Prepared by Roughan & O'Donovan Arena House, Arena Road, Sandyford, Dublin 18 Tel: +353 1 2940800 Fax: +353 1 2940820 Email: info@rod.ie www.rod.ie



PROPOSED RESIDENTIAL DEVELOPMENT AT HOLYWELL, SWORDS, CO. DUBLIN

Preliminary Construction & Environmental Management Plan | September 2023







Housing at Holywell, Swords, County Dublin

Preliminary Construction & Environmental Management Plan

Document No: HHP-ROD-XX-XX-RP-C-C0003

Made: Ciaran McGee (CMG)

Checked:..... Sean Kennedy (SK)

Approved:..... Ben Gallery (BDG)

Revision	Description	Made	Checked	Approved	Date
P01	Issued for Planning	CMG	SK	-	29/09/2023
P02	Issued for Planning	CMG	SK	BDG	17/10/2023

Housing at Holywell, Swords, County Dublin Preliminary Construction & Environmental Management Plan TABLE OF CONTENTS

1.	INTR	TRODUCTION					
2.	CON	NSTRUCTION OF THE DEVELOPMENT					
	2.1	Site Location					
	2.2	Description of the Site					
	2.3	Project Details2					
	2.4	Programme					
	2.5	Working Hours					
	2.6	Pre-Start Survey					
	2.7	Const	ruction Site Compounds & Accommodation, Welfare & Storage	3			
		2.7.1	Accommodation	3			
		2.7.2	Welfare Facilities	3			
	2.8	Const	ruction of the Development	3			
		2.8.1	Site Set-up	3			
		2.8.2	Existing Structures and Buildings	3			
		2.8.3	Proposed Development	4			
		2.8.4	Associated Civils Works	4			
3.	TRAFFIC MANAGEMENT – HOLYWELL DISTRIBUTOR ROAD AND SITE TRAFFIC						
	3.1	Const	raints				
		3.1.1	Associated Civil Works	5			
		3.1.2	Vehicular Access to Site	5			
	3.2	Const	ruction Traffic	5			
		3.2.1	Site Set-up	5			
		3.2.2	Services Connection Construction on Hollywell Distributor Road	6			
		3.2.3	Proposed Development	6			
		3.2.4	Routes for HGV's to Site	6			
	3.3	Mainte	enance of Public Roads	6			
		3.3.1	Dust	6			
4.	ENVIRONMENTAL MANAGEMENT SYSTEM8						
	4.1	Identification					
	4.2	Assessment					
	4.3	Mitigation					
	4.4	Monitoring, Recording & Reviewing					
	4.5	Minimising the Environmental Impacts8					
	4.6	External Stakeholders8					
	4.7	Noise & Vibration					
	4.8	Protection of Watercourses9					
	4.9	Waste	/ Demolition Management	10			

1. INTRODUCTION

This Preliminary Construction & Environmental Management Plan (CEMP) has been prepared to outline the envisaged procedures, sequencing, construction methodology and environmental control measures anticipated by the Project Team engaged in the planning, liaison, and construction of the proposed residential development at Holywell, Swords, Co. Dublin. The plan outlines proposals on traffic and environmental management measures to be adopted during construction. The appointed construction Contractor will prepare and be responsible for implementing the Final Construction & Environmental Management Plan for Construction.

This document is designed to be a live document which will eventually address how any planning conditions imposed on the project will be managed or discharged by the construction team.

The CEMP incorporates 3 main elements:

- 1. Description of the construction of the development.
- 2. Traffic management considerations.
- 3. Environmental management considerations, including demolition waste management.

2. CONSTRUCTION OF THE DEVELOPMENT

2.1 Site Location

The proposed development is located at Holywell, Swords, Co. Dublin. The site is bounded by the Holywell Distributor Road to the north and west, existing residential development to the east and a residential landscaped area to the south.

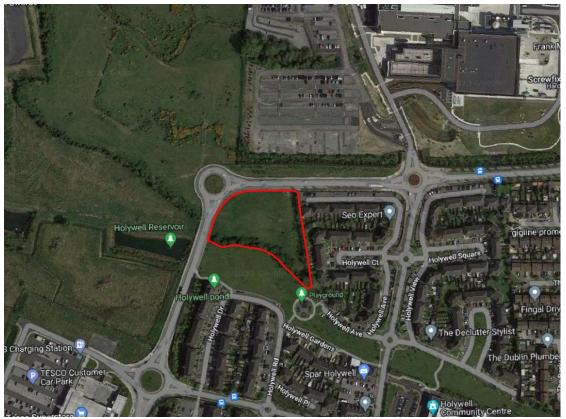


Figure 2.1 Proposed Development Location

2.2 Description of the Site

The site generally slopes from northeast to southwest. The elevation across the site varies by approximately 2.5m from the highest to lowest points of the site (approximately 3.9% gradient). There is an existing drainage ditch located along the southern boundary of the site. Proposed ground levels are to be set above the flood level of the adjacent ditch.

2.3 Project Details

Table 2.1Description of Organisations

Organisations				
Client	Fingal County Council			
Architect	Henchion & Reuter Architects			
Engineering Consultants	Roughan & O'Donovan Consulting Engineers			
Contractor	Yet to be Appointed			

2.4 Programme

The project is due to commence in 2024 with a period of construction of approximately 12 months.

2.5 Working Hours

Except where otherwise agreed with Fingal County Council (FCC), working hours will be 07:00 - 19:00 Monday to Friday and 09:00 - 17:00 Saturday and closed on Sundays.

2.6 Pre-Start Survey

A Pre-Start Survey of the works will be carried out prior to construction works commencing. This will consist of a photographic aided report on the existing environment including; existing structures, boundaries, footpaths, roads, access points, fences lines, walls, hedge lines, kerb lines, lighting columns, street furniture and road signs. The findings of the survey will be documented and stored by the Contractor.

2.7 Construction Site Compounds, Accommodation, Welfare & Storage

It is envisaged that the main project offices will be established on the site, welfare facilities will be provided adjacent to the main project offices for operatives on the site. The site offices shall be located to minimise any potential impact on existing trees and landscape. It is envisaged that storage facilities shall be provided adjacent to the main project offices.

2.7.1 Accommodation

Site offices will be constructed from modular anti-vandal containers. The offices shall be provided with a metered mains power supply and electric heating. It is the contractors responsibility to obtain agreement for any connections from Uisce Éireann (IW) for temporary connections.

2.7.2 Welfare Facilities

The main offices must include welfare facilities including toilets and kitchen facilities for staff. Operative welfare facilities including drying rooms and locker rooms will be provided.

2.8 Construction of the Development

The construction and commissioning of the development will commence following planning and permitting consent approval, and will comprise of the following elements of work:

2.8.1 Site Set-up

Initially offices and storage containers will be transported to the site to provide accommodation and welfare in advance of the works commencing.

2.8.2 Existing Structures and Buildings

There are existing residential developments located to the east and south of the development site and existing industrial developments to the north. The contractor will incorporate protection measures such as minimising duct, noise and vibrations on site during construction to protect these existing developments.

2.8.3 **Proposed Development**

The proposed development involves the construction of 3 no. apartment blocks comprising of 57 no. units at Holywell, Swords, Co. Dublin. The proposed development has a gross site area of approximately 0.78 hectares.

2.8.4 Associated Civils Works

A new access will be constructed to serve the development off the Holywell Distributor Road. This access will be constructed at the northern boundary of the site, where the current access is located.

New connections to drainage, water supply and utilities will be brought into the site from the Holywell Distributor Road.

3. TRAFFIC MANAGEMENT

The proposed development will be accessed from the existing access off the Holywell Distributor Road. The Contractor will agree traffic management proposals with Fingal County Council and An Garda Síochána to facilitate traffic in the surrounding area at all times. Once all the necessary earth moving (minimal cut/fill) is completed, there will be limited construction traffic on the existing road network as the initial phase involves processing and moving aggregates within the site boundary. Typical construction associated traffic would include operatives travelling to and from work and deliveries of materials.

All Traffic Management proposals shall be agreed with Fingal County Council and An Garda Síochána prior to construction of the development.

3.1 Constraints

The main constraints for construction activities relates to the construction of the new services connections to the site and the construction of the new site entrance. There are a number of residential and industrial developments served by the Hollywell Distributor Road located within the vicinity of the development site. Road users will need to be accommodated throughout the works.

3.1.1 Associated Civil Works

It is proposed to carry out the construction of the service connections within the existing road / footpaths simultaneously. These works are intended to be undertaken concurrently to minimise the impacts on the surrounding road network.

3.1.2 Vehicular Access to Site

The site will be accessed from the existing access off the Hollywell Distributor Road. There will be no other access points to the site. Deliveries and general traffic from HGV's will be required to access the development via the Hollywell Distributor Road. The HGV's will be directed to the appropriate location and an appropriate member of staff from the contractor will be notified to meet the delivery and arrange offloading. Pedestrian safety barriers will be erected at the entrance to the site to permit safe passage for pedestrians across the access to the development segregating members of the public from the HGV's and other vehicles entering the development.

3.2 Construction Traffic

As with any construction project, the contractors will be obliged to carry out a comprehensive Construction Traffic Management Plan (CTMP) in consultation with the local authority, Fingal County Council (FCC) before the commencement of the construction phase. The purpose of such a plan is to outline the measures to manage the expected construction traffic during the construction period and will be revised accordingly as works progress. The CTMP will also detail how facilities for existing road users will be maintained whilst construction operations are proceeding. During the construction phase the project will generate a range of traffic, which can be broken down into the main phases of construction as outlined below.

3.2.1 Site Set-up

Earthworks plant will be required to prepare the compound area, install services and commence enabling works. Portacabins will be required for the site compounds, as well as portable toilets/welfare facilities, and lock up containers.

It is expected that parking for site operatives will be a requirement throughout the construction of the development. It is considered that there will be adequate land within the curtilage of the site to accommodate temporary car and truck parking for site operatives. Site operatives will be encouraged to use public transport.

3.2.2 Services Connection Construction on Hollywell Distributor Road

Excavations may generate unsuitable fill material which will be transported by tipper lorries back to the site for use in landscaping or transported off site to a licensed waste disposal facility. Materials such as pipes, precast manhole rings, kerbs etc will all come to site on flatbed lorries. Additional construction plant will be required for resurfacing works.

3.2.3 Proposed Development

The commencement of the main construction works will require additional construction plant. Regular deliveries of materials and ready mixed concrete will take place during these works. There will also be an increase in the workforce resulting in more cars and vans accessing the site.

3.2.4 Routes for HGV's to Site

It is envisaged that HGV's travelling from the north, will access the site via the M1 Junction 4, heading south via the R132 and then west via the R125 before heading on to the Hollywell Distributor Road.

It is envisaged that HGV's travelling from the west will access the site via the R125 before heading on to the Hollywell Distributor Road.

It is envisaged that HGV's travelling from the east will access the site via the Feltrim Road before heading on to the Hollywell Distributor Road.

It is envisaged that HGV's travelling from the south will access the site via the M1 Junction 3, heading west via the R125 before heading on to the Hollywell Distributor Road.

Final routes for HGV's to site shall be agreed by the Contractor with Fingal County Council prior to construction commencing.

3.3 Maintenance of Public Roads

There will be potential for delivery vehicles and other site traffic to carry mud and silt onto the public roads when exiting the site. In order to prevent this, a wheelwash will be utilised on site. This will be used as required to wash down vehicles prior to leaving the site. If required a road sweeper may also be deployed on the immediately adjacent road network to the site to keep this clean and prevent vehicles carrying mud onto the surrounding road network. The road sweeper will be required during the works on the Hollywell Distributor Road. Roadside gullies will be maintained by the road sweeper contractor. Road line markings will be monitored and markings that require replacement throughout the duration of the project will be replaced by a specialist contractor.

3.3.1 Dust

Dust is a nuisance and can be damaging to humans, machinery, plants and animals. All workers on site are to consider the nuisance caused by the impacts of dust. The effects of dust will be minimised using the following techniques;

• Avoid creating unnecessary dust.

- Cover materials which could create dust when windy.
- Dampen down dust in operations which create dust.
- Ensure that vehicles leaving site do not leave mud on the road.

4. ENVIRONMENTAL MANAGEMENT SYSTEM

This CEMP shall be read in conjunction with the measures outlined in the environmental assessments that accompanies this planning application.

4.1 Identification

Prior to commencement of site works the Design Team and the Contractor will convene to identify the potential environmental issues which may arise throughout the duration of the Project. These will include off-site issues and cover the design, construction and commissioning phases of the Project, up to handover to operations staff. Each issue will be entered on a register of environmental risks.

4.2 Assessment

The Project Team will undertake an assessment of each of the identified environmental risks. This assessment will produce a clear definition of the risk, the potential impacts it may have and the consequences arising from the occurrence of the risk. The findings will be entered on the register of environmental risks.

4.3 Mitigation

Mitigation measures will be devised based upon the individually assessed risks. These could range from changes in design to remove the risk to on-site precautions to manage the risk and prevent the impact being realised. The agreed mitigation measures will be entered on the register of environmental risks. Any specific mitigation measures defined by planning conditions will also be addressed.

4.4 Monitoring, Recording & Reviewing

The register of environmental risks will act as the management tool for the control of environmental issues arising for the project. It will be reviewed on a regular basis to identify the efficiency of the mitigation measures employed based upon the monitoring data collected and records kept.

4.5 Minimising the Environmental Impacts

The Project Team and all its employees shall conduct their work in such a manner that unnecessary risks and disturbance to the environment are avoided. As part of the Environmental Management System, personnel are made aware of issues which may impact on the environment, and are encouraged to act responsibly.

4.6 External Stakeholders

With respect to environmental impacts, consultations will be undertaken with the Local Authority (Fingal County Council) and relevant environmental stakeholders as required.

4.7 Noise & Vibration

Noise will be generated from delivery vehicles and from concreting operations (vibrating concrete pokers etc). Noise hoarding will be erected around noisy equipment/activities where necessary. Effective management of noise on site will consist of the following measures;

- Ensure plant and equipment have properly operating silencers / mufflers.
- Do not leave plant and other vehicles / machinery running needlessly. This causes unnecessary pollution.

• Consider the location of noisy plant in order to minimise nuisance to nearby houses, motorists, and wildlife.

4.8 **Protection of Watercourses**

There is an existing drainage ditch located along the southern boundary of the site. However, following a number of site visits and discussions with FCC, the ditch appears to be dry. Flow from the Gaybrook steam is culverted to bypass the subject site. Runoff or surface water that is generated within the site will be discharged to the existing storm water network rather than to the ditch or other open watercourses.

Even though the ditch appears to be dry, as a further precaution, all works in proximity to the existing drainage ditch shall follow the generic best practice guidance outlined in the following documents:

- Guidelines for Crossing Watercourses during the Construction of National Road Schemes (NRA, 2008c).
- Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters (IFI, 2016).
- CIRIA C648 Control of water pollution from linear construction projects: technical guidance (CIRIA, 2006).

The following protection measures will also be followed to ensure water quality discharged from site is maintained:

- All machinery will be refuelled from mobile tankers on the local/access/haul/site roads. No refuelling will take place within 50m the ditch.
- Mobile storage facilities, such as fuel bowsers, will be bunded to 110% capacity to prevent spills. Tanks for bowsers and generators will be double skinned.
- When not in use, all valves and fuel trigger guns from fuel storage containers will be locked.
- Only dedicated trained and competent personnel will carry out refuelling operations. A spill kit and drip tray will be on site at all times and available for all refuelling operations. Equipment will not be left unattended during refuelling. All pipework from containers to pump nozzles will have anti siphon valves fitted.
- Strict procedures for plant inspection, maintenance and repairs will be detailed in the contractor's method statements and machinery will be checked for leaks before arrival on site.
- All site plant will be inspected at the beginning of each day prior to use. Defective plant will not be used until the defect is satisfactorily fixed.
- All major repair and maintenance operations will take place off site.
- Care will be taken at all times to avoid contamination of the environment with contaminants other than hydrocarbons, such as uncured concrete and other chemicals.
- Surface water from the site be treated in attenuation ponds prior to discharging to the storm water network.

4.9 Waste / Demolition Management

The proper management and handling of waste on site is essential to ensure that pollution and increased levels of contamination are minimised. Effective management of waste on site will consist of the following measures;

- Closed skip containers
- Non dumping/littering policy on site
- Waste segregation
- Regular clean up of the site
- Careful handling and transportation to avoid damage to raw materials.
- Efficient ordering

Excavated material from the site will be tested accordingly. Acceptable material can be recycled and used as part of the development or as import on other schemes, while unacceptable material will be transported off site to a licensed waste disposal facility.

5. Conclusion

The Housing at Holywell project in Swords, County Dublin, envisage the construction of a residential development with three apartment blocks totalizing 57 units in an area of 0.78 Hectares. The site, located along the Holywell Distributor Road.

Key aspects of the plan include setting up construction facilities, accommodating workers, and implementing measures to manage traffic and minimize environmental impacts. The project aims to establish access via the Holywell Distributor Road and will adhere to regulations set forth by Fingal County Council and An Garda Síochána. The plan also outlines strategies to mitigate dust, noise, and vibration, as well as to protect watercourses and manage waste. The document underscores the importance of environmental responsibility and collaboration with stakeholders throughout the development process. The plan serves as a comprehensive guide for construction activities, traffic management, and environmental protection measures.