

DUNBOYNE LRD

VOLUME III - PART 1
Appendices

RECEIVED: 19/12/2025



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DUNBOYNE LRD

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CHAPTER ONE

INTRODUCTION

APPENDIX 1-1 Consultation Responses



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APPENDIX 1-1 Consultation Responses

Appendix 1.1

Consultation Responses

1.1 Introduction

As part of the consultation process for this EIA, letters were sent out via email and post in January 2025 to the following statutory bodies:

- Bat Conservation Ireland
- Bord Gáis
- Environmental Protection Agency
- Fáilte Ireland
- The Health Service Executive (HSE)
- The National Transport Authority (NTA)
- Department of Education
- Department of Housing, Local Government, and Heritage
- Department of Tourism, Culture, Arts, Gaeltacht, Sport & Media
- Geological Survey Ireland (GSI)
- The Health and Safety Authority (HSA)
- The Heritage Council
- Inland Fisheries Ireland (IFI)
- Office of Public Works (OPW)
- Transport Infrastructure Ireland (TII)
- Uisce Éireann
- ESB

An example of the letter sent to the above bodies is provided on the following pages.

1.2 Responses Received on this Phase 3 EIA

Responses were received via email from the following bodies:

- Bord Gáis
- Department of Housing, Local Government, and Heritage
- Geological Survey Ireland (GSI)
- The Health and Safety Authority (HSA)
- Inland Fisheries Ireland (IFI)
- Office of Public Works (OPW)
- Transport Infrastructure Ireland (TII)
- Uisce Éireann

These responses are provided on the following pages.

1.3 Responses received on Phase 1 and 2 EIA

In addition, the following bodies provided responses, via email, to the Phase 1 EIA (reference: 23/60290) and the Phase 2 EIA (ref: 23/30290):

- The Health and Safety Authority (HSA)
- Geological Survey Ireland (GSI)
- Inland Fisheries Ireland (IFI)
- Uisce Éireann
- Transport Infrastructure Ireland (TII)
- Department of Housing, Local Government, and Heritage
- Office of Public Works (OPW)

These email responses received are provided on the following pages.

A response from Inland Fisheries Ireland was also received via phonecall on Thursday 31st August 2023. The following key points and concerns were raised:

- SuDS
 - Management of SuDs crucial
 - Requested inclusion of nature-based solutions as much as possible.
 - Suggested inclusion of open ponds as a nature-based solution and noted tree pits are tokenistic.
 - Assumed discharging to river Tolka and noted mitigation measures will be required to minimise impact.
- River Tolka
 - Noted river is a salmonid system.
 - Also noted it is a shallow river and therefore vulnerable.
 - Bridge span should be designed with a narrow span to minimise impact on river.
 - Would like to see green riparian buffer along River Tolka maintained.

All of the responses received, both on completed Phases 1 and 2 EIAs and this Phase 3 EIA, were taken into account in the preparation of this EIA.

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Appendix 1.1

Letter Template

«Company_Name»
«Address_1»
«Address_2»
«Address_3_»
«Address_4»
«Address_5»

«Email_»

28 January 2025

RECEIVED: 19/12/2025

Re: Consultation on the preparation of an Environmental Impact Assessment Report for a proposed Large Scale Residential Development at Dunboyne, Co. Meath

A Chara,

We are acting on behalf of Marina Quarter Ltd in the preparation of an Environmental Impact Assessment Report (EIAR) for a proposed Large Scale Residential Development (LRD) at Dunboyne, Co. Meath.

Research and baseline analysis for the EIAR has commenced and an impact assessment will be carried out following completion of the design of the proposed development.

If you have any comments in relation to the potential environmental impacts of the proposed development, I would be grateful if you would forward them to me as soon as is convenient. The details of the site location, project description, and proposed works are outlined further below.

Proposed Development

Marina Quarter Ltd are seeking permission for the construction of c. 356 no. residential units, a creche, and all associated landscaping, amenity areas, and site development works at Dunboyne, Co. Meath.

Please find enclosed a Site Location Map and the proposed draft Site Layout Plan.

Please note that the details provided in the enclosed drawing are subject to change as the scheme progresses and feedback from the council and other statutory consultees are incorporated.

Site Location and Description

The subject site is c. 1.3km north of Dunboyne town centre and west of the M3 Parkway Train Station car park. The site is currently greenfield and the R157 bounds the site to the east.

The site is zoned for residential development and is located within the Dunboyne North Masterplan (MP22) lands. The lands to the south of the site are currently greenfield. The lands to the north are zoned for employment use.

Four applications have been submitted on the masterplan lands.

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1. An LRD for 267 no. residential units was submitted in September 2023 granted by An Bord Pleanála in November 2024 (MCC reference: 23/60290; ABP 320049). An EIAR and NIS were completed with this LRD application.
2. An LRD for 309 no. residential units was submitted in September 2024 and permission was granted by Meath County Council in November 2024 (MCC Reference: 24/60805). An EIAR and NIS were completed with this LRD application.
3. A 10-year permission for the construction of a single storey commercial building was submitted in May 2023 and granted by Meath County Council in June 2024 (reference 23/60065).
4. An application for 3 no. office buildings was permitted in June 2024 and is currently awaiting a decision from An Bord Pleanála (MCC Reference: 23/424; ABP 320091).

These applications will be taken into account in the assessment of the subject site and proposed development.

The two LRD applications are Phase 1 and 2 of the residential development to be completed by Marina Quarter Ltd on the MR22 Dunboyne North Masterplan lands. The current LRD application will be the third and final phase of this residential development.

The red line boundary for the current LRD application will include the infrastructural upgrades permitted in the two LRD applications listed above. This includes a new link road and a bridge over the River Tolka.

EIAR Structure and Content

The EIAR is divided into three volumes as follows:

- Volume 1: Non-Technical Summary
- Volume 2: Main Environmental Impact Assessment Report
- Volume 3: Appendices

The overall structure of Volume 2 of the EIAR is as follows:

Chapter	Chapter Title
1.	Introduction
2.	Site Location and Project Description
3.	Alternatives Considered
4.	Population and Human Health
5.	Land, Soils, and Geology
6.	Hydrology and Hydrogeology
7.	Air Quality
8.	Climate Change
9.	Noise and Vibration
10.	Waste
11.	Landscape and Visual Impact
12.	Traffic and Transport
13.	Material Assets: Service Infrastructure and Utilities
14.	Biodiversity
15.	Cultural Heritage and Archaeology
16.	Significant Interaction of Impacts
17.	Summary of Mitigation Measures and Monitoring
18.	Screening for Major Accidents

Each chapter is to include the following elements:

- Introduction and Methodology
- Description of the Existing Environment
- Impact Assessment. Each discipline will consider impacts under the following headings:
 - Do-Nothing Scenario
 - Construction Phase
 - Operational Phase

In assessing impacts regard will be had to direct impacts, indirect impacts, and cumulative impacts. Where relevant, reference may also be made to 'synergistic impacts' or 'secondary impacts'. The assessment of impacts will have regard to the EPA guidelines and advice notes for preparing EIAR.

As the EIA progresses any relevant permitted or proposed projects will be included in the assessment.

The EIAR will also consider:

- Mitigation Measures
- Residual Impacts

Summary

In summary, this EIAR will consider the potential impact of the proposed development, in combination with the relevant planning applications in the vicinity.

The EIAR is being co-ordinated by McCutcheon Halley Chartered Planning Consultants. If you have any comments in relation to the potential environmental impacts of the proposed, I would be grateful if you would forward them to me as soon as is convenient.

You can email any comments to me at [REDACTED]

Yours sincerely,



Saoirse Kavanagh

McCutcheon Halley

Appendix 1.1

Phase 3 Responses

Saoirse Kavanagh

From: DIG <Dig@gasnetworks.ie>
Sent: Wednesday 29 January 2025 08:20
To: Saoirse Kavanagh
Subject: RE: EIAR Consultation - Dunboyne 3 LRD
Attachments: Dunboyne Co Meath (1).pdf; Dunboyne Co Meath (2).pdf; Safety Booklet-A5-HSQE-GU-016.pdf

NOTE: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for your enquiry to the Gas Networks Ireland **Dial Before You Dig** service, please find the attached network map for your area of interest.

Gas Networks Ireland has **Distribution Gas Network** within your area of interest.

Before you start work, you must have a current gas network map (or maps) for the work location. A current gas network map (or maps) must always be kept on site while work is under way.

Reading your Map

- High pressure transmission gas pipe is shown **Red**.
- Medium pressure distribution gas pipe is shown **Blue**.
- Low Pressure distribution gas pipe is shown **Green**.

The gas network map is indicative only. You must conform to the safety and legal notices printed on the map. For further information on reading this map refer to the **Safety Information**.

Breaking Ground

- Supervision by Gas Networks Ireland is **not** required when working in the vicinity of Distribution gas pipes (unless noted otherwise). Safe digging practices **must** be followed. All work in the vicinity of a gas transmission pipeline **must** be carried out in compliance with:
 - Health and Safety Authority, **Code of Practice for Avoiding Danger from Underground Services**.

Critical Activity

Quarrying or blasting must not be carried out within 400 m of the gas network until Gas Networks Ireland has been consulted on **1800 42 77 47**

Aurora Telecom

- Part of the Aurora Telecom Network may be present on your network map. For further information, Aurora can be contacted on **01 892 6166** (Office Hours) or auroralink@gasnetworks.ie.

Service Pipes

- Service pipes feeding individual properties are not generally shown but their presence should always be anticipated. For further information on domestic gas services refer to the [Safety Information](#).

Safety Information

- Before starting work any work in the vicinity of the gas network, please refer to the Gas Networks Ireland safety booklet, [Safety advice for working in the vicinity of natural gas pipelines](#), available at <https://www.gasnetworks.ie/home/safety/dial-before-you-dig/>

This booklet contains important safety information, including advice on how to read the gas network maps you have requested.

If you did not request this map. please contact Customer Service on 1800 42 77 47.

Thank you for your enquiry to Gas Networks Ireland.

T 1800 20 50 50 (Emergency)

T 1800 42 77 47 (Dial Before You Dig enquiries)

E dig@gasnetworks.ie

Gas Networks Ireland Networks Services Centre, St. Margaret's Road, Finglas, D11 Y895
gasnetworks.ie | Find us on [Twitter](#)



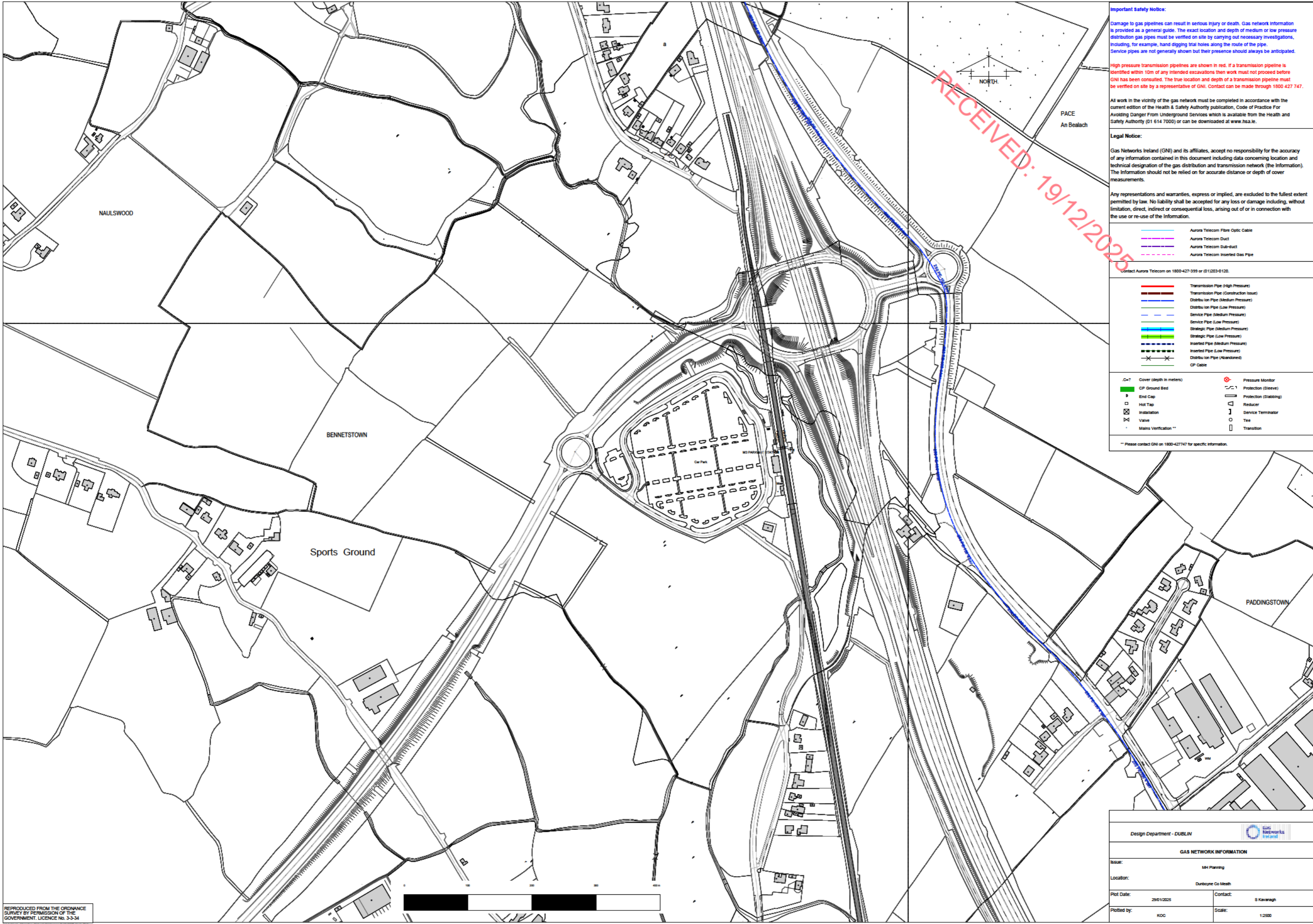
Useful Publications

- Health and Safety Authority, [Code of Practice for Avoiding Danger from Underground Services](#)
- Health and Safety Authority, [Guide to Safety in Excavations](#)

Both are available free of charge from: Health and Safety Authority on **0818 289 389**
www.hsa.ie

RECEIVED: 19/12/2025

From: Saoirse Kavanagh <skavanagh@mhplanning.ie>
Sent: Tuesday 28 January 2025 10:37
To: DIG <dig@gasnetworks.ie>
Subject: EIAR Consultation - Dunboyne 3 LRD



Important Safety Notice:

Damage to gas pipelines can result in serious injury or death. Gas network information is provided as a general guide. The exact location and depth of medium or low pressure distribution gas pipes must be verified on site by carrying out necessary investigations, including, for example, hand digging trial holes along the route of the pipe. Service pipes are not generally shown but their presence should always be anticipated.

High pressure transmission pipelines are shown in red. If a transmission pipeline is identified within 10m of any intended excavations then work must not proceed before GNI has been consulted. The true location and depth of a transmission pipeline must be verified on site by a representative of GNI. Contact can be made through 1800 427 747.

All work in the vicinity of the gas network must be completed in accordance with the current edition of the Health & Safety Authority publication, Code of Practice For Avoiding Danger From Underground Services which is available from the Health and Safety Authority (01 614 7000) or can be downloaded at www.hsa.ie.

Legal Notice:

Gas Networks Ireland (GNI) and its affiliates, accept no responsibility for the accuracy of any information contained in this document including data concerning location and technical designation of the gas distribution and transmission network (the Information). The Information should not be relied on for accurate distance or depth of cover measurements.

Any representations and warranties, express or implied, are excluded to the fullest extent permitted by law. No liability shall be accepted for any loss or damage including, without limitation, direct, indirect or consequential loss, arising out of or in connection with the use or re-use of the Information.

Contact Aurora Telecom on 1800-427-339 or (0)1203-0120.

	Aurora Telecom Fibre Optic Cable
	Aurora Telecom Duct
	Aurora Telecom Sub-duct
	Aurora Telecom Inserted Gas Pipe

	Transmission Pipe (High Pressure)
	Transmission Pipe (Construction Issue)
	Distribution Pipe (Medium Pressure)
	Distribution Pipe (Low Pressure)
	Service Pipe (Medium Pressure)
	Service Pipe (Low Pressure)
	Strategic Pipe (Medium Pressure)
	Strategic Pipe (Low Pressure)
	Inserted Pipe (Medium Pressure)
	Inserted Pipe (Low Pressure)
	Distribution Pipe (Abandoned)
	CP Cable

	>=7 Cover (depth in meters)		Pressure Monitor
	CP Ground Bed		Protection (Sleeve)
	End Cap		Protection (Slabbing)
	Hot Tap		Reducer
	Installation		Service Terminator
	Valve		Tee
	Mains Verification **		Transition

** Please contact GNI on 1800-427747 for specific information.

REPRODUCED FROM THE ORDNANCE SURVEY BY PERMISSION OF THE GOVERNMENT. LICENCE No. 3-3-34

Design Department - DUBLIN

GAS NETWORK INFORMATION

ISSUE: MH Planning

Location: Dunboyne Co Meath

Plot Date: 29/01/2025 Contact: G Kavanagh

Plotted by: KOC Scale: 1:2500



Important Safety Notice:
 Damage to gas pipelines can result in serious injury or death. Gas network information is provided as a general guide. The exact location and depth of medium or low pressure distribution gas pipes must be verified on site by carrying out necessary investigations, including, for example, hand digging trial holes along the route of the pipe. Service pipes are not generally shown but their presence should always be anticipated.

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Any representations and warranties, express or implied, are excluded to the fullest extent permitted by law. No liability shall be accepted for any loss or damage including, without limitation, direct, indirect or consequential loss, arising out of or in connection with the use or re-use of the Information.

Legend:

- Aurora Telecom Fibre Optic Cable
- Aurora Telecom Duct
- Aurora Telecom Sub-duct
- Aurora Telecom Inserted Gas Pipe

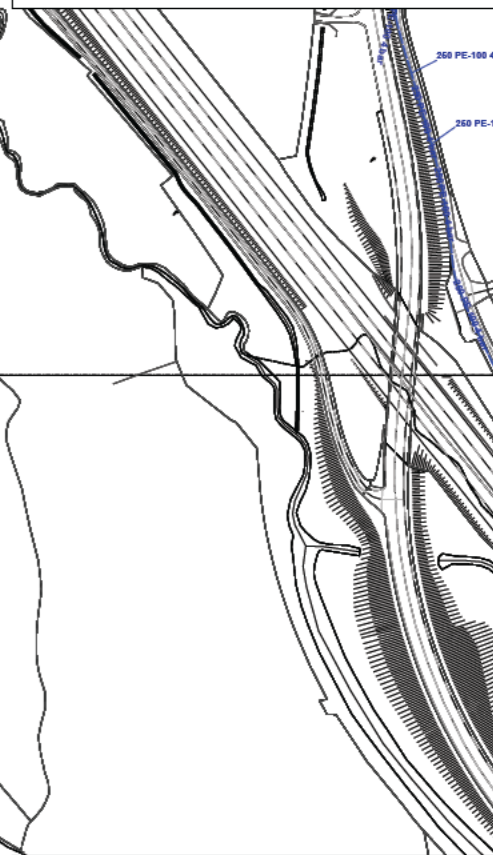
Contact Aurora Telecom on 1800-427-399 or (01)203-0120.

- Transmission Pipe (High Pressure)
- Transmission Pipe (Construction Issue)
- Distribution Pipe (Medium Pressure)
- Distribution Pipe (Low Pressure)
- Service Pipe (Medium Pressure)
- Service Pipe (Low Pressure)
- Strategic Pipe (Medium Pressure)
- Strategic Pipe (Low Pressure)
- Inserted Pipe (Medium Pressure)
- Inserted Pipe (Low Pressure)
- Distribution Pipe (Abandoned)

Other Symbols:

- Cover (depth in meters)
- CP Test Point
- End Cap
- Hot Tap
- Installation
- Valve
- Mains Verification
- Pressure Monitor
- Protection (Sleeve)
- Protection (Slabbing)
- Reducer
- Service Terminator
- Tee
- Transition

** Please contact GNI on 1800-427747 for specific information.



REPRODUCED FROM THE ORDNANCE SURVEY BY PERMISSION OF THE GOVERNMENT. LICENCE No. 3-3-34

Design Department - DUBLIN			
GAS NETWORK INFORMATION			
ISSUE:	MH Planning		
Location:	Dunboyne Co Meath		
Plot Date:	29/01/2025	Contact:	@ Kavanagh
Plotted by:	KDC	Scale:	1:2500

Safety advice

for working in the vicinity
of natural gas pipelines



Important safety information



When planning any excavation works dial
1800 42 77 47

to obtain up to date gas network maps.
Monday to Friday 9am – 5.30pm

Or you can sign up to DBYD online at
gasnetworks.ie/dbyd
and have access to maps 24 hours, 7 days a week
You can also contact us on
dig@gasnetworks.ie

If you have damaged a gas pipe call
1800 20 50 50
immediately, even if you do not suspect that
gas is leaking
24 hours, 7 days a week

If you smell gas call
1800 20 50 50
24hr emergency service

Contents



This booklet contains important safety advice.
Please read the following before you start work:

Natural gas characteristics and behaviour	4
Risks of damaging a gas pipe	5
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Natural gas **characteristics and behaviour**



Behaviour

During an uncontrolled escape, natural gas will behave in the following ways:

- In open excavations, where there is a clear path to the atmosphere, natural gas will rise, dilute and disperse into the air.
- If the path to the atmosphere is blocked, the gas will travel through soil, ducts, drains, sewers and voids. It can also follow the line of other buried utility services. This can lead to gas entering a building or other confined spaces, and may lead to a fire or explosion.

Note: Never cover a damaged gas pipe; or attempt to carry out a repair. Call 1800 20 50 50 immediately.

Characteristics

Natural gas is:

- a highly flammable gas;
- lighter than air and will rise when released;
- non-toxic (but can suffocate in enclosed or confined spaces); and
- made up mostly of methane and has a smell added for safety purposes.

Risks of **damaging a gas pipe**

The risks of damaging a gas pipe can be classified as:

Highest Risk



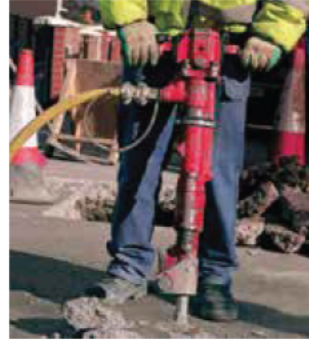
Mechanical excavators pose the highest risk and "should not be used within 500 mm of a gas distribution pipe."

(HSA Code of Practice)

Mechanical excavators must not be used within 3 metres of a Transmission pipeline.

(Refer to Code of Practice for Working in the Vicinity of the Transmission Network - AO/PR/127)

High Risk



Hand held power tools should not be used directly over the line of a gas pipe, unless the gas pipe has been positively located by hand and a safe working distance has been established.

Use of handheld power tools is not permitted within 1.5 m of a Transmission pipeline.

(Refer to Code of Practice for Working in the Vicinity of the Transmission Network - AO/PR/127)

Damage to gas pipes from power tools presents a high risk to the operatives involved in the work.

Low Risk



Hand digging using shovels and spades presents the lowest risk of damaging a gas pipe.

This is the method that should be used where the presence of gas pipes is suspected or close to a known gas pipe.

Risks from a **damaged gas pipe**



- Remember when gas escapes, or is released in an uncontrolled way, it can fuel a fire, give rise to an explosive atmosphere or cause asphyxiation.
- If you suspect there is a gas leak, immediately call Gas Networks Ireland's 24hr Emergency Service on **1800 20 50 50**.
- Gas can quickly fill underground cavities and travel into buildings through soil, or following the line of other buried utilities.
- Gas can only burn if exposed to an ignition source:
 - Do not turn electrical switches on or off
 - Do not operate any plant or equipment
 - Do not use naked flames, smoke or vape
 - Do not use mobile phones in the vicinity.
- Move people away from, and upwind of, the affected area.
- If gas has entered a confined space or building:
 - Open doors and windows
 - Turn off the gas supply at the meter
 - Do not expose to an ignition source.



Gas Networks Ireland transports gas in Ireland through a network of steel and polyethylene (PE) pipes. The network operates at pressures between 20 mbar and 85 bar and is split between Transmission and Distribution pipelines.

The **Transmission** system is made up of steel pipes and operates from 7 bar to 85 bar.

The **Distribution** system is made up mostly of polyethylene pipes and operates from 20 mbar to 7 bar.

The network is made up of three elements:

.....
Transmission pipes

.....
Distribution pipes

.....
Pressure Regulating
Installations



Transmission pipes

These are high pressure pipelines that transfer gas across the country. They are constructed from steel, with a black, white, cream, yellow or concrete coating, and may have marker posts at intervals along their length, particularly at field boundaries and road crossings.

If a transmission pipeline is identified near intended excavations then work must not proceed until Gas Networks Ireland Transmission has been consulted on 1800 42 77 47.



The network

Distribution pipes

These are medium or low pressure pipelines within urban areas. They are mainly constructed from Polyethylene (PE) and are predominantly yellow in colour, but may have brown or black stripes. There are two types – Mains and Services.

Mains gas pipes usually run parallel to property in the footpath, grass verge or road and range in size from 63 mm to 400 mm diameter.

Service gas pipes are connected to mains and run to a meter position at the property, and range in size from 20 mm to 63 mm diameter.

Note: There is a limited use of steel pipes in areas like bridges or where only shallow depths can be achieved.

There are still a small number of ductile and cast iron gas mains in use, ranging in size from 3 inch (75 mm) to 24 inch (600 mm) in diameter (these mains are similar in appearance to metal water mains). Steel and PE gas services are run from these metal mains to the meter location at each building.

These ductile and cast iron mains and services have been largely replaced with PE pipes. In urban areas a large number of redundant ductile or cast iron pipes are utilised as carrier pipes for new PE pipelines.

Some Distribution pipelines have been classified as strategic mains due to their pressure, diameter and/ or location and the elevated consequences if they are damaged.

If a Distribution strategic main is identified near an intended excavation then work must not proceed until Gas Networks Ireland has been consulted on 1800 42 77 47.



The network

Pressure Regulating Installations

There are two types: Above Ground and Under Ground

Above Ground Installations (AGI) / District Regulating Installations (DRI)

An AGI/DRI is a fenced area containing a visible arrangement of pipework and ancillary equipment and will be clearly marked with Gas Networks Ireland signage. Some DRI's can be housed in a steel unit with no fencing surround.

Under Ground Installations (UGI / DRIug)

Gas Networks Ireland also have underground pressure regulating installations which have metal or concrete cover plates. There will be no visible arrangement of pipework etc, as this will be contained within the chamber.

If an AGI/DRI or UGI/DRIug is identified near intended works, then work must not proceed until Gas Networks Ireland has been consulted on 1800 42 77 47.



District Regulating Installation (DRI)



Gas Networks Ireland use three main construction methods:

'Dig' Technique



Open Cut – installing pipe using standard trenching techniques. Pipe is laid with a sand or pea gravel surround and gas marker tape is laid above the sand.

'No-Dig' Techniques

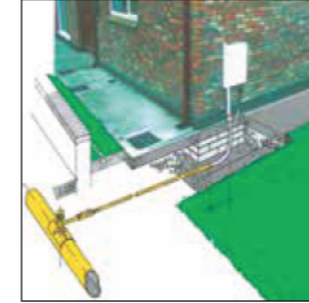


Insertion – utilising existing metal gas mains / services as a carrier for new PE pipes. Inserted PE may be a close or loose fit. The carrier pipe is broken out at connection points, i.e. at pipe joints or where a gas service pipe is connected.



Moling/Directional Drilling – installing mains/ services where a 'moling' machine drills from one location to another pulling the pipe behind it using "no-dig" technology.

Note: Where pipe has been installed using "no-dig" techniques, the gas pipe will not have sand surround or marker tape.



Typical service arrangement



Service Connection



Purge Point

New Mains – Normally 750 mm in roads and 600 mm in footpaths. (1.1 m in open fields)

New Services – 450 mm rising to 375 mm within 1.5 m of the building line. In some cases these depths are not achievable.

Note:

Older mains and services may have reduced cover.

Services and other connections are taken from the top of the main and will therefore have a reduced depth of cover.

Alteration since original installation – roads, footpaths and grass verges may have been altered since the gas main or service was laid and reduced the depth of cover.

Purge Points and Test Caps – Mains are laid with "purge points" and/or test caps at the ends. These may also rise above the top of the main.

Gas Valve Covers – Gas valves are a key safety component part of the gas network.

Some gas mains and services have valves installed below ground with valve covers marked "GAS".

Do not cover over or remove gas valve covers.

The risk of a gas valve cover being removed or covered over is particularly high during resurfacing or reinstatement works.

Even shallow excavation techniques such as road planing can damage gas pipelines with reduced cover.

Requesting Gas Networks Ireland maps

Gas Networks Ireland operates a **Dial Before You Dig** service to enable those involved in excavations to obtain natural gas network maps prior to starting work.

This service operates from 9am to 5.30pm, Monday to Friday.

Or you can sign up to DBYD online at gasnetworks.ie/dbyd and have access to maps 24 hours, 7 days a week.

You can also email your enquiry to: dig@gasnetworks.ie

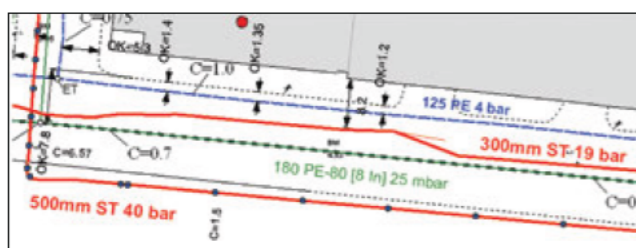


Maps will be sent out by post or by email where appropriate. When you contact Gas Networks Ireland to request a map, ensure you give the precise location of the intended works. You may be required to give some information regarding the nature of the planned work, i.e. start date, any high risk activity, etc.

Ensure you have allowed enough time for the maps to be obtained and to organise for the pipe location to be marked out if transmission pipelines are involved.

Note: Typical turnaround for maps is five working days when contact is made through phone or email, however using the online system will allow you instant access to up-to-date maps.

Organisers or planners of any work should ensure that the map is made available to personnel on-site.

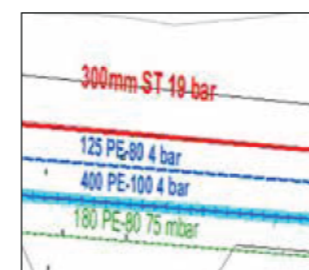


Excerpt from a Gas Networks Ireland map.

Reading Gas Networks Ireland maps

Note: Natural Gas Network maps will only show mains and not services.

See page 16 for more information on service pipe locations.



The colour coding is as follows:

- Red** = Transmission Main* = 7 to 85 bar.
- Blue** = Distribution Medium Pressure = 100 mbar to 7 bar.
- Blue Buffer** = Distribution strategic main* = 100 mbar to 7 bar.
- Green** = Distribution Low Pressure = up to 100 mbar.

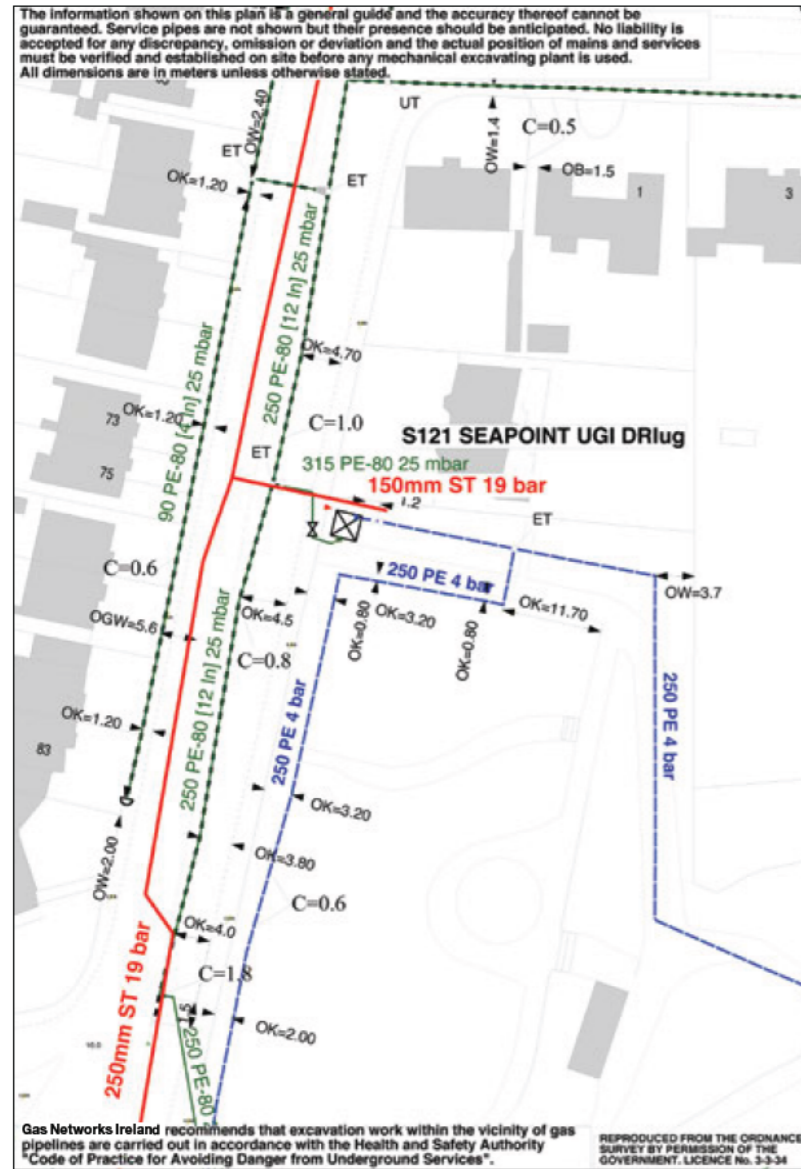


Typical AGI

Pressure regulating installations are marked as:

- DRI** – District Regulating Installation (Above Ground).
- DRIug** - District Regulating Installation (Under Ground).
- UGI** – Under Ground Installation.
- AGI** – Above Ground Installation.

* If you obtain a natural gas network map that shows a **red** Transmission main in the area of the proposed works or a distribution strategic main with a blue buffer, a consultation with Gas Networks Ireland **must** take place **before** starting works. Gas Networks Ireland will advise you on the safety measures required and will arrange for the location of the pipe to be marked out on site.



- Abbreviations**
- OK = Kerb, Curb
 - ORE = Road Edge
 - ORB = Rail Base
 - OB = Building
 - OW = Wall
 - OF = Fence
 - ODW = Dividing Wall
 - OGW = Garden Wall
 - RD = Road
 - BR = Branch
 - RED = Reducer
 - C = Cover to top of pipe
 - LH = Left Hand
 - RH = Right Hand
 - SWP = Sweep
 - CNR = Corner
 - S = South
 - N = North
 - E = East
 - W = West
 - No. = Number
 - Ctr = Centre
 - CL = Centre Line
 - Trans = Transition
 - DIV = Dividing
 - PK = Park
 - Conn = Connection
 - Opp = Opposite
 - Cplg = Coupling
 - ST = Steel
 - PE = Polyethylene

Example of a Gas Networks Ireland map



Typical service arrangement



Service riser cover



Domestic meter box

Natural gas services are not normally identified on network maps, but their presence should be assumed. Services will normally, but not always, run at right angles from the main to the meter point.

To assist in determining the approximate position of gas services ensure you:

- Obtain a natural gas network map to identify the position of the gas main.
- Complete a site survey looking for gas meter boxes/cabinets, house entry points, service risers and gas valve covers.
- Older buildings may have no visible signs of a service, as the service may run directly into the building underground, with the meter fitted internally. In these cases a check should be made inside the building to identify the meter position.

Note: Ensure you utilise safe digging practices to locate the exact position of gas services.



Six meter cabinet



Purpose built multi-meter house (apartment complex).

Safe systems of work

Safe systems of work, as recommended by the Health and Safety Authority (HSA) should be employed on all projects.

Guidance on this can be found in the:

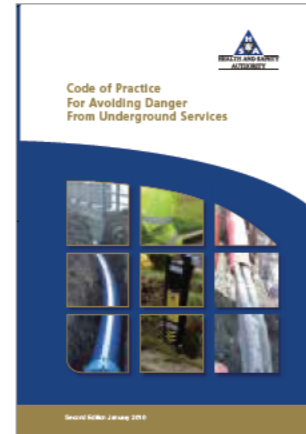
[HSA: Code of Practice for Avoiding Danger from Underground Services.](#)

Available from HSA website: www.hsa.ie

A safe system of work will include the following elements:

- Planning.
- Obtaining and using utility maps.
- Identifying pipes/services.
- Safe digging practices.
- Explosives must not be used within 30 m of any gas pipe (400 m for Transmission Pipelines), without prior consultation with Gas Networks Ireland.
- Piling, directional drilling or boring must not take place within 15 m of a gas pipe unless Gas Networks Ireland has been consulted.
- Extra care should be exercised when performing 'hot work' (such as welding) where a gaseous atmosphere could exist. If this potential exists Gas Networks Ireland must be consulted.
- Extra care should also be taken when using welding equipment, burners, torches or other heat generating equipment near pipelines (even if there is no potential for a gaseous atmosphere to exist) to ensure that the heat or sparks generated do not lead to the melting of polyethylene pipes or damage to pipeline coatings.

Contact Gas Networks Ireland for general enquiries on: **1800 464 464.**



Safe systems of work

Planning

- Early contact should be made with Gas Networks Ireland to obtain a Natural Gas Network map.
Dial Before You Dig 1800 42 77 47 or visit gasnetworks.ie/dbyd
- Work involving piling, demolition, directional drilling, use of explosives or 'hot works' should be mentioned, as this may necessitate a site visit from Gas Networks Ireland personnel.
- Ensure you have allowed enough time to obtain the maps.

Maps

- Gas Networks Ireland will issue maps as outlined in this booklet. It is imperative that these maps are available for the operatives on-site for the duration of any works. The responsible person should ensure that operatives on-site understand the maps.

Identifying Pipes

- Steel, cast iron and ductile iron gas pipes can usually be traced using a conventional pipe/cable locating device set to "R" (Radio) mode.
- Polyethylene mains and services cannot be traced using conventional devices, so it is essential that maps are used and site surveys for meter boxes, valve covers, service risers, reinstatement scarring and other signs are completed.
- During the progress of works ensure no gas valve covers or markers are covered over.
- The position of gas mains and services should be marked out as they are located.

Note: Transmission pipelines pipelines and Distribution strategic mains must be marked out by a Gas Networks Ireland inspector.

Safe systems of work

Safe Digging Practices:

- As per the HSA Code of Practice, gas mains and services should be located by digging trial holes by hand. Mechanical excavators should not be used within 500 mm of any gas main.
Mechanical excavators MUST NOT be used within 3 m of a Transmission pipeline.
(Refer to Code of Practice for Working in the Vicinity of the Transmission Network - AO/PR/127)
- Never use hand held power tools directly over gas pipes unless precautions to prevent damage have been made and the pipe has been positively located.
Use of handheld power tools is not permitted within 1.5 m of a Transmission pipeline.
(Refer to Code of Practice for Working in the Vicinity of the Transmission Network - AO/PR/127)
- Do not leave a polyethylene gas pipe exposed.
- Provide adequate support for any gas pipe uncovered during the work.
- Report any damage, no matter how minor it may appear, to **1800 20 50 50**.
- If you have any concerns regarding safety around gas pipes contact Gas Networks Ireland for advice on **1800 464 464**.



What to do if a gas pipeline is damaged

(or if you smell gas in the area)

- Do not turn any electrical switches on or off, e.g. ignition switches.
- Do not operate any plant or equipment.
- Move people away from, and upwind of, the affected area. Restrict employee and public access to the affected area.
- Prevent smoking, vaping, the use of naked flames, the use of mobile phones and other ignition sources in the vicinity of the leak.
- Report the leak/damage immediately to:
Gas Networks Ireland 24hr Emergency Service on 1800 20 50 50.
- Provide accurate information on your location and the nature of the incident.
- Do not attempt to repair the damage.
- Do not cover up a damaged main or service, this may lead to the gas travelling through soil, ducts, sewers, chambers or voids and potentially building up inside a premises or confined space.
- Do not turn off any gas valves in the road or footpath (you may be causing further problems by doing so).
- Assist Gas Networks Ireland emergency personnel as required.
- Remember any damage to gas pipes, even if the pipe does not appear to be leaking, must be reported to Gas Networks Ireland.

If you smell gas call

1800 20 50 50

24hr emergency service

Gas Networks Ireland contacts

The main contact numbers for Gas Networks Ireland are

24hr Emergency Service

1800 20 50 50

24 hours, 7 days a week

Dial Before You Dig

1800 42 77 47

Monday to Friday 9am – 5.30pm

or sign up to DBYD online

gasnetworks.ie/dbyd

General Enquiries

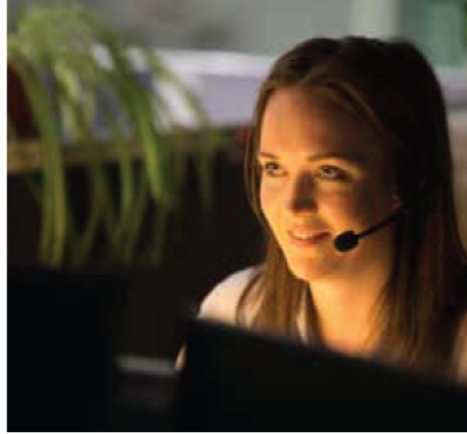
1800 464 464

Monday to Friday 8am – 8pm

Saturday 9am – 5.30pm

gasnetworks.ie

For “Dial Before You Dig” posters or stickers for your workplace call: **1800 464 464**



Other useful publications

HSA: Code of Practice for Avoiding Danger from Underground Services

HSA: Guide to Safety in Excavations

both are available free of charge from:

Health and Safety Authority on **01 614 7000**

www.hsa.ie

ESB Networks: How you can avoid hitting electrical cables when digging and drilling

available free of charge from:

ESB Networks on **1800 372 757**

esb.ie/esbnetworks

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The main contact details for
Gas Networks Ireland are:

General Enquiries
1800 464 464

Dial Before You Dig
1800 42 77 47

24hr Emergency Service
1800 20 50 50

networksinfo@gasnetworks.ie
gasnetworks.ie



Our Ref: **G Pre00031/2025** (Please quote in all related correspondence)

13 March 2025

Saoirse Kavanagh
McCutcheon Halley
6 Joyce House
Barrack Square
Ballincollig
Cork
P31 YX97

Via email: [REDACTED]@e

Re: Preplanning Consultation in relation to the preparation of an Environmental Impact Assessment Report (EIAR) for a proposed Large Scale Residential Development at Dunboyne, County Meath.

A Chara

I refer to correspondence received in connection with the above.

Outlined below are archaeological observations/recommendations of the Department co-ordinated by the Development Applications Unit.

The Department has examined the documentation submitted for comment. It is noted that the proposed development is large-scale in extent and is located in an area of high archaeological potential.

On the basis of the information available it is recommended that the services of a suitably qualified archaeologist are engaged to review the finalised proposals for the proposed residential development. Archaeological geophysical survey and archaeological test excavations will inform the EIAR. The archaeologist will assess results of the geophysical survey and test excavations and describe the archaeological impacts and potential impacts that may arise from large-scale construction works on previously undeveloped land. Furthermore, the archaeologist will describe the proposed mitigation of impacts and potential impacts identified.

The above observations/recommendations are based on the papers submitted to this Department on a pre-planning basis and are made without prejudice to any observations that the Minister may make in the context of any consultation arising on foot of any development application referred to the Minister, by the Planning Authority, in his role as statutory consultee under the Planning and Development Act, 2000, as amended.



You are requested to send any further communications to this Department's Development Applications Unit (DAU) at manager.dau@npws.gov.ie or to the following address:

The Manager
Development Applications Unit (DAU)
Government Offices
Newtown Road
Wexford
Y35 AP90

Is mise, le meas

Sinéad O'Brien
Development Applications Unit
Administration

RECEIVED: 19/12/2025



Saoirse Kavanagh
McCutcheon Halley
6 Joyce House
Barrack Square
Ballincollig
Cork, P31 YX97

29 January 2025

Re: EIAR Consultation - Dunboyne Large Scale Residential Development, Co Meath
Your Ref: n/a
Our Ref: 25/17

Dear Saoirse,
Geological Survey Ireland is the national earth science agency and is a division of the Department of the Environment, Climate and Communications. We provide independent geological information and interpretation and gather various data for that purpose. Please see our [website](#) for data availability.

With reference to your email received on the 28 January 2025, concerning the EIAR Consultation - Dunboyne Large Scale Residential Development, Co Meath, we recommend using our various data sets when conducting the EIAR, SEA, planning and scoping processes for developments, plans and policies. For more detailed information on how to access this data please access 'Data and Maps' [Data & Maps \(gsi.ie\)](#) on our 'Geoscience for planning' webpage. Use of our data or maps should be attributed correctly (please refer to each individual dataset's metadata for correct attribution).

For specific data available for Environmental Assessment and Planning topics please follow this link [\[Data by Environmental Assessment and Planning Topic \(gsi.ie\)\]](#), where you will find our data arranged by environmental assessment topic as illustrated below:

<p>Land and soils</p> <p><i>Soil</i></p> <ul style="list-style-type: none"> • Subsoils (Quaternary Geology) • Tellus Geochemistry • Geotechnical <p><i>Geology</i></p> <ul style="list-style-type: none"> • Bedrock • Geophysics • Bedrock & Quaternary 3D 	<p>Water</p> <p><i>Groundwater</i></p> <ul style="list-style-type: none"> • Aquifers GW vulnerability, GWPSs (GWPPs) <p><i>Surface water</i></p> <ul style="list-style-type: none"> • Tellus Geochemistry <p><i>Estuarine & marine waters</i></p> <ul style="list-style-type: none"> • Marine and coastal <p><i>Flooding</i></p> <ul style="list-style-type: none"> • GWClimate • Karst 	<p>Climate Change</p> <p><i>Carbon accounting / Carbon balance</i></p> <ul style="list-style-type: none"> • Geothermal • Carbon capture and storage <p><i>Climate change trends</i></p> <ul style="list-style-type: none"> • National coastal change assessment
<p>Cultural Heritage</p> <p><i>Archaeology</i></p> <ul style="list-style-type: none"> • Cherish <p><i>Underwater Archaeology</i></p> <ul style="list-style-type: none"> • Shipwrecks 	<p>Material Assets</p> <p><i>Built Services</i></p> <ul style="list-style-type: none"> • Natural resources (Minerals & Aggregates) • Active quarries 	<p>The Landscape</p> <p><i>Landscape Appearance & Character</i></p> <ul style="list-style-type: none"> • Physiographic units <p><i>Historical landscapes</i></p> <ul style="list-style-type: none"> • Historic mines
<p>Other Relevant Data</p>		
<p><i>Natural (Geo) hazards</i></p> <ul style="list-style-type: none"> • Landslide Susceptibility Mapping • Groundwater flooding • Coastal vulnerability • Subsidence • Radon 	<p><i>Natural heritage</i></p> <ul style="list-style-type: none"> • Geoheritage (County Geological Sites) • Dimension Stone/Stone Built Ireland 	

Other Comments

Should development go ahead, all other factors considered, Geological Survey Ireland would much appreciate a copy of reports detailing any site investigations carried out. The data would be redacted for confidentiality and added to Geological Survey Ireland's national database of site investigation boreholes, implemented to provide a better service to the civil engineering sector. Data can be sent to the Geological Mapping Unit, at <mailto:GeologicalMappingInfo@gsi.ie>.

If we can be of any further help, please do not hesitate to contact me Clare Glanville, or my colleague Trish Smullen at GSIPlanning@gsi.ie.

Yours sincerely,

Dr. Clare Glanville
Senior Geologist
Geoheritage and Planning Programme
Geological Survey Ireland

Trish Smullen
Geologist
Geoheritage and Planning Programme
Geological Survey Ireland

The publicly available data referenced/presented here, should in no way be construed as Geological Survey Ireland support for or objection to the proposed development or plan. The data are made freely available to all and can be used as independent scientific data in assessments, plans or policies. It should be noted that in many cases these data are a baseline or starting point for further site specific assessments.

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Mc Cutcheon Halley
4th Floor, Kreston House
Arran Court
Arran Quay
Dublin 7
D07 K271

Our Ref: CAS-20706-S2K7

20/02/25

Re: EIAR Consultation - Dunboyne 3 LRD.

Dear Ms. Kavanagh,

The Health and Safety Authority (the Authority), acting as the Central Competent Authority under the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 of 2015) gives technical advice to the Planning Authority when requested, under regulation 24(2) in relation to:

- (a) the siting and development of new establishments;
- (b) modifications to establishments of the type described in Regulation 12(1);
- (c) new developments including transport routes, locations of public use and residential areas in the vicinity of establishments, where the siting, modifications or developments may be the source of, or increase the risk or consequences of, a major accident.

Since the above-referenced application appears to be outside the scope of the Regulations, the Authority has no observations to forward.

If you have any queries please contact the undersigned.

Yours sincerely

Tara Horigan
Tara Horigan

Inspector,
COMAH, Chemical Production & Storage (CCPS)

01.06.32 LUPR9 Outside scope of Regs



Iascach Iníre Éireann
Inland Fisheries Ireland

05/02/2025

RE: Environmental Impact Assessment Report (EIAR) for a proposed Large Scale Residential Development (LRD) at Dunboyne, Co. Meath.

To whom it may concern

The following observations and comments are of necessity of a general nature, as construction proposals and method statements are not as yet available. While they apply to the proposed development in general, the waters in fisheries terms likely to be impacted act primarily as contributories to downstream habitat for juvenile salmonids, lampreys and other species. They also, in the context of the proposed works, have the potential to convey deleterious matter from those works such as concrete, silt, fuel, lubricating and hydraulic oils from construction plant and equipment downstream unless proper safeguards are in place. IFI request you have particular regard to the following in the proposed development:

Pollution of the adjacent fresh waters from poor on-site construction practices could have a significantly negative impact on the fauna and flora of this surface water system. A comprehensive and integrated approach for achieving river protection during construction and operation should be implemented through environmental construction management planning.

Best practice should be implemented at all times in relation to any activities that may impact on surface water. Any discharges to surface streams present on the site must not impact negatively on the salmonid status of the Tolka system. Comprehensive surface water management measures must be implemented at the construction and operational stage to prevent any pollution.

Concrete / cement and other construction materials can be highly toxic to aquatic life. Use of these elements should be strictly controlled and monitored with appropriate licensing where applicable, particularly where batching / casting is planned locally. Implementation of comprehensive environmental management planning systems is essential for all construction activities.



Iascach Intire Éireann
Inland Fisheries Ireland

It is recommended that the "Guidelines on protection of fisheries during construction works in and adjacent to waters" (2016) <http://www.fisheriesireland.ie/fisheries-management-1/624-guidelines-on-protection-of-fisheries-during-construction-works-in-and-adjacent-to-waters> should be consulted when planning to undertake works. It is important to highlight the following key constraints including:

- All watercourses should be maintained in their natural open state
- Disturbance of in-stream habitats should be minimised.
- A method statement for all riparian / in-stream works must first be submitted to IFI for approval.

Pre-construction baseline data (biotic and abiotic) is essential within the EIA process and IFI would be delighted to contribute any information that may be relevant to the fishery section. Previous surveys were carried out by IFI for WFD and can be found at: <http://www.wfdfish.ie>

Potential impacts (likely and significant effects) of the development on the system should be comprehensively assessed and recommendations and mitigation measures should be formulated. The identification of good baseline data across a range of sites, both close to the development and at a distance from the site will allow for comparison between the current situation and that which may develop over time if the project proceeds. Consultation between the project team and IFI will be essential in order that a fisheries-sustainable solution is arrived at and incorporated in the final works programme.

I trust you will take our observations on board.

Kind regards,

Roisin O' Callaghan

Senior Fisheries Environmental Officer
Inland Fisheries Ireland - Dublin
Iascach Intire Éireann
Inland Fisheries Ireland

Telephone: +353 (0) 1 8842651

EMail: [REDACTED]

Saoirse Kavanagh

From: Drainage Admin <drainage.admin@opw.ie>
Sent: Friday 31 January 2025 14:11
To: Saoirse Kavanagh
Subject: FW: EIAR Consultation - Dunboyne 3 LRD
Attachments: Section 50 Brochure.pdf

NOTE: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Saoirse,

I hope this email finds you well, please see below response from East regional Drainage Maintenance section.

The Tolka flood alleviation scheme by Meath county council is in that area and that maintenance strips for tracked excavators are probably required along the channels concerned. The restrictions on the construction or alteration of bridges/culverts is set out under Section 50 of the Arterial Drainage Act, 1945 from the Office of Public works. I have attached a brochure for more information.

Kind regards,
Sarah

From: Saoirse Kavanagh [REDACTED]
Sent: Tuesday 28 January 2025 10:35
To: Info Opw <info@opw.ie>
Subject: EIAR Consultation - Dunboyne 3 LRD

A Chara,

We are acting on behalf of Marina Quarter Ltd in the preparation of an Environmental Impact Assessment Report (EIAR) for a proposed Large Scale Residential Development (LRD) at Dunboyne, Co. Meath.

Research and baseline analysis for the EIAR has commenced and an impact assessment will be carried out following completion of the design of the proposed development. Please see attached

- Letter outlining the site and proposed development
- Site Location Map
- Site Layout Plan

If you have any comments in relation to the potential environmental impacts of the proposed development, I would be grateful if you would forward them to me as soon as is convenient.

Le meas,
Saoirse

Saoirse Kavanagh
Executive Planning Consultant
McCutcheon Halley
CHARTERED PLANNING CONSULTANTS
Mobile: +353 (0)83 070 1855

Cork
6 Joyce House, Barrack Square,
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Arran Court, Arran Quay,
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Summerhill, Bantry, Co. Cork,
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www.mhplanning.ie

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Construction, Replacement or Alteration of Bridges and Culverts

RECEIVED: 19/12/2025



About this Guide

This guide has been produced by the Office of Public Works (OPW) to assist those applying for consent from the Commissioners of Public Works to construct, replace or alter a bridge or culvert. The issues that this guide addresses include:

- Why is consent required from the OPW?
- How is an application reviewed by the OPW and how long can a review take?
- What information should be submitted in support of an application for consent?
- What are the features of hydraulically efficient and inefficient bridges and culverts?

Within this guide, the following references are used:

- Bridges: This refers to the entire bridge structure, including all ancillary works such as watercourse realignment, erosion control and approach works.
- Culverts: This refers to the entire culvert structure, including all ancillary works such as watercourse realignment, erosion control and approach works.
- Structures: This refers to both bridges and culverts, including all ancillary works such as watercourse realignment, erosion control and approach works.

If further information is required, please refer to the relevant OPW contact details on the back page of this guide.

Introduction to Section 50

Section 50 of the Arterial Drainage Act, 1945 requires that:

No local authority, no railway company, canal company or other similar body, and no industrial concern shall construct any new bridge or alter, reconstruct, or restore any existing bridge over any watercourse without the consent of the Commissioners or otherwise than in accordance with plans previously approved of by the Commissioners.

The OPW is responsible for the implementation of the regulations in the Arterial Drainage Act, 1945, including Section 50.

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Section 50 and Flood Risk Management in Ireland

The objective of flood risk management is to reduce the impact that flooding has on communities and infrastructure both at present and into the foreseeable future through the implementation of measures such as:

- Planning and development controls.
- Land use management.
- Flood warning systems.
- Flood relief schemes.

The role of the various State Bodies in the management of flood risk in Ireland is defined by the "Report of the Flood Policy Review Group". Of particular relevance to this guide are the roles and responsibilities that are assigned to the OPW, which include taking the lead role in relation to the management of flood risk in Ireland.

The construction, replacement or alteration of a bridge or culvert has the potential to change the hydraulic characteristics of a watercourse. If significant, this change may result in:

- Flood levels upstream of the bridge being increased due to the creation of a restriction in the watercourse.
- Flood levels downstream of the bridge being increased due to the removal of a beneficial restriction from the watercourse.
- Erosion of the watercourse and/or floodplain being initiated or accelerated due to the restriction increasing flow velocities and turbulence.
- Deposition of material in the watercourse or on the floodplain due to a change in flow velocities and turbulence.
- Overland flow paths on the adjacent floodplain being blocked or diverted due to the construction of bridge approaches.

The above changes to the hydraulic characteristics of a watercourse or floodplain may impact on local flood risk management plans. The OPW has a broader interest in ensuring that the adverse hydraulic effects created by new or existing bridges and culverts are avoided, minimised or managed through the process of obtaining consent under Section 50.

! Consent under Section 50 does not confer permission to construct and does not absolve the developer from fulfilling any other legal obligations or from third party claims that might arise from the project.

Hydraulic Design Standards

In general, a proposed bridge or culvert design submitted with an application under Section 50 should demonstrate the achievement of the following design standards:

- ✓ A bridge or culvert must be capable of passing a fluvial flood flow with a 1% annual exceedance probability (AEP) or 1 in 100 year flow without significantly changing the hydraulic characteristics of the watercourse.
- ✓ In addition to the above fluvial flood flow standard, if a bridge or culvert is located within a tidal zone, it must cater for a tide level with a 0.5 % (AEP) or 1 in 200 year flow without significantly changing the hydraulic characteristics of the watercourse.
- ✓ A bridge must be capable of operating under the above design conditions while maintaining a freeboard of at least 300 mm.
- ✓ If the land potentially affected does not include dwellings and infrastructure, a culvert must be capable of operating under the above design conditions while causing a hydraulic loss of no more than 300 mm (excluding the culvert gradient).
- ✓ If the land potentially affected includes dwellings and infrastructure, it must be demonstrated that those dwellings and/or infrastructure are not adversely affected by constructing the bridge or culvert.
- ✓ A culvert diameter, height and width must not be less than 900 mm to facilitate maintenance access and reduce the likelihood of debris blockage.

! If the level of risk or uncertainty warrants, a HIGHER design standard may be required.

i A LOWER design standard may be considered by the OPW if there is a sufficiently low risk. In such cases, adequate justification must be provided with the application.



Hydrological Considerations

The hydrological analysis submitted in support of an application should be representative of the rainfall and flood flows that can be expected at the site of the proposed bridge or culvert. It should therefore:

- Define the hydrological characteristics of the watercourse catchment upstream of the location of the proposed bridge or culvert.
- Utilise all appropriate and available rainfall and hydrometric data.
- Where appropriate, use a range of techniques to estimate the design peak flood flow.
- Incorporate any expected change in the catchment's hydrological characteristics due to "climate change".

Hydraulic Considerations

The hydraulic analysis submitted in support of an application should be representative of the bridge or culvert that will be constructed. It should therefore take into account:

- All losses associated with the bridge or culvert (e.g. entrance, exit, friction and pier losses).
- Any ancillary works that may affect the hydraulic performance of the bridge or culvert (e.g. erosion control works and debris screens).
- The effect of the downstream water level on the hydraulic performance of the bridge or culvert, including tides.
- The hydraulic implications of any environmental measures incorporated into the bridge or culvert design (e.g. depression of the invert or the installation of baffles).



If the information required to review your application is not submitted, the OPW will place your application on hold pending the receipt of outstanding or additional information.



Any change to the hydraulic design of the bridge or culvert made after receipt of consent from the OPW under Section 50 will invalidate that consent.



Level of Technical Analysis

The level of technical analysis that may be required in support of an application is outlined in the following table.

		Information Requirements											
		Impact		Survey Information		Hydrology		Hydraulics		Additional			
Affected Land		Flood level	Flood extent	Detailed plan of structure and adjacent watercourse	Cross section survey extending over the affected area	Aerial or ground-based contour survey covering the affected area	Estimation of design flood flow	Estimation of design flood hydrograph	Simple hydraulic calculations	Numerical hydraulic model	Flood risk assessment	Analysis of alternative events that may be affected by the structure	Joint probability analysis combining fluvial and tidal events
			Undeveloped	✓	-	✓	○	-	✓	-	✓	-	-
	Rural dwellings and infrastructure	✓	○	✓	○	○	✓	○	✓	○	○	○	○
	Urban dwellings and infrastructure	✓	✓	✓	✓	○	✓	✓	✓	✓	✓	○	○

- ✓ Likely to be required
- May be required
- Unlikely to be required



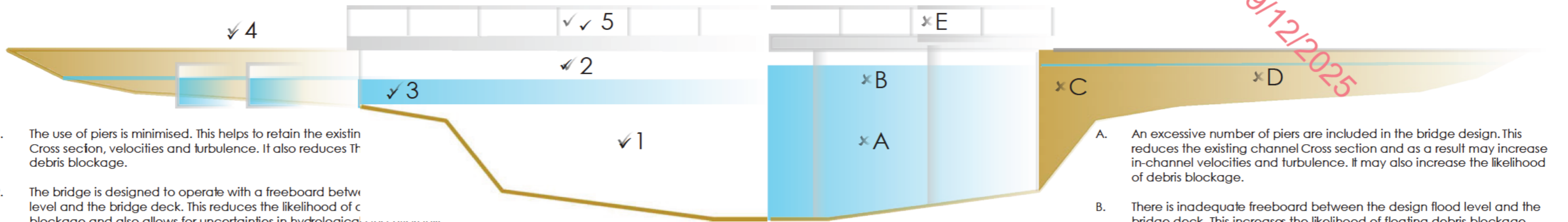
Please be aware that this information is provided as a guide only, and that additional information may be requested at the discretion of the OPW.



RECEIVED: 19/12/2025

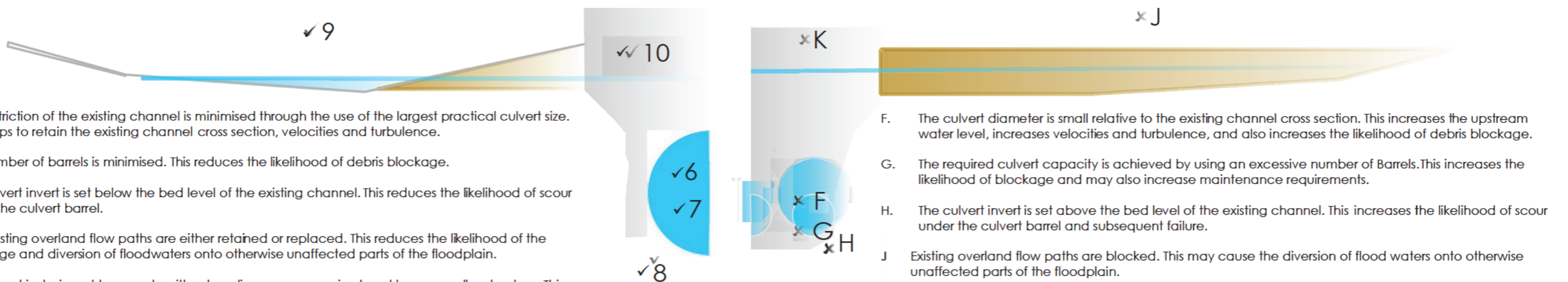
Some features of a Hydraulically **EFFICIENT** Bridge and Culvert

Some features of a Hydraulically **INEFFICIENT** Bridge and Culvert



1. The use of piers is minimised. This helps to retain the existing Cross section, velocities and turbulence. It also reduces the likelihood of debris blockage.
2. The bridge is designed to operate with a freeboard between the design flood level and the bridge deck. This reduces the likelihood of debris blockage and also allows for uncertainties in hydrological and hydraulic design calculations.
3. The encroachment of the bridge abutments into the channel is minimised. This helps to retain the existing channel cross section, velocities and turbulence.
4. Any existing overland flow paths are either retained or replaced. This reduces the likelihood of the blockage and diversion of floodwaters onto otherwise unaffected parts of the floodplain.
5. The bridge abutments and any piers are parallel with the existing direction of flow.

- A. An excessive number of piers are included in the bridge design. This reduces the existing channel Cross section and as a result may increase in-channel velocities and turbulence. It may also increase the likelihood of debris blockage.
- B. There is inadequate freeboard between the design flood level and the bridge deck. This increases the likelihood of floating debris blockage and does not allow for any uncertainties in the hydrological and hydraulic design calculations.
- C. The bridge abutments encroach into the existing channel. This reduces the existing channel cross section and as a result may increase in-channel velocities and turbulence.
- D. Existing overland flow paths are blocked. This may cause the diversion of flood waters onto otherwise unaffected parts of the floodplain.
- E. The bridge abutments and any piers are not aligned parallel to the existing direction of flow. This is likely to decrease the hydraulic performance of the bridge.



6. The restriction of the existing channel is minimised through the use of the largest practical culvert size. This helps to retain the existing channel cross section, velocities and turbulence.
7. The number of barrels is minimised. This reduces the likelihood of debris blockage.
8. The culvert invert is set below the bed level of the existing channel. This reduces the likelihood of scour under the culvert barrel.
9. Any existing overland flow paths are either retained or replaced. This reduces the likelihood of the blockage and diversion of floodwaters onto otherwise unaffected parts of the floodplain.
10. The culvert is designed to operate without a reliance on excessive head loss across the structure. This reduces the likelihood of high velocities and turbulence in the culvert and channel.

- F. The culvert diameter is small relative to the existing channel cross section. This increases the upstream water level, increases velocities and turbulence, and also increases the likelihood of debris blockage.
- G. The required culvert capacity is achieved by using an excessive number of Barrels. This increases the likelihood of blockage and may also increase maintenance requirements.
- H. The culvert invert is set above the bed level of the existing channel. This increases the likelihood of scour under the culvert barrel and subsequent failure.
- J. Existing overland flow paths are blocked. This may cause the diversion of flood waters onto otherwise unaffected parts of the floodplain.
- K. The culvert is only able to pass the design flow with a significant head loss across the structure. This may result in increased upstream water levels, high velocities and turbulence that may damage the structure and channel.



Information Checklist

To allow us complete a full review of your application, you need to prepare and submit the following information to the OPW:

- ✓ Completed application form.
- ✓ Scaled and annotated location plan (including accurate geographic position).
- ✓ Scaled plan(s) and cross section(s) of all works associated with the bridge or culvert (including the earthworks necessary to form any approaches to the bridge or culvert) referenced to ordnance datum.
- ✓ Annotated photographs of the proposed site, the upstream channel and floodplain, and the downstream channel and floodplain. Details of any existing bridges both upstream and downstream of the proposed site are to be included, if applicable.
- ✓ Technical documentation covering the hydrological and hydraulic analysis completed during the design of the bridge or culvert.

The Review Process

An application for consent under Section 50 is reviewed by the OPW as follows:

- a. The application is received, registered and acknowledged by the OPW.
- b. The application is checked to ensure that all the information necessary to review it has been submitted.
- c. If necessary, a request for any outstanding information is issued.
- d. Once all necessary information is received, the application is reviewed. This review includes:
 - Examination of the hydrological and hydraulic calculations.
 - Review of the basis for the conclusions reached with regard to the impact of application on upstream and downstream flood levels.
 - A request is issued if any additional information is required to complete the review of the application.
- e. The application for consent under Section 50 is either granted or declined.

i The OPW aims to review applications within 8 weeks of receiving all necessary information.

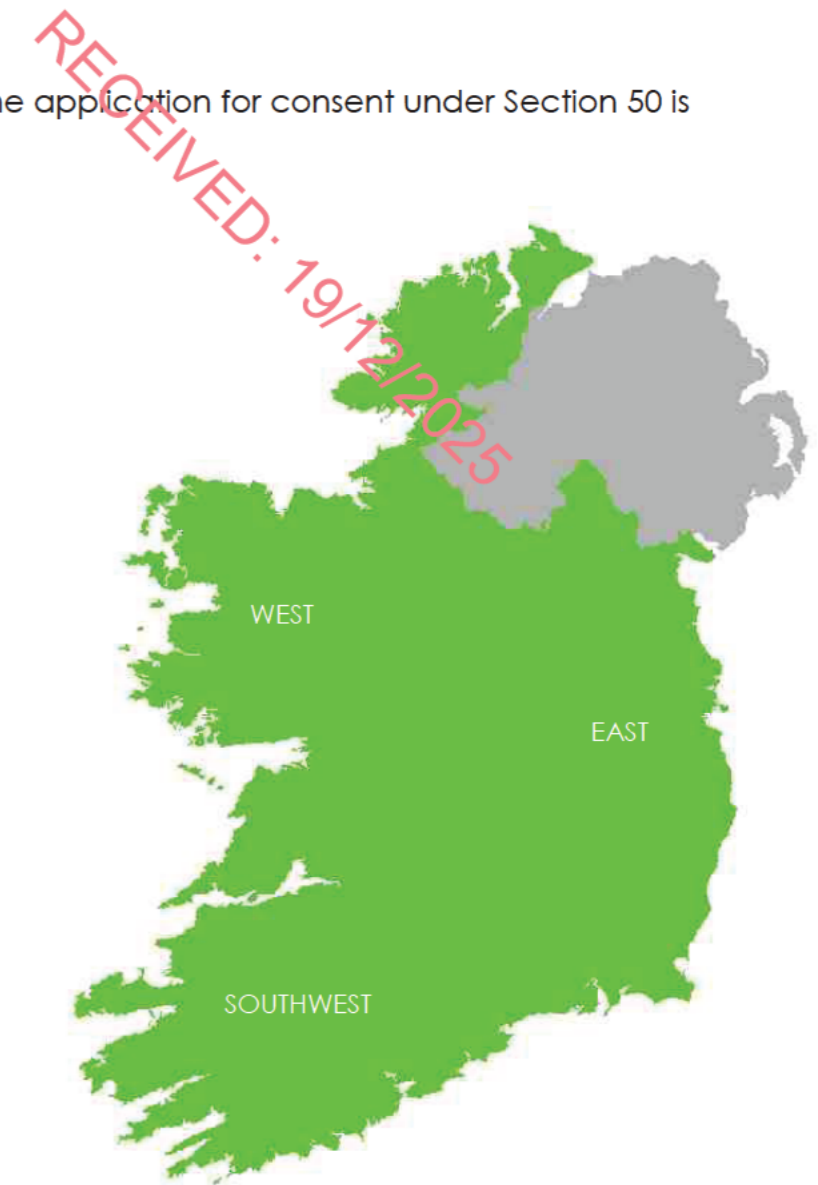
Further Information

Further information specific to the application for consent under Section 50 is available from:

OPW East Region
 Newtown
 Trim
 Co. Meath
 Phone: (046) 943 1352
 bridgeseast@opw.ie

OPW South West Region
 Templemungret House
 Mungret
 Co. Limerick
 Phone: (061) 227 139
 bridgessouthwest@opw.ie

OPW West Region
 Headford
 Co. Galway
 Phone: (093) 35456
 bridgeswest@opw.ie



General information may also be available from the following organisations.



www.opw.ie



www.epa.ie



www.met.ie

! The OPW accepts no liability for the failure of a bridge or culvert, or the effect of a bridge or culvert on third parties, as a consequence of information contained in this guide.

Saoirse Kavanagh

From: INFO <Information@tii.ie>
Sent: Wednesday 19 February 2025 15:18
To: Saoirse Kavanagh
Subject: TII25-130189 - Environmental Impact Assessment Report (EIAR) for a proposed Large Scale Residential Development (LRD) at Dunboyne, Co. Meath.

NOTE: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Ms. Kavanagh,

Thank you for your email of 28 January 2025 in relation to the above. The position in relation to your enquiry is as follows.

Transport Infrastructure Ireland (TII) wishes to advise that it is not in a position to engage directly with planning applicants with respect to proposed developments. TII will endeavour to consider and respond to planning applications referred to it given its status and duties as a statutory consultee under the Planning Acts. The approach to be adopted by TII in making such submissions or comments will seek to uphold official national road and light rail policy and guidelines including Spatial Planning and National Roads Guidelines for Planning Authorities (DoECLG, 2012) and TII Publications.

Regard should also be had to other relevant guidance available at www.tii.ie.

The issuing of this correspondence is provided as best practice guidance only and does not prejudice TII's statutory right to make any observations, requests for further information, objections or appeals following the examination of any valid planning application referred.

TII notes that the EIAR scoping request received, dated 28 January 2025 included a drawing entitled Site Location Map, Dwg. No. DBN2-OS-00-DR-JFA-AR-P1001, Rev 01 dated 16.07.2024 by JFA Architects, which appears to encompass the proposed LRD site and associated vehicular and other infrastructure services in the general vicinity of the proposed development site. TII notes that the red line site boundary indicated therefore encompasses a significant area to the immediate west of the M3 and Junction 5 of the M3. The N/M3, a national primary road, fulfils an important strategic link between Dublin and the North-West serving important urban centres and rural catchments in between and providing access to national and international markets through airport and port connections. Also, be aware that Junction 5 of the N/M3 forms part of TII's Motorway Maintenance and Renewals Contract (MMaRC) Network Area A.

TII advises the assessment demonstrate consideration of the following underlying transportation policy context in the design, delivery and associated mitigation measures presented in the EIAR:

- TII notes that the indicated development site occurs in an area subject to Meath County Council Transportation Study at Dunboyne & Environs (2018). Section 7.2 of the Transportation Study at Dunboyne & Environs (2018) outlines Future Development Principles which includes the provision that 'future development proposals within the transportation study area will be assessed using the model developed for the transport study to ensure proposals are consistent with the assumptions made in the Dunboyne and Environs Transport Study' in order to identify requirements for necessary transport interventions in the study. TII is aware that Meath County Council has begun work on the Dunboyne Transport Strategy 2024 in the form of an Area-Based Transport Assessment (ABTA).
- TII considers that the revised Dunboyne Transport Strategy 2024 would require cognisance of the requirements of the Climate Action Plan 2024, National Investment Framework for Transport in Ireland (NIFTI), National

Sustainable Mobility Policy, Road Safety Strategy 2021 – 2030, Moving Together: A Strategic Approach to Improving Efficiency of Ireland's Transport System, the National Planning Framework and the MMaRC Network which have all emerged and developed since 2018.

With respect to EIAR scoping issues, the recommendations indicated below provide only general guidance for the preparation of an EIAR, which may affect the national roads and/or light rail networks.

The project promoter should have regard, inter alia, to the following:

Having regard to the EPA Guidelines on the information to be contained in Environmental Impact Assessment Reports, 2022 it is recommended as appropriate that the national road and light rail networks be recognised as strategic transport assets under "material assets". EIAR assessment and mitigation should have regard to the following:

- **National Roads:** Official policy for development at or near national roads is set out in the DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities (2012) available at <https://www.gov.ie/en/collection/85b83-planning-guidelines-standards/>.
- **TII Publications:** In addition, as part of TII's responsibilities for managing and improving the country's national road and light rail networks, the Authority sets development guidance and standards for traffic and road assessments and construction that may be necessary by reason of proposed development location, scale, or typology to be prepared to accompany applications for developments or works. Technical guidance and standards are contained in TII Publications, available at <https://www.tiipublications.ie/>.

In addition, the EIAR should have regard to, inter alia, the following:

National Road Network:

- TII would be specifically concerned with to potential significant impacts the development would have on the national road network (and junctions with national roads) in the proximity of the proposed development,
- Consultations should be had with the relevant Local Authority/National Roads Design Office (RDO) with regard to locations of existing and future national road schemes,
- The EIAR should have regard to any prior Environmental Impact Statement or Assessment Report and all conditions and/or modifications imposed by An Bord Pleanála regarding road schemes in the area. The developer should in particular have regard for any potential cumulative impacts,
- The EIAR should have regard to the provisions of Chapter 3 of the DoECLG Spatial Planning and National Roads Guidelines in the assessment.

TII Publications:

- It would be important that, where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a Traffic and Transport Assessment be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/from the site with reference to impacts on the national road network and junctions of lower category roads with national roads. TII's Traffic and Transport Assessment Guidelines (TII Publication No. PE-PDV-02045) should be referred to in relation to the proposed development with potential impacts on the national road network. The development promoter is also advised to have regard to Section 2.2 of the Guidelines which addresses requirements for sub-threshold TTA,
- The designers and assessors are asked to consult TII Publications to determine whether a Road Safety Audit is required.

TII environmental assessment guidance:

- The EIAR should have regard to TII's Environmental Assessment and Construction Guidelines, including the Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes (March 2014),
- The EIAR should consider the European Communities (Environmental Noise) Regulations 2018 (S.I. No. 549 of 2018) and, in particular, how the development will affect future action plans by the relevant competent authority. The developer may need to consider the incorporation of noise barriers to reduce noise impacts (see Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes (March 2014)).

Haul routes utilising the national road network:

- Elements of the national road network are operated and managed by a combination of Public-Private Partnerships (PPP) Concessions, MMarC and local road authorities in association with TII. In relation to haul route identification, the applicant/developer should clearly identify haul routes proposed and fully assess the network to be traversed to ascertain any operational requirements, including delivery timetabling, etc. to ensure that the strategic function of the national road network is safeguarded,
- Separate structure approvals/permits, and other licences and works-specific deeds of indemnity may be required in connection with the proposed haul route, including where temporary modification to the road network may be required. Consultation with relevant local authorities, PPP Companies and MMarC Contractors may also be required,
- All structures on the haul route should be checked by the applicant/developer to confirm their capacity to accommodate any abnormal load proposed, including abnormal weight load. Additionally, any damage caused to the pavement on the existing national road arising from any temporary works due to the turning movement of abnormal loads (e.g. tearing of the surface course, etc.) shall be rectified in accordance with TII Pavement Standards and details in this regard shall be agreed with the Road Authority prior to the commencement of any development on site.

Notwithstanding, any of the above, the developer should be aware that this list is non-exhaustive, thus site and development-specific issues should be addressed in accordance with best practice.

I hope this information is of assistance to you.

Yours sincerely,

Rachel Begley
Regulatory & Administration Executive
Transport Infrastructure Ireland



From: Saoirse Kavanagh
Sent: Tuesday 28 January 2025 10:35
To: Landuse Planning
Subject: EIAR Consultation - Dunboyne 3 LRD

You don't often get email from [redacted]. [Learn why this is important](#)

CAUTION: This email originated from outside of TII. Do not click links or open attachments unless you recognise the sender and are sure that the content is safe.

A Chara,

We are acting on behalf of Marina Quarter Ltd in the preparation of an Environmental Impact Assessment Report (EIAR) for a proposed Large Scale Residential Development (LRD) at Dunboyne, Co. Meath comprising c. 356 no. residential units and a creche.

Research and baseline analysis for the EIAR has commenced and an impact assessment will be carried out following completion of the design of the proposed development. Please see attached

- Letter outlining the site and proposed development
- Site Location Map
- Site Layout Plan

If you have any comments in relation to the potential environmental impacts of the proposed development, I would be grateful if you would forward them to me as soon as is convenient.

Le meas,
Saoirse

Saoirse Kavanagh

Executive Planning Consultant

McCUTCHEON HALLEY
CHARTERED PLANNING CONSULTANTS
Mobile: +353 (0)83 070 1855

www.mhplanning.ie

Cork

6 Joyce House, Barrack Square,
Ballincollig, Cork,
P31 YX97
Tel: +353 (0)21 420 8710

Dublin

4th Floor, Kreston House,
Arran Court, Arran Quay,
Dublin 7, D07 K271
Tel: +353 (0)1 804 4477

Bantry

1st Floor, The Old Schoolhouse,
Summerhill, Bantry, Co. Cork,
P75 VP95
Tel: +353 (0)21 420 8710



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RECEIVED: 19/12/2025

Re: EIA Scoping Request – Proposed Large Scale Residential Development at Dunboyne, Co. Meath.

A Chara,

Uisce Éireann has received your Environmental Impact Assessment (EIA) scoping request relating to a proposed Large Scale Residential Development by Marina Quarter Ltd., consisting of c.356 no. residential units at Dunboyne, Co. Meath.

It is Uisce Éireann's current policy to maintain safe and secure drinking water supplies and that no development that will impact Drinking Water Source. Uisce Éireann must be satisfied that the proposed development has no impact on drinking water quality and that water sources are adequately protected. It is a requirement of the Water Framework Directive that waters used for the abstraction of drinking water are protected so as to avoid deterioration in quality.

The following aspects of Water Services should also be considered in the scope of an EIA where relevant;

- a) Where the development proposal has the potential to impact an Uisce Éireann Drinking Water Source(s), the applicant shall provide details of measures to be taken to ensure that there will be no negative impact to Uisce Éireann's Drinking Water Source(s) during the construction and operational phases of the development. Hydrological / hydrogeological pathways between the applicant's site and receiving waters should be identified as part of the report.
- b) Where the development proposes the backfilling of materials, the applicant is required to include a waste sampling strategy to ensure the material is inert.

- c) Mitigations should be proposed for any potential negative impacts on any water source(s) which may be in proximity and included in the environmental management plan and incident response.
- d) Any and all potential impacts on the nearby public water supply water source(s) are assessed, including any impact on hydrogeology and any groundwater/ surface water interactions.
- e) Impacts of the development on the capacity of water services (*i.e. do existing water services have the capacity to cater for the new development*). This is confirmed by Uisce Éireann in the form of a Confirmation of Feasibility (COF). If a development requires a connection to either a public water supply or sewage collection system, the developer is advised to submit a Pre-Connection Enquiry (PCE) enquiry to Uisce Éireann to determine the feasibility of connection to the Uisce Éireann network.
- f) The applicant shall identify any upgrading of water services infrastructure that would be required to accommodate the proposed development.
- g) In relation to a development that would discharge trade effluent – any upstream treatment or attenuation of discharges required prior to discharging to an Uisce Éireann collection network.
- h) In relation to the management of surface water; the potential impact of surface water discharges to combined sewer networks and potential measures to minimise and or / stop surface waters from combined sewers.
- i) Any physical impact on Uisce Éireann assets – reservoir, drinking water source, treatment works, pipes, pumping stations, discharges outfalls etc. including any relocation of assets.
- j) When considering a development proposal, the applicant is advised to determine the location of public water services assets, possible connection points from the applicant's site / lands to the public network and any drinking water abstraction catchments to ensure these are included and fully assessed in any pre-planning proposals. Details, where known, can be obtained by emailing an Ordnance Survey map identifying the proposed location of the applicant's intended development to datarequests@water.ie
- k) Other indicators or methodologies for identifying infrastructure located within the applicant's lands are the presence of registered wayleave agreements, visible manholes, vent stacks, valve chambers, marker posts etc. within the proposed site.
- l) Any potential impacts on the assimilative capacity of receiving waters in relation to Uisce Éireann discharge outfalls including changes in dispersion / circulation characterises. Hydrological / hydrogeological pathways between the applicant's site and receiving waters should be identified within the report.
- m) Any potential impact on the contributing catchment of water sources either in terms of water abstraction for the development (*and resultant potential impact on the capacity of the source*) or the potential of the development to influence / present a risk to the quality of the water abstracted by Uisce Éireann for public supply should be identified within the report.
- n) Where a development proposes to connect to an Uisce Éireann network and that network either abstracts water from or discharges wastewater to a "protected"/ sensitive area, consideration as to whether the integrity of the site / conservation objectives of the site would be compromised should be identified within the report.
- o) Uisce Éireann does not permit building over of its assets. As an applicant you are required to;
- survey the site to determine the exact location of the assets. Any trial investigations should be carried out with the agreement and in the presence of Uisce Éireann.
 - Provide evidence of separation distances between the existing Uisce Éireann assets and proposed structures, other services, trees, etc. have to be in accordance with the Irish Water Codes of Practice and Standard Details.
- p) Where a diversion of Public Infrastructure may be required subject to layout proposal of the development and separation distances, the applicant is required to submit a Diversions Enquiry to diversions@water.ie
- q) Mitigation measures in relation to any of the above ensuring a zero risk to any Uisce Éireann drinking water sources (Surface and Ground water).

This is not an exhaustive list.

Please note;

- Where connection(s) to the public network is required as part of the development proposal, applicants are advised to complete the Pre-Connection Enquiry process and have received a Confirmation of Feasibility letter from Uisce Éireann ahead of any planning application.
- Uisce Éireann will not accept new surface water discharges to combined sewer networks.

Queries relating to the terms and observations above should be directed to planning@water.ie

Signed on behalf of Dermot Phelan
Connections and Developer Services

Appendix 1.1

Phase 2 Responses

Saoirse Kavanagh
McCUTCHEON HALLEY
6 Joyce House
Ballincollig
Cork, P31 YX97

27 May 2024

Re: Consultation on the preparation of an EIAR for a proposed Large Scale Residential Development at Dunboyne, Co. Meath

Your Ref: n/a
Our Ref: 24/172

Dear Saoirse,

Geological Survey Ireland is the national earth science agency and is a division of the Department of the Environment, Climate and Communications. We provide independent geological information and gather various data for that purpose. Please see our [website](#) for data availability. We recommend using these various data sets, when conducting the EIAR, SEA, planning and scoping processes. Use of our data or maps should be attributed correctly to 'Geological Survey Ireland'.

The publicly available data referenced/presented here, should in no way be construed as Geological Survey Ireland support for or objection to the proposed development or plan. The data is made freely available to all and can be used as independent scientific data in assessments, plans or policies. It should be noted that in many cases this data is a baseline or starting point for further site specific assessments.

With reference to your email received on the 01 May 2024, concerning the consultation on the preparation of an EIAR for a proposed Large Scale Residential Development at Dunboyne, Co. Meath, Geological Survey Ireland would encourage use of and reference to our datasets. Please find attached a list of our publicly available datasets that may be useful to the environmental assessment and planning process. We recommend that you review this list and refer to any datasets you consider relevant to your assessment. The remainder of this letter and following sections provide more detail on some of these datasets.

Geoheritage

A national inventory of geoheritage sites known as County Geological Sites (CGSs) is managed by the Geoheritage Programme of Geological Survey Ireland. CGSs, as adopted under the National Heritage Plan, include sites that are of national importance which have been selected as the very best examples for NHA (Natural Heritage Areas) designation. NHA designation will be completed in partnership with the National Parks and Wildlife Service (NPWS). CGSs are now routinely included in County Development Plans and in the GIS of planning departments, to ensure the recognition and appropriate protection of geological heritage within the planning system. CGSs can be viewed online under the Geological Heritage tab on the online [Map Viewer](#).

The audit for Co. Meath was carried out in 2007. The full report details can be found [here](#). **Our records show that there are no CGSs in the vicinity of the proposed residential development.**

Groundwater

Geological Survey Ireland's [Groundwater and Geothermal Unit](#), provides advice, data and maps relating to groundwater distribution, quality and use, which is especially relevant for safe and secure drinking water supplies and healthy ecosystems.

Proposed developments need to consider any potential impact on specific groundwater abstractions and on groundwater resources in general. We recommend using the groundwater maps on our [Map viewer](#) which should include: wells; drinking water source protection areas; the national map suite - aquifer, groundwater vulnerability, groundwater recharge and subsoil permeability maps. For areas underlain by limestone, please refer to the karst specific data layers (karst features, tracer test database; turlough water levels (gwlevel.ie). Background information is also provided in the Groundwater Body Descriptions. Please read all disclaimers carefully when using Geological Survey Ireland data.



The Groundwater Data Viewer indicates an aquifer classed as a 'Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zone' underlies the proposed development. The Groundwater Vulnerability map indicates the range of groundwater vulnerabilities within the area covered is variable. We would therefore recommend use of the Groundwater Viewer to identify areas of High to Extreme Vulnerability and 'Rock at or near surface' in your assessments, as any groundwater-surface water interactions that might occur would be greatest in these areas.

There is a groundwater drinking water abstraction within the residential development area for which there is a source protection area: Dunboyne Public Water Scheme (PWS).

Link to report at:

https://secure.dccae.gov.ie/GSI_DOWNLOAD/Groundwater/Reports/SPZ/MH_PWSS_SPZ_Dunboyne_June_2004_GSI.pdf

Key to groundwater protection in general, and protection of specific drinking water supplies, is preventing ingress of runoff to the aquifer. With any infrastructure projects such as roads and housing, design of any drainage will need to be cognisant of this supply scheme and the interactions between surface water and groundwater as well as run-off. Appropriate design should be undertaken by qualified and competent persons to include mitigation measures as necessary, such as SUDs or other drainage mitigation measures.

Note that there could be other groundwater abstractions in the locality for which Geological Survey Ireland has not undertaken studies, and a robust assessment should be undertaken by qualified and competent persons. Given the nearby drinking water source, the effects of any potential contamination / dewatering as a result of the development would need to be assessed.

[GWClimate](#) is a groundwater monitoring and modelling project that aims to investigate the impact of climate change on groundwater in Ireland. This is a follow on from a previous project (GWFlood) and the data may be useful in relation to Flood Risk Assessment (FRA) and management plans. Maps and data are available on the [Map viewer](#).

Geological Survey Ireland has completed Groundwater Protection Schemes (GWPSs) in partnership with Local Authorities, and there is now national coverage of GWPS mapping. A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater. **The Groundwater Protection Response overview and link to the main reports is here:** <https://www.gsi.ie/en-ie/programmes-and-projects/groundwater/projects/protecting-drinking-water/what-is-drinking-water-protection/county-groundwater-protection-schemes/Pages/default.aspx>

Geological Mapping

Geological Survey Ireland maintains online datasets of bedrock and subsoils geological mapping that are reliable and accessible. We would encourage you to use these data which can be found [here](#), in your future assessments.

Please note we have recently launched QGIS compatible bedrock (100K) and Quaternary geology map data, with instructional manuals and videos. This makes our data more accessible to general public and external stakeholders. QGIS compatible data can be found in our downloadable bedrock 100k .zip file on the [Data & Maps](#) section of our website.

Natural Resources (Minerals/Aggregates)

Geological Survey Ireland provides data, maps, interpretations and advice on matters related to minerals, their use and their development in our [Minerals section](#) of the website. The Active Quarries, Mineral Localities and the Aggregate Potential maps are available on our [Map Viewer](#).

We would recommend use of the Aggregate Potential Mapping viewer to identify areas of High to Very High source aggregate potential within the area. In keeping with a sustainable approach we would recommend use of our data and mapping viewers to identify and ensure that natural resources used in the proposed development are sustainably sourced from properly recognised and licensed facilities, and that consideration of future resource sterilization is considered.



Geochemistry of soils, surface waters and sediments

Geological Survey Ireland provides baseline geochemistry data for Ireland as part of the Tellus programme. Baseline geochemistry data can be used to assess the chemical status of soil and water at a regional scale and to support the assessment of existing or potential impacts of human activity on environmental chemical quality. Tellus is a national-scale mapping programme which provides multi-element data for shallow soil, stream sediment and stream water in Ireland. At present, mapping consists of the border, western and midland regions. Data is available at <https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx>.

Guidelines

The following guidelines may also be of assistance:

- Institute of Geologists of Ireland, 2013. Guidelines for the Preparation of the Soils, Geology and Hydrogeology Chapters of Geology in Environmental Impact Statements.
- [EPA, 2022](#). Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR)

Other Comments

Should development go ahead, all other factors considered, Geological Survey Ireland would much appreciate a copy of reports detailing any site investigations carried out. The data would be added to Geological Survey Ireland's national database of site investigation boreholes, implemented to provide a better service to the civil engineering sector. Data can be sent to the Geological Mapping Unit, at <mailto:GeologicalMappingInfo@gsi.ie>, 01-678 2795.

I hope that these comments are of assistance, and if we can be of any further help, please do not hesitate to the Geological Survey Ireland Planning Team at GSIPlanning@gsi.ie.

Yours sincerely,

Geoheritage and Planning Programme

Enc: Table - Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes.

Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes
following European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018
(S.I. No. 296 of 2018)

RECEIVED: 19/12/2025

Geological Survey Ireland Programme	Dataset	Relevant EIA Topic	Coverage	Description / Notes / Limitations	Link to Geological Survey Ireland map viewer
Geohazards	Landslide: National landslide database and landslide susceptibility map	Land & Soil/Climate/Landscape	National	Associated guidance documentation relating to the National Landslide Susceptibility Map is also available.	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=b686f1e490445981950e9b9c5625c
Geohazards	Groundwater Flooding (Historic)	Water	Regional	Provide information of historic flooding, both surface water and groundwater. [A lack of flooding presented in any specific location of the map only indicates that a flood has not been detected. It does not indicate that a flood cannot occur in that location at present or in the future]	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=848f83c85799436b8086529c735b1cc
Geohazards	Groundwater Flooding (Predictive)	Water	Regional	Provides information on the probability of future karst groundwater flooding (where available). [The maps do not, and are not intended to, constitute advice. Professional or specialist advice should be sought before taking, or refraining from, any action on the basis of the flood maps]	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=848f83c85799436b8086529c735b1cc
Geohazards	Radon Map	Land & Soils/Air	National		http://www.epa.ie/radiation/radonmap/
Geohazards	County Geological Sites as adopted by National Heritage Plan and listed in County Development Pla	Land & Soils/Landscape	Regional	All geological heritage sites identified by Geological Survey Ireland are categorised as CGS pending any further NHA designation by NPWS.	https://dceen.maps.arcgis.com/apps/MapSeries/index.html?appid=30af518e87a4c0ab2fde2aac3c228
Geological Mapping	Bedrock geology:	Land & Soils	National	1:100,000 scale and associated memoirs.	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748e9106e7ee1b6ab8d58scale=0
Geological Mapping	Bedrock geology:	Land & Soils	Regional	1:50,000 scale	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748e9106e7ee1b6ab8d58scale=0
Geological Mapping	Quaternary geology: Sediments	Land & Soils	National	1:50,000 scale	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748e9106e7ee1b6ab8d58scale=0
Geological Mapping	Quaternary geology: Geomorphology	Land & Soils	National	1:50,000 scale	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748e9106e7ee1b6ab8d58scale=0
Geological Mapping	Physiographic units:	Land & Soils	National	Broad-scale physical landscape units mapped at 1:100,000 scale in order to be represented as a cartographic digital map at 1:250,000 scale	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=afa76a420654877843ca1bc075c67b
Geological Mapping	GeoUrban: Spatial geological data for the greater Dublin and Cork areas	Land & Soils	Regional	includes 3D models	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=9768f4818b79416093b62212a850ce68scale=0
Geological Mapping	Geotechnical database	Land & Soils	National	Digitised geotechnical and Site Investigation Reports and boreholes which can be accessed through online downloads	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=a27118be1873d47e585a3d0415b4a724c
Goldmine	Historical data sets including geological memoirs and 6" to 1 mile geological mapping records	Land & Soils/Water	National	available online	https://secure.dcca.gov.ie/goldmine/index.html
Groundwater & Geothermal	Groundwater resources (aquifers)	Water	National	Data limited to 1:100,000 scale; sites should be investigated at local scale	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater recharge.	Water	National	Data limited to 1:40,000 scale; sites should be investigated at local scale; long term annual average recharge	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater vulnerability.	Water	National	Data limited to 1:40,000 scale; sites should be investigated at local scale	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Group scheme and public supply source protection areas.	Water	National	Not all PWS / GWS have SPZ / ZOC. Check with IW / COCO / NFGWS for private supplies.	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater Protection Schemes	Water	National	Data is limited to scale of 1:40,000. Data does not include all of the source protection areas	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Catchment and WFD management units.	Water	National		https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	karst specific data layers	water	National	For areas underlain by limestone, includes karst features, tracer test database; turlough water levels [w/level.ie]	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Wells and Springs	Water	National	Not comprehensive, there may be unrecorded wells and springs	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater body Descriptions	Water	National	Not exhaustive; only those in designated SACs; could be other GWDEs; for more information contact NPWS / EPA / site investigations	https://www.gsi.ie/en-ie/programmes-and-projects/groundwater-and-geothermal-unit/activities/understanding-ireland-groundwater/Pages/Groundwater-bodies.aspx
Groundwater & Geothermal	Geothermal Suitability maps	land & Soils/Water	National	Also, Roadmap for a Policy and Regulatory Framework for Geothermal Energy, November 2020	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=9ee46bee08de41278b90a991d60c0b9e
Marine & Coastal Unit	INFOMAR - Ireland's national marine mapping programme; providing key baseline data for Ireland's	Water	National		https://secure.dcca.gov.ie/GSI/INFOMAR_VIEWER/
Marine & Coastal Unit	CHERISH - Coastal change project (Climate, Heritage and Environments of Reefs, Islands, and Head)	Water	Regional		http://www.cherishproject.eu/en/
Marine & Coastal Unit	Coastal Vulnerability Index (CVI)	water /Land & Soils	Regional	Currently the project is being carried out on the east coast and will be rolled out nationally.	https://www.gsi.ie/en-ie/programmes-and-projects/marine-and-coastal-unit/projects/Pages/Coastal-Vulnerability-Index.aspx
Minerals	Aggregate potential	Land & Soils/Material Assets	National	Consideration of mineral resources and potential resources as a material asset which should be explicitly recognised within the environmental assessment process	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=ee8c4c285a49413aa8f1344416d49956
Minerals	Active quarries	Land & Soils	National		https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=ee8c4c285a49413aa8f1344416d49956
Minerals	Historic mines	Land & Soils/Cultural Heritage	National	Inventory and Risk Classification 2009. Environmental Protection Agency, Economic Minerals Division and Geological Survey Ireland (DECC).	https://gis.epa.ie/EPA/Maps/default?eastings=78&northings=7&id=EPA-LEMA_Facilities_Extractive_Facilities
Tellus	Geochemical data: multi-element data for shallow soil, stream sediment and stream water	Land & Soils	Regional	A national mapping programme	https://dceen.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b9964270772754
Tellus	Airborne geophysical data including radiometrics, electromagnetics and magnetics	Land & Soils	Regional	A national mapping programme	https://dceen.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b9964270772754
Tellus	urban geochemistry mapping (Dublin SURGE project).	Land & Soils	Regional		https://dceen.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b9964270772754

Notes:
1. The maps and data listed above are available on the Geological Survey Ireland map viewer <https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx>
2. Please read all disclaimers carefully when using Geological Survey Ireland data
3. Geological Survey Ireland and Irish Concrete Federation published guidelines for the treatment of geological heritage in the extractive industry in 2008.

Saoirse Kavanagh

From: Roisin O'Callaghan [REDACTED]
Sent: Friday 3 May 2024 09:47
To: Saoirse Kavanagh
Subject: RE: EIAR Consultation - Dunboyne

NOTE: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Saoirse,

The following observations and comments are of necessity of a general nature, while they apply to the proposed development in general, IFI request you have particular regard to the following:

The proposed development is located in the catchment of the Tolka River which supports Lamprey (Habitats Directive Annex II species) and Brown Trout populations in addition to other fish species in this locality.

The disturbance of riparian habitats should be minimised. An undisturbed buffer zone between development area and river bank should be maximised. Riparian vegetation should be retained in as natural a state as possible and any cleared areas should be replanted with native species to mitigate negative ecological impacts.

Best practice should be implemented at all times in relation to any activities that may impact on surface water. Any discharges to surface streams present on the site must not impact negatively on the salmonid status of the system. Comprehensive surface water management measures must be implemented at the construction and operational stage to prevent any pollution of the Tolka. As specific details of the construction works at this site are as yet unknown, IFI are not in a position to comment further on potential impacts.

Good housekeeping measures are integral to achieving prevention of excessive turbid run-off to surface water systems. Silt fencing of discharge streams would also be essential during construction and possibly during operation.

The closed season for instream construction works in salmonid river systems runs from October 1st to June 30th (inclusive) each year. Any instream works should only be carried out in the open season and subject to an agreed method statement with IFI.

IFI strongly recommend incorporating soft engineering, nature based options for surface water management. These can include swales or bio-retention areas rather than the hard underground attenuation structures. These solutions should be easily achieved in this greenfield site. The Department of Housing, local Government and Heritage have published the following interim guidance document on Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas – Best Practice Interim Guidance Document, which should be considered when designing drainage systems.

<https://www.gov.ie/en/publication/10d7c-nature-based-solutions-to-the-management-of-rainwater-and-surface-water-runoff-in-urban-areas-best-practice-interim-guidance-document/>

Please refer to our published guidelines for construction works near waterways in the EIAR. "Guidelines on protection of fisheries during construction works in and adjacent to waters" (2016). IFI have also published revised "Planning for watercourses in the urban environment" which can provide guidance on site specific measures to enhance, protect, rehabilitate or establish riparian and aquatic habitats.

This should be referred to in the EIAR. It can be accessed on our website www.fisheriesireland.ie. See below link:

<https://www.fisheriesireland.ie/extranet/fisheries-management-1/1762-ifi-urban-watercourses-planning-guide-1/file.html>

I hope the above information is useful to you.

Kind Regards,

Roisin

Roisin O'Callaghan
Senior Fisheries Environmental Officer

Roisin.O'Callaghan@fisheriesireland.ie • [+353 \(0\)1 8842 600](tel:+353(0)18842600) • www.fisheriesireland.ie • [D24 CK66](#)



Help us protect Ireland's rivers, lakes and coastlines by reporting illegal fishing, water pollution or invasive species. Our confidential phone number is 0818 34 74 24, which is open 24 hours a day / 7 days a week.

To read our Privacy Policy and Email Disclaimer Notice, Please visit www.fisheriesireland.ie

From: Saoirse Kavanagh [REDACTED]
Sent: Wednesday, May 1, 2024 9:26 AM
To: Roisin O'Callaghan [REDACTED]
Cc: info <info@fisheriesireland.ie>
Subject: EIAR Consultation - Dunboyne

Hi Roisin,

Hope all is well.

We are acting on behalf of Marina Quarter Ltd in the preparation of an Environmental Impact Assessment Report (EIAR) for proposed residential development at Dunboyne, Co. Meath.

Research and baseline analysis for the EIAR has commenced and an impact assessment will be carried out following completion of the design of the proposed development.

Please see attached:

- A letter providing details of the site location, proposed development, and the proposed EIAR.
- Draft Site Layout Plan.
- Draft Site Location Map.

If you have any comments in relation to the potential environmental impacts of the proposed development, I would be grateful if you would forward them to me as soon as is convenient.

Kind regards,
Saoirse

Saoirse Kavanagh
Executive Planning Consultant
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Saoirse Kavanagh

From: Drainage Admin <drainage.admin@opw.ie>
Sent: Friday 7 June 2024 16:39
To: Saoirse Kavanagh
Subject: RE: EIAR Consultation - Dunboyne

NOTE: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Saoirse,

I hope this email finds you well,

Please see comments below from East Regional Engineer,

'In Terms of the river crossing itself OPW don't have any objections as long as it doesn't cause any flooding issues or damage the flood relief scheme. The section 50 consent is primarily to do with the flood conveyance capacity of the structure.'

Kind regards,
Sarah

From: Saoirse Kavanagh <[REDACTED]>
Sent: Tuesday 4 June 2024 11:26
To: Drainage Admin <drainage.admin@opw.ie>
Subject: RE: EIAR Consultation - Dunboyne

Hi Sarah,

Thanks again for sending through the comments.

The design team have consulted with Meath County Council and the council have requested confirmation from the OPW that the river crossing is acceptable in principle.

Based on the comments previously issued, would I be correct in saying that the OPW consider that the river crossing is acceptable in principle?

Thanks,
Saoirse

Saoirse Kavanagh
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From: Saoirse Kavanagh
Sent: Friday, May 3, 2024 9:53 AM
To: Drainage Admin <drainage.admin@opw.ie>
Subject: RE: EIAR Consultation - Dunboyne

Hi Sarah,

Many thanks for your quick response. I have forwarded the comments on to the design team to ensure they are addressed.

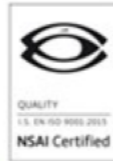
Kind regards,
Saoirse

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From: Drainage Admin <drainage.admin@opw.ie>
Sent: Thursday, May 2, 2024 2:53 PM
To: Saoirse Kavanagh [REDACTED]
Subject: FW: EIAR Consultation - Dunboyne

NOTE: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Saoirse,

Thank you for your email,

Please find comments below issued by an East Regional Engineer,

There are no Arterial drainage channels in the area. However, OPW constructed a flood relief scheme on behalf of the local Authority in the early 2000s in that area. I would suggest contacting Meath Co. Council as they may have information from the consultants who designed that scheme in relation to what land the flood relief scheme protects and the height that embankments etc need to be maintained at. It would be important that if the embankments are moved that they are constructed to an appropriate standard and level and that the design is reviewed to ensure that the consequences of moving the embankments are fully understood.

In relation to the construction of the new bridge, this will require Section 50 consent from the OPW to ensure that it doesn't generate any additional flooding. It is not an OPW channel so we don't maintain it, but they should also ensure that they leave an access strip for maintenance of the channel for the local Authority in the future with a defined access point for excavator type machinery. For our large channels we recommend that this strip is 10m wide measured back from the top bank edge of the channel. It should not be planted or paved in any way which would hinder tracked excavators from carrying out the maintenance.

Kind regards,
Sarah

From: Saoirse Kavanagh [REDACTED]
Sent: Wednesday 1 May 2024 09:25
To: Info Opw <info@opw.ie>
Subject: EIAR Consultation - Dunboyne

A Chara,

We are acting on behalf of Marina Quarter Ltd in the preparation of an Environmental Impact Assessment Report (EIAR) for proposed residential development at Dunboyne, Co. Meath.

Research and baseline analysis for the EIAR has commenced and an impact assessment will be carried out following completion of the design of the proposed development.

Please see attached:

- A letter providing details of the site location, proposed development, and the proposed EIAR.
- Draft Site Layout Plan.
- Draft Site Location Map.

If you have any comments in relation to the potential environmental impacts of the proposed development, I would be grateful if you would forward them to me as soon as is convenient.

Kind regards,
Saoirse

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Saoirse Kavanagh

From: INFO <Information@tii.ie>
Sent: Monday 27 May 2024 13:02
To: Saoirse Kavanagh
Subject: TII24-127164 - Environmental Impact Assessment Report (EIAR) scoping for proposed residential development at Dunboyne, Co. Meath.

NOTE: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Ms. Kavanagh,

Thank you for your email of 1 May 2024 regarding the above. The position in relation to your enquiry is as follows.

Transport Infrastructure Ireland (TII) wishes to advise that it is not in a position to engage directly with planning applicants with respect to proposed developments. TII will endeavour to consider and respond to planning applications referred to it given its status and duties as a statutory consultee under the planning acts. The approach to be adopted by TII in making such submissions or comments will seek to uphold official national road and light rail policy and guidelines including Spatial Planning and National Roads Guidelines for Planning Authorities (DoECLG, 2012) and TII Publications. Regard should also be had to other relevant guidance available at www.tii.ie.

The issuing of this correspondence is provided as best practice guidance only and does not prejudice TII's statutory right to make any observations, requests for further information, objections or appeals following the examination of any valid planning application referred.

The proposed development site is in the immediate vicinity of Junction 5 of the M3 where the motorway and interchange are operated and managed by Eurolink Motorway Operation M3 Ltd., a Public Private Partnership (PPP) Concession.

With respect to EIAR scoping issues, the recommendations indicated below provide only general guidance for the preparation of an EIAR, which may affect the national roads and/or light rail networks.

The project promoter should have regard, inter alia, to the following;

- **National Roads:** Official policy for development at or near national roads is set out in the DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities (2012) available at <https://www.gov.ie/en/collection/85b83-planning-guidelines-standards/>
- **TII Publications:** In addition, as part of TII's responsibilities for managing and improving the country's national road and light rail networks, TII sets development guidance and standards for traffic and road assessments and construction that may be necessary by reason of proposed development location, scale or typology to be prepared to accompany applications for developments or works. Technical guidance and standards are contained in TII Publications, available at <https://www.tiipublications.ie/>

In addition, the EIAR should have regard to, inter alia, the following;

The EIAR should have regard to Meath County Council Transportation Study at Dunboyne & Environs (2018). Section 7.2 outlines Future Development Principles and includes the provision that "future development proposals within the Transportation Study area will be assessed using the model developed for the transport study to ensure proposals are consistent with the assumptions made in the Dunboyne and Environs Transport Study" and to identify requirements for necessary transport interventions.

National Road Network:

- TII would be specifically concerned with to potential significant impacts the development would have on the national road network (and junctions with national roads) in the proximity of the proposed development,
- Consultations should be had with the relevant Local Authority/National Roads Design Office (RDO) with regard to locations of existing and future national road schemes,
- The EIAR should have regard to any prior Environmental Impact Statement or Assessment Report and all conditions and/or modifications imposed by An Bord Pleanála regarding road schemes in the area. The developer should in particular have regard for any potential cumulative impacts,
- The EIAR should have regard to the provisions of Chapter 3 of the DoECLG Spatial Planning and National Roads Guidelines in the assessment.

TII Publications:

- It would be important that, where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a Traffic and Transport Assessment (TTA) be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/from the site with reference to impacts on the national road network and junctions of lower category roads with national roads. TII's Traffic and Transport Assessment Guidelines (TII Publication No. PE-PDV-02045) should be referred to in relation to the proposed development with potential impacts on the national road network. The scheme promoter is also advised to have regard to Section 2.2 of the Guidelines which addresses requirements for sub-threshold TTA,
- The designers and assessors are asked to consult TII Publications to determine whether a Road Safety Audit is required.

TII environmental assessment guidance:

- The EIAR should have regard to TII's Environmental Assessment and Construction Guidelines, including the Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes (March 2014),
- The EIAR should consider the European Communities (Environmental Noise) Regulations 2018 (S.I. No. 549 of 2018) and, in particular, how the development will affect future action plans by the relevant competent authority. The developer may need to consider the incorporation of noise barriers to reduce noise impacts (see Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes (March 2014)),

Haul routes utilising the national road network:

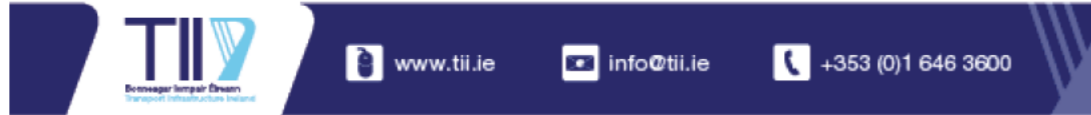
- Elements of the national road network are operated and managed by a combination of PPP Concessions, Motorway Maintenance and Renewal Contractors (MMaRC) and local road authorities in association with TII. In relation to haul route identification, the applicant/developer should clearly identify haul routes proposed and fully assess the network to be traversed to ascertain any operational requirements, including delivery timetabling, etc. to ensure that the strategic function of the national road network is safeguarded.
- Separate structure approvals/permits, and other licences and works-specific deeds of indemnity may be required in connection with the proposed haul route, including where temporary modification to the road network may be required. Consultation with relevant local authorities, PPP Companies and MMaRC Contractors may also be required.
- All structures on the haul route should be checked by the applicant/developer to confirm their capacity to accommodate any abnormal load proposed, including abnormal weight load. Additionally, any damage caused to the pavement on the existing national road arising from any temporary works due to the turning movement of abnormal loads (e.g., tearing of the surface course, etc.) shall be rectified in accordance with TII Pavement Standards and details in this regard shall be agreed with the Road Authority prior to the commencement of any development on site.

Notwithstanding any of the above, the developer should be aware that this list is non-exhaustive, thus site and development-specific issues should be addressed in accordance with best practice.

I trust that the above comments are of use in your EIAR preparation.

Yours sincerely,

Alban Mills
Senior Regulatory & Administration Executive
Transport Infrastructure Ireland



In accordance with TII's Right to Disconnect policy, if you are receiving this email outside of normal working hours, I do not expect a response or action outside of your own working hours unless it is clearly noted as requiring urgent attention.

De réir pholasaí BIÉ An Ceart gan a bheith Ceangailte, má tá an ríomhphost seo á fháil agat lasmuigh de na gnáthuaireanta oibre, nílím ag súil le freagra ná le gníomh uait lasmuigh de do ghnáthuaireanta oibre féin mura bhfuil sé ráite go soiléir go bhfuil gá gníomhú go práinneach.

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Próiseálann BIÉ sonraí pearsanta a sholáthraítear dó i gcomhréir lena Fhógra ar Chosaint Sonraí atá ar fáil ag <https://www.tii.ie/about/about-tii/Data-Protection/?set-lang=ga>

TII E-mail system: This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error then please notify postmaster@tii.ie and delete the original including attachments.

Córas r-phoist BIE: Tá an ríomhphost seo agus aon chomhaid a tharchuirtear leis faoi rún agus beartaithe lena n-úsáid ag an duine aonair nó ag an eintiteas a bhfuil siad dírithe chuige/chuici amháin. Más rud é go bhfuair tú an ríomhphost seo trí bhotún, cuir sin in iúil do postmaster@tii.ie, le do thoil, agus scríos an ríomhphost bunaidh agus aon cheangaltáin.

Appendix 1.1

Phase 1 Responses

RECEIVED: 19/12/2025



Your Ref:
Our Ref: G Pre00190/2023

27 September 2023

Saoirse Kavanagh
McCutcheon Halley Chartered Planning Consultants

Re: proposed EIAR for Dunboyne Large Scale Residential Development of 269 residential units, crèche, and associated works at Dunboyne, Co. Meath.

A Chara,

With regard to the above enquiry please note the following archaeological recommendations of the National Monuments Service of the Department of Housing, Local Government and Heritage:

The National Monuments Service has examined the documentation submitted for comment. It is noted that the proposed development is large-scale in extent and is located in an area of high archaeological potential.

On the basis of the information available it is recommended that the services of a suitably qualified archaeologist are engaged to review the proposals for the proposed residential development. Archaeological geophysical survey and archaeological test excavations will inform the EIAR. The archaeologist will assess results of the geophysical survey and test excavations and describe the archaeological impacts and potential impacts that may arise from large-scale construction works on previously undeveloped land. Furthermore, the archaeologist will describe the proposed mitigation of impacts and potential impacts identified.

You are requested to send any further communications to this Department's Development Applications Unit (DAU) at referrals@npws.gov.ie, where used, or to the following address:

The Manager, Development Applications Unit (DAU), Government Offices, Newtown Road, Wexford Y35 AP90

Is mise, le meas

David O'Connor
Development Applications Unit
Administration

RECEIVED: 19/12/2025



Saoirse Kavanagh
McCutcheon Hally
6 Joyce House
Ballincollig
Cork, P31 YX97

28 August 2023

Re: Dunboyne Large Scale Residential Development – Consultation on the preparation of an EIAR for a proposed Large Scale Residential Development.

Your Ref: n/a
Our Ref: 23/214

Dear Saoirse,

Geological Survey Ireland is the national earth science agency and is a division of the Department of the Environment, Climate and Communications. We provide independent geological information and gather various data for that purpose. Please see our [website](#) for data availability. We recommend using these various data sets, when conducting the EIAR, SEA, planning and scoping processes. Use of our data or maps should be attributed correctly to 'Geological Survey Ireland'.

The publicly available data referenced/presented here, should in no way be construed as Geological Survey Ireland support for or objection to the proposed development or plan. The data is made freely available to all and can be used as independent scientific data in assessments, plans or policies. It should be noted that in many cases this data is a baseline or starting point for further site specific assessments.

With reference to your email received on the 16 August 2023, concerning the proposed Dunboyne Large Scale Residential Development, Geological Survey Ireland would encourage use of and reference to our datasets. Please find attached a list of our publicly available datasets that may be useful to the environmental assessment and planning process. We recommend that you review this list and refer to any datasets you consider relevant to your assessment. The remainder of this letter and following sections provide more detail on some of these datasets.

Geoheritage

A national inventory of geoheritage sites known as County Geological Sites (CGSs) is managed by the Geoheritage Programme of Geological Survey Ireland. CGSs, as adopted under the National Heritage Plan, include sites that are of national importance which have been selected as the very best examples for NHA (Natural Heritage Areas) designation. NHA designation will be completed in partnership with the National Parks and Wildlife Service (NPWS). CGSs are now routinely included in County Development Plans and in the GIS of planning departments, to ensure the recognition and appropriate protection of geological heritage within the planning system. CGSs can be viewed online under the Geological Heritage tab on the online [Map Viewer](#).

The audit for Co. Meath was carried out in 2007. The full report details can be found [here](#). **Our records show that there are no CGSs in the vicinity of the proposed residential development.**

Groundwater

Geological Survey Ireland's [Groundwater and Geothermal Unit](#), provides advice, data and maps relating to groundwater distribution, quality and use, which is especially relevant for safe and secure drinking water supplies and healthy ecosystems.

Proposed developments need to consider any potential impact on specific groundwater abstractions and on groundwater resources in general. We recommend using the groundwater maps on our [Map viewer](#) which should include: wells; drinking water source protection areas; the national map suite - aquifer, groundwater vulnerability, groundwater recharge and subsoil permeability maps. For areas underlain by limestone, please refer to the karst specific data layers (karst features, tracer test database; turlough water levels (gwlevel.ie). Background information is also provided in the Groundwater Body Descriptions. Please read all disclaimers carefully when using Geological Survey Ireland data.

The Groundwater Data Viewer indicates an aquifer classed as a 'Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zone' underlies the proposed development. The Groundwater Vulnerability map indicates the area covered is classed as 'Low' to 'Moderate' Vulnerability.

There is a groundwater drinking water abstraction within the residential development area for which there is a source protection area: Dunboyne Public Water Scheme (PWS).

Link to report at:

https://secure.dccae.gov.ie/GSI_DOWNLOAD/Groundwater/Reports/SPZ/MH_PWS_SPZ_Dunboyne_June_2004_GSI.pdf

Key to groundwater protection in general, and protection of specific drinking water supplies, is preventing ingress of runoff to the aquifer. With any infrastructure projects such as roads and housing, design of any drainage will need to be cognisant of this supply scheme and the interactions between surface water and groundwater as well as run-off. Appropriate design should be undertaken by qualified and competent persons to include mitigation measures as necessary, such as SUDs or other drainage mitigation measures. Note that there could be other groundwater abstractions in the locality for which Geological Survey Ireland has not undertaken studies, and a robust assessment should be undertaken by qualified and competent persons. Given the nearby drinking water source, the effects of any potential contamination / dewatering as a result of the development would need to be assessed.

[GWClimate](#) is a groundwater monitoring and modelling project that aims to investigate the impact of climate change on groundwater in Ireland. This is a follow on from a previous project (GWFlood) and the data may be useful in relation to Flood Risk Assessment (FRA) and management plans. Maps and data are available on the [Map viewer](#).

Geological Survey Ireland has completed Groundwater Protection Schemes (GWPSs) in partnership with Local Authorities, and there is now national coverage of GWPS mapping. A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater. **The Groundwater Protection Response overview and link to the main reports is here: <https://www.gsi.ie/en-ie/programmes-and-projects/groundwater/projects/protecting-drinking-water/what-is-drinking-water-protection/county-groundwater-protection-schemes/Pages/default.aspx>**

Geological Mapping

Geological Survey Ireland maintains online datasets of bedrock and subsoils geological mapping that are reliable and accessible. We would encourage you to use these data which can be found [here](#), in your future assessments.

Please note we have recently launched QGIS compatible bedrock (100K) and Quaternary geology map data, with instructional manuals and videos. This makes our data more accessible to general public and external stakeholders. QGIS compatible data can be found in our downloadable bedrock 100k .zip file on the [Data & Maps](#) section of our website.

Natural Resources (Minerals/Aggregates)

Geological Survey Ireland provides data, maps, interpretations and advice on matters related to minerals, their use and their development in our [Minerals section](#) of the website. The Active Quarries, Mineral Localities and the Aggregate Potential maps are available on our [Map Viewer](#).

We would recommend use of the Aggregate Potential Mapping viewer to identify areas of High to Very High source aggregate potential within the area. In keeping with a sustainable approach we would recommend use of our data and mapping viewers to identify and ensure that natural resources used in the proposed development are sustainably sourced from properly recognised and licensed facilities, and that consideration of future resource sterilization is considered.

Geochemistry of soils, surface waters and sediments

Geological Survey Ireland provides baseline geochemistry data for Ireland as part of the Tellus programme. Baseline geochemistry data can be used to assess the chemical status of soil and water at a regional scale and to support the assessment of existing or potential impacts of human activity on environmental chemical quality. Tellus is a national-scale



mapping programme which provides multi-element data for shallow soil, stream sediment and stream water in Ireland. At present, mapping consists of the border, western and midland regions. Data is available at <https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx>.

Guidelines

The following guidelines may also be of assistance:

- Institute of Geologists of Ireland, 2013. Guidelines for the Preparation of the Soils, Geology and Hydrogeology Chapters of Geology in Environmental Impact Statements.
- [EPA, 2022](#). Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR)

Other Comments

Should development go ahead, all other factors considered, Geological Survey Ireland would much appreciate a copy of reports detailing any site investigations carried out. The data would be added to Geological Survey Ireland's national database of site investigation boreholes, implemented to provide a better service to the civil engineering sector. Data can be sent to the Geological Mapping Unit, at <mailto:GeologicalMappingInfo@gsi.ie>, 01-678 2795.

I hope that these comments are of assistance, and if we can be of any further help, please do not hesitate to the Geological Survey Ireland Planning Team at GSIPlanning@gsi.ie.

Yours sincerely,

Geoheritage and Planning Programme

Enc: Table - Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes.

RECEIVED: 19/12/2025

Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes
following European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018
(S.I. No. 296 of 2018)

RECEIVED: 19/12/2025

Geological Survey Ireland Programme	Dataset	Relevant EIA Topic	Coverage	Description / Notes / Limitations	Link to Geological Survey Ireland map viewer
Geohazards	Landslide: National landslide database and landslide susceptibility map	Land & Soil/Climate/Landscape	National	Associated guidance documentation relating to the National Landslide Susceptibility Map is also available.	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=b686f1e490445981950e9b9c5625c
Geohazards	Groundwater Flooding (Historic)	Water	Regional	Provide information of historic flooding, both surface water and groundwater. [A lack of flooding presented in any specific location of the map only indicates that a flood has not been detected. It does not indicate that a flood cannot occur in that location at present or in the future]	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=848f83c85799436b8086529c735b1cc
Geohazards	Groundwater Flooding (Predictive)	Water	Regional	Provides information on the probability of future karst groundwater flooding (where available). [The maps do not, and are not intended to, constitute advice. Professional or specialist advice should be sought before taking, or refraining from, any action on the basis of the flood maps]	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=848f83c85799436b8086529c735b1cc
Geohazards	Radon Map	Land & Soils/Air	National		http://www.epa.ie/radiation/radonmap/
Geohazards	County Geological Sites as adopted by National Heritage Plan and listed in County Development Pla	Land & Soils/Landscape	Regional	All geological heritage sites identified by Geological Survey Ireland are categorised as CGS pending any further NHA designation by NPWS.	https://dceen.maps.arcgis.com/apps/MapSeries/index.html?appid=30af518e874c0ab2fde2aac3c228
Geological Mapping	Bedrock geology:	Land & Soils	National	1:100,000 scale and associated memoirs.	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=de701299d2748e9106e7ee1b6ab8d58scale=0
Geological Mapping	Bedrock geology:	Land & Soils	Regional	1:50,000 scale	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=de701299d2748e9106e7ee1b6ab8d58scale=0
Geological Mapping	Quaternary geology: Sediments	Land & Soils	National	1:50,000 scale	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=de701299d2748e9106e7ee1b6ab8d58scale=0
Geological Mapping	Quaternary geology: Geomorphology	Land & Soils	National	1:50,000 scale	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=de701299d2748e9106e7ee1b6ab8d58scale=0
Geological Mapping	Physiographic units:	Land & Soils	National	Broad-scale physical landscape units mapped at 1:100,000 scale in order to be represented as a cartographic digital map at 1:250,000 scale	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=afa76a420654877843ca1bc075c67b
Geological Mapping	GeoUrban: Spatial geological data for the greater Dublin and Cork areas	Land & Soils	Regional	includes 3D models	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=9768f4818b79416093b62212a850ce68scale=0
Geological Mapping	Geotechnical database	Land & Soils	National	Digitised geotechnical and Site Investigation Reports and boreholes which can be accessed through online downloads	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=a2718be1873d47e585a3d0415b4a724c
Goldmine	Historical data sets including geological memoirs and 6" to 1 mile geological mapping records	Land & Soils/Water	National	available online	https://secure.dcca.gov.ie/goldmine/index.html
Groundwater & Geothermal	Groundwater resources (aquifers)	Water	National	Data limited to 1:100,000 scale; sites should be investigated at local scale	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater recharge.	Water	National	Data limited to 1:40,000 scale; sites should be investigated at local scale; long term annual average recharge	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater vulnerability.	Water	National	Data limited to 1:40,000 scale; sites should be investigated at local scale	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Group scheme and public supply source protection areas.	Water	National	Not all PWS / GWS have SPZ / ZOC. Check with IW / COCO / NFGWS for private supplies.	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater Protection Schemes	Water	National	Data is limited to scale of 1:40,000. Data does not include all of the source protection areas	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Catchment and WFD management units.	Water	National		https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	karst specific data layers	water	National	For areas underlain by limestone, includes karst features, tracer test database; turlough water levels [w/level.ie]	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Wells and Springs	Water	National	Not comprehensive, there may be unrecorded wells and springs	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater body Descriptions	Water	National	Not exhaustive; only those in designated SACs; could be other GWDEs; for more information contact NPWS / EPA / site investigations	https://www.gsi.ie/en-ie/programmes-and-projects/groundwater-and-geothermal-unit/activities/understanding-ireland-groundwater/Pages/Groundwater-bodies.aspx
Groundwater & Geothermal	Geothermal Suitability maps	land & Soils/Water	National	Also, Roadmap for a Policy and Regulatory Framework for Geothermal Energy, November 2020	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=9ee46bee08de41278b90a991d60c0b9e
Marine & Coastal Unit	INFOMAR - Ireland's national marine mapping programme; providing key baseline data for Ireland's	Water	National		https://secure.dcca.gov.ie/GSI/INFOMAR_VIEWER/
Marine & Coastal Unit	CHERISH - Coastal change project (Climate, Heritage and Environments of Reefs, Islands, and Head)	Water	Regional		http://www.cherishproject.eu/en/
Marine & Coastal Unit	Coastal Vulnerability Index (CVI)	water /Land & Soils	Regional	Currently the project is being carried out on the east coast and will be rolled out nationally.	https://www.gsi.ie/en-ie/programmes-and-projects/marine-and-coastal-unit/projects/Pages/Coastal-Vulnerability-Index.aspx
Minerals	Aggregate potential	Land & Soils/Material Assets	National	Consideration of mineral resources and potential resources as a material asset which should be explicitly recognised within the environmental assessment process	https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=ee8c4c285a49413aa8f1344416d49956
Minerals	Active quarries	Land & Soils	National		https://dceen.maps.arcgis.com/apps/webappviewer/index.html?id=ee8c4c285a49413aa8f1344416d49956
Minerals	Historic mines	Land & Soils/Cultural Heritage	National	Inventory and Risk Classification 2009. Environmental Protection Agency, Economic Minerals Division and Geological Survey Ireland (DECC).	https://gis.epa.ie/EPA/Maps/default?eastings=78&northings=7&id=EPA-LEMA_Facilities_Extractive_Facilities
Tellus	Geochemical data: multi-element data for shallow soil, stream sediment and stream water	Land & Soils	Regional	A national mapping programme	https://dceen.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b9964270772754
Tellus	Airborne geophysical data including radiometrics, electromagnetics and magnetics	Land & Soils	Regional	A national mapping programme	https://dceen.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b9964270772754
Tellus	urban geochemistry mapping (Dublin SURGE project).	Land & Soils	Regional		https://dceen.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b9964270772754

- Notes:
- The maps and data listed above are available on the Geological Survey Ireland map viewer <https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx>
 - Please read all disclaimers carefully when using Geological Survey Ireland data
 - Geological Survey Ireland and Irish Concrete Federation published guidelines for the treatment of geological heritage in the extractive industry in 2008.

Saoirse Kavanagh,
McCutcheon Halley

Our Ref: 4156

24/08/2023

Re: Consultation on EIAR Preparation - Dunboyne LRD

Dear Saoirse

I wish to acknowledge receipt of your correspondence dated 16/08/2023, regarding the above which has been noted.

If you have any queries please contact the undersigned.

Yours sincerely



Geoff Hynes
Inspector,
COMAH, Chemical Production & Storage (CCPS)

Saoirse Kavanagh

From: Roisin O'Callaghan [REDACTED]
Sent: Tuesday 12 September 2023 14:04
To: Saoirse Kavanagh
Cc: Matthew Carroll
Subject: EIAR Preparation - Dunboyne LRD

Follow Up Flag: Follow up
Flag Status: Completed

NOTE: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Saoirse,

I'm just back from leave and not sure if any of my colleagues have responded to your request?

The following observations and comments are of necessity of a general nature:

The Tolka River supports Atlantic salmon, Lamprey and Brown trout populations in addition to other fish species and provides a particularly important nursery function for salmonid species throughout. Salmon were recorded in the Glasnevin area in 2011.

Because of the importance of the Tolka it is recommended that the "Guidelines on protection of fisheries during construction works in and adjacent to waters" (2016) <http://www.fisheriesireland.ie/fisheries-management-1/624-guidelines-on-protection-of-fisheries-during-construction-works-in-and-adjacent-to-waters> should be consulted when planning to undertake works near any of the relevant rivers and streams. The maintenance of habitat integrity (both in-stream and riparian) is essential in safeguarding the ecological value of this important urban natural resource. IFI have also published revised "Planning for watercourses in the urban environment" which can provide guidance on site specific measures to enhance, protect, rehabilitate or establish riparian and aquatic habitats. This should be referred to in the EIAR. It can be accessed on our website www.fisheriesireland.ie

IFI should be consulted directly in relation to any proposal to manipulate surface water channels in this area (including production of a works method statement) and should in-stream works be required; they must be carried out between 1st July to 30th September as specified in the IFI's guidelines document.

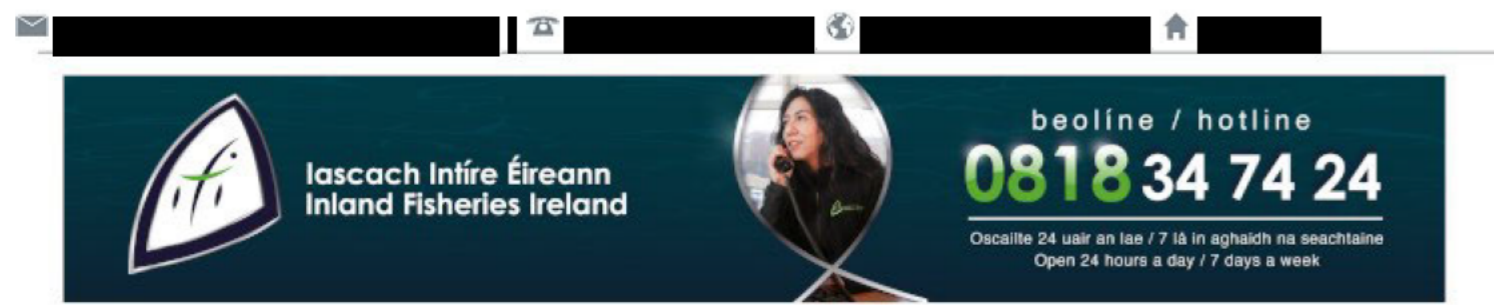
The new bridge crossing of the Tolka must be fish passable structures and preferably in the form of clear span designs to minimise in-stream impact. Consultation between the project team and IFI will be essential in order that a fisheries-sustainable solution is arrived at and incorporated in the final works programme.

Pollution of the adjacent freshwaters from poor on-site construction practices could have a significantly negative impact on the fauna and flora of this surface water system. A comprehensive and integrated approach for achieving river protection during construction and operation should be implemented through environmental construction management planning. All works will be completed in line with the Construction Environmental Management Plan (CEMP)

I trust you will take our concerns on board while compiling the EIAR.

Kind Regards,

Roisin



Help us protect Ireland's rivers, lakes and coastlines by reporting illegal fishing, water pollution or invasive species. Our confidential phone number is 0818 34 74 24, which is open 24 hours a day / 7 days a week.

To read our Privacy Policy and Email Disclaimer Notice, Please visit www.fisheriesireland.ie

Saoirse Kavanagh

From: INFO <Information@tii.ie>
Sent: Tuesday 26 September 2023 15:54
To: Saoirse Kavanagh
Subject: TII23-124110 - Consultation on EIA Preparation - Dunboyne LRD Meath.

Follow Up Flag: Follow up
Flag Status: Flagged

NOTE: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Ms. Kavanagh,

Thank you for your correspondence of 16 August 2023 regarding the above.

Transport Infrastructure Ireland (TII) wishes to advise that it is not in a position to engage directly with planning applicants with respect to proposed developments. TII will endeavour to consider and respond to planning applications referred to it given its status and duties as a statutory consultee under the Planning Acts. The approach to be adopted by TII in making such submissions or comments will seek to uphold official policy and guidelines as outlined in the Spatial Planning and National Roads Guidelines for Planning Authorities (DoECLG, 2012). Regard should also be had to other relevant guidance available at www.TII.ie.

The issuing of this correspondence is provided as best practice guidance only and does not prejudice TII's statutory right to make any observations, requests for further information, objections or appeals following the examination of any valid planning application referred.

With respect to EIA scoping issues, the recommendations indicated below provide only general guidance for the preparation of an EIA, which may affect the national roads network.

The developer/scheme promoter should have regard, inter alia, to the following:

- Consultations should be had with the relevant local authority/national roads design office regarding locations of existing and future national road schemes,
- TII would be specifically concerned with potential significant impacts the development would have on the national road network (and junctions with national roads) in the proximity of the proposed development,
- The developer should have regard to any environmental impact statement and all conditions and/or modifications imposed by An Bord Pleanála regarding road schemes in the area. The developer should have regard for any potential cumulative impacts,
- The developer, in conducting an environmental impact assessment, should have regard to TII publications (formerly DMRB and the Manual of Contract Documents for Road Works),
- The developer, in conducting an environmental impact assessment, should have regard to TII's Environmental Assessment and Construction Guidelines, including the Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes (National Roads Authority, 2006),
- The EIA should consider the Environmental Noise Regulations 2006 (SI 140 of 2006) and, in particular, how the development will affect future action plans by the relevant competent authority. The developer may

need to consider the incorporation of noise barriers to reduce noise impacts (see Guidelines for the Treatment of Noise and Vibration in National Road Schemes (1st Rev., National Roads Authority, 2004)),

- It would be important that, where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a traffic and transport assessment (TTA) be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/from the site concerning impacts on the national road network and junctions of lower category roads with national roads. TII's Traffic and Transport Assessment Guidelines (2014) should be referred to in relation to proposed development with potential impacts on the national road network. The scheme promoter is also advised to have regard to Section 2.2 of the NRA/TII TTA Guidelines which addresses requirements for sub-threshold TTA,
- The designers are asked to consult TII publications to determine whether a road safety audit is required,
- In the interests of maintaining the safety and standard of the national road network, the EIAR should identify the methods/techniques proposed for any works traversing/in proximity to the national road network,
- In relation to haul route identification, the applicant/developer should clearly identify the haul routes proposed and fully assess the network to be traversed. Separate structure approvals/permits and other licences may be required in connection with the proposed haul route, including where temporary modification to the road network may be required. Consultation with relevant PPP companies and MMaRC contractors may also be required. All structures on the haul route should be checked by the applicant/developer to confirm their capacity to accommodate any abnormal load proposed, including abnormal weight load,

Notwithstanding any of the above, the developer should be aware that this list is non-exhaustive, thus site and development-specific issues should be addressed by best practice.

I trust that the above comments are of use in your EIAR preparation.

Yours Sincerely,

Alban Mills
Senior Regulatory & Administration Executive



From: Saoirse Kavanagh [REDACTED]
Sent: Wednesday, August 16, 2023 9:53 AM
To: Landuse Planning <LandUsePlanning@tii.ie>
Subject: Consultation on EIAR Preparation - Dunboyne LRD

You don't often get email from skavanagh@mhplanning.ie. [Learn why this is important](#)

CAUTION: This email originated from outside of TII. Do not click links or open attachments unless you recognise the sender and are sure that the content is safe.

A Chara,

We are acting on behalf of Glenveagh Homes Ltd in the preparation of an Environmental Impact Assessment Report (EIAR) for proposed residential development at Dunboyne, Co. Meath. Please see the attached letter with details of the site location, project description and proposed works.

Research and baseline analysis for the EIAR has commenced and an impact assessment will be carried out following completion of the design of the proposed development.

If you have any comments in relation to the potential environmental impacts of the proposed development, I would be grateful if you would forward them to me as soon as is convenient.

Kind regards,
Saoirse

Saoirse Kavanagh

Executive Planning Consultant

McCutcheon Halley

CHARTERED PLANNING CONSULTANTS

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For the attention of Saoirse Kavanagh
6 Joyce House,
Barrack Square,
Ballincollig, Cork.
Eircode: P21 YX97

Date: 25th August 2023

By Email: [REDACTED]

Re: EIA Scoping Request – Proposed LRD consisting of the construction of c. 269 no. residential units, a creche, and all associated landscaping, amenity areas, and site development works at Dunboyne, Co. Meath.

Uisce Éireann
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Éire

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Dear Saoirse Kavanagh,

Uisce Éireann has received notification of your Environmental Impact Assessment (EIA) scoping request relating to Glenveagh Homes Ltd.'s forthcoming application to construct 269 no. residential units within Dunboyne, Co. Meath.

Please see attached, Uisce Éireann's scoping opinion in relation to Water Services. On receipt of the planning referral, Uisce Éireann will review the finalised Environmental Impact Assessment Report (EIAR) as part of the planning process.

Queries relating to the terms and the EIA scoping opinions below should be directed to planning@water.ie

PP. *Ali Robinson*

Yvonne Harris

Connections and Developer Services

Uisce Éireann's Response to EIA Scoping Requests

At present, Uisce Éireann does not have the capacity to advise on the scoping of individual projects. However, in general the following aspects of Water Services should be considered in the scope of an EIA where relevant;

- a) Where the development proposal has the potential to impact an Uisce Éireann Drinking Water Source(s), the applicant shall provide details of measures to be taken to ensure that there will be no negative impact to Uisce Éireann's Drinking Water Source(s) during the construction and operational phases of the development. Hydrological / hydrogeological pathways between the applicant's site and receiving waters should be identified as part of the report.
- b) Where the development proposes the backfilling of materials, the applicant is required to include a waste sampling strategy to ensure the material is inert.
- c) Mitigations should be proposed for any potential negative impacts on any water source(s) which may be in proximity and included in the environmental management plan and incident response.
- d) Any and all potential impacts on the nearby reservoir as public water supply water source(s) are assessed, including any impact on hydrogeology and any groundwater/ surface water interactions.
- e) Impacts of the development on the capacity of water services (*i.e. do existing water services have the capacity to cater for the new development*). This is confirmed by Uisce Éireann in the form of a Confirmation of Feasibility (COF). If a development requires a connection to either a public water supply or sewage collection system, the developer is advised to submit a Pre-Connection Enquiry (PCE) enquiry to Uisce Éireann to determine the feasibility of connection to the Uisce Éireann network.

All pre-connection enquiry forms are available from <https://www.water.ie/connections/connection-steps/>.
- f) The applicant shall identify any upgrading of water services infrastructure that would be required to accommodate the proposed development.
- g) In relation to a development that would discharge trade effluent – any upstream treatment or attenuation of discharges required prior to discharging to an Uisce Éireann collection network.

- h) In relation to the management of surface water; the potential impact of surface water discharges to combined sewer networks and potential measures to minimise and or / stop surface waters from combined sewers.
- i) Any physical impact on Uisce Éireann assets – reservoir, drinking water source, treatment works, pipes, pumping stations, discharges outfalls etc. including any relocation of assets.
- j) When considering a development proposal, the applicant is advised to determine the location of public water services assets, possible connection points from the applicant's site / lands to the public network and any drinking water abstraction catchments to ensure these are included and fully assessed in any pre-planning proposals. Details, where known, can be obtained by emailing an Ordnance Survey map identifying the proposed location of the applicant's intended development to datarequests@water.ie
- k) Other indicators or methodologies for identifying infrastructure located within the applicant's lands are the presence of registered wayleave agreements, visible manholes, vent stacks, valve chambers, marker posts etc. within the proposed site.
- l) Any potential impacts on the assimilative capacity of receiving waters in relation to Uisce Éireann discharge outfalls including changes in dispersion / circulation characterises. Hydrological / hydrogeological pathways between the applicant's site and receiving waters should be identified within the report.
- m) Any potential impact on the contributing catchment of water sources either in terms of water abstraction for the development (*and resultant potential impact on the capacity of the source*) or the potential of the development to influence / present a risk to the quality of the water abstracted by Uisce Éireann for public supply should be identified within the report.
- n) Where a development proposes to connect to an Uisce Éireann network and that network either abstracts water from or discharges wastewater to a "protected"/ sensitive area, consideration as to whether the integrity of the site / conservation objectives of the site would be compromised should be identified within the report.
- o) Mitigation measures in relation to any of the above ensuring a zero risk to any Uisce Éireann drinking water sources (Surface and Ground water).

This is not an exhaustive list.

Please note:

- Where connection(s) to the public network is required as part of the development proposal, applicants are advised to complete the Pre-Connection Enquiry process and have received a Confirmation of Feasibility letter from Uisce Éireann ahead of any planning application.
- Uisce Éireann will not accept new surface water discharges to combined sewer networks.

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CHAPTER FIVE

LAND, SOIL, & GEOLOGY

APPENDIX 5-1 NRA Criteria for Rating the Magnitude and Significance of Impacts at EIA Stage



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APPENDIX 5-1 NRA Criteria for Rating the Magnitude and Significance of Impacts at EIA Stage

APPENDIX 5.1

NRA CRITERIA FOR RATING THE MAGNITUDE AND SIGNIFICANCE OF IMPACTS AT EIA STAGE

Impact Ratings and Assessment Criteria (Land, Soils & Geology)

The NRA criteria for rating the magnitude and significance of impacts at EIA stage on the geological related attributes are also relevant in determining impact assessment and area presented in Table 2 below.

Table 1 Criteria for rating site importance of Geological Features (NRA)

Importance	Criteria	Typical Example
Very High	Attribute has a high quality, significance or value on a regional or national scale Degree or extent of soil contamination is significant on a national or regional scale Volume of peat and/or soft organic soil underlying route is significant on a national or regional scale.	Geological feature rare on a regional or national scale (NHA) Large existing quarry or pit Proven economically extractable mineral resource
High	Attribute has a high quality, significance or value on a local scale. Degree or extent of soil contamination is significant on a local scale. Volume of peat and/or soft organic soil underlying route is significant on a local scale.	Contaminated soil on site with previous heavy industrial usage Large recent landfill site for mixed wastes Geological feature of high value on a local scale (County Geological Site) Well drained and/or high fertility soils Moderately sized existing quarry or pit Marginally economic extractable mineral resource
Medium	Attribute has a medium quality, significance or value on a local scale Degree or extent of soil contamination is moderate on a local scale Volume of peat and/or soft organic soil underlying route is moderate on a local scale	Contaminated soil on site with previous light industrial usage Small recent landfill site for mixed wastes Moderately drained and/or moderate fertility soils Small existing quarry or pit Sub-economic extractable mineral resource

Low	Attribute has a low quality, significance or value on a local scale Degree or extent of soil contamination is minor on a local scale. Volume of peat and/or soft organic soil underlying route is small on a local scale	Large historical and/or recent site for construction and demolition wastes. Small historical and/or recent landfill site for construction and demolition wastes. Poorly drained and/or low fertility soils. Uneconomically extractable mineral resource.
-----	--	---

Table 2 Criteria for rating impact magnitude at EIS stage – Estimation of magnitude of impact on soil / geology attribute (NRA)

Magnitude of Impact	Criteria	Typical Examples
Large Adverse	Results in loss of attribute	Loss of high proportion of future quarry or pit reserves
Moderate Adverse	Results in impact on integrity of attribute or loss of part of attribute	Loss of moderate proportion of future quarry or pit reserves
Small Adverse	Results in minor impact on integrity of attribute or loss of small part of attribute	Loss of small proportion of future quarry or pit reserves
Negligible	Results in an impact on attribute but of insufficient magnitude to affect either use or integrity	No measurable changes in attributes
Minor Beneficial	Results in minor improvement of attribute quality	Minor enhancement of geological heritage feature
Moderate Beneficial	Results in moderate improvement of attribute quality	Moderate enhancement of geological heritage feature
Major Beneficial	Results in major improvement of attribute quality	Major enhancement of geological heritage feature

The NRA criteria for estimation of the importance of hydrogeological attributes at the site during the EIA stage are summarized below.

Table 3 Rating of Significant Environmental Impacts at EIS Stage (NRA)

Importance of Attribute	Magnitude of Importance

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	Negligible	Small Adverse	Moderate Adverse	Large Adverse
Extremely High	Imperceptible	Significant	Profound	Profound
Very High	Imperceptible	Significant/moderate	Profound/Significant	Profound
High	Imperceptible	Moderate/Slight	Significant/moderate	Profound/Significant
Medium	Imperceptible	Slight	Moderate	Significant
Low	Imperceptible	Imperceptible	Slight	Slight/Moderate

Source: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)

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CHAPTER SIX

HYDROLOGY & HYDROGEOLOGY

APPENDIX 6-1 NRA Criteria for Rating the Magnitude and Significance of Impacts at EIA Stage
APPENDIX 6-2 Water Framework Directive (WFD) Screening Assessment



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APPENDIX 6-1 NRA Criteria for Rating the Magnitude and
Significance of Impacts at EIA Stage

APPENDIX 6.1

NRA/TII Criteria for Rating the Magnitude and Significance of Hydrological and Hydrogeological Impacts at EIA Stage National Roads Authority.

(NRA/TII, 2009).

Table 1 Criteria for rating Site Attributes - Estimation of Importance of Hydrogeology Attributes (NRA)

Magnitude of Impact	Criteria	Typical Examples
Extremely High	Attribute has a high quality or value on an international scale	Groundwater supports river, wetland or surface water body ecosystem protected by EU legislation e.g. SAC or SPA status
Very High	Attribute has a high quality or value on a regional or national scale	Regionally Important Aquifer with multiple well fields Groundwater supports river, wetland or surface water body ecosystem protected by national legislation – NHA status Regionally important potable water source supplying >2500 homes Inner source protection area for
High	Attribute has a high quality or value on a local scale	Regionally Important Aquifer Groundwater provides large proportion of baseflow to local rivers Locally important potable water source supplying >1000 homes Outer source protection area for regionally important water source Inner source protection area for locally important water source
Medium	Attribute has a medium quality or value on a local scale	Locally Important Aquifer Potable water source supplying >50 homes Outer source protection area for locally important water source
Low	Attribute has a low quality or value on a local scale	Poor Bedrock Aquifer Potable water source supplying <50 homes

Source: Box 4.3: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)

Table 2 Criteria for Rating Impact Significance at EIS Stage – Estimation of Magnitude of Impact on Hydrogeology Attribute (NRA)

Magnitude of Impact	Criteria	Typical Examples
Large Adverse	Results in loss of attribute and /or quality and integrity of attribute	Removal of large proportion of aquifer. Changes to aquifer or unsaturated zone resulting in extensive change to existing water supply springs and wells, river baseflow or ecosystems. Potential high risk of pollution to groundwater from routine run- off. ¹ Calculated risk of serious pollution incident >2% annually. ²
Moderate Adverse	Results in impact on integrity of attribute or loss of part of attribute	Removal of moderate proportion of aquifer. Changes to aquifer or unsaturated zone resulting in moderate change to existing water supply springs and wells, river baseflow or ecosystems. Potential medium risk of pollution to groundwater from routine run-off. ¹ Calculated risk of serious pollution incident >1% annually. ²
Small Adverse	Results in minor impact on integrity of attribute or loss of small part of attribute	Removal of small proportion of aquifer. Changes to aquifer or unsaturated zone resulting in minor change to water supply springs and wells, river baseflow or ecosystems. Potential low risk of pollution to groundwater from routine run- off. ¹ Calculated risk of serious pollution incident >0.5% annually. ²
Negligible	Results in an impact on attribute but of insufficient magnitude to affect either use or integrity	Calculated risk of serious pollution incident <0.5% annually. ²

1 refer to Annex 1, Method C, Annex 1 of HA216/06

2 refer to Appendix B3 / Annex 1, Method D, Annex 1 of HA216/06

Source: Box 5.3: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)

Table 3 Rating of Significant Environmental Impacts at EIA Stage (NRA)

Importance of Attribute	Magnitude of Importance			
	Negligible	Small Adverse	Moderate Adverse	Large Adverse
Extremely High	Imperceptible	Significant	Profound	Profound
Very High	Imperceptible	Significant/moderate	Profound/Significant	Profound
High	Imperceptible	Moderate/Slight	Significant/moderate	Profound/Significant
Medium	Imperceptible	Slight	Moderate	Significant
Low	Imperceptible	Imperceptible	Slight	Slight/Moderate

Source: Box 5.4: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)

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APPENDIX 6-2 Water Framework Directive (WFD) Screening
Assessment

APPENDIX 6.2

NRA/TII Criteria for Rating the Magnitude and Significance of Impacts at EIA Stage
National Roads Authority.

(NRA/TII, 2009).

Table 1 Criteria for Rating Site Attributes – Estimation of Importance of Hydrological Attributes (NRA)

Importance	Criteria	Typical Examples
Extremely High	Attribute has a high quality or value on an international scale	River, wetland or surface water body ecosystem protected by EU legislation e.g. 'European sites' designated under the Habitats Regulations or 'Salmonid waters' designated pursuant to the European Communities (Quality of Salmonid Waters) Regulations, 1988.
Very High	Attribute has a high quality or value on a regional or national scale	River, wetland or surface water body ecosystem protected by national legislation – NHA status. Regionally important potable water source supplying >2500 homes. Quality Class A (Biotic Index Q4, Q5). Flood plain protecting more than 50 residential or commercial properties from flooding. Nationally important amenity site for wide range of leisure activities.
High	Attribute has a high quality or value on a local scale	Salmon fishery. Locally important potable water source supplying >1000 homes. Quality Class B (Biotic Index Q3-4). Flood plain protecting between 5 and 50 residential or commercial properties from flooding. Locally important amenity site for wide range of leisure activities.
Medium	Attribute has a medium quality or value on a local scale	Coarse fishery. Local potable water source supplying >50 homes. Quality Class C (Biotic Index Q3, Q2-3). Flood plain protecting between 1 and 5 residential or commercial properties from flooding.
Low	Attribute has a low quality or value on a local scale	Locally important amenity site for small range of leisure activities. Local potable water source supplying <50 homes Quality Class D (Biotic Index Q2, Q1). Flood plain protecting 1 residential or commercial property from flooding. Amenity site used by small numbers of local people.

Table 2 Criteria for Rating Site Attributes – Estimation of Magnitude of Impact on Hydrological Attribute (NRA)

Magnitude of Impact	Criteria	Typical Examples
Large Adverse	Results in loss of attribute	Loss or extensive change to a waterbody or water dependent habitat. Increase in predicted peak flood level >100mm. Extensive loss of fishery. Calculated risk of serious pollution incident >2% annually. Extensive reduction in amenity value.
Moderate Adverse	Results in impact on integrity of attribute or loss of part of attribute	Increase in predicted peak flood level >50mm. Partial loss of fishery. Calculated risk of serious pollution incident >1% annually. Partial reduction in amenity value.
Small Adverse	Results in minor impact on integrity of attribute or loss of small part of attribute	Increase in predicted peak flood level >10mm. Minor loss of fishery. Calculated risk of serious pollution incident >0.5% annually. Slight reduction in amenity value.
Negligible	Results in an impact on attribute but of insufficient magnitude to affect either use or integrity	Negligible change in predicted peak flood level. Calculated risk of serious pollution incident <0.5% annually.
Minor Beneficial	Results in minor improvement of attribute quality	Reduction in predicted peak flood level >10mm. Calculated reduction in pollution risk of 50% or more where existing risk is <1% annually.
Moderate Beneficial	Results in moderate improvement of attribute quality	Reduction in predicted peak flood level >50mm. Calculated reduction in pollution risk of 50% or more where existing risk is >1% annually.
Major Beneficial	Results in major improvement of attribute quality	Reduction in predicted peak flood level >100mm

Table 3 Rating of Significant Environmental Impacts at EIS Stage (NRA)

Importance of Attribute	Magnitude of Importance			
	Negligible	Small Adverse	Moderate Adverse	Large Adverse
Extremely High	Imperceptible	Significant	Profound	Profound
Very High	Imperceptible	Significant/moderate	Profound/Significant	Profound
High	Imperceptible	Moderate/Slight	Significant/moderate	Profound/Significant
Medium	Imperceptible	Slight	Moderate	Significant
Low	Imperceptible	Imperceptible	Slight	Slight/Moderate

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CHAPTER TEN

WASTE

APPENDIX 10-1 Resource Waste Management Plan
APPENDIX 10-2 Operational Waste Management Plan



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APPENDIX 10-1 Resource Waste Management Plan



DOCUMENT CONTROL SHEET

Document Control Sheet	
Our Reference	R247501.0488WMR01
Original Issue Date	12/12/2025
Client:	Glenveagh Homes Limited
Client Address:	Block B, Maynooth Business Park, Maynooth, Co. Kildare, W23 W5X7

Revision	Revision Date	Description

Details	Written by	Approved by
Signature		
Name	Chonaiil Bradley	Elaine Neary
Title	Associate	Associate
Date	12/12/2025	12/12/2025

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Resource & Waste Management Plan

Project Title: Dunboyne LRD Phase 3

CLIENT
Glenveagh
Homes
Limited

**DOCUMENT
REFERENCE**
R247501.0488WMR01

DATE
12/12/2025

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1. INTRODUCTION

AWN Consulting, a Trinity Consultants Company, has prepared this Construction and Demolition (C&D) Resource & Waste Management Plan (RWMP) on behalf of Glenveagh Homes Limited. The development will principally consist of Glenveagh Homes Limited. The proposed development consists of 356 no. residential units and a creche unit, and all associated ancillary development works at Bennetstown, Dunboyne, Co. Meath.

This plan provides information necessary to ensure that the management of C&D waste at the site is undertaken in accordance with the current legal and industry standards including the *Waste Management Act 1996* as amended and associated Regulations ¹, *Environmental Protection Agency Act 1992* as amended ², *Litter Pollution Act 1997* as amended ³, the National Waste Management Plan for a Circular Economy 2024 - 2030 (NWMPCE) (2024) ⁴. In particular, this plan aims to ensure maximum recycling, reuse and recovery of waste with diversion from landfill, wherever possible. It also provides appropriate measures in relation to the collection and transport of waste from the site to prevent issues associated with litter or more serious environmental pollution (e.g. contamination of soil and/or water).

This RWMP includes information on the legal and policy framework for C&D waste management in Ireland, estimates of the type and quantity of waste to be generated by the proposed development and prescribes measures for the management of different waste streams. The RWMP should be viewed as a live document and will be regularly revisited throughout the project's lifecycle so that opportunities to maximise waste reduction / efficiencies are exploited throughout, and that data is collected on an ongoing basis so that it is as accurate as possible.

2. OVERVIEW OF WASTE MANAGEMENT IN IRELAND

2.1 National level

The Irish Government issued a policy statement in September 1998, *Changing Our Ways*⁵, which identified objectives for the prevention, minimisation, reuse, recycling, recovery and disposal of waste in Ireland. The target for C&D waste in this report was to recycle at least 50% of C&D waste within a five year period (by 2003), with a progressive increase to at least 85% over fifteen years (i.e. 2018).

In response to the *Changing Our Ways* report, a task force (Task Force B4) representing the waste sector of the already established Forum for the Construction Industry, released a report entitled '*Recycling of Construction and Demolition Waste*'⁶ concerning the development and implementation of a voluntary construction industry programme to meet the Government's objectives for the recovery of C&D waste.

In September 2020, the Irish Government published a policy document outlining a new action plan for Ireland to cover the period of 2020-2025. This plan, '*A Waste Action Plan for a Circular Economy*'⁷ (WAPCE), replaces the previous national waste management plan, '*A Resource Opportunity*' (2012), and was prepared in response to the 'European Green Deal' which sets a roadmap for a transition to an altered economical model, where climate and environmental challenges are turned into opportunities.

The WAPCE sets the direction for waste planning and management in Ireland up to 2025. This reorientates policy from a focus on managing waste to a much greater focus on creating circular patterns of production and consumption. Other policy statements of a number of public bodies already acknowledge the circular economy as a national policy priority.

The policy document contains over 200 measures across various waste areas including circular economy, municipal waste, consumer protection and citizen engagement, plastics and packaging, construction and demolition, textiles, green public procurement and waste enforcement.

One of the first actions to be taken was the development of the *Whole of Government Circular Economy Strategy 2022-2023 'Living More, Using Less'* (2021) ⁸ to set a course for Ireland to transition across all sectors and at all levels of Government toward circularity and was issued in December 2021. It is anticipated that the Strategy will be updated in full every 18 months to 2 years.

The Circular Economy and Miscellaneous Provisions Act 2022 ⁹ was signed into law in July 2022. The Act underpins Ireland's shift from a "take-make-waste" linear model to a more sustainable pattern of production and consumption, that retains the value of resources in our economy for as long as possible and that will work to significantly reduce our greenhouse gas emissions. The Act defines Circular Economy for the first time in Irish law, incentivises the use of recycled and reusable alternatives to wasteful, single-use disposable packaging, introduces a mandatory segregation and incentivised charging regime for commercial waste, streamlines the national processes for End-of-Waste and By-Products decisions, tackling the delays which can be encountered by industry, and supporting the availability of recycled secondary raw materials in the Irish market, and tackles illegal fly-tipping and littering.

The Environmental Protection Agency (EPA) of Ireland issued '*Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects*' in November 2021 ¹⁰. These guidelines replace the previous 2006 guidelines issued by The National Construction and Demolition Waste Council (NCDWC) and the Department of the Environment, Heritage and Local Government (DoEHLG) in 2006 ¹¹. The guidelines provide a practical approach which is informed by best practice in the prevention and management of C&D wastes and resources from design to construction of a project, including consideration of the deconstruction of a project.

These guidelines have been followed in the preparation of this document and include the following elements:

- ▶ Predicted C&D wastes and procedures to prevent, minimise, recycle and reuse wastes;
- ▶ Design teams roles and approach;
- ▶ Relevant EU, national and local waste policy, legislation and guidelines;
- ▶ Waste disposal/recycling of C&D wastes at the site;
- ▶ Provision of training for Resource Waste Manager (RM) and site crew;
- ▶ Details of proposed record keeping system;
- ▶ Details of waste audit procedures and plan; and
- ▶ Details of consultation with relevant bodies i.e. waste recycling companies, Local Authority, etc.

Section 3 of the Guidelines identifies thresholds above which there is a requirement for the preparation of a bespoke RWMP for developments. The new guidance classifies developments on a two-tiered system. Developments which do not exceed any of the following thresholds may be classed as Tier 1 development, which require a simplified RWMP:

- ▶ New residential development of less than 10 dwellings.
- ▶ Retrofit of 20 dwellings or less.
- ▶ New commercial, industrial, infrastructural, institutional, educational, health and other developments with an aggregate floor area less than 1,250m².
- ▶ Retrofit of commercial, industrial, infrastructural, institutional, educational, health and other developments with an aggregate floor area less than 2,000m²; and
- ▶ Demolition projects generating in total less than 100m³ in volume of C&D waste.

A development which exceeds one or more of these thresholds is classed as Tier-2 development.

This development requires a RWMP as a Tier 2 development as it is above following criterion:

- ▶ New residential development of less than 10 dwellings.

The Department of Housing, Local Government and Heritage authored *Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities (2024)*¹². Suggest the below thresholds at which the need for supplemental information such as the RWMP should be considered.

- ▶ 30 or more residential units,
- ▶ 1,000 sq. meters of mixed-use development

Other guidelines followed in the preparation of this report include 'Construction and Demolition Waste Management – a handbook for Contractors and Site Managers'¹³, published by FÁS and the Construction Industry Federation in 2002 and the previous guidelines, 'Best Practice Guidelines for the Preparation of Waste Management Plans for Construction and Demolition Projects' (2006).

These guidance documents are considered to define best practice for C&D projects in Ireland and describe how C&D projects are to be undertaken such that environmental impacts and risks are minimised and maximum levels of waste recycling are achieved.

2.2 Regional Level

The proposed development is located in the Local Authority area of Meath County Council (MCC).

The Eastern Midlands Region (EMR) Waste Management Plan 2015 – 2021, which previously governed waste management policy in the MCC area, has been superseded as of March 2024 by the NWMPCE 2024 – 2030, the new national waste management plan for Ireland.

The NWMPCE does not dissolve the three regional waste areas. The NWMPCE sets the ambition of the plan to have a 0% total waste growth per person over the life of the Plan with an emphasis on non-household wastes including waste from commercial activities and the construction and demolition sector. This Plan seeks to influence sustainable consumption and prevent the generation of waste, improve the capture of materials to optimise circularity and enable compliance with policy and legislation.

The national plan sets out the following strategic targets for waste management in the country that are relevant to the development:

National Targets

- 1B. (Construction Materials) 12% Reduction in Construction & Demolition Waste Generated by 2030.
- 3B. (Reuse Facilities) Provide for reuse at 10 Civic Amenity Sites, minimum

Municipal landfill charges in Ireland are based on the weight of waste disposed. In the Leinster Region, charges are approximately €140 - €160 per tonne of waste which includes an €85 per tonne landfill levy introduced under the *Waste Management (Landfill Levy) (Amendment) Regulations 2015 (as amended)*¹⁴.

*The Circular Economy (Waste Recovery Levy) Regulations 2024*¹⁵ will also incur a levy of €10 per tonne for waste accepted for recovery. This will include backfilling at authorised recovery sites and at municipal waste landfills. *The Circular Economy (Waste Recovery Levy) Regulations 2024*¹⁶ will also incur a levy of €10 per tonne for waste accepted for recovery. This will include backfilling at authorised recovery sites and at municipal waste landfills.

The Meath County Development Plan 2021 – 2027¹⁷ sets out a number of policies and objectives for Meath in line with the objectives of the regional waste management plan. Waste policies and objectives with a particular relevance to this development are:

Policies:

- ▶ INF POL 61: To facilitate the implementation of National Waste legislation and National and Regional Waste Management Policy.
- ▶ INF POL 62: To encourage and support the provision of a separate collection of waste throughout the County in accordance with the requirements of the Waste Management (Household Food Waste) Regulations 2009, the Waste Framework Directive Regulations, 2011, the Waste Management (Commercial Food Waste) Regulations 2015 and other relevant legislation to meet the requirements of the Regional Waste Management Plan.
- ▶ INF POL 64: To encourage and support the expansion and improvement of a three bin system (mixed dry recyclables, organic waste and residual waste) in order to increase the quantity and quality of materials collected for recycling in conjunction with relevant stakeholders.
- ▶ INF POL 65: To adopt the provisions of the waste management hierarchy and implement policy in relation to the County's requirements under the current or any subsequent Waste Management Plan. All prospective developments in the County shall take account of the provisions of the regional waste management plan and adhere to the requirements of the Plan. Account shall also be taken of the proximity principle and the inter-regional movement of waste.

Objectives:

- ▶ INF OBJ 54: To facilitate the transition from a waste management economy to a green circular economy to enhance employment opportunities and increase the value recovery and recirculation of resources.
- ▶ INF OBJ 56: To support developments necessary to manage food waste in accordance with the requirements of the current Waste Management (Food Waste) Regulations and the regional Waste Management Plan.
- ▶ INF OBJ 68: To support the development of facilities to cater for commercial waste not provided for within the kerbside collection system such as the WEEE, C & D type waste and hazardous materials in accordance with the requirements of the Eastern Midlands Regional Waste Management Plan.

2.3 Legislative Requirements

The primary legislative instruments that govern waste management in Ireland and applicable to the development are:

- ▶ *Waste Management Act 1996 as amended;*
- ▶ *Environmental Protection Agency Act 1992 as amended;*
- ▶ *Litter Pollution Act 1997 as amended;*
- ▶ *Planning and Development Act 2000 as amended*¹⁸;
- ▶ *Circular Economy and Miscellaneous Provisions Act 2022.*

One of the guiding principles of European waste legislation, which has in turn been incorporated into the *Waste Management Act 1996 as amended* and subsequent Irish legislation, is the principle of "Duty of Care". This implies that the waste producer is responsible for waste from the time it is generated through until its legal recycling, recovery or disposal (including its method of disposal). As it is not practical in most cases for the waste producer to physically transfer all waste from where it is produced to the final destination, waste contractors will be employed to physically transport waste to the final destination. Following on from this is the concept of "Polluter Pays" whereby the waste producer is liable to be prosecuted for pollution incidents, which may arise from the incorrect management of waste produced, including the actions of any contractors engaged (e.g. for transportation and disposal/recovery/recycling of waste).

It is therefore imperative that the developer ensures that the waste contractors engaged by demolition and construction contractors are legally compliant with respect to waste transportation, recycling, recovery and disposal. This includes the requirement that a contractor handle, transport and recycle/recover/dispose of waste in a manner that ensures that no adverse environmental impacts occur as a result of any of these activities.

A collection permit to transport waste must be held by each waste contractor which is issued by the National Waste Collection Permit Office (NWCPO). Waste receiving facilities must also be appropriately permitted or licensed. Operators of such facilities cannot receive any waste, unless in possession of a Certificate of Registration (COR) or waste permit granted by the relevant Local Authority under the *Waste Management (Facility Permit & Registration) Regulations 2007 as amended* or a Waste Licence granted by the EPA. The COR / permit / licence held will specify the type and quantity of waste able to be received, stored, sorted, recycled, recovered and/or disposed of at the specified site.

3. DESIGN APPROACH

The client and the design team have integrated the 'Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects' guidelines into the design workshops, to help review processes, identify and evaluate resource reduction measures and investigate the impact on cost, time, quality, buildability, second life and management post demolition and construction. Further details on these design principals can be found within the aforementioned guidance document.

The design team have undertaken the design process in line with the international best practice principles to firstly prevent wastes, reuse where possible and thereafter sustainably reduce and recover materials. The below sections have been the focal point of the design process and material selections and will continued to be analysed and investigated throughout the design process and when selecting material.

As noted in the EPA guidelines, the approaches presented are based on international principles of optimizing resources and reducing waste on construction projects through:

- ▶ *Prevention;*
- ▶ *Reuse;*
- ▶ *Recycling;*
- ▶ *Green Procurement Principles;*
- ▶ *Off-Site Construction;*
- ▶ *Materials Optimisation; and*
- ▶ *Flexibility and Deconstruction.*

3.1 Designing For Prevention, Reuse and Recycling

Undertaken at the outset and during project feasibility and evaluation the Client and Design Team considered:

- ▶ Establishing the potential for any reusable site assets (buildings, structures, equipment, materials, soils, etc.);
- ▶ The potential for refurbishment and refit of existing structures or buildings rather than demolition and new build;
- ▶ Assessing any existing buildings on the site that can be refurbished either in part or wholly to meet the Client requirements; and
- ▶ Enabling the optimum recovery of assets on site.

3.2 Designing for Green Procurement

Waste prevention and minimisation pre-procurement have been discussed and will be further discussed in this section. The Design Team will discuss proposed design solutions, encourage innovation in tenders and incentivise competitions to recognise sustainable approaches. They will also discuss options for packaging reduction with the main Contractor and subcontractors/suppliers using measures such as 'Just-in-Time' delivery and use ordering procedures that avoid excessive waste. The Green procurement extends from the planning stage into the detailed design and tender stage and will be an ongoing part of the long-term design and selection process for this development.

3.3 Designing for Off-Site Construction

Use of off-site manufacturing has been shown to reduce residual wastes by up to 90% (volumetric building versus traditional). The decision to use offsite construction is typically cost led but there are significant benefits for resource management. Some further considerations for procurement which are being investigated as part of the planning stage design process are listed as follows:

- ▶ Modular buildings as these can displace the use of concrete and the resource losses associated with concrete blocks such as broken blocks, mortars, etc.;
- Modular buildings are typically pre-fitted with fixed plasterboard and installed insulation, eliminating these residual streams from site.
- ▶ Use of pre-cast structural concrete panels which can reduce the residual volumes of concrete blocks, mortars, plasters, etc.;
- ▶ The use of prefabricated composite panels for walls and roofing to reduce residual volumes of insulation and plasterboards;
- ▶ Using pre-cast hollow-core flooring instead of in-situ ready mix flooring or timber flooring to reduce the residual volumes of concrete/formwork and wood/packaging, respectively; and
- ▶ Designing for the preferential use of offsite modular units.

3.4 Designing for Materials Optimisation During Construction

To ensure manufacturers and construction companies adopt lean production models, including maximising the reuse of materials onsite as outlined in section 3.1, structures should be designed with the intent of designing out waste. This helps to reduce the environmental impacts associated with transportation of materials and from waste management activities. This includes investigating the use of standardised sizes for certain materials to help reduce the amount of offcuts produced on site, focusing on promotion and development of off-site manufacture.

3.5 Designing for Flexibility and Deconstruction

Design flexibility has and will be investigated throughout the design process to ensure that where possible products (including buildings) only contain materials that can be recycled and are designed to be easily disassembled. Material efficiency is being considered for the duration and end of life of a building project to produce; flexible, adaptable spaces that enable a resource-efficient, low-waste future change of use; durability of materials and how they can be recovered effectively when maintenance and refurbishment are undertaken and during disassembly/deconstruction.

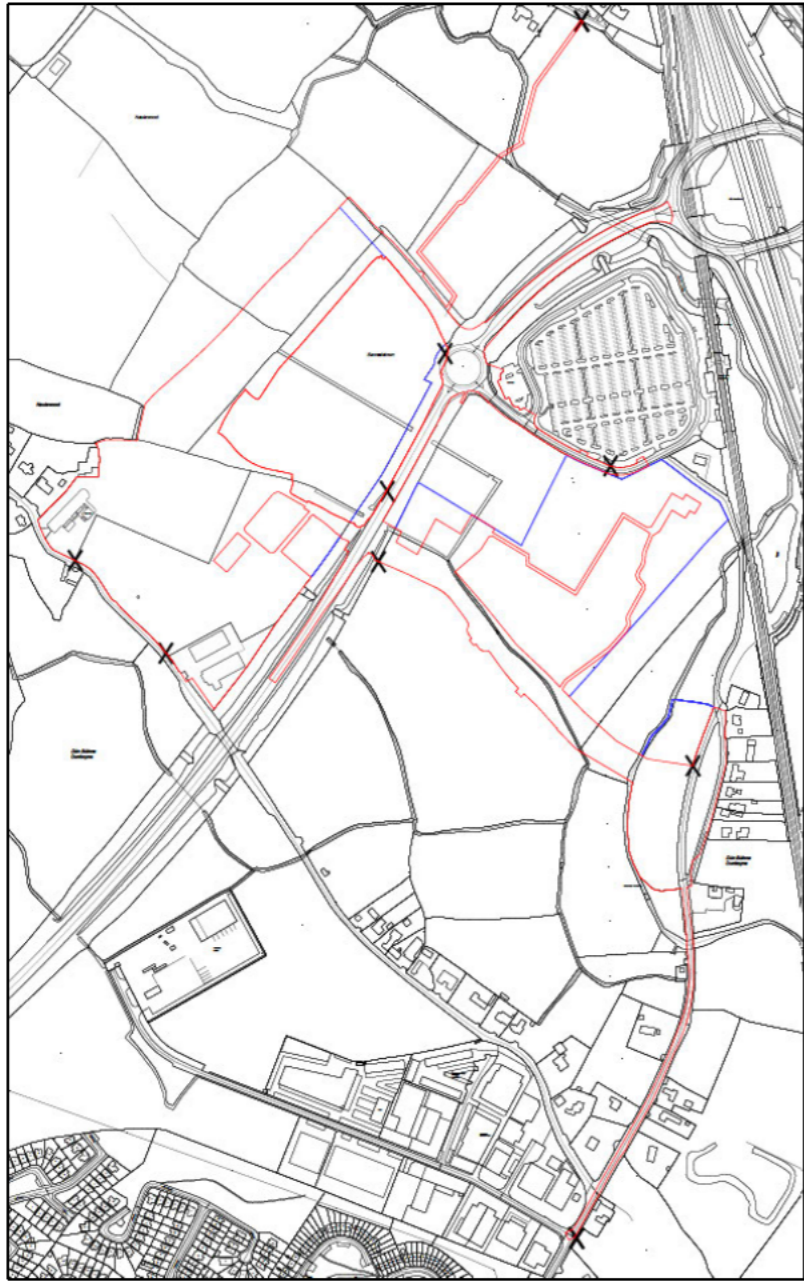
4. DESCRIPTION OF THE DEVELOPMENT

4.1 Location, Size and Scale of the Development

The proposed development site is located at Bennets'own, Dunboyne, Co. Meath. The site location and red line boundary are illustrated in Figure 4.1.

The proposed development will see the third residential phase of the Dunboyne North Masterplan. Permission is sought for the following development: The demolition of GAA facilities, shed and agricultural buildings on site, the construction of 252 no. houses and 104 no. apartments / duplex units, 1 no. childcare facility, the provision of landscaping and amenity area and all associated infrastructure and services including a vehicular and pedestrian / cycle access point, roads, parking, lighting and drainage. The proposed site layout is illustrated in Figure 4.1.

A full description of the proposed development is outlined in Chapter 2 'Site Location & Project Description' of this EIAR.



**Figure 4.1 Site Location Map and Red Line Boundary (Source: John Fleming Architects
Drawing No: DBN3-OS-00-DR-JFA-AR-P1001**

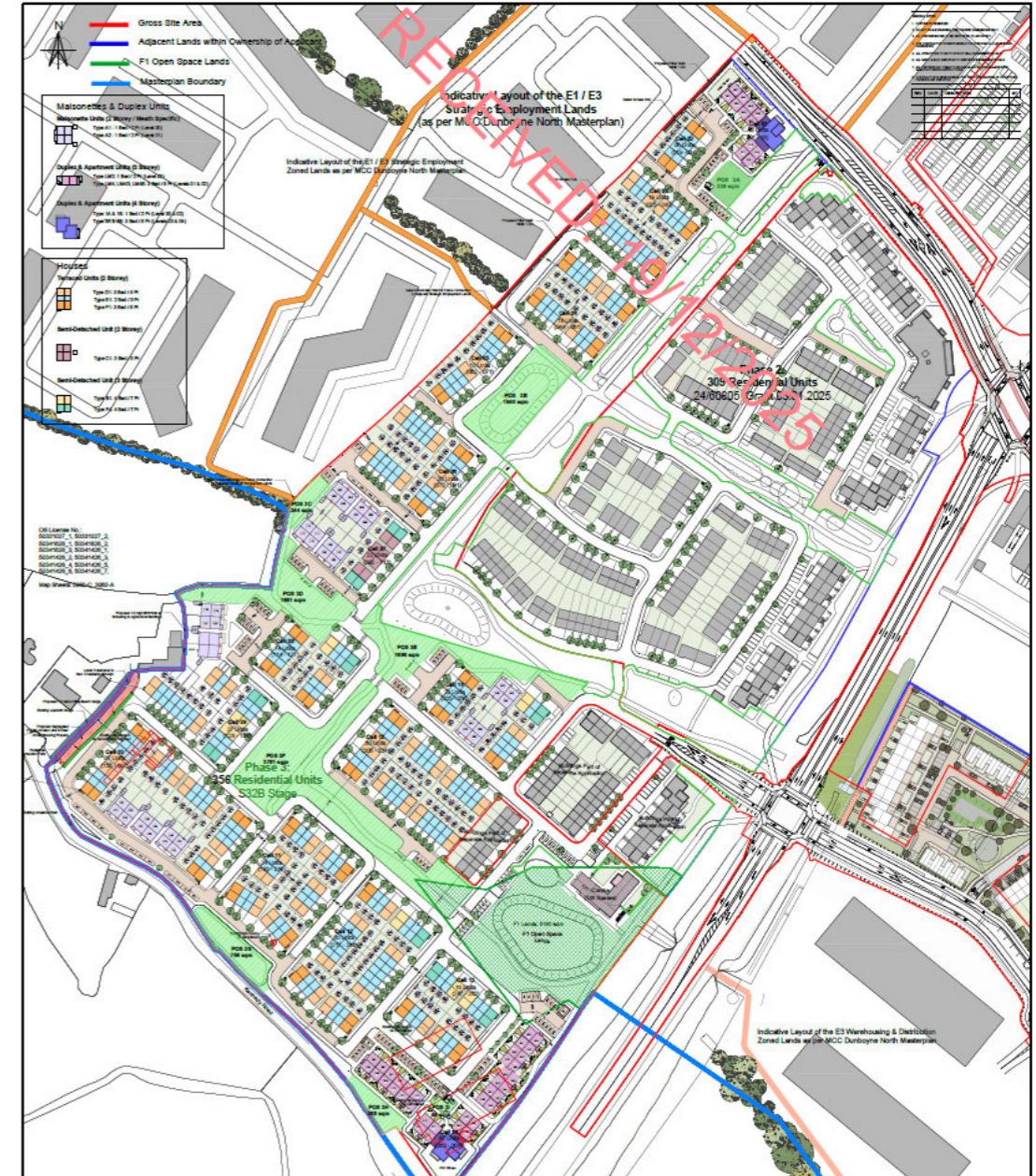


Figure 4.2 Proposed Site Layout Plan (Source: John Fleming Architects)

4.2 Details of the Non-Hazardous Wastes to be Produced

There will be waste materials generated from the demolition of GAA facilities, shed and agricultural buildings and hardstanding areas on site, as well as from the further excavation of the building foundations. The volume of waste generated from demolition will be more difficult to segregate than waste generated from the construction phase, as many of the building materials will be bonded together or integrated i.e. plasterboard on timber ceiling joists, steel embedded in concrete, etc.

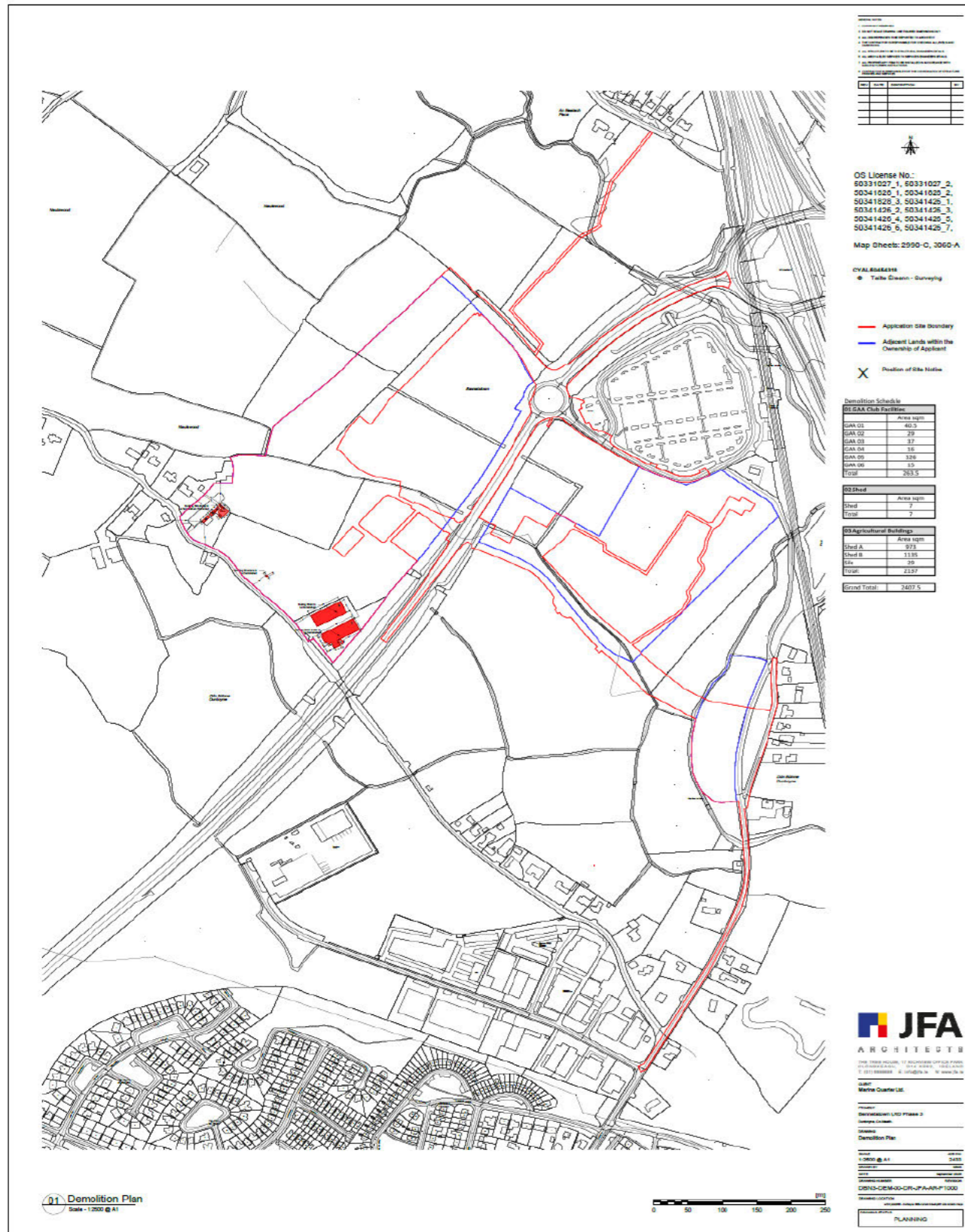


Figure 4.3 Proposed Site Demolition Layout (Source: John Fleming Architects)

There will be soil, clay and gravel excavated to facilitate construction of new foundations, underground services, and the installation of the proposed basements. The project engineers (Paul McGrail Consulting

Engineers) have estimated that c. 2,524m³ of material will need to be excavated to do so. It is currently envisaged that all of the material will be able to be retained and reused onsite for landscaping and fill.

During the construction phase there may be a surplus of building materials, such as timber off-cuts, broken concrete blocks, cladding, plastics, metals and tiles generated. There may also be excess concrete during construction which will need to be disposed of. Plastic and cardboard waste from packaging and supply of materials will also be generated. The contractor will be required to ensure that oversupply of materials is kept to a minimum and opportunities for reuse of suitable materials is maximised.

Waste will also be generated from construction workers e.g. organic / food waste, dry mixed recyclables (waste paper, newspaper, plastic bottles, packaging, aluminium cans, tins and Tetra Pak cartons), mixed non-recyclables and potentially sewage sludge from temporary welfare facilities provided on site during the construction phase. Waste printer / toner cartridges, waste electrical and electronic equipment (WEEE) and waste batteries may also be generated infrequently from site offices.

4.3 Potential Hazardous Wastes Arising

4.3.1 Contaminated Soil

A site investigation was undertaken by Ground Investigation Ltd, in May 2024 at the site of the proposed development. This included a site visit to observe existing conditions, 5 no. soakaway tests to determine soil infiltration, 3 no. percussion boreholes, installation of 3 no. groundwater monitoring wells and geotechnical and environmental laboratory testing. The geotechnical testing carried out confirmed the descriptions of the logs with the primary constituent of the cohesive deposits found to be a clay of low to intermediate plasticity. The pH and Sulphate testing of the soil was undertaken indicate that the pH results are near neutral and the water soluble sulphate result is low when compared to the guideline values from BRE Special Digest 1:2005.

If any potentially contaminated material is encountered, it 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 & Determining if Waste is Hazardous or Non-Hazardous'¹⁸ 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/EC¹⁹, which establishes the criteria for the acceptance of waste at landfills.

In the event that Asbestos Containing Materials (ACMs) are found within the excavated material, the removal will only be carried out by a suitably permitted waste contractor, in accordance with the Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010 and the Best Practice Guidance for Handling Asbestos (2023)²⁰. 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 contractor will notify MCC 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).

4.3.2 Fuel/Oils

Fuels and oils are classed as hazardous materials; any on-site storage of fuel / oil, and all storage tanks and all draw-off points will be bunded and located in a dedicated, secure area of the site. Provided that these requirements are adhered to and the site crew are trained in the appropriate refuelling techniques, it is not expected that there will be any fuel / oil waste generated at the site.

4.3.3 Invasive Plant Species

A site invasive species surveys were undertaken by Enviroguide at the proposed site on the 24th of July 2024 and the 14th of February 2025. There were no species listed on the Third Schedule of the Birds and Habitats Regulations recorded on the site during the site survey. If any third schedule invasive species detected during the construction phase of the development, then an invasive species management plan will be produced and submitted to MCC.

Sycamore, a medium impact invasive species, was located along hedgerows and treelines on site. The sycamore tree species is not considered to pose any risk of impacts at the site of the proposed development and will be removed where required as per the Arborist's Tree Impact Plan.

4.3.4 Asbestos

An asbestos demolition survey will be undertaken prior to commencement of demolition on site.

Removal of asbestos or ACMs will be carried out by a suitably qualified contractor and ACMs will only be removed from site by a suitably permitted / licenced waste contractor, in accordance with the *Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010 and the Best Practice Guidance for Handling Asbestos (2023)*²¹. All material will be taken to a suitably licensed or permitted facility.

4.3.5 Other Known Hazardous Substances

Paints, glues, adhesives and other known hazardous substances will be stored in designated areas. They will generally be present in small volumes only and associated waste volumes generated will be kept to a minimum. Wastes will be stored in appropriate receptacles pending collection by an authorised waste contractor.

In addition, WEEE (containing hazardous components), printer toner / cartridges, batteries (Lead, Ni-Cd or Mercury) and / or fluorescent tubes and other mercury containing waste may be generated from during C&D activities or temporary site offices. These wastes, if generated, will be stored in appropriate receptacles in designated areas of the site pending collection by an authorised waste contractor.

5. ROLES AND RESPONSIBILITIES

The *Best Practice Guidelines on the Preparation of Resource Waste Management Plans for Construction and Demolition Projects* promotes that a suitably qualified Resource Manager (RM) with expertise in waste and resource management to implement the RWMP should be appointed. The RM may be performed by number of different individuals over the life-cycle of the Project, however it is intended to be a reliable person chosen from within the Planning/Design/Contracting Team, who is technically competent and appropriately trained, who takes the responsibility to ensure that the objectives and measures within the Project RWMP are complied with. The RM is assigned the requisite authority to meet the objective and obligations of the RWMP. The role will include the important activities of conducting waste checks/audits and adopting construction and demolition methodology that is designed to facilitate maximum reuse and/or recycling of waste.

5.1 Role of the Client

The Client are the body establishing the aims and the performance targets for the project.

- ▶ The Client has commissioned the preparation and submission of this RWMP as part of the design and planning submission;
- ▶ The Client is to commission the preparation and submission of an updated RWMP as part of the construction tendering process;
- ▶ The Client will ensure that the RWMP is agreed on and submitted to the local authority and their agreement obtained prior to commencement of works on site;
- ▶ The Client will request the end-of-project RWMP from the Contractor.

5.2 Role of the Client Advisory Team

The Client Advisory Team or Design Team is formed of architects, consultants, quantity surveyors and engineers and is responsible for:

- ▶ Drafting and maintaining the RWMP through the design, planning and procurement phases of the project;
- ▶ Appointing a RM to track and document the design process, inform the Design Team and prepare the RWMP.
- ▶ Including details and estimated quantities of all projected waste streams with the support of environmental consultants/scientists. This will also include data on waste types (e.g. waste characterisation data, contaminated land assessments, site investigation information) and prevention mechanisms (such as by-products) to illustrate the positive circular economy principles applied by the Design Team;
- ▶ Managing and valuing the demolition work with the support of quantity surveyors;
- ▶ Handing over of the RWMP to the selected Contractor upon commencement of construction of the development, in a similar fashion to how the safety file is handed over to the Contractor;
- ▶ Working with the Contractor as required to meet the performance targets for the project.

5.3 Future Role of the Contractor

The future demolition and construction Contractors have not yet been decided upon for this RWMP. However, once select they will have major roles to fulfil. They will be responsible for:

- ▶ Preparing, implementing and reviewing the (including the Pre-Demolition) RWMP throughout the demolition and construction phases (including the management of all suppliers and sub-contractors) as per the requirements of the EPA guidelines;

- ▶ Identifying a designated and suitably qualified RM who will be responsible for implementing the RWMP;
- ▶ Identifying all hauliers to be engaged to transport each of the resources / wastes off-site;
- ▶ Implementing waste management policies whereby waste materials generated on site are to be segregated as far as practicable;
- ▶ Renting and operating a mobile-crusher to crush concrete for temporary reuse onsite during construction and reduce the amount of HGV loads required to remove material from site;
- ▶ Applying for the appropriate waste permit to crush concrete onsite;
- ▶ Identifying all destinations for resources taken off-site. As above, any resource that is legally classified as a 'waste' must only be transported to an authorised waste facility;
- ▶ End-of-waste and by-product notifications addressed with the EPA where required;
- ▶ Clarification of any other statutory waste management obligations, which could include on-site processing;
- ▶ Full records of all resources (both wastes and other resources) will be maintained for the duration of the project; and
- ▶ Preparing a RWMP Implementation Review Report at project handover.

6. KEY MATERIALS & QUANTITIES

6.1 Project Resource Targets

Project specific resource and waste management targets for the site have not yet been set and this information will be updated for these targets once these targets have been confirmed by the client. However, it is expected for projects of this nature that a minimum of 70% of waste is fully re-used, recycled or recovered. Target setting will inform the setting of project-specific benchmarks to track target progress. Typical Key Performance Indicators (KPIs) that will be used to set targets include (as per guidelines):

- ▶ Weight (tonnes) or Volume (m3) of waste generated per construction value;
- ▶ Weight (tonnes) or Volume (m3) of waste generated per construction floor area (m2);
- ▶ Fraction of resource reused on site;
- ▶ Fraction of resource notified as by-product;
- ▶ Fraction of waste segregated at source before being sent off-site for recycling/recovery; and
- ▶ Fraction of waste recovered, fraction of waste recycled, or fraction of waste disposed.

6.2 Main Construction and Demolition Waste Categories

The main non-hazardous and hazardous waste streams that could be generated by the construction activities at a typical site are shown in **Error! Reference source not found..** The List of Waste (LoW) code (2018) for each waste stream is also shown.

The main non-hazardous and hazardous waste streams that could be generated by the construction activities at a typical site are shown in **Error! Reference source not found..** The List of Waste (LoW) code (2018) for each waste stream is also shown.

Table 6.1 Typical waste types generated and LoW codes (individual waste types may contain hazardous substances)

Waste Material	LoW Code
Concrete, bricks, tiles, ceramics	17 01 01-03 & 07
Wood, glass and plastic	17 02 01-03
Treated wood, glass, plastic, containing hazardous substances	17-02-04*
Bituminous mixtures, coal tar and tarred products	17 03 01*, 02 & 03*
Metals (including their alloys) and cable	17 04 01-11
Soil and stones	17 05 03* & 04
Gypsum-based construction material	17 08 01* & 02
Paper and cardboard	20 01 01
Mixed C&D waste	17 09 04
Green waste	20 02 01
Electrical and electronic components	20 01 35 & 36
Batteries and accumulators	20 01 33 & 34
Liquid fuels	13 07 01-10
Chemicals (solvents, pesticides, paints, adhesives, detergents etc.)	20 01 13, 19, 27-30
Insulation materials	17 06 04
Organic (food) waste	20 01 08
Mixed Municipal Waste	20 03 01

* Individual waste type may contain hazardous substances

6.3 Demolition Waste Generation

The demolition stage will involve the demolition of GAA facilities, shed and agricultural buildings on site on site. The demolition areas are identified in the planning drawings provided with this application. The anticipated demolition waste and rates of reuse, recycling / recovery and disposal are shown in 2, below.

Table 6.2 Estimated off-site reuse, recycle and disposal rates for demolition waste

Waste Type	Tonnes	Reuse		Recycle Recovery /		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Concrete, Bricks, Tiles, Ceramics	184.2	30	55.3	65	119.7	5	9.2
Asphalts	3.6	0	0.0	75	2.7	25	0.9
Metals	173.3	5	8.7	80	138.7	15	26.0
Total	361.1		63.9		261.1		36.1

6.4 Construction Waste Generation

Table 6.3 shows the breakdown of C&D waste types produced on a typical site based on data from the EPA *National Waste Reports*²² and the joint EPA & GMIT study²³.

Table 6.3 Waste materials generated on a typical Irish construction site

Waste Types	%
Mixed C&D	33
Timber	28
Plasterboard	10
Metals	8
Concrete	6
Other	15
Total	100

Table 6.3, below, shows the estimated construction waste generation for the proposed Project based on the gross floor area of construction and other information available to date, along with indicative targets for management of the waste streams. The estimated amounts for the main waste types (with the exception of soils and stones) are based on an average large-scale development waste generation rate per m², using the waste breakdown rates shown in Table 6.3. These have been calculated from the schedule of development areas provided by the architect.

Table 6.4 Predicted on and off-site reuse, recycle and disposal rates for construction waste

Waste Type	Tonnes	Reuse		Recycle Recovery /		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Mixed C&D	602.6	10	60.3	80	482.1	10	60.3
Timber	511.3	40	204.5	55	281.2	5	25.6
Plasterboard	182.6	30	54.8	60	109.6	10	18.3
Metals	146.1	5	7.3	90	131.5	5	7.3
Concrete	109.6	30	32.9	65	71.2	5	5.5
Other	273.9	20	54.8	60	164.3	20	54.8
Total	1826.0		414.5		1239.8		171.6

In addition to the waste streams in Table 6.4 there will be c. 2,524m³ of soil, clay and gravel excavated to facilitate construction of new foundations and the installation of underground services. Any suitable excavated material will be temporarily stockpiled for reuse onsite for landscaping purposes or as fill, where possible.

It should be noted that until final materials and detailed construction methodologies have been confirmed, it is difficult to predict with a high level of accuracy the construction waste that will be generated from the proposed works as the exact materials and quantities may be subject to some degree of change and variation during the construction process.

6.5 Proposed Resource and Waste Management Options

Waste materials generated will be segregated on-site, 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, where feasible. All waste receptacles leaving the 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 Dublin region that provide this service.

All waste arisings will be handled by an approved waste contractor holding a current waste collection permit. All waste arisings requiring disposal off-site will be reused, recycled, recovered or disposed of at a facility holding the appropriate registration, permit or licence, as required.

National End-of-Waste Decision EoW-N001/2023 (Regulation 28) published by the EPA in September 2023, establishes criteria determining when recycled aggregate resulting from a recovery operation ceases to be waste. Material from this proposed development will be investigated to see if it can cease to be a waste under the requirements of the National End of Waste Criteria for Aggregates.

During construction, some of the sub-contractors on site will generate waste in relatively low quantities. The transportation of non-hazardous waste by persons who are not directly involved with the waste business, at weights less than or equal to 2 tonnes, and in vehicles not designed for the carriage of waste, are exempt from the requirement to have a waste collection permit (per Article 30 (1) (b) of the Waste Collection Permit Regulations 2007, as amended). Any sub-contractors engaged that do not generate more than 2 tonnes of waste at any one time can transport this waste off-site in their work vehicles (which are not designed for the carriage of waste). However, they are required to ensure that the receiving facility has the appropriate COR / permit / licence.

Written records will be maintained by the contractor(s), detailing the waste arising throughout the C&D phases, the classification of each waste type, waste collection permits for all waste contractors who collect waste from the site and COR / permit / licence for the receiving waste facility for all waste removed off-site for appropriate reuse, recycling, recovery and / or disposal

Dedicated bunded storage containers will be provided for hazardous wastes which may arise, such as batteries, paints, oils, chemicals, if required.

The anticipated management of the main waste streams is outlined as follows:

Soil, Clay and Gravel

The waste hierarchy states that the preferred option for waste management is prevention and minimisation of waste, followed by preparing for reuse and recycling / recovery, energy recovery (i.e. incineration) and, least favoured of all, disposal. The excavations are required to facilitate construction works so the preferred option (prevention and minimisation) cannot be accommodated for the excavation phase.

It is anticipated that all of the topsoil and subsoil will be reused on site. In the event that excess excavated material requires removal off-site it could be reused as a by-product (and not as a waste). If this is done, it will be done in accordance with Regulation 27 of the European Communities (Waste Directive) Regulations 2011, as amended, which requires that certain conditions are met and that by-product notifications are made to the EPA via their online notification form. Excavated material should not be removed from site until approval from the EPA has been received. The potential to reuse material as a by-product will be confirmed during the course of the excavation works, with the objective of eliminating any unnecessary disposal of material.

The next option (beneficial reuse) may be appropriate for the excavated material, pending environmental testing to classify the material as hazardous or non-hazardous in accordance with the EPA *Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous* publication. Clean inert material may be used as fill material in other construction projects or engineering fill for waste licensed sites. Beneficial reuse of surplus excavation material as engineering fill may be subject to further testing to determine if materials meet the specific engineering standards for their proposed end use.

Any nearby sites requiring clean fill/capping material will be contacted to investigate reuse opportunities for clean and inert material. If any of the material is to be reused on another site as a by-product (and not as a waste), this will be done in accordance with Regulation 27. Similarly, if any soils/stones are imported onto the site from another construction site as a by-product, this will also be done in accordance with Regulation 27. Regulation 27 will be investigated to see if the material can be imported onto this site for beneficial reuse instead of using virgin materials.

If the material is deemed to be a waste, then removal and reuse / recovery / disposal of the material will be carried out in accordance with the Waste Framework Directive (Directive 2008/98/EC), the *Waste Management Act 1996* as amended, the *Waste Management (Collection Permit) Regulations 2007* as amended and the *Waste Management (Facility Permit & Registration) Regulations 2007* as amended. Once all available beneficial reuse options have been exhausted, the options of recycling and recovery at waste permitted and licensed sites will be considered.

In the event that contaminated material is encountered and subsequently classified as hazardous, this material will be stored separately to any non-hazardous material. It will require off-site treatment at a suitable facility or disposal abroad via Transfrontier Shipment of Wastes (TFS).

Bedrock

While it is not envisaged that bedrock will be encountered, if bedrock is encountered, it is anticipated that it will not be crushed on site. Any excavated rock is expected to be removed off-site for appropriate reuse, recovery and / or disposal. If bedrock is to be crushed on-site, the appropriate mobile waste facility permit will be obtained from MCC, where required.

Silt & Sludge

During the construction phase, silt and petrochemical interception will be carried out on run-off and pumped water from site works, where required. Sludge and silt will then be collected by a suitably licensed contractor and removed off-site.

Concrete Blocks, Bricks, Tiles & Ceramics

The majority of concrete blocks, bricks, tiles and ceramics generated as part of the construction works are expected to be clean, inert material and will be recycled, where possible. If concrete is to be crushed on-site, the appropriate mobile waste facility permit will be obtained from MCC.

Hard Plastic

As hard plastic is a highly recyclable material, much of the plastic generated will be primarily from material off-cuts. All recyclable plastic will be segregated and recycled, where possible.

Timber

Timber that is uncontaminated, i.e. free from paints, preservatives, glues, etc., will be disposed of in a separate skip and recycled off-site.

Metal

Metals will be segregated, where practical, and stored in skips. Metal is highly recyclable and there are numerous companies that will accept these materials.

Plasterboard

There are currently a number of recycling services for plasterboard in Ireland. Plasterboard from the construction phases will be stored in a separate skip, pending collection for recycling. The site Manager will ensure that oversupply of new plasterboard is carefully monitored to minimise waste.

Glass

Glass materials will be segregated for recycling, where possible.

Waste Electrical & Electronic Equipment (WEEE)

Any WEEE will be stored in dedicated covered cages / receptacles / pallets pending collection for recycling.

Other Recyclables

Where any other recyclable wastes, such as cardboard and soft plastic, are generated, these will be segregated at source into dedicated skips and removed off-site.

Non-Recyclable Waste

C&D waste which is not suitable for reuse or recovery, such as polystyrene, some plastics and some cardboards, will be placed in separate skips or other receptacles. Prior to removal from site, the non-recyclable waste skip / receptacle will be examined by a member of the waste team (see Section 9) to determine if recyclable materials have been placed in there by mistake. If this is the case, efforts will be made to determine the cause of the waste not being segregated correctly and recyclable waste will be removed and placed into the appropriate receptacle.

Asbestos Containing Materials

Any asbestos or ACM found on-site will be removed by a suitably competent contractor and disposed of as asbestos waste before the demolition works begin. All asbestos removal work or encapsulation work must be carried out in accordance with the *Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010*.

Other Hazardous Wastes

On-site storage of any hazardous wastes produced (i.e. contaminated soil if encountered and / or waste fuels) will be kept to a minimum, with removal off-site organised on a regular basis. Storage of all hazardous wastes on-site will be undertaken so as to minimise exposure to on-site personnel and the public and to also minimise potential for environmental impacts. Hazardous wastes will be recovered, wherever possible, and failing this, disposed of appropriately.

On-Site Crushing

It is currently not envisaged that the crushing of waste materials will occur on-site. However, if the crushing of material is to be undertaken, a mobile waste facility permit will first be obtained from MCC, where required and the destination of the accepting waste facility or if an application under regulation 28 will be made using National End-of-Waste Decision EoW-N001/2023, will be supplied to the MCC waste unit.

It should be noted that until a construction contractor is appointed it is not possible to provide information on the specific destinations of each construction waste stream. Prior to commencement of construction and removal of any waste offsite, details of the proposed destination of each waste stream will be provided to MCC by the project team.

6.6 Tracking and Documentation Procedures for Off-Site Waste

All waste will be documented prior to leaving the site. Waste will be weighed by the contractor, either by a weighing mechanism on the truck or at the receiving facility. These waste records will be maintained on site by the nominated project RM (see Section 9).

All movement of waste and the use of waste contractors will be undertaken in accordance with the Waste Framework Directive (Directive 2008/98/EC), the *Waste Management Act 1996* as amended, *Waste Management (Collection Permit) Regulations 2007* as amended and *Waste Management (Facility Permit & Registration) Regulations 2007* and amended. This includes the requirement for all waste contractors to have a waste collection permit issued by the NWCPO. The nominated project RM (see Section 9) will maintain a copy of all waste collection permits on-site.

If the waste is being transported to another site, a copy of the Local Authority waste COR / permit or EPA Waste Licence for that site will be provided to the nominated project Waste Manager (see Section 9). If the waste is being shipped abroad, a copy of the Transfrontier Shipping (TFS) notification document will be obtained from DCC (as the relevant authority on behalf of all Local Authorities in Ireland) and kept on-site along with details of the final destination (COR, permits, licences, etc.). A receipt from the final destination of the material will be kept as part of the on-site waste management records.

All information will be entered in a waste management recording system to be maintained on-site.

7. ESTIMATED COST OF WASTE MANAGEMENT

An outline of the costs associated with different aspects of waste management is outlined below. The total cost of C&D waste management will be measured and will take into account handling costs, storage costs, transportation costs, revenue from rebates and disposal costs.

7.1 Reuse

By reusing materials on site, there will be a reduction in the transport and recycle / recovery / disposal costs associated with the requirement for a waste contractor to take the material off-site. Clean and inert soils, gravel, stones, etc., which cannot be reused on-site may be used as access roads or capping material for landfill sites, etc. This material is often taken free of charge or at a reduced fee for such purposes, reducing final waste disposal costs.

7.2 Recycling

Salvageable metals will earn a rebate, which can be offset against the costs of collection and transportation of the skips.

Clean, uncontaminated cardboard and certain hard plastics can also be recycled. Waste contractors will charge considerably less to take segregated wastes, such as recyclable waste, from a site than mixed waste.

Timber can be recycled as chipboard. Again, waste contractors will charge considerably less to take segregated wastes, such as timber, from a site than mixed waste.

7.3 Disposal

Landfill charges are currently at around €140 - €160 per tonne which includes a €85 per tonne landfill levy specified in the *Waste Management (Landfill Levy) Regulations 2015* as amended. In addition to disposal costs, waste contractors will also charge a collection fee for skips.

Collection of segregated C&D waste usually costs less than municipal waste. Specific C&D waste contractors take the waste off-site to a licensed or permitted facility and, where possible, remove salvageable items from the waste stream before disposing of the remainder to landfill. Clean soil, rubble, etc., is also used as fill / capping material, wherever possible.

8. DEMOLITION PROCEDURES

The demolition stage will involve the demolition of GAA facilities, shed and agricultural buildings on site. The demolition areas are identified in the planning drawings submitted as part of this application. A formal demolition plan including safety procedures will be prepared by the demolition contractor. However, in general, the following sequence of works should be followed during the demolition stage:

Waste Reduction Assessment

- ▶ Preparation of a pre-demolition audit detailing resource recovery best practice, i.e. deconstruction and disassembly where feasible and practicable. The demolition audit will be informed by the EU Guidelines for the waste audits before demolition and renovation works of buildings (May 2018) ²⁴.
- ▶ Investigate the reduction and recycling potential of deconstructed components, elements and materials within the new build if it will be compliance with functionality, regulatory and performance requirements. The reuse and recycling of deconstructed components, elements and materials will be carried out in compliance with relevant requirements relating to by-product, end-of-waste and waste data reporting.
- ▶ Reuse and recycle deconstructed components, elements and materials from other projects off-site if in compliance with functionality, regulatory and performance requirements. The reuse and recycling of deconstructed components, elements and materials must be carried out in compliance with relevant requirements relating to by-product, end-of-waste and waste data reporting.
- ▶ A specific audit for potentially hazardous material (asbestos, polychlorinated biphenyls (PCBs), persistent organic pollutants (POPs), etc.) and document procedures for removal of same prior to main demolition works will be undertaken.

Check for Hazards

Prior to commencing works, buildings and structures to be demolished will be checked for any likely hazards including asbestos, ACMS, electrical power lines or cables, gas reticulation systems, telecommunications, unsafe structures and fire / explosion hazards, e.g. combustible dust, chemical hazards, oil, fuels and contamination.

Removal of Components

All hazardous materials will be removed first. All components from within the buildings that can be salvaged will be removed next. This will primarily be comprised of metal; however, may also include timbers, doors, windows, wiring and metal ducting, etc.

Removal of Roofing

Steel roof supports, beams, etc., will be dismantled and taken away for recycling / salvage.

Excavation of Services, Demolition of Walls and Concrete

Services will be removed from the ground and the breakdown of walls will be carried out once all salvageable or reusable materials have been taken from the buildings. Finally, any existing foundations and hard standing areas will be excavated.

9. TRAINING PROVISIONS

A member of the construction team will be appointed as the RM to ensure commitment, operational efficiency and accountability in relation to waste management during the C&D phases of the development.

9.1 Resource Manager Training and Responsibilities

The nominated RM will be given responsibility and authority to select a waste team if required, i.e. members of the site crew that will aid them in the organisation, operation and recording of the waste management system implemented on site.

The RM will have overall responsibility to oversee, record and provide feedback to the client on everyday waste management at the site. Authority will be given to the Waste Manager to delegate responsibility to sub-contractors, where necessary, and to coordinate with suppliers, service providers and sub-contractors to prioritise waste prevention and material salvage.

The RM will be trained in how to set up and maintain a record keeping system, how to perform an audit and how to establish targets for waste management on site. The RM will also be trained in the best methods for segregation and storage of recyclable materials, have information on the materials that can be reused on site and be knowledgeable in how to implement this RWMP.

9.2 Site Crew Training

Training of site crew in relation to waste is the responsibility of the RM and, as such, a waste training program will be organised. A basic awareness course will be held for all site crew to outline the RWMP and to detail the segregation of waste materials at source. This may be incorporated with other site training needs such as general site induction, health and safety awareness and manual handling.

This basic course will describe the materials to be segregated, the storage methods and the location of the Waste Storage Areas (WSAs). A sub-section on hazardous wastes will be incorporated into the training program and the particular dangers of each hazardous waste will be explained.

10. TRACKING AND TRACING / RECORD KEEPING

Records will be kept for all waste material which leaves the site, either for reuse on another site, recycling or disposal. A recording system will be put in place to record the waste arisings on Site.

A waste tracking log will be used to track each waste movement from the site. On exit from the site, the waste collection vehicle driver will stop at the site office and sign out as a visitor and provide the security personnel or RM with a waste docket (or Waste Transfer Form (WTF) for hazardous waste) for the waste load collected. At this time, the security personnel will complete and sign the Waste Tracking Register with the following information:

- ▶ Date
- ▶ Time
- ▶ Waste Contractor
- ▶ Company waste contractor appointed by, e.g. Contractor or subcontractor name
- ▶ Collection Permit No.
- ▶ Vehicle Reg.
- ▶ Driver Name
- ▶ Docket No.
- ▶ Waste Type
- ▶ LoW
- ▶ Weight/Quantity

The waste vehicle will be checked by security personal or the RM to ensure it has the waste collection permit no. displayed and a copy of the waste collection permit in the vehicle before they are allowed to remove the waste from the site.

The waste transfer dockets will be transferred to the RM on a weekly basis and can be placed in the Waste Tracking Log file. This information will be forwarded onto the MCC Waste Regulation Unit when requested.

Each subcontractor that has engaged their own waste contractor will be required to maintain a similar waste tracking log with the waste dockets / WTF maintained on file and available for inspection on site by the main contractor as required. These subcontractor logs will be merged with the main waste log.

Waste receipts from the receiving waste facility will also be obtained by the site contractor(s) and retained. A copy of the Waste Collection Permits, CORs, Waste Facility Permits and Waste Licences will be maintained on site at all times and will be periodically reviewed by the RM. Subcontractors who have engaged their own waste contractors, will provide the main contractor with a copy of the waste collection permits and COR / permit / licence for the receiving waste facilities and maintain a copy on file, available for inspection on site as required.

11. OUTLINE WASTE AUDIT PROCEDURE

11.1 Responsibility for Waste Audit

The appointed RM will be responsible for conducting a waste audit at the site during the C&D phase of the proposed Project. Contact details for the nominated RM will be provided to the MCC Waste Regulation Unit after the main contractor is appointed and prior to any material being removed from site.

11.2 Review of Records and Identification of Corrective Actions

A review of all waste management costs and the records for the waste generated and transported off-site will be undertaken mid-way through the demolition and construction phase of the proposed Project.

If waste movements are not accounted for, the reasons for this will be established in order to see if and why the record keeping system has not been maintained. The waste records will be compared with the established recovery / reuse / recycling targets for the site. Each material type will be examined, in order to see where the largest percentage waste generation is occurring. The waste management methods for each material type will be reviewed in order to highlight how the targets can be achieved.

Upon completion of the C&D phase, a final report will be prepared, summarising the outcomes of waste management processes adopted and the total recycling / reuse / recovery figures for the development.

12. CONSULTATION WITH RELEVANT BODIES

12.1 Local Authority

Once construction contractors have been appointed and have appointed waste contractors, and prior to removal of any C&D waste materials off-site, details of the proposed destination of each waste stream will be provided to the MCC Waste Regulation Unit.

MCC will also be consulted, as required, throughout the demolition, excavation and construction phases in order to ensure that all available waste reduction, reuse and recycling opportunities are identified and utilised and that compliant waste management practices are carried out.

12.2 Recycling / Salvage Companies

The appointed waste contractor for the main waste streams managed by the demolition and construction contractors will be audited in order to ensure that relevant and up-to-date waste collection permits and facility registrations / permits / licences are held. In addition, information will be obtained regarding the feasibility of recycling each material, the costs of recycling / reclamation, the means by which the wastes will be collected and transported off-site, and the recycling / reclamation process each material will undergo off-site.

13. SUMMARY AND CONCLUSION

Adherence to this plan will also ensure that waste management during the construction phase at the proposed development is carried out in accordance with the requirements in the EPA's Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects and the MCC Waste Bye-Laws and the NWMPCE.

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APPENDIX 10-2 Operational Waste Management Plan



Operational Waste Management Plan

Project Title: Frascati Centre - Phase 2A Residential Development

CLIENT Glenveagh Homes Limited	DOCUMENT REFERENCE R247501.0488WMR02	DATE 12/12/2025
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DOCUMENT CONTROL SHEET

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Title	Associate	Associate
Date	12/12/2025	12/12/2025

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 This report considers the specific instructions and requirements of our client. It is not intended for third-party use or reliance, and no responsibility is accepted for any third party. The provisions in this report apply solely to this project and should not be assumed applicable to other developments without review and modification.



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1. INTRODUCTION

AWN Consulting, a Trinity Consultants Company, has prepared this Operational Waste Management Plan (OWMP) on behalf of Glenveagh Homes Limited. The proposed development consists of 356 no. residential units and a childcare facility, and all associated ancillary development works at Bennetstown, Dunboyne, Co. Meath.

This OWMP has been prepared to ensure that the management of waste during the operational phase of the proposed development is undertaken in accordance with the current legal and industry standards including, the Waste Management Act 1996 as amended and associated Regulations¹, Environmental Protection Agency Act 1992 as amended², Litter Pollution Act 1997 as amended³, the National Waste Management Plan for a Circular Economy 2024 - 2030 (NWMPC) (2024)⁴ and Meath County Council (MCC) Waste Management (Segregation, Storage & Presentation of Household and Commercial Waste) Bye-Laws (2018)⁵. In particular, this OWMP aims to provide a robust strategy for the storage, handling, collection and transport of the wastes generated at site.

This OWMP aims to ensure maximum recycling, reuse and recovery of waste with diversion from landfill, wherever possible. The OWMP also seeks to provide guidance on the appropriate collection and transport of waste to prevent issues associated with litter or more serious environmental pollution (e.g. contamination of soil or water resources). The plan estimates the type and quantity of waste to be generated from the proposed development during the operational phase and provides a strategy for managing the different waste streams.

At present, there are no specific national guidelines in Ireland for the preparation of OWMPs. Therefore, in preparing this document, consideration has been given to the requirements of national and regional waste policy, legislation and other guidelines.

2. OVERVIEW OF WASTE MANAGEMENT IN IRELAND

2.1 National level

The Irish Government issued a policy statement in September 1998 entitled 'Changing Our Ways'⁶, which identified objectives for the prevention, minimisation, reuse, recycling, recovery and disposal of waste in Ireland. A heavy emphasis was placed on reducing reliance on landfill and finding alternative methods for managing waste. Amongst other things, Changing Our Ways stated a target of at least 35% recycling of municipal (i.e. household, commercial and non-process industrial) waste.

A further policy document, 'Preventing and Recycling Waste – Delivering Change' was published in 2002⁷. This document proposed a number of programmes to increase recycling of waste and allow diversion from landfill. The need for waste minimisation at source was considered a priority.

This view was also supported by a review of sustainable development policy in Ireland and achievements to date, which was conducted in 2002, entitled 'Making Ireland's Development Sustainable – Review, Assessment and Future Action'⁸. This document also stressed the need to decouple economic growth and waste generation, again through waste minimisation and reuse of discarded material.

In order to establish the progress of the Government policy document Changing Our Ways, a review document was published in April 2004 entitled 'Taking Stock and Moving Forward'⁹. Covering the period 1998 – 2003, the aim of this document was to assess progress to date with regard to waste management in Ireland, to consider developments since the policy framework and the local authority waste management plans were put in place, and to identify measures that could be undertaken to further support progress towards the objectives outlined in *Changing Our Ways*.

In particular, *Taking Stock and Moving Forward* noted a significant increase in the amount of waste being brought to local authority landfills. The report noted that one of the significant challenges in the coming years was the extension of the dry recyclable collection services.

In September 2020, the Irish Government published a new policy document outlining a new action plan for Ireland to cover the period of 2020-2025. This plan 'A Waste Action Plan for a Circular Economy'¹⁰ (WAPCE), was prepared in response to the 'European Green Deal' which sets a roadmap for a transition to a new economy, where climate and environmental challenges are turned into opportunities, replacing the previous national waste management plan "A Resource Opportunity" (2012).

The WAPCE sets the direction for waste planning and management in Ireland up to 2025. This reorientates policy from a focus on managing waste to a much greater focus on creating circular patterns of production and consumption. Other policy statements of a number of public bodies already acknowledge the circular economy as a national policy priority.

The policy document contains over 200 measures across various waste areas including circular economy, municipal waste, consumer protection and citizen engagement, plastics and packaging, construction and demolition, textiles, green public procurement and waste enforcement.

One of the first actions to be taken was the development of the Whole of Government Circular Economy Strategy 2022-2023 'Living More, Using Less' (2021)¹¹ to set a course for Ireland to transition across all sectors and at all levels of Government toward circularity and was issued in December 2021. It is anticipated that the Strategy will be updated in full every 18 months to 2 years.

The Circular Economy and Miscellaneous Provisions Act 2022¹² was signed into law in July 2022. The Act underpins Ireland's shift from a "take-make-waste" linear model to a more sustainable pattern of production and consumption, that retains the value of resources in our economy for as long as possible and that will to significantly reduce our greenhouse gas emissions. The Act defines Circular Economy for

the first time in Irish law, incentivises the use of recycled and reusable alternatives to wasteful, single-use disposable packaging, introduces a mandatory segregation and incentivised charging regime for commercial waste, streamlines the national processes for End-of-Waste and By-Products decisions, tackling the delays which can be encountered by industry, and supporting the availability of recycled secondary raw materials in the Irish market, and tackles illegal fly-tipping and littering.

The Department of Housing, Local Government and Heritage authored Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities (2024)¹³, suggests the below thresholds at which the need for the supplemental information such as the OWMP should be considered.

- ▶ 30 or more residential units,
- ▶ 1,000 sq. metres of mixed-use development

Since 1998, the Environmental Protection Agency (EPA) has produced periodic 'National Waste (Database) Reports' which as of 2023 have been renamed Circular Economy and Waste Statistics Highlight Reports¹⁴ detailing, among other things, estimates for household and commercial (municipal) waste generation in Ireland and the level of recycling, recovery and disposal of these materials. The 2025 National Circular Economy and Waste Statistics web resource, which is the most recent study published, along with the national waste statistics web resource (2025) reported the following key statistics for 2024:

- ▶ Ireland generated 3.13 million tonnes of municipal waste in 2023, relatively unchanged compared to the 3.19 million tonnes generated in 2022.
- ▶ Between 2016 and 2023, municipal waste increased from 2.7 million tonnes to 3.13 million tonnes.
- ▶ Some 1.3 million tonnes of municipal waste generated in Ireland was recycled in 2023, resulting in a recycling rate of 42%. This indicates that we face significant challenges to meet the upcoming EU recycling targets for 2025 to 2035.
- ▶ Of the municipal waste recycled in 2023, over 814,000 tonnes went for material recycling (approximately the same as 2022) and over 480,000 tonnes were treated by composting/anaerobic digestion (approximately the same as 2022 but up 37% on 2020).
- ▶ A rounded 1.3 million tonnes of Ireland's municipal waste went for incineration with energy recovery in 2023. This tonnage is 43% of municipal waste managed.
- ▶ Ireland's landfill rate for municipal waste managed was 14% in 2023. This is a 1% decrease from 2022's rate of 15%.
- ▶ There has been a steep decline in Ireland's landfill rate for municipal waste from over 80% in 2001. Ireland must reduce the share of municipal waste landfilled to 10% or less by 2035, which includes waste landfilled at each step along the waste treatment process in Ireland and abroad.
- ▶ An estimated 42% (1.2 million tonnes) of all municipal waste managed was exported abroad in 2023, an increase from the 39% in 2022. Of the waste exported, most went for recycling (49%) or energy recovery (36%) while 11% went for composting or anaerobic digestion.

2.2 Regional Level

The proposed development is located in the Local Authority administrative area of Meath County Council (MCC).

The Eastern Midlands Region (EMR) Waste Management Plan 2015 – 2021, which previously governed waste management policy in the MCC area, has been superseded as of March 2024 by the NWMPCE 2024 – 2030, the new national waste management plan for Ireland.

The NWMPCE does not dissolve the three regional waste areas. The NWMPCE sets the ambition of the plan to have a 0% total waste growth per person over the life of the Plan with an emphasis on non-household wastes including waste from commercial activities and the construction and demolition sector.

This Plan seeks to influence sustainable consumption and prevent the generation of waste, improve the capture of materials to optimise circularity and enable compliance with policy and legislation. The national plan sets out the following strategic targets for waste management in the country that are relevant to the development:

This Plan seeks to influence sustainable consumption and prevent the generation of waste, improve the capture of materials to optimise circularity and enable compliance with policy and legislation.

The national plan sets out the following strategic targets for waste management in the country that are relevant to the development:

National Targets

- 1A. *(Residual Municipal Waste) 6% Reduction in Residual Municipal Waste per person by 2030*
- 2A. *(Contamination of Materials) 90% of Material in Compliance in the Dry Recycling Bin*
- 2B. *(Material Compliance Residual) 10% per annum increase in Material Compliance in the residual bin. (90% by the end of 2030)*
- 3A. *(Reuse of Materials) 20kg Per person / year – Reuse of materials like cloths or furniture to prevent waste.*

Municipal landfill charges in Ireland are based on the weight of waste disposed. In the Leinster Region, charges are approximately €140-160 per tonne of waste, which includes a €85 per tonne landfill levy introduced under the Waste Management (Landfill Levy) (Amendment) Regulations 2015.

The Meath County Development Plan 2021 – 2027¹⁵ sets out a number of policies and objectives for Meath in line with the objectives of the regional waste management plan. Waste policies and objectives with a particular relevance to this development are:

Policies:

- ▶ *INF POL 61: To facilitate the implementation of National Waste legislation and National and Regional Waste Management Policy.*
- ▶ *INF POL 62: To encourage and support the provision of a separate collection of waste throughout the County in accordance with the requirements of the Waste Management (Household Food Waste) Regulations 2009, the Waste Framework Directive Regulations, 2011, the Waste Management (Commercial Food Waste) Regulations 2015 and other relevant legislation to meet the requirements of the Regional Waste Management Plan.*
- ▶ *INF POL 64: To encourage and support the expansion and improvement of a three bin system (mixed dry recyclables, organic waste and residual waste) in order to increase the quantity and quality of materials collected for recycling in conjunction with relevant stakeholders.*
- ▶ *INF POL 65: To adopt the provisions of the waste management hierarchy and implement policy in relation to the County's requirements under the current or any subsequent Waste Management Plan. All prospective developments in the County shall take account of the provisions of the regional waste management plan and adhere to the requirements of the Plan. Account shall also be taken of the proximity principle and the inter-regional movement of waste.*

Objectives:

- ▶ *INF OBJ 54: To facilitate the transition from a waste management economy to a green circular economy to enhance employment opportunities and increase the value recovery and recirculation of resources.*
- ▶ *INF OBJ 56: To support developments necessary to manage food waste in accordance with the requirements of the current Waste Management (Food Waste) Regulations and the regional Waste Management Plan.*
- ▶ *INF OBJ 68: To support the development of facilities to cater for commercial waste not provided for within the kerbside collection system such as the WEEE, C & D type waste and hazardous materials in accordance with the requirements of the Eastern Midlands Regional Waste Management Plan.*

2.3 Legislative Requirements

The primary legislative instruments that govern waste management in Ireland and applicable to the proposed Development are:

- ▶ *Waste Management Act 1996 as amended;*
- ▶ *Environmental Protection Agency Act 1992 as amended;*
- ▶ *Litter Pollution Act 1997 as amended;*
- ▶ *Planning and Development Act 2000 as amended¹⁶;*
- ▶ *Circular Economy and Miscellaneous Provisions Act 2022.*

These Acts and subordinate Regulations transpose the relevant European Union Policy and Directives into Irish law.

One of the guiding principles of European waste legislation, which has in turn been incorporated into the Waste Management Act 1996 as amended and subsequent Irish legislation, is the principle of "Duty of Care". This implies that the waste producer is responsible for waste from the time it is generated through until its legal disposal (including its method of disposal). As it is not practical in most cases for the waste producer to physically transfer all waste from where it is produced to the final disposal area, waste contractors will be employed to physically transport waste to the final waste disposal site.

It is, therefore, imperative that the residents, the childcare facility staff and the proposed facilities management company undertake on-site management of waste in accordance with all legal requirements and that the facilities management company employ suitably permitted / licenced contractors to undertake off-site management of their waste in accordance with all legal requirements. This includes the requirement that a waste contractor handle, transport and reuse / recover / recycle / dispose of waste in a manner that ensures that no adverse environmental impacts occur as a result of any of these activities.

A collection permit to transport waste must be held by each waste contractor which is issued by the National Waste Collection Permit Office (NWCPO). Waste receiving facilities must also be appropriately permitted or licensed. Operators of such facilities cannot receive any waste, unless in possession of a Certificate of Registration (COR) or waste permit granted by the relevant Local Authority under the Waste Management (Facility Permit & Registration) Regulations 2007, as amended, or a Waste Licence granted by the EPA. The COR / permit / licence held will specify the type and quantity of waste able to be received, stored, sorted, recycled, recovered and / or disposed of at the specified site.

2.3.1 Meath County Council Waste Management Bye-Laws

The MCC "Meath County Council Waste Management (Storage, Presentation and Segregation of Household and Commercial Waste) By-Laws (2018)" came into effect on the 12th of November 2018. These by-laws set a number of enforceable requirements on waste holders with regard to storage, separation and presentation of waste within the MCC functional area. Key requirements under these by-laws of relevance to the development include the following:

- ▶ *Kerbside waste presented for collection shall not be presented for collection earlier than 6.00pm on the day immediately preceding the designated waste collection day;*
- ▶ *All containers used for the presentation of kerbside waste and any uncollected waste shall be removed from any roadway, footway, footpath or any other public place no later than 8:00am on the day following the designated waste collection day;*
- ▶ *An authorised waste collector is engaged to service the receptacles referred to in this section of these bye-laws, with documentary evidence, such as receipts, statements or other proof of payment, demonstrating the existence of this engagement being retained for a period of no less than two years. Such evidence shall be presented to an authorised person within a time specified in a written request from either that person or from another authorised person employed by Meath County Council;*
- ▶ *Adequate access and egress onto and from the premises by waste collection vehicles is maintained; and*
- ▶ *Written information is provided to each resident or other occupier about the arrangements for waste separation, segregation, storage and presentation prior to collection.*

The full text of the waste by-laws is available from the MCC website.

2.4 Regional Waste Management Service Providers and Facilities

Various contractors offer waste collection services for the residential sector in the MCC region. Details of waste collection permits (granted, pending and withdrawn) for the region are available from the NWCPO.

As outlined in the regional waste management plan, there is a decreasing number of landfills available in the region. Only three municipal solid waste landfills remain operational and all are operated by the private sector. There are a number of other licensed and permitted facilities in operation in the region including waste transfer stations, hazardous waste facilities and integrated waste management facilities. There are two existing thermal treatment facilities, one in Duleek, Co. Meath and a second in Poolbeg in Dublin.

There is the Civic Amenity / Recycling Centre at Dunboyne Industrial Estate, Co. Meath, A86 X446, located c. 1.7 km to the south-east of the development site, which can be utilised by the residents of the proposed development for other household waste streams while a bottle bank can be found c. 2.7 km to the south east at Rooske Rd, Castlefarm, Dunboyne, Co. Meath.

A copy of all CORs and waste permits issued by the Local Authorities are available from the NWCPO website and all Waste Licenses issued are available from the EPA.

3. DESCRIPTION OF THE DEVELOPMENT

3.1 Location, Size and Scale of the Development

The proposed development site is located at Bennelstown, Dunboyne, Co. Meath.

The proposed development will see the third residential phase of the Dunboyne North Masterplan. Permission is sought for the following development: The demolition of existing structures on site, the construction of 252 no. houses and 104 no. apartments / duplex units, 1 no. childcare facility, the provision of landscaping and amenity area and all associated infrastructure and services including a vehicular and pedestrian / cycle access point, roads, parking, lighting and drainage.

A full description of the proposed development is outlined in Chapter 2 'Site Location & Project Description' of this EIAR.

3.2 Typical Waste Categories

The typical non-hazardous and hazardous wastes that will be generated at the proposed development will include the following:

- ▶ Dry Mixed Recyclables (DMR) - includes waste paper (including newspapers, magazines, brochures, catalogues, leaflets), cardboard and plastic packaging, metal cans, plastic bottles, aluminium cans, tins and Tetra Pak cartons;
- ▶ Organic waste – food waste and green waste generated from internal plants / flowers;
- ▶ Glass; and
- ▶ Mixed Non-Recyclable (MNR) / General Waste.

In addition to the typical waste materials that will be generated at the development on a daily basis, there will be some additional waste types generated less frequently / in smaller quantities which will need to be managed separately including:

- ▶
- ▶ Drink Cans and Bottles (Deposit Return Scheme)
- ▶ Green / garden waste may be generated from external landscaping;
- ▶ Batteries (both hazardous and non-hazardous);
- ▶ Waste electrical and electronic equipment (WEEE) (both hazardous and non-hazardous);
- ▶ Printer cartridges / toners;
- ▶ Chemicals (paints, adhesives, resins, detergents, etc.);
- ▶ Light bulbs;
- ▶ Textiles;
- ▶ Waste cooking oil (if any generated by the residents and childcare facility);
- ▶ Furniture (and, from time to time, other bulky wastes); and
- ▶ Abandoned bicycles.

Wastes should be segregated into the above waste types to ensure compliance with waste legislation and guidance while maximising the re-use, recycling and recovery of waste with diversion from landfill wherever possible.

3.3 List of Waste Codes

In 1994, the *European Waste Catalogue*¹⁷ and *Hazardous Waste List*¹⁸ were published by the European Commission. In 2002, the EPA published a document titled the *European Waste Catalogue and Hazardous Waste List*¹⁹, which was a condensed version of the original two documents and their subsequent

amendments. This document has recently been replaced by the EPA 'Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous' 20 2018. This waste classification system applies across the EU and is the basis for all national and international waste reporting, such as those associated with waste collection permits, COR's, permits and licences and EPA National Waste Database.

Under the classification system, different types of wastes are fully defined by a code. The List of Waste (LoW) code for typical waste materials expected to be generated during the operation of the proposed development are provided in Table 3.1 below.

Table 3.1 Typical Waste Types Generated and LoW Codes

Waste Material	LoW Code
Paper and Cardboard	20 01 01
Plastics	20 01 39
Metals	20 01 40
Mixed Non-Recyclable Waste	20 03 01
Glass	20 01 02
Biodegradable Kitchen Waste	20 01 08
Oils and Fats	20 01 25
Textiles	20 01 11
Batteries and Accumulators*	20 01 33* - 34
Printer Toner/Cartridges*	20 01 27* - 28
Green Waste	20 02 01
WEEE*	20 01 35*-36
Chemicals (solvents, pesticides, paints & adhesives, detergents, etc.) *	20 01 13*/19*/27*/28/29*30
Fluorescent tubes and other mercury containing waste*	20 01 21*
Bulky Wastes	20 03 07

* Individual waste type may contain hazardous materials

4. ESTIMATED WASTE ARISING

A waste generation model (WGM) developed by Awn has been used to predict waste types, weights and volumes expected to arise from operations within the proposed development. The WGM incorporates building area and use and combines these with other data, including Irish and US EPA waste generation rates.

The estimated quantum / volume of waste that will be generated from the residential units has been determined based on the predicted occupancy of the units. While the floor area usage (m²) has been used to estimate the waste arising from the childcare facility.

The estimated waste generation for the proposed development for the main waste types is presented in Tables 4.1 – 4.2.

Table 4.1 Estimated Waste Generation for Proposed Residential Units

Waste Type	Waste Volume (m ³ / week)			
	1-Bed Apartment Units (Individual WSAs)	2-Bed Houses (Individual WSAs)	3-Bed Duplexes and Houses (Individual WSAs)	4-Bed Houses (Individual WSAs)
Organic Waste	0.01	0.02	0.02	0.02
DMR	0.08	0.11	0.13	0.18
Glass	>0.01	>0.01	>0.01	>0.01
MNR	0.05	0.07	0.08	0.09
Total	0.14	0.20	0.23	0.29

Table 4.2 Estimated Waste Generation for Proposed Residential and Childcare Facility Units

Waste Type	Waste Volume (m ³ / week)		
	Cell 01 Apartment Block (Shared WSA)	Cell 14 Apartment Block (Shared WSA)	Childcare Facility
Organic Waste	0.10	0.10	0.06
DMR	0.72	0.72	2.31
Glass	0.02	0.02	0.01
MNR	0.42	0.42	1.26
Total	1.26	1.26	3.64

BS5906:2005 Waste Management in Buildings – Code of Practice ²¹ has been considered in the calculations of waste estimates. Awn's modelling methodology is based on recently published data and data from numerous other similar developments in Ireland and is based on Awn's experience, it provides a more representative estimate of the likely waste arisings from the proposed development.

5. WASTE STORAGE AND COLLECTION

This section provides information on how waste generated within the Site will be stored and collected. This has been prepared with due consideration of the proposed Site layout as well as best practice standards, local and national waste management requirements, including those of MCC. In particular, consideration has been given to the following documents:

- ▶ BS 5906:2005 Waste Management in Buildings – Code of Practice,
- ▶ The NWMPCE (2024);
- ▶ Meath County Council, Meath County Development Plan 2021-2027 (2021);
- ▶ MCC 'Waste Management (Segregation, Storage and Presentation of Household & Commercial Waste Bye-Laws' (2018); and
- ▶ DoHLGH, Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (2025) ²²

Waste Storage Areas

Locations of all Waste Storage Areas (WSAs) can be viewed on the drawings submitted with the planning application under separate cover and in Appendix A of this plan.

1-Bed Apartments, 2/3/4-Bed Duplexes and Houses (Individual WSAs)

The residential units will have their own individual WSAs allocated at the rear of their home where external access to the rear yard is possible. When external access to the rear of the property is unavailable, bins will be stored at the front of the unit, shielded from view of the road.

Cell 01 and Cell 14 Apartment Blocks (Shared WSAs)

One (1 no.) shared WSA per apartment block, has been allocated within the proposed development design. This has been strategically located externally on ground floor level.

Childcare Facility

One (1 no.) WSA has been allocated within the development design for the childcare facility. This has been strategically located within the proposed childcare facility design.

Using the estimated waste generation volumes in Tables 4.1 – 4.2, above, the waste receptacle requirements for MNR, DMR, organic waste and glass have been established for the WSAs. It is envisaged that all waste types from the proposed development will be collected on a weekly basis.

Waste Storage Requirements

Estimated waste storage requirements for the operational phase of the proposed development are detailed in Table 5.1, below.

Table 5.1 Waste storage requirements for the proposed development

Area/Use	Bins Required			
	MNR ¹	DMR ²	Glass	Organic
1-Bed Apartments, 2/3/4-Bed Duplexes and Houses (Individual WSAs)	1 no. 240 L	1 no. 240 L	Bottle Bank	1 no. 120 L
Cell 01 and Cell 14 Residential Apartment Block (Shared WSAs)	1 no. 1100 L	1 no. 1100 L	1 no. 240 L	1 no. 120 L
Childcare Facility	2 no. 1100 L 1 no. 240 L	1 no. 1100 L 1 no. 240 L	1 no. 120L	1 no. 120L

Note: 1 = Mixed Non-Recyclables
2 = Dry Mixed Recyclables

The waste receptacle requirements have been established from distribution of the total weekly waste generation estimate into the holding capacity of each receptacle type.

Waste storage receptacles as per Table 5.1 above (or similar appropriate approved containers) will be provided by the facilities management company in the WSAs.

The types of bins used will vary in size, design and colour dependent on the appointed waste contractor. However, examples of typical receptacles to be provided in the WSAs are shown in Figure 5.1. All waste receptacles used will comply with the SIST EN 840-1:2020 and SIST EN 840-2:2020 as the standards for performance requirements of mobile waste containers, where appropriate.



Figure 5.1 Typical waste receptacles of varying size (240L and 1100L)

Receptacles for organic, mixed dry recyclable, glass and mixed non-recyclable waste will be provided in the shared WSAs prior to first occupation of the proposed development i.e. prior to the first residential unit being occupied. Residential units with individual WSAs will be required to obtain their own waste receptacles from their selected waste contractor. Receptacles will be provided in the childcare facility WSA prior to the childcare facility becoming operational. Training will be provided to the relevant staff on the implementation of the Plan.

This Plan will be provided to each resident and the childcare facility staff from first occupation of the proposed development i.e. once the childcare facility is operational or the first residential unit is occupied.

This Plan will be supplemented, as required, by the property management company with any new information on waste segregation, storage, reuse and recycling initiatives that are subsequently introduced.

5.1 Operational Phase Waste Storage – Apartment Blocks (Shared WSAs)

Residents of the apartment blocks in Cell 01 and Cell 14 will be required to segregate waste into the following main waste streams:

- ▶ DMR;
- ▶ MNR;
- ▶ Glass; and
- ▶ Organic waste.

Residents will be required to take their segregated waste materials to their designated WSAs and deposit their segregated waste into the appropriate bins. The location of the WSAs are illustrated in the drawings submitted with the planning application under separate cover.

Provision will be made in all residential units to accommodate 3 no. bin types to facilitate waste segregation at source. An example of a potential 3 bin storage system is provided in Figure 5.2 below.



Figure 5.2 Example three bin storage system to be provided within the unit design

Each bin / container in the WSAs will be clearly labelled and colour coded to avoid cross contamination of the different waste streams. Signage will be posted above or on the bins to show exactly which waste types can be placed in each bin.

Access to the apartment block WSAs will be restricted to authorised residents, facilities management and waste contractors by means of a key or electronic fob access.

Other waste materials such as textiles, batteries, printer toner / cartridges, light bulbs and WEEE may be generated infrequently by the residents. Residents will be required to identify suitable temporary storage areas for these waste items within their own units and dispose of them appropriately. Further details on additional waste types can be found in Section 5.5

5.2 Operational Phase Waste Storage – 1-Bed Apartments, 2/3/4-Bed Duplexes and Houses (Individual WSAs)

Residents in the duplexes and houses will be required to segregate their waste into the following waste categories within their own units:

- ▶ DMR;
- ▶ MNR;
- ▶ Glass; and
- ▶ Organic waste.

It is anticipated that residents with external access to the rear of their property will store waste in bins at the back of the units. For units with no external access to the rear, a dedicated shielded area for storage of 2 no. 240l and 1 no. 120l wheelie bins have been allocated at the front or side of the property.

It is anticipated that DMR, MNR and organic waste will be collected on a weekly basis. Glass waste will be required to be brought to the nearest bottle bank for disposal.

Other waste materials such as textiles, batteries, printer toner/cartridges and WEEE may be generated infrequently by the residents. Residents will be required to identify suitable temporary storage areas for these waste items within their own units and dispose of them appropriately. Further details on additional waste types can be found in Section 5.4.

5.3 Waste Storage – Childcare Facility

Staff at the childcare facility will be required to segregate waste within their own unit into the following main waste types:

- ▶ DMR;
- ▶ MNR;
- ▶ Glass; and
- ▶ Organic waste.

The childcare facility staff will be required to take their segregated waste materials to their designated WSA and deposit their segregated waste into the appropriate bins. The location of the childcare facility WSA is illustrated in the drawings submitted with the planning application under separate cover.

Suppliers for the childcare facility should be requested by the staff to make deliveries in reusable containers, minimize packaging or remove any packaging after delivery, where possible, to reduce waste generated by the proposed development.

If a kitchen is required, it is anticipated that waste will be generated in the kitchen throughout the day. Small bins will be placed adjacent to work areas for temporary storage of waste generated during the day. Waste will then be transferred from the small bins to the childcare facility WSA.

All bins / containers in the childcare facility as well as in the childcare facility WSA will be clearly labelled and colour coded to avoid cross contamination of the different waste streams. Signage will be posted above or on the bins to show exactly which wastes can be put in each.

Other waste materials such as textiles, batteries, lightbulbs, WEEE, cooking oil and printer toner / cartridges will be generated less frequently. The staff will be required to store these waste types within their own unit and arrange collection with an appropriately licensed waste contractor. Facilities management may arrange collection, depending on the agreement. Further details on additional waste types can be found in Section 5.5.

5.4 Waste Collection

There are numerous private contractors that provide waste collection services in the MCC area. All waste contractors servicing the proposed development must hold a valid waste collection permit for the specific waste types collected. All waste collected must be transported to registered / permitted / licensed facilities only.

Residents from the apartments, duplexes and houses with their own individual WSAs will be responsible for moving their waste receptacles to and from the curb, before and after collection.

The waste receptacles from the residential shared WSAs and the childcare facility WSA will be collected by facilities management and childcare facility staff, respectively, immediately prior to collection and brought to where the bins will be staged temporarily awaiting collection.

The staging areas are as such that it will not obstruct traffic or pedestrians (allowing a footway path of at least 1.8m, the space needed for two wheelchairs to pass each other) as is recommended in the *Design Manual for Urban Roads and Streets* (2019)²³.

All locations for staging areas can be viewed on the drawings submitted with the planning application under separate cover and in Appendix A of this plan. The auto track for the waste truck can be viewed in Appendix B and on drawings submitted with the planning application under separate cover.

Suitable access and egress have been provided to enable the bins to be moved easily from the temporary staging area to the waste collection vehicles on the appropriate days. Waste will be collected at agreed days and times by the nominated waste contractors.

All waste receptacles should be clearly identified as required by waste legislation and the requirements of the MCC *Waste Bye-Laws*. Waste will be presented for collection in a manner that will not endanger health, create a risk to traffic, harm the environment or create a nuisance through odours or litter.

It is recommended that bin collection times are staggered to reduce the number of bins required to be emptied at once and the time the waste vehicle is on-site. This will be determined during the process of appointment of a waste contractor.

5.5 Additional Waste Materials

In addition to the typical waste materials that are generated on a daily basis, there will be some additional waste types generated from time to time that will need to be managed separately. A non-exhaustive list is presented below.

Deposit Return Scheme

Most drinks containers can be recycled via the deposit return scheme, such as bottles, cans and tins made from plastic, aluminium or steel can be returned once they are between 150ml and 3 litres in size and have the Re-turn logo on them.

At the shops you can either return the containers:

- ▶ Using a Reverse Vending Machine (RVM)
- ▶ Manually in the shop

If a shop does not have a RVM but they sell containers with the Re-turn logo, the shop may allow you to manually return containers in store, unless they have a take back exemption.

Locations of RVM machines can be found via the Re-turn website (www.re-turn.ie)

Green Waste

Green waste may be generated from gardens, external landscaping and internal plants / flowers. Green waste generated from landscaping of external areas will be removed by external landscape contractors. Green waste generated from gardens internal plants / flowers can be placed in the organic waste bins.

Batteries

A take-back service for waste batteries and accumulators (e.g. rechargeable batteries) is in place in order to comply with the S.I. No. 283/2014 - European Union (Batteries and Accumulators) Regulations 2014,

as amended. In accordance with these regulations, consumers are able to bring their waste batteries to their local civic amenity centre or can return them free of charge to retailers which supply the equivalent type of battery, regardless of whether or not the batteries were purchased at the retail outlet and regardless of whether or not the person depositing the waste battery purchases any product or products from the retail outlet.

The childcare facility staff cannot use the civic amenity centre. They must segregate their waste batteries and either avail of the take-back service provided by retailers or arrange for recycling / recovery of their waste batteries by a suitably permitted / licenced contractor. The childcare facility staff may arrange collection, depending on the agreement.

Waste Electrical and Electronic Equipment (WEEE)

The WEEE Directive (Directive 2002/96/EC) and associated Waste Management (WEEE) Regulations have been enacted to ensure a high level of recycling of electronic and electrical equipment. In accordance with the regulations, consumers can bring their waste electrical and electronic equipment to their local recycling centre. In addition, consumers can bring back WEEE within 15 days to retailers when they purchase new equipment on a like for like basis. Retailers are also obliged to collect WEEE within 15 days of delivery of a new item, provided the item is disconnected from all mains, does not pose a health and safety risk and is readily available for collection.

As noted above, the childcare facility staff cannot use the civic amenity centre. They must segregate their WEEE and either avail of the take-back / collection service provided by retailers or arrange for recycling / recovery of their WEEE by a suitably permitted / licenced contractor. The childcare facility staff may arrange collection, depending on the agreement.

Printer Cartridge / Toners

It is recommended that a printer cartridge / toner bin is provided in the childcare facility, where appropriate. The childcare facility staff will be required to store this waste within their unit and arrange for return to retailers or collection by an authorised waste contractor, as required.

Waste printer cartridge / toners generated by residents can usually be returned to the supplier free of charge or can be brought to a civic amenity centre.

Chemicals

Chemicals (such as solvents, paints, adhesives, resins, detergents, etc) are largely generated from building maintenance works. Such works are usually completed by external contractors who are responsible for the off-site removal and appropriate recovery / recycling / disposal of any waste materials generated.

Any waste cleaning products or waste packaging from cleaning products generated in the childcare facility that are classed as hazardous (if they arise) will be appropriately stored within the unit. The childcare facility staff may arrange collection, depending on the agreement.

Any waste cleaning products or waste packaging from cleaning products that are classed as hazardous (if they arise) generated by the residents should be brought to a civic amenity centre.

Light Bulbs

Waste light bulbs (fluorescent, incandescent and LED) may be generated by lighting at the childcare facility. It is anticipated that childcare facility staff will be responsible for arranging for the off-site removal and appropriate recovery / disposal of these wastes. The childcare facility staff may arrange collection, depending on the agreement.

Light bulbs generated by residents should be taken to the nearest civic amenity centre for appropriate storage and recovery / disposal.

Textiles

Where possible, waste textiles should be recycled or donated to a charity organisation for reuse. Childcare facility staff and residents will be responsible for disposing of waste textiles appropriately.

Waste Cooking Oil

If the childcare facility staff use cooking oil, waste cooking oil will need to be stored within the unit on a bunded area or spill pallet and regular collections by a dedicated waste contractor will need to be organised as required. Under sink grease traps will be installed in any cooking space.

If the residents generate waste cooking oil, this can be brought to a civic amenity centre.

Furniture & Other Bulky Waste Items

Furniture and other bulky waste items (such as carpet, etc.) may occasionally be generated by the childcare facility. The childcare facility staff may arrange collection of any bulky waste, depending on the agreement. If residents wish to dispose of furniture, this can be brought a civic amenity centre.

Abandoned Bicycles

Bicycle parking areas are planned for the development. As happens in other developments, residents sometimes abandon faulty or unused bicycles, and it can be difficult to determine their ownership. Abandoned bicycles should be donated to charity if they arise or facilities management may arrange collection by a licensed waste contractor.

5.6 Waste Storage Area Design

The childcare facility and shared residential WSAs should be designed and fitted-out to meet the requirements of relevant design Standards, including:

- ▶ Be fitted with a non-slip floor surface;
- ▶ Provide ventilation to reduce the potential for generation of odours with a recommended 6-10 air changes per hour for a mechanical system for internal WSAs;
- ▶ Provide suitable lighting – a minimum Lux rating of 400 is recommended;
- ▶ Be easily accessible for people with limited mobility;
- ▶ Be restricted to access by nominated personnel only;
- ▶ Be supplied with hot or cold water for disinfection and washing of bins;
- ▶ Be fitted with suitable power supply for power washers;
- ▶ Have a sloped floor to a central foul drain for bins washing run-off;
- ▶ Have appropriate signage placed above and on bins indicating correct use;
- ▶ Have access for potential control of vermin, if required; and
- ▶ Be fitted with CCTV for monitoring.

The facilities management company, childcare facility staff and residents will be required to maintain the resident bins and storage areas in good condition as required by the MCC Waste Bye-Laws.

5.7 Facility Management Responsibilities

It shall be the responsibility of the facilities management company, and childcare facility operator and staff to ensure that all waste generated by residents and the childcare facility are managed to ensure correct storage prior to collection by an appropriately permitted waste management company.

Facilities management company and the childcare facility operator will provide the following items:

- ▶ Provision of a Waste Management Plan document, prepared by the Facilities Management Company and the childcare facility operator to all residential units and childcare facility staff, respectively, which shall clearly state the methods of source waste segregation, storage, reuse and recycling initiatives that shall apply to the management of the development;
- ▶ Provision and maintenance of appropriate graphical signage to inform residents and childcare facility staff of their obligation to reduce waste, segregate waste and in the correct bin;
- ▶ Preparation of an annual waste management report for all residential units and the childcare facility;
- ▶ Designation of access routes to common waste storage areas to ensure safe access from the apartment units by mobility impaired persons;
- ▶ Provision of an appropriately qualified and experienced staff member, who will be responsible for all aspects of waste management at the development;
- ▶ Daily inspection of waste storage areas and signing of a daily check list, which shall be displayed within the area; and
- ▶ Maintenance of a weekly register, detailing the quantities and breakdown of wastes collected from the development and provision of supporting documentation by the waste collector to allow tracking of waste recycling rates.

5.8 Pest Management

A pest control operator will be appointed as required to manage pests onsite during the operational phase of this development. All waste generated within the development will be stored in closed waste receptacles both within units and within the WSAs. Any waste receptacles will be carefully managed to prevent leaks, odours and pest problems.

The childcare facility and shared residential WSAs will have access for potential control of vermin, if required, be supplied with hot or cold water, drainage point and will be regularly inspected by facilities management to deter pests.

6. SUMMARY AND CONCLUSION

In summary, this OWMP presents a waste strategy that addresses all legal requirements, waste policies and best practice guidelines and demonstrates that the required storage areas have been incorporated into the design of the proposed development.

Implementation of this OWMP will ensure a high level of recycling, reuse and recovery at the development. All recyclable materials will be segregated at source to reduce waste contractor costs and ensure maximum diversion of materials from landfill, thus contributing to the targets set out in *the NWMPCE*.

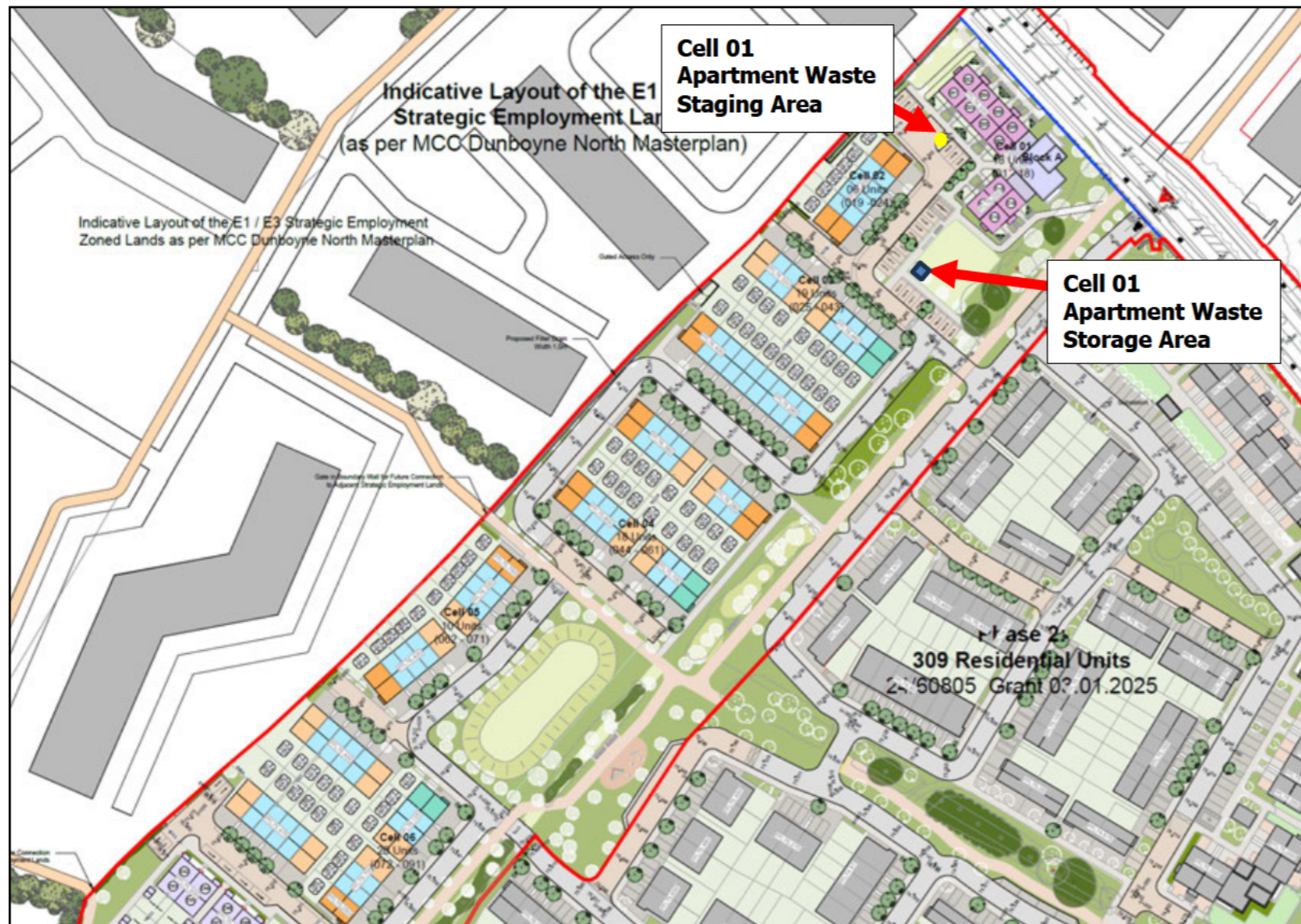
Adherence to this plan will also ensure that waste management at the development is carried out in accordance with the requirements of the *MCC Waste Bye-Laws*.

The waste strategy presented in this document will provide sufficient storage capacity for the estimated quantity of segregated waste. The designated areas for waste storage will provide sufficient room for the required receptacles in accordance with the details of this strategy.

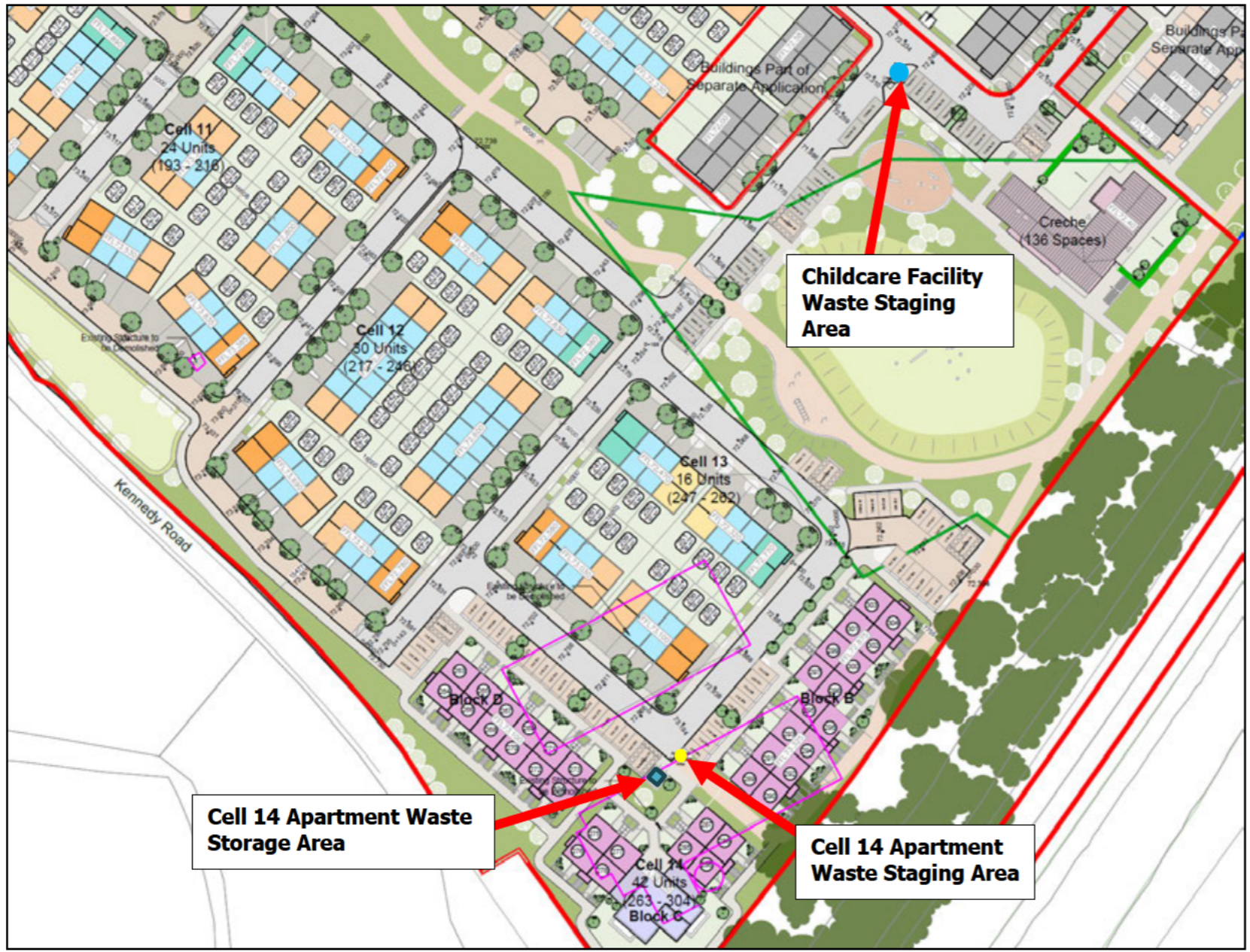
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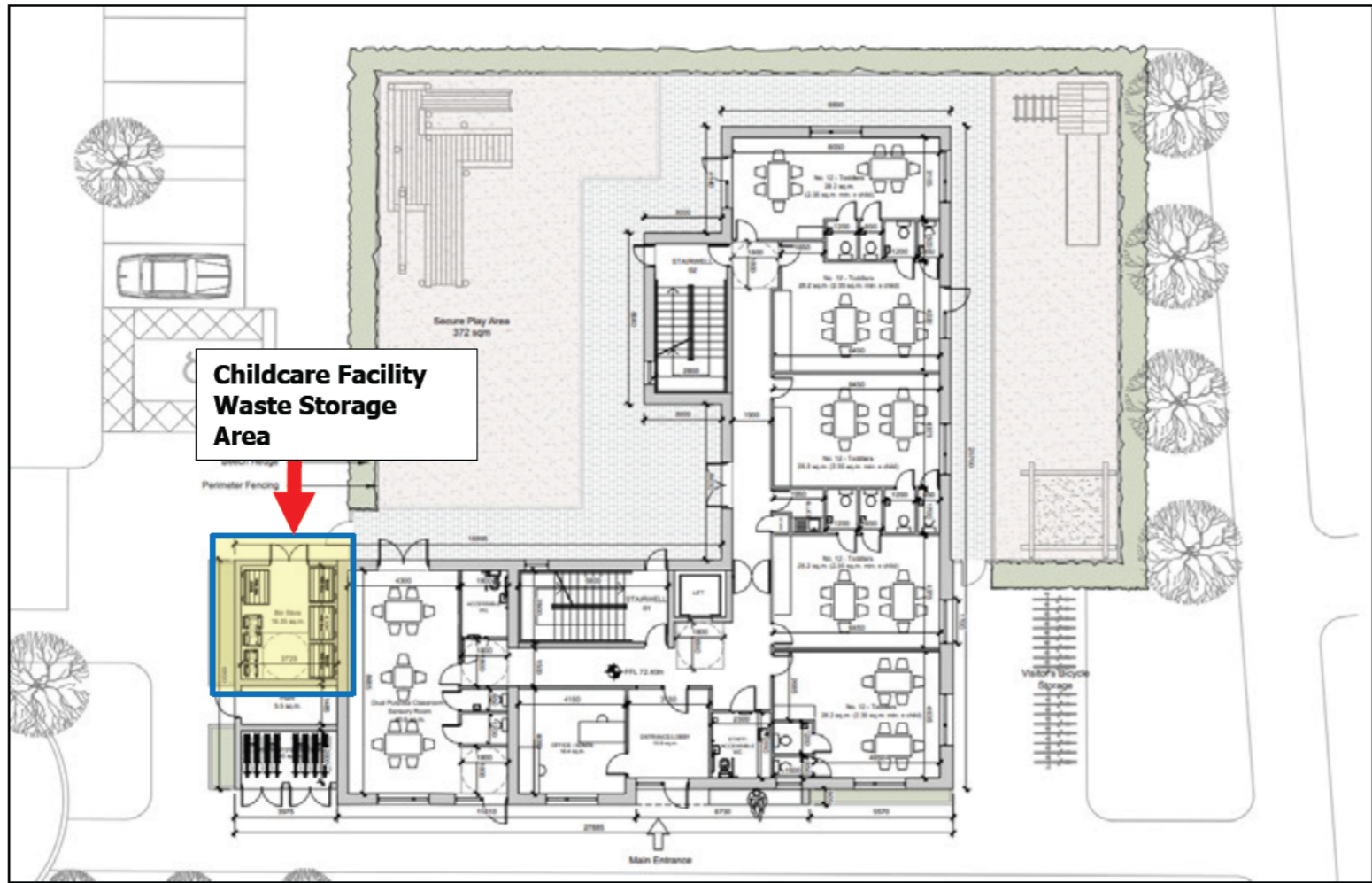
APPENDIX A. WASTE STORAGE AREAS AND WASTE STAGING AREAS



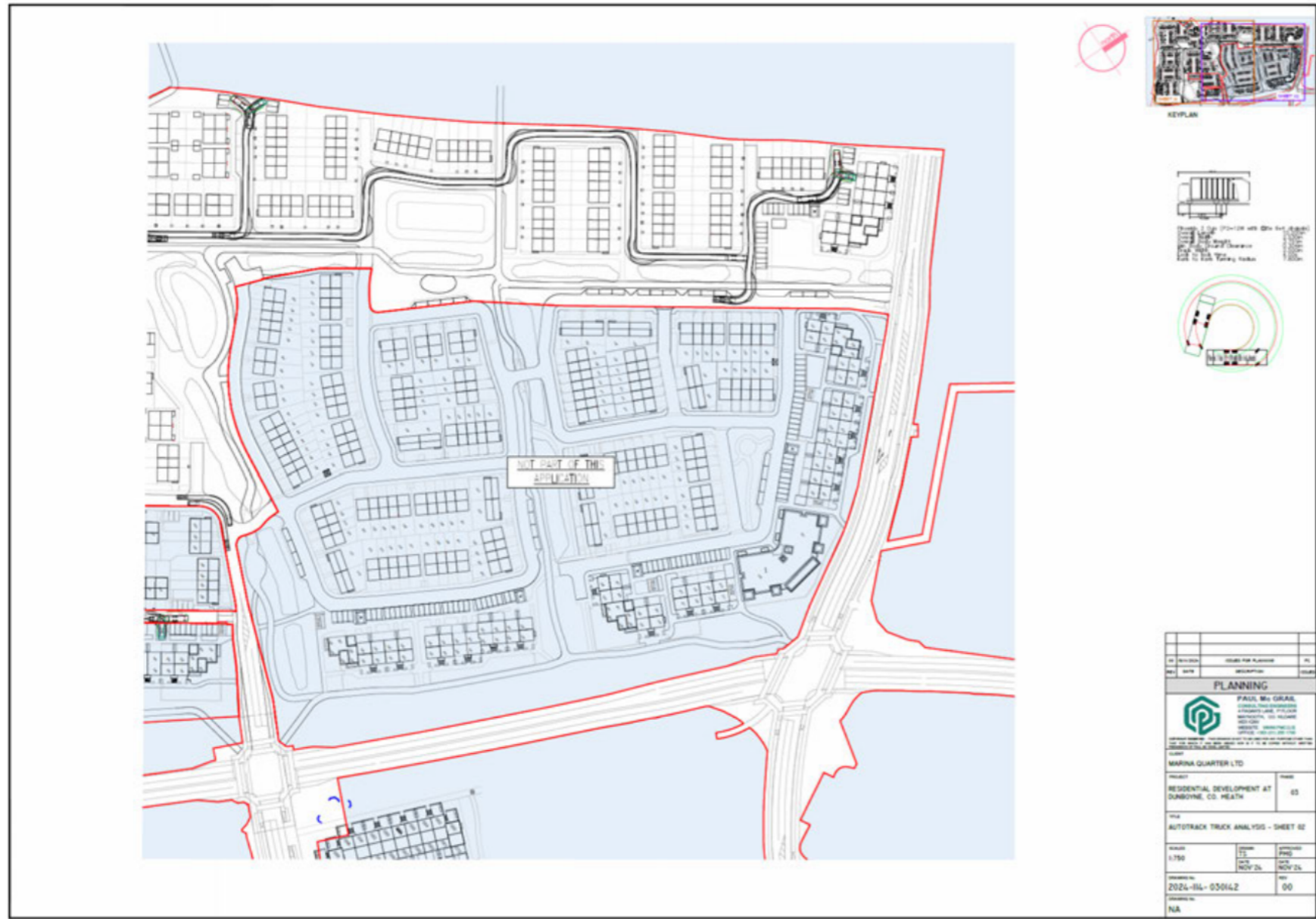
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