health and environmental management.

2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

Thornmeadow Developments Limited intend to apply for permission for a Large-Scale Residential Development on lands at the Securispeed Logistics site, Elmfield, Ninth Lock Road, Clondalkin, Dublin 22.

The Proposed Development will consist of:

- The demolition of the existing warehouses and structures on site;
- The construction of a mixed-use residential-led development comprising a total of 408 no. residential units as follows:
  - 24 no. studio units;
  - 230 no. 1 bedroom units;
  - 149 no. 2 bedroom / 3 persons units;
  - 5 no. 3 bedroom / 5 person units; and
- 1 no. childcare facility.

The residential units will comprise a mixture of apartments and own-door houses and range in height from 2 to 9 storeys.

The Proposed Development will also include:

- All associated car parking (205 no. spaces);
- Cycle parking;
- Refuse and storage areas;
- plant, landscaping;
- Open space;
- Boundary treatment;
- Public lighting;
- ESB substations; and
- Site and infrastructural works necessary to facilitate the Proposed Development.

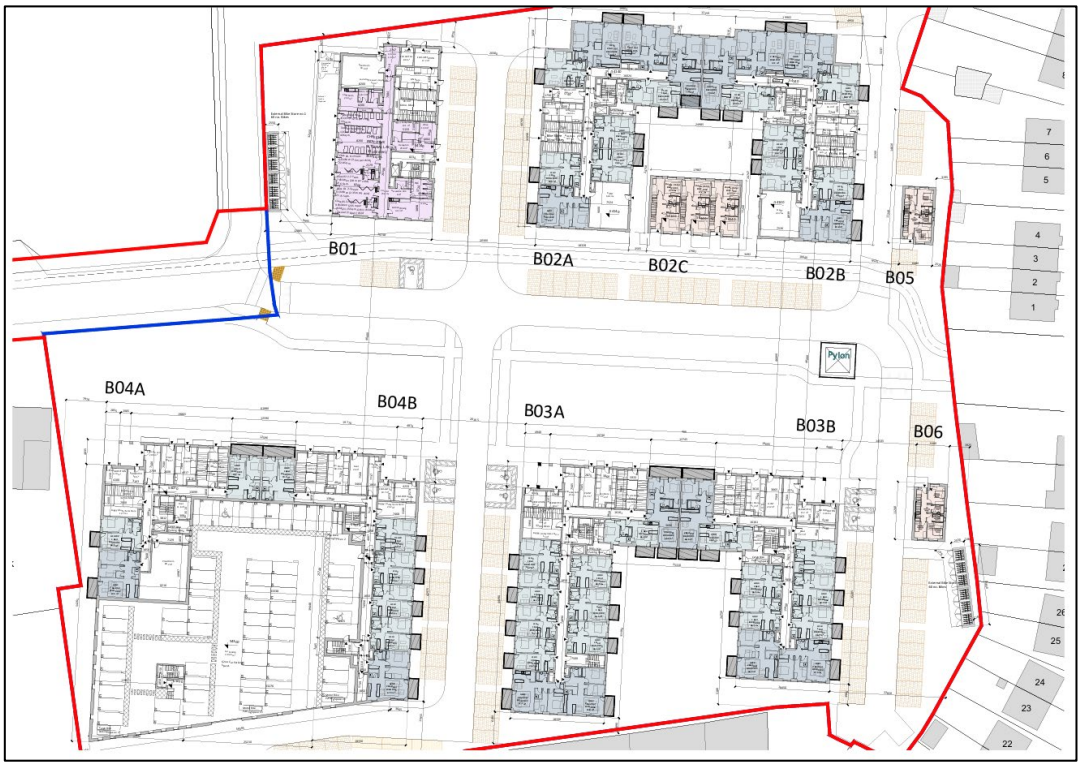

Figure 2.1 Proposed Site Layout (Source: O'Mahony Pike, Drawing No. 25018-OMP-00-XX-DR-A-1000, 2026)

3. CONSTRUCTION PROGRAMME AND PHASING

Construction work is expected to commence in January 2027 and run until approximately August 2028.

Subject to detailed planning at the construction stage, it is currently envisaged that the construction compound, offices, staff parking and storage areas will be located to the south of the development area, as indicated in Figure 3.1.

The exact size, location and configuration of the site compound will be confirmed by the Main Contractor prior to the commencement of works and incorporated into the live version of the CEMP. Any modifications to the compound location or layout during the construction phase will be updated in the CEMP accordingly.

Figure 3.1 Proposed Site Compound Location (Source: Google Earth imagery (2025), annotated by Altemar Ltd.)

3.1 Demolition Phase

The development will include the demolition of the existing buildings on site. Drawings detailing the areas of demolition can be viewed on the drawings submitted with the planning application under separate cover.

A pre-demolition asbestos survey will be carried out prior to the commencement of any demolition works to identify any Asbestos Containing Materials (ACMs).

The demolition shall be in full compliance with BS 6187 "Demolition in Buildings" [1] and all measures necessary will be taken to protect persons from injury.

Prior to the demolition works, a Construction and Demolition Waste Resource Management Plan will be updated and prepared and updated, as required, by the appointed demolition contractor. The plan will be prepared in accordance with the Environmental Protection Agency (EPA) of Ireland issued guidelines the *Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for Construction and Demolition Projects* (2021)[2] and will incorporate any relevant planning conditions.

The demolition will commence with the removal of any hazardous materials by an appropriately qualified contractor for disposal at an appropriate licensed waste collection facility. All non-structural items will then be removed and segregated for reuse or recycling where possible. The remainder of the building structure will be removed in an approved sequence outlined in a Method Statement prepared by the yet to be selected demolition contractor's structural engineer.

3.2 Excavation and Construction Phase

The Proposed Development excavations will involve excavations for new foundations, site levelling and excavations for roads and services. The Resource and Waste Management Plan (RWMP) prepared by AWN Consulting Ltd (267501.0875WMR01) for the Proposed Development will be updated by the Main Contractor and will be in compliance with the requirements of the *Best Practice Guidelines for the Preparation of Resource andWaste Management Plans for Construction and Demolition Projects'*published by the EPA (2021), which will identify and categorise any waste arising from the Proposed Development.

The RWMP will contain the proposals for the minimisation, reuse and recycling of site generated waste. As part of this Plan separate storage areas will be designated on the site for various types of material in order to maximise the reuse and recycling potential. Procedure will also be put in place to ensure that all sub-contractors fulfil the requirements of the RWMP.

The works will include:

- Site set up, welfare facilities and compound establishment, decommissioning and movement of site compound and facilities as needed;
- Set up of hoarding around compound and the site boundary; and
- Erection of safety signage to all areas and implementation of traffic / pedestrian management plan.

4. EXCAVATIONS

4.1 Archaeological and Architectural Heritage

The site is not located within, nor does it contain any Recorded Monument, Protected Structure or National Inventory of Architectural Heritage (NIAH) listed structure.

Should archaeological features or material be uncovered during any phase of construction, all groundwork will cease immediately, and the and the National Monuments Service (NMS) of the Department of Housing, Local Government and Heritage (DOHLGH) will be notified. Time will be allowed for a suitably qualified archaeologist to inspect and assess any material. If it is established that archaeologically significant material is present, the NMS may require that further archaeological mitigation are undertaken.

4.2 Ground Conditions

Ground investigations (GI) were carried out by Causeway Geotech Ltd. in July 2025.

In-situ tests were carried out on exploratory holes for standard penetration tests and variable head permeability testing in one borehole to provide information for the proposed design. The full details of the in-situ tests and exploratory hole locations can be viewed in the GI report submitted with this application.

Environmental soil testing will be undertaken prior to any excavated material being removed from site. In the event that any contaminated material is found on site, this material will need to be segregated from clean / inert material, tested and classified as either non-hazardous or hazardous in accordance with the EPA publication entitled *Waste Classification: List of Waste and Determining if Waste is Hazardous or Non-Hazardous* [3] using the *HazWasteOnline* application (or similar approved classification method). The material will then need to be classified as clean, inert, non-hazardous or hazardous in accordance with the *EC Council Decision 2003/33/EC* [4], which establishes the criteria for the acceptance of waste at landfills.

In the event that Asbestos Containing Materials (ACMs) are found, the removal will only be carried out by a suitably permitted waste contractor, in accordance with *S.I. No. 386 of 2006 Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010* [5] and the *Best Practice Guidance for Handling Asbestos (2023)* [6] All asbestos will be taken to a suitably licensed or permitted facility.

In the event that hazardous soil, or historically deposited waste is encountered during the construction phase, the Main Contractor will notify South Dublin County Council (SDCC) and provide a Hazardous/Contaminated Soil Management Plan, to include estimated tonnages, description of location, any relevant mitigation, destination for disposal / treatment, in addition to information on the authorised waste collector(s).

5. SITE LOGISTICS

5.1 Site Safety Compliance

The Main Contractor will be responsible for overall management of the site for the duration of the proposed works and will progress their works with reasonable skill, care, diligence and to proactively manage the works in a manner most likely to ensure the safety and welfare of those carrying out construction works.

The Main Contractor will comply with all relevant statutory requirements such as the *Safety Health and Welfare at Work Act 2005*[7], the *Safety, Health and Welfare at Work (Construction) Regulations 2013* (SI 291 of 2013)[8], and the *Safety, Health and Welfare at Work (General Application) Regulations 2007* (SI 299 of 2007) [9], together with any subsequent amendments or associated regulations.

In addition, the Main Contractor shall comply with all the reasonable safety requirements of the Client, the Project Supervisor for the Design Process and the Project Supervisor for the construction phase.

5.2 Site Establishment and Security

The first activity to be carried out at the site will be the establishment of site facilities and security. It is anticipated that site establishment works will take approximately four weeks. The site office and welfare facilities will be confirmed in advance of the commencement of site works and agreed with SDCC.

All of the sub-contractors as well as the Main Contractor and project managers will occupy offices within the construction compounds. The proposed site parking for all staff, contractors and visitors will be decided upon by the Main Contractor prior to the commencement of works. Carpooling and the use of public transport will be encouraged to reduce pressure on parking in the area.

5.3 Consents and Licenses

All statutory consents and licences required to commence on-site construction activities will be obtained ahead of works commencing, allowing for the appropriate notice period. These will include, but are not limited to:

- Site notices;
- Construction commencement notices; and
- Licence to connect to existing utilities and mains sewers, where required.

5.4 Services and Utilities

Welfare facilities (canteens, toilets etc.) will be available within the construction compound and this will remain in place for the construction phase. The offices and site amenities will have their own power supply (generator) where necessary, water will be supplied via deliveries until a connection is available to the mains networks and foul water will be collected until the permanent connection is established.

Electrical connections will be made by suitably qualified personnel following consultation with the relevant authorities and will be cognisant of subsequent construction works. High voltage connections will be established for heavy duty equipment and site facilities, as required.

Water supply required for welfare facilities, dust suppression and general construction activities will be sourced from the existing public piped supplies running into the site.

Prior to establishment of a permanent water connection, the supply may need to be trucked to the site. As with electrical works, this will be carried out by a suitably qualified contractor. It will be necessary to service the site with a reliable and safe water supply.

Site welfare facilities will be established to provide sanitary facilities for construction workers on site. The Main Contractor will ensure that sufficient facilities are available at all times to accommodate the number of employees on site. Until the site is connected to the foul sewer, wastewater from the offices and welfare facilities will be collected and removed by a licensed wastewater contractor.

5.5 Material Handling and Storage

Key materials will be ordered by specific order for the Proposed Development, a 'Just in Time' delivery system will operate to minimise storage of materials, the quantities of which are unknown at this stage.

Where possible it is proposed to source general construction materials from the SDCC area to minimise transportation distances.

Aggregate materials such as sands and gravels will be stored in clearly marked receptacles in the compound area within the site. Liquid materials will be stored within temporary bunded areas, doubled skinned tanks or bunded containers (all bunds will conform to standard bunding specifications – BS EN 1992-3:2006 [10]) to prevent spillage.

Construction materials will be brought to site by road. Construction materials will be transported in clean vehicles. Lorries/trucks will be properly enclosed or covered during transportation of friable construction materials and spoil to prevent the escape of material along the public roadway.

The majority of construction waste materials generated will be soil from excavation works. Material will be removed from site regularly to ensure there is minimal need for stockpiling.

5.6 Visitor Management

Visitors will only be allowed to enter the main site compound via the designated pedestrian access gate. A dedicated, secured footpath to the site office is established at the gate for registration and obtaining Personal Protective Equipment (PPE) prior to entering the site. A log will be maintained by security to control access to the site. Visitors will be required to attend a site-specific induction to allow access to the compound and/or construction site unless being accompanied by an inducted member of the site team.

Visitors will then be taken by an inducted member of the construction team to the required area of the site.

5.7 Site Working Hours

Site development and building works will only be carried out between the hours of:

- 07:00 to 19:00 Monday to Friday inclusive; and
- 08:00 and 14:00 hours on Saturdays.

No construction works will be carried out on Sundays or public holidays. Deviation from these times will only take place when written approval is granted by SDCC in exceptional circumstances.

5.8 Employment and Management Workforce

It is estimated that there will be c. 40 - 110 staff and subcontractors on site on a typical day.

It is anticipated that the key project managers and Main Contractor representatives will maintain a presence on site for the whole duration of the Proposed Development and the labour workforce will be determined by the specialist contractors required on site.

All employees working on the site will be required to have a SafePass Card (or similar approved Construction Health and Safety card), manual handling training and the necessary certificates to operate machinery as required. The details of training required, records maintained, and induction procedures will be outlined in the Main Contractor's Health and Safety Plan(s).

6. CONSTRUCTION TRAFFIC AND SITE ACCESS

The proposed construction vehicle routes for the site will require a traffic management plan to be agreed upon with SDCC and Transport Infrastructure Ireland (TII) prior to site workings beginning. A Construction Traffic Management Plan (CTMP) will be prepared post-planning and prior to construction. Advance warning signs will be placed at sufficient distances to taper off the entry and exit points. Pedestrian marshals will be used as and when required.

Material deliveries and collections from site will be planned, scheduled and staggered to avoid any unnecessary build-up of construction related traffic.

The CTMP will be designed to minimise the interaction between the construction activities and the surrounding residential areas.

The appointed site manager will undertake the transport co-ordination role for the site. In this respect, their main responsibilities will include, but are not limited to:

- Managing the implementation of the CTMP;
- Vehicle scheduling;
- Scheduling refuse collections;
- Handling complaints;
- Acting as a point of contact for employees, contractors, the general public and with stakeholders; and
- Liaising with other developers / contractors in the area to mitigate against cumulative construction traffic impacts.

The following measures should be implemented in relation to plant and materials:

- All materials relating to the development process will be stored within the footprint of the site;
- Skips and other plant machinery will be stored within the confines of the site;
- A loading and unloading area for plant and machinery will be available within the site. It is expected that the majority of deliveries will be made via articulated goods vehicles; and
- All car parking, both staff and others, will be within the site, not on the public road.

Given the scale of the Proposed Development, the number of daily site deliveries throughout the construction phases is anticipated to be moderate. Disruption would be minimised via the scheduling of deliveries and material removals. In addition, construction materials that are delivered will be stored onsite.

Use of an agreed vehicle route will be included as a contractual requirement and communicated to all drivers. No temporary full closures of public roads are expected to be required for construction of the development, but should exceptional circumstances arise that would require such a closure, SDCC would be notified in advance and their consent sought to the statutory process required.

To ensure the proper movement of construction staff on site, the appointed contractor should also prepare
a Mobility Management Plan (MMP) document for staff. This would set out measures to ensure the traffic impact of construction staff travelling to work is also minimised. This would include elements such as car sharing initiatives and information on public transport for staff who are able to travel by bus.

The CTMP will be designed to minimise the interaction between the construction activities and the surrounding residential areas.

Traffic management will be undertaken for the site works in accordance with the principles outlined below and shall comply at all times with the requirements of:

- Department of Transport, *Traffic Signs Manual 2010 – Chapter 8 Temporary Traffic Measures and Signs for Roadworks* [11];
- *Department of Transport Guidance for the Control and Management of Traffic at Road Works* (2010) [12]; and
- Any additional requirements detailed in *Design Manual for Urban Roads and Streets* (DMURS) [13].

Construction traffic operations will be limited to 07:00 to 19:00 from Monday to Friday and 08:00 to 14:00 on Saturdays. These times may vary to facilitate specific site requirements and / or construction activities associated with the site. Any variation will be discussed and agreed in advance with SDCC.

It should be noted that construction traffic generated during the Construction Phase tends to be outside of peak hours. All construction activities will be agreed with SDCC's Roads Department prior to the commencement of the construction phase.

Approved traffic mitigation measures requested by SDCC will be submitted with an updated CEMP as part of compliance, prior to the commencement of works.

6.1 Construction Traffic Management

Below is a list of the proposed traffic management measures to be adopted during the construction works. Please note that this is not an exhaustive list, and that it will be the Main Contractor's responsibility to prepare a detailed CTMP which includes conditions imposed by SDCC.

- Warning signs / advance warning signs will be installed at appropriate locations in advance of the construction access locations;
- Construction and delivery vehicles will be instructed to use only the approved and agreed means of access; and movement of construction vehicles will be restricted to these designated routes;
- Appropriate vehicles will be used to minimise environmental impacts from transporting construction material, for example the use of dust covers on trucks carrying dust producing material;
- Speed limits of construction vehicles to be managed by appropriate signage, to promote low vehicular speeds within the site;
- Parking of site vehicles will be managed and will not be permitted on public road, unless proposed within a designated area that is subject to traffic management measures and agreed with SDCC;
- A road sweeper will be employed to clean the public roads adjacent to the site of any residual debris that may be deposited on the public roads leading away from the construction works;
- On site wheel washing will be undertaken for construction trucks and vehicles to remove any debris prior to leaving the site, to remove any potential debris on the local roads;
- All vehicles will be suitably serviced and maintained to avoid any leaks or spillage of oil, petrol or diesel. Spill kits will be available on site. All scheduled maintenance carried out off-site will not be carried out on the public highway;
- Safe and secure pedestrian facilities are to be provided where construction works obscure any existing pedestrian footways. Alternative pedestrian facilities will be provided in these instances, supported by physical barriers to segregate traffic and pedestrian movements, and to be identified by appropriate signage; and

- Pedestrian facilities will cater for vulnerable users including those with mobility impairments.

The above mitigation measures will ensure that the presence of construction traffic does not lead to any significant environmental impacts or safety concerns in the vicinity of the proposed works. Furthermore, it is in the interests of the construction programme that deliveries, particularly concrete deliveries are not unduly hampered by traffic congestion. Continuous review of haulage routes, delivery timings and access arrangements will be undertaken throughout the construction phase to ensure efficient operation.

6.2 Traffic Queueing

Material deliveries and collections from site will be planned, scheduled and staggered to avoid any unnecessary build-up of construction works related traffic.

Deliveries to site will be booked in advance using a delivery schedule, so as to prevent lorry congestion on the road networks surrounding the site. Alternative safe routeways shall be established for traffic and pedestrians where existing routeways have to be altered, removed or worked on during the construction phase.

6.3 Site Hoarding and Security Fencing

All areas of construction will be fenced / hoarded off to prevent unauthorized access. This fencing shall remain closed at all times during construction works and closed and locked after construction work hours / break times.

This fencing shall be erected in accordance with good practice and the Construction Regulations 2013. Fencing arrangements will be reviewed and adjusted as the works progress.

7. SAFETY, HEALTH AND ENVIRONMENTAL CONSIDERATIONS DURING CONSTRUCTION WORKS

The appointed Main Contractor will implement a Construction, Health and Safety Plan for the duration of the construction phase, which contains health and safety measures covering the below items at a minimum:

- Construction Health and Safety training requirements;
- Induction procedures;
- Emergency protocols; and
- Details of welfare facilities.

7.1 Construction Lighting

Construction work will generally be confined to daylight hours and lighting will generally not be required for the construction phase. There will however be occasions where the provision of portable lighting will be required (works on roadways and power floating floors as examples). Where possible and without jeopardising site safety, lights will be pointed down at a 45-degree angle and away from sensitive receptors. The site compound will have external lights for safety and security. These lights will be pointed down at a 45-degree angle and away from sensitive receptors where possible.

7.2 Air Quality

This section describes the site policy with regard to dust management and the specific mitigation measures which will be put in place during construction works. The objective of dust control at the site is to ensure that no significant nuisance occurs at nearby sensitive receptors.

In order to develop a workable and transparent dust control strategy, the measures set out below have been formulated by drawing on best practice guidance from Ireland, the UK and the US, such as:

- Department of Environment, Heritage and Local Government (DOEHLG), *Quarries and Ancillary Activities, Guidelines for Planning Authorities* (2004) [14];
- US Environment Protection Agency (USEPA), *Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition* (periodically updated) (1986)[15];
- The Scottish Office – Development Department, *Planning Advice Note PAN50 Controlling the Environmental Effects Of Surface Mineral Workings Annex B: The Control of Dust at Surface Mineral Workings* (1996) [16]; and
- Institute of Air Quality Management (IAQM), *Guidance on the Assessment of Dust from Demolition and Construction* (2024) [17].

7.2.1 Site Management

The site activities will be undertaken with due consideration of the surrounding environment and the close proximity of sensitive receptors such as residents and pedestrians. Dust management during the construction phase will be a key measures in terms of minimising the impacts on the local air quality. The following measures will also be implemented to ensure impacts are minimised:

- Complaint registers will be kept detailing all telephone calls and letters of complaint received in connection with construction activities, together with details of any remedial actions carried out;
- Equipment and vehicles used on site will be in good condition such that emissions from diesel engines etc. are not excessive;

- Pre-start checks will be carried out on equipment to ensure they are operating efficiently and that emission controls installed as part of the equipment are functional;
- The use of hardcore access route to work front;
- A regime of 'wet' road sweeping can be set up to ensure the roads around the immediate site are as clean and free from dirt / dust arising from the site, as is reasonably practicable. This cleaning will be carried out by approved mechanical sweepers;
- Footpaths immediately around the site can be cleaned by hand regularly, with damping as necessary;
- High level walkways and surfaces such as scaffolding can be cleaned regularly using safe 'wet' methods, as opposed to dry methods;
- Vehicle waiting areas or hard standings can be regularly inspected and kept clean by brushing or vacuum sweeping and will be regularly sprayed to keep moist, if necessary;
- Vehicle and wheel washing facilities can be provided at site exit(s) where practicable. If necessary vehicles can be washed down before exiting the site;
- Vehicles and equipment shall not emit black smoke from exhaust system, except during ignition at start up;
- Engines and exhaust systems should be maintained so that exhaust emissions do not breach stationary emission limits set for the vehicle / equipment type and mode of operation;
- Servicing of vehicles and plant should be carried out regularly, rather than just following breakdowns.
- Internal combustion plant should not be left running unnecessarily;
- Exhaust direction and heights should be such as not to disturb dust on the ground and to ensure adequate local dispersal of emissions;
- Where possible fixed plant such as generators should be located away from residential areas;
- The number of handling operations for materials will be kept to a minimum in order to ensure that dusty material is not moved or handled unnecessarily;
- The transport of dusty materials and aggregates should be carried out using covered / sheeted lorries.
- Material handling areas should be clean, tidy and free from dust;
- Vehicle loading should be dampened down and drop heights for material to be kept to a minimum.
- Drop heights for chutes / skips should be kept to a minimum;
- Dust dispersal over the site boundary should be minimised using static sprinklers or other watering methods as necessary;
- Stockpiles of materials should be kept to a minimum and if necessary, they should be kept away from sensitive receptors such as residential areas etc.;
- Stockpiles were necessary, should be sheeted or watered down;
- Methods and equipment should be in place for immediate clean-up of spillages of dusty material;
- No burning of materials will be permitted on site;
- Earthworks excavations should be kept damp where necessary and where reasonably practicable;
- Equipment and techniques for cutting / grinding / drilling / sawing etc., which minimise dust emissions and which have the best available dust suppression measures, should be employed; and
- The Main Contractor should allocate suitably qualified personnel to be responsible for ensuring the generation of dust is minimised and effectively controlled.

Dust deposition levels will be monitored, if requested by the local authority or if complaints are received, to assess the impact that site activities may have on the local ambient air quality. If requested the following procedure will be implemented:

- The dust deposition rate will be measured using Bergerhoff Dust Deposit Gauges placed at strategic locations near the boundaries of the site for a period of 30 (+/- 2) days if required.

Monitoring should be conducted as required during periods when the highest levels of dust are expected to be generated i.e., during site preparation works and soil stripping activities;
- The exact locations will be determined after consideration of the requirements of Method VDI 2119 with respect to the location of the samplers relative to obstructions, height above ground and sample collection and analysis procedures;
- After each 30 (+/- 2 days) exposure period, the gauges will be removed from the sampling location, sealed and the dust deposits in each gauge will be determined gravimetrically by an accredited laboratory and expressed as a dust deposition rate in mg/m^2/day in accordance with the relevant standards; and
- Technical monitoring reports detailing all measurement results, methodologies and assessment of results shall be subsequently prepared and maintained by the Site Manager.

A limit value of 350 mg/m^2/day will be used in comparison with recorded values.

7.2.2 Dust Control Measures

The aim is to ensure good site management by avoiding dust becoming airborne at source. This will be done through good design, planning and effective control strategies. The siting of construction activities and the limiting of stockpiling will take note of the location of sensitive receptors and prevailing wind directions in order to minimise the potential for significant dust nuisance. In addition, good site management will include the ability to respond to adverse weather conditions by either restricting operations on-site or using effective control measures quickly before the potential for nuisance occurs.

- During working hours, technical staff will be available to monitor dust levels as appropriate; and
- At all times, the dust management procedures put in place will be strictly monitored and assessed.

The dust minimisation measures 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 generation. In the event of dust nuisance occurring outside the site boundary, site activities will be reviewed, and procedures implemented to rectify the problem. Specific dust control measures to be employed are presented below.

Site Routes

Site access routes (particularly unpaved areas) can be a significant source of fugitive dust from construction sites if control measures are not in place. The most effective means of suppressing dust emissions from unpaved roads is to apply speed restrictions. Studies show that these measures can have a control efficiency ranging from 25% to 80% (USEPA, 1997) [18].

- A speed restriction of 20 km/hr will be applied as an effective control measure for dust for on-site vehicles or delivery vehicles within the vicinity of the site;
- Bowsers will be available during periods of dry weather throughout the construction period. Research shown found that the effect of surface watering is to reduce dust emissions by 50%. The bowser will operate during dry periods to ensure that unpaved areas are kept moist. The required application frequency will vary according to soil type, weather conditions and vehicular use; and
- Any hard surface roads will be swept to remove mud and aggregate materials from their surface while any unsurfaced areas shall be restricted to essential site traffic only.

Excavation

Excavation works during periods of high winds and dry weather conditions can be a significant source of dust.

- During dry and windy periods, and when there is a likelihood of dust nuisance, watering shall be conducted to ensure moisture content of materials being moved is high enough to increase the stability of the soil and thus suppress dust; and
- During periods of very high winds (gales), activities likely to generate significant dust emissions should be postponed until the gale has subsided.

The movement of trucks containing materials with potential for dust generation to an off-site location will be enclosed or covered.

Stockpiling

The location and moisture content of stockpiles are important factors which determine their potential for dust emissions. The following measures will be put in place:

- Overburden material will be protected from exposure to wind by storing the material in sheltered parts of the site, where possible storage piles should be located downwind of sensitive receptors.
  Regular watering will take place during dry/windy periods to ensure the moisture content is high enough to increase the stability of the soil and suppress dust.

Site Traffic on Public Roads

Spillage and blow-off of debris, aggregates and fine material onto public roads will be reduced to a minimum by employing the following measures:

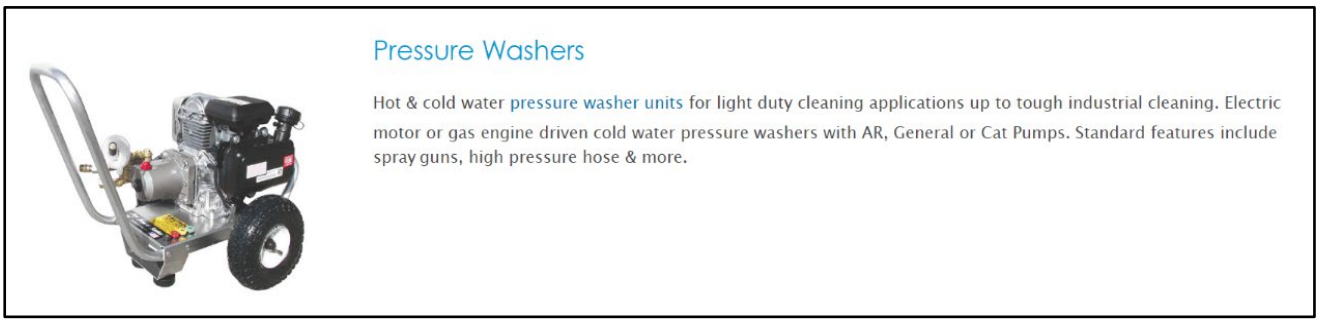

Figure 7.1 Example of Proposed Wheel Cleaning Equipment Example

- Vehicles delivering material with potential for dust emissions to an off-site location shall be enclosed or covered at all times to restrict the escape of dust;
- Any hard surface site roads will be swept to remove mud and aggregate materials from their surface while any unsurfaced roads shall be restricted to essential site traffic only;
- A power washing facility or wheel cleaning facility will be installed near to the site compound for use by vehicles exiting the site when appropriate, and an example of the washing equipment can be seen in Figure 7.1; and
- Road sweepers will be employed to clean the site access route as required.

General

The pro-active control of fugitive dust will ensure that the prevention of significant emissions, rather than an inefficient attempt to control them once they have been released, will contribute towards the satisfactory management of dust by the Main Contractor. The key features with respect to control of dust will be:

- The specification of a site policy on dust and the identification of the site management responsibilities for dust issues;
- The development of a documented system for managing site practices with regard to dust control;

- The development of a means by which the performance of the dust minimisation plan can be regularly monitored and assessed; and
- The specification of effective measures to deal with any complaints received.

7.3 Ecology

An Ecological Impact Assessment (EcIA) was carried out by Altemar Ltd. on the 18th of December 2025.
An Invasive Species Survey was conducted by Altemar Ltd. on the 2nd of September 2025. Based on the survey, Butterfly Bush (Buddleja davidii) was noted on site which is a noxious weed and is considered a medium impact non-native invasive species according to the National Biodiversity Data Centre. However,
no plant species (such as Japanese knotweed (*Reynoutria japonica*) or giant hogweed (*Mantegazzianum heracleum*) listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 were recorded during the field survey in 2025.

The ecologists found that the site is not located within or adjacent to any designated wildlife or conservation area. There is no direct hydrological pathway to designated conservation sites and all surface water drainage from the site will discharge into a combined sewer for treatment prior to discharge to Dublin Bay.

No rare or protected habitats were noted on site during the field survey. No protected plant species were noted on site or in the records of rare and threatened species from National Parks and Wildlife Services (NPWS).

The ecologists have found that there is a possibility that terrestrial mammals, bats and nesting birds could establish themselves within the site of in advance of the commencement of construction works. Therefore, mitigation is required in the form of a pre-construction /pre-demolition ecological survey.

In the event that any species listed under the Third Schedule of European Communities (EC) (Birds and Natural Habitats) Regulations (2011) (S.I. 477 of 2011), as amended and under the First Schedule of European Union (EU) (Invasive Alien Species) Regulations 2024 (S.I. No. 374/2024) is found on site, an Invasive Species Management Plan (ISMP) will be prepared. The ISMP will include an eradication and treatment programme and will be submitted to SDCC for approval. This management plan will be continued as required during the operational phase until eradication is complete.

Full details on the Ecological Impact Assessment, the locations of the findings and the full suite of mitigation measures recommended by Altemar Ltd. are provide in the EcIA Report submitted with this planning application.

The key strategies to be undertaken to minimise impact on the local flora and fauna during site clearing and construction are as follows:

- All site clearance works will comply with current legislative requirements and best practice;
- The working area will be clearly defined and limited during the construction phase to reduce the impacts of the Proposed Development on adjacent areas. The construction area will be clearly delimited by the site boundary and machinery should operate only within this allocated site area;
- All refuelling of plant, equipment and vehicles will be carried out at the construction site boundary. All fuels, chemicals, liquid and solid waste will be stored in areas bunded in accordance with established best practice guidelines at the construction compound also; and Provision of spill kits;

- Provision of a water and sediment management plan, providing for means to ensure that surface water runoff is controlled such that no silt or other pollutants enter local water courses or drains;
- The measures outlined in Section 7.6 will ensure that silt runoff and potential flooding risks are minimised which will protect any ecological receptors associated with the site; and
- Construction lighting will be designed so as to be sensitive to the potential presence of bats and should adhere to the following guidance:
  - Bats and Lighting: Guidance Notes for Planners, engineers, architects and developers (Bat Conservation Trust, 2010) [19];
  - Guidance Notes for the Reduction of Obtrusive Light GN01 (Institute of Lighting Professionals, 2011) [20];
  - Bats and Artificial Lighting in the UK – Bats and the Built Environment Series. Guidance Note 08/18 (Bat Conservation Trust UK, 2018) [21].

7.4 Noise and Vibration

7.4.1 Noise Criteria

Noise impacts arising from construction activities have the potential to cause annoyance or nuisance to local residents and businesses in the area.

Appropriate criteria relating to permissible construction noise levels for this development are taken from British Standard BS 5228 – 1: 2009 +A1 2014: *Code of Practice for Noise and Vibration Control on Construction and Open Sites – Noise* [22]. The approach adopted here calls for the designation of a noise sensitive location into a specific category (A, B or C) based on exiting ambient noise levels in the absence of construction noise.

In accordance with the standard, ambient measured noise levels representative of noise sensitive locations should be rounded to the nearest 5 dB and construction noise limits are then set according to the category definitions above. This then sets a threshold noise value that, if exceeded at this location, indicates a potential significant noise impact is associated with the construction activities depending on context. The approach is summarised in Table 7.1, below.

Table 7.1 Threshold of Potential Significant Effect at Dwellings (BS5228-1)

Assessment Category and Threshold Value Period	Threshold Value (dB)		
	Category A [A])	Category B [B])	Category C [C])
Night Time (23:00-07:00)	45	50	55
Evenings and Weekends D)	55	60	65
Daytime (07:00-19:00) and Saturdays (07:00 – 13:00)	65	70	75

A) Category A: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are less than these values.
B) Category B: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are the same as category A values.
C) Category C: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are higher than category A values.
D) 19:00–23:00 weekdays, 13:00–23:00 Saturdays and 07:00–23:00 Sundays.

7.4.2 Vibration Criteria

Vibration criteria are taken from BS 5228-2:2009+A1:2014 *Code of Practice for Noise and Vibration Control on Construction and Open Sites- Vibration*. This document sets the following vibration limits for transient vibration. For buildings or structures that are structurally unsound, lower

vibration magnitudes will apply, typically 50% of those for structurally sound buildings. Protected or historic buildings are not automatically assumed to be more vulnerable to vibration unless they have existing structural defects. The recommended transient vibration thresholds from BS5228-2 for the avoidance of cosmetic damage to light and heavy framed buildings are summarised in Table 7.2, below.

Table 7.2 Transient Vibration Threshold Values for Buildings

Type of Building	Peak component particle velocity in frequency range of predominant pulse Note 1	
	4 Hz to 15 Hz	15 Hz and above
Reinforced or framed structures. Industrial and heavy commercial buildings	50mm/s	
Unreinforced or light framed structures. Residential or light commercial buildings.	15 mm/s at 4 Hz Note 2 increasing to 20 mm/s at 15 Hz	20 mm/s at 15 Hz increasing to 50 mm/s at 40 Hz and above

Note 1: Values referred to are at the base of the building.

Note 2: At frequencies below 4 Hz, a maximum displacement of 0.6 mm (zero to peak) is not to be exceeded.

7.4.3 General Noise and Vibration Mitigation

Best practice noise and vibration control measures will be employed by the Main Contractor during the construction phase in order to control noise and vibration impacts at the nearest noise sensitive locations. All works on site shall comply with BS 5228 2009+ A1 2014 (Parts 1 and 2) which gives detailed guidance on the control of noise and vibration from construction activities. This includes guidance on several aspects of construction site mitigation measures, including, but not limited to:

- Selection of quiet plant;
- Noise control at source;
- Screening; and
- Liaison with the Public.

The following key forms of noise control for the site are set out below:

- Site compounds will be located away from noise sensitive boundaries within the site constraints;
- For mobile plant items such as cranes, dump trucks, excavators and loaders, the installation of an acoustic exhaust and or maintaining enclosure panels closed during operation can reduce noise levels by up to 10dB. Mobile plant should be switched off when not in use and not left idling;
- For steady continuous noise, such as that generated by diesel engines, it may be possible to reduce the noise emitted by fitting a more effective exhaust silencer system and avoid idling of engines when not in use;
- For percussive tools, a number of noise control measures include fitting a muffler or sound reducing equipment to the breaker 'tool' and ensure any leaks in the air lines are sealed. Erection of localised screens around breaker or drill bit when in operation in close proximity to noise sensitive boundaries;

- The use of a high quality construction site hoarding will be included around all noise sensitive boundaries;
- For all materials handling, ensure that materials are not dropped from excessive heights, lining drops chutes and dump trucks with resilient materials;
- All items of plant should be subject to regular maintenance. Such maintenance can prevent unnecessary increases in plant noise and can serve to prolong the effectiveness of noise control measures; and
- All site staff shall be briefed on noise mitigation measures and the application of best practicable means to be employed to control noise.

7.4.3.1 Liaison with the Public

The designated environmental liaison officer will be appointed to site during construction works. Any noise complaints will be logged and followed up in a prompt fashion by the liaison officer. In addition, where a particularly noisy construction activity is planned or other works with the potential to generate high levels of noise, or where noisy works are expected to operate outside of normal working hours etc., the liaison officer will inform the nearest noise sensitive locations of the time and expected duration of the noisy works.

Any noise complaints related to activities at the site will be logged and investigated and, where required, measures taken to ameliorate the source of the noise complaint.

7.4.3.2 Monitoring

During the construction phase, spot check noise monitoring may be required where the construction noise thresholds have the potential to be exceeded at noise sensitive locations. The monitoring shall be carried out by the Main Contractor and used to inform the requirement for any control measures on site to reduce construction noise levels.

Noise monitoring will be conducted in accordance with the International Standard ISO 1996-2:2017 - *Description, measurement and assessment of environmental noise - Part 2: Determination of sound pressure levels* (ISO 2017) [23].

Where required, or requested by the local authority, unattended external noise monitoring will be undertaken at locations on the site boundary closest to sensitive locations. It is considered that it will be appropriate to amend the monitoring program and location as the works progress. Accordingly, monitors may be added, removed or relocated as necessary.

The noise monitoring terminals should provide the following at minimum:

- Logging at hourly intervals; and
- Remote access for information download.

Where required (i.e. where there is potential for exceedance of the vibration thresholds for buildings in Table 8.2), or requested by the local authority, vibration monitoring will be installed at the site boundary to monitor Peak Particle Velocity parameter (PPV, mm/s) in the X, Y and Z directions, in accordance with BS ISO 4866: 2010: *Mechanical vibration and shock – Vibration of fixed structures – Guidelines for the measurement of vibrations and evaluation of their effects on structures* [24].

The mounting of the transducer to the vibrating structure will need to comply with BS EN ISO 5348: 1998: *Mechanical vibration and shock – Mechanical mounting of accelerometers* [25]. In summary, the following ideal mounting conditions apply:

- The transducer and its mountings should be as rigid as possible;
- The mounting surfaces should be as clean and flat as possible;

- Simple symmetric mountings are best; and
- The mass of the mounting should be small in comparison to that of the structure under test.

7.5 Resource and Waste Management

This section outlines the measures that will be undertaken to minimise the quantity of waste produced at the site and the measures to handle the waste in such a manner as to minimise the effects on the environment. A site-specific RWMP has been prepared by AWN Consulting (267501.0875WMR01) and will be employed to ensure sustainable and effective waste management throughout the demolition, excavation and construction phases of the Proposed Development.

Adherence to the RWMP prepared for the construction works will ensure that the management of waste arising is dealt with in compliance with the provisions of the *Waste Management Act 1996* as amended [26], and associated Regulations, the *Litter Pollution Act of 1997* as amended [27] and the *National Waste Management Plan for a Circular Economy 2024 - 2030 (NWMPCE) (2024)* [28], and that it will achieve optimum levels of waste reduction, reuse and recycling.

Typical waste materials that will be generated from the construction works will include:

- Soil and stones;
- Concrete, bricks, tiles and ceramics;
- Wood, glass and plastics;
- Metals;
- Gypsum-based construction material;
- Paper and cardboard;
- Mixed construction waste; and
- Chemicals (solvents, paints, adhesives, detergents etc.).

The management of all hazardous waste arisings, if they occur, shall be coordinated in liaison with Health and Safety Management.

7.5.1 Waste Minimisation

Waste minimisation measures proposed are summarised as follows:

- Materials will be ordered on an 'as needed' basis to prevent over supply;
- Materials will be correctly stored and handled to minimise the generation of damaged materials;
- Materials will be ordered in appropriate sequence to minimise materials stored on site;
- A waste tracking log will be established;
- Sub-contractors will be responsible for similarly managing their wastes; and
- All wood waste generated by site works will be inspected and examined and will be segregated as re-useable wood and scrap wood waste.

7.5.2 Waste Storage

The main waste storage area will be located in the site compound. A dedicated and secure area containing bins, and/or skips, and storage areas, into which all waste materials generated by construction site activities, will be established within the Proposed Development.

Waste materials generated will be segregated at the site compound, where it is practical. Where the on-site segregation of certain wastes types is not practical, off-site segregation will be carried out. There will be skips and receptacles provided to facilitate segregation at source. All waste receptacles leaving site will be covered or enclosed. The appointed waste contractor will collect

and transfer the wastes as receptacles are filled. There are numerous waste contractors in the SDCC Region that provide this service.

The site Resource Manager will ensure that all staff are informed of the requirements for segregation of waste materials by means of clear signage and verbal instruction. Appointed employees will be made responsible for ensuring good site housekeeping.

7.5.3 Pest Management

A pest control operator will be appointed as required to manage pests onsite during the construction phase. Organic and food wastes generated by staff will not be stored in open skips, but in closed waste receptacles. Any waste receptacles will be carefully managed to prevent leaks, odours and pest problems.

7.5.4 Responsibility

It will be the responsibility of the construction manager to ensure that a written record of all quantities and natures of wastes removed from the site are maintained on-site in a waste file (in hardcopy or electronically).

It is the responsibility of the project manager or their delegate, that all contracted waste haulage drivers hold an appropriate waste collection permit for the transport of waste loads and that all waste materials are delivered to an appropriately licensed or permitted waste facility in compliance with the relevant Regulations as will be outlined in the RWMP.

The Main Contractor, as part of regular site inspection audits, will determine the effectiveness of the waste management strategy and will assist the project manager in implementing the measures under the RWMP and in determining the best methods for waste minimisation, reduction, re-use, recycling and disposal as the construction phase progresses and waste materials are generated.

Prior to commencement of the excavation and construction activity and removal of any waste off-site, details of the proposed destination of each waste stream will be provided to SDCC, along with waste collection permit numbers.

7.6 Surface Water Management

During construction, surface water runoff will be managed using a temporary, staged approach that prevents uncontrolled runoff, ponding, or discharge beyond the site boundary. The strategy will include:

- Retention of existing drainage patterns where practicable during early works;
- Progressive installation of permanent drainage infrastructure in advance of final surfacing; and
- Use of temporary drainage measures until permanent infiltration systems are fully operational.

As far as practically possible, no untreated surface water will be permitted to discharge to any external surface water network.

For temporary surface water control measures, the following measures will be implemented during the construction phase as appropriate:

- Temporary swales, shallow channels or cut-off ditches to intercept and direct surface water runoff within the site;
- Temporary attenuation areas or sumps formed within open areas to provide short-term storage following rainfall events;

- Controlled overland flow routes to safely convey exceedance flows away from excavations and completed structures; and
- Pumped removal of surface water, where required, following heavy rainfall, with discharge directed to temporary on-site infiltration areas or settlement zones.

All temporary measures will be maintained for the duration of construction and adjusted as site conditions evolve.

To protect ground conditions and future infiltration performance, the following controls will be implemented:

- Use of silt traps, sediment fences, or settlement areas where runoff may carry suspended material;
- Regular inspection and cleaning of temporary drainage features;
- No discharge of untreated, silty, or contaminated water to ground; and
- Designated refueling and plant maintenance areas, located away from drainage features and provided with spill kits.

Rainwater or groundwater pumped from excavations is to be directed to on-site settlement ponds where required. Any on site settlement ponds are to include geotextile liners and riprapped inlets and outlets to prevent scour and erosion. Monitoring of same will be undertaken.

Surface water discharge point during the construction phase is to be agreed with South Dublin County Council's Environment Section prior to commencing works on site.

A discharge licence will be required for any ground water pumped from the excavations to any public water course or sewer.

Care will be taken to ensure that exposed soil surfaces are stable to minimise erosion. All exposed soil surfaces will be within the main excavation site thereby limiting the potential for any offsite impacts. All runoff will be prevented from directly entering into any water courses as no construction will be undertaken directly adjacent to open water.

It is not anticipated that any significant dewatering will be required during the construction phase which would result in the localised lowering of the water table. There may be localised pumping of surface runoff from the excavations during and after heavy rainfall events to ensure that the excavation is kept relatively dry.

The following measures will be put in place during the construction phase to ensure protection of surface waterbodies. Construction works are informed by best practice guidance from Inland Fisheries Ireland on the prevention of pollution during development projects:

- *Control of Water Pollution from construction Sites, Guidance for Consultants and Contractors (C532)* [29];
- Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters (2016) [30]; and
- Environmental Good Practice on Site (3rd edition) (C692) [31].

Where required (areas of exposed soil) a temporary drainage system shall be installed prior to the commencement of the construction works to collect surface water runoff generated on site during construction.

7.6.1 Pollution Control

Management of Suspended Solids in Runoff

Any temporary storage of spoil, hardcore, crushed concrete or similar material will be stored as far as possible from any surface water drains and also stored in receptacles where possible. In order to minimise the risk of contamination, the stockpiled material will be removed off-site as soon as possible. Surface water drain gratings in areas near or close to where stockpiles are located will be covered by appropriate durable polyurethane covers or similar protective coverings.

There will be no direct pumping of silty water from the works to any watercourse. Sediment entrapment facilities will be installed to reduce sediment discharges to downstream properties and receiving waters. All runoff leaving a disturbed area should pass through a sediment entrapment facility before it exits the site and flows downstream such as straw bales, silt fencing, silt barriers and diversion dams.

Concrete Runoff

No wash-down or wash-out of ready-mix concrete vehicles during the construction works will be carried out at the site within 10 meters of an existing surface water drainage point. Wash-outs will only be allowed to take place in designated areas with an impervious surface.

Accidental Spills and Leaks

No bulk chemicals will be stored within the active construction areas. Temporary oil and fuel storage tanks will be kept in the material storage area in suitable containers and will be appropriately bunded as required. Refueling of vehicles and the addition of hydraulic oils or lubricants to vehicles will take place in designated areas of the site, where possible, which will be kept away from surface water drains.

Spill protection equipment such as absorbent mats, socks and sand will be available to be used in the event of an accidental release during refueling. Training will be given to appropriate site workers in how to manage a spill event.

The following mitigation measures will be taken at the construction site in order to prevent any spillages to ground of fuels during machinery activities and prevent any resulting soil and / or groundwater quality impacts:

- Refuelling will be undertaken off site where possible;
- Where mobile fuel bowsers are used the following measures will be taken:
  - Any flexible pipe, tap or valve will be fitted with a lock and will be secured when not in use;
  - The pump or valve will be fitted with a lock and will be secured when not in use;
  - All bowsers must carry a spill kit;
  - Operatives must have spill response training; and
  - Portable generators or similar fuel containing equipment will be placed on suitable drip trays.

Monitoring

Weekly checks will be carried out to ensure surface water drains are not blocked by silt, or other items, and that all storage is located at least 10m from surface water receptors. A regular log of inspections will be maintained, and any significant blockage or spill incidents will be recorded for root cause investigation purposes and updating procedures to ensure incidents do not reoccur.

8. SUMMARY

This CEMP sets out the overall management strategy for the excavation and construction works for the Proposed Development. The CEMP aims to ensure the management of construction activity is carried out in a planned, structured and considerate manner which minimises the impacts of the works on the local environment, nearby residents and commercial activities in the vicinity of the site. Due to the nature of construction works, there may be unforeseen events which occur at the site and the project team will actively manage any changes and discuss with the relevant authorities, where required.

The CEMP will be reviewed regularly and will be updated by the Main Contractor to account for any planning conditions issued, any updated guidance released and any changes in construction methodology or site circumstances as the Proposed Development progresses.

The Project Team are committed to ensuring that all construction activities are proactively managed and coordinated to minimise environmental effects, maintain high standards of environmental performance, and ensure regulatory compliance throughout the works.

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