

RECEIVED: 11/09/2025

Appropriate Assessment Screening Report and Natura Impact Statement

Proposed EV Hub with
Service Station &
Distribution Centre at
Junction 15, M6,
Ballinasloe, Co. Galway



RECEIVED: 11/09/2025



DOCUMENT DETAILS

Client: **Petrogas Group Limited**

Project Title: **Proposed EV Hub with Service Station at Junction 15, M6, Ballinasloe, Co. Galway**

Project Number: **240957**

Document Title: **Appropriate Assessment Screening Report and Natura Impact Statement**

Document File Name: **NIS F – 2025.09.08 - 240957**

Prepared By: **MKO
Tuam Road
Galway
Ireland
H91 VW84**



Rev	Status	Date	Author(s)	Approved By
01	Draft	18/08/2025	SC	PD
02	Final	08/09/2025	SC	PD

RECEIVED: 11/09/2025

Table of Contents

1.	INTRODUCTION.....	1
1.1	Background.....	1
1.2	Statement of Authority.....	1
1.3	Methodology.....	1
1.3.1	Appropriate Assessment Process.....	1
1.3.2	Ecological Survey Methodologies.....	2
1.3.2.1	Ecological Multidisciplinary Walkover Survey.....	2
1.3.3	Desk Study.....	2
2.	DESCRIPTION OF PROPOSED DEVELOPMENT.....	4
2.1	Site Location.....	4
2.2	Characteristics of Proposed Development.....	4
2.2.1	Development Description.....	4
2.2.2	Site Services.....	9
2.2.2.1	Drainage.....	9
2.2.2.2	Surface water drainage.....	9
2.2.3	Fuel Storage.....	10
2.2.4	Flood Risk.....	10
3.	CHARACTERISTICS OF THE RECEIVING ENVIRONMENT.....	13
3.1	Hydrological Desk Study.....	13
3.2	Results of Baseline Ecological Surveys.....	14
3.2.1	Description of Habitats and Flora with the Proposed Development Site.....	14
4.	APPROPRIATE ASSESSMENT SCREENING.....	18
4.1	Identification of Relevant European Sites.....	18
4.2	Appropriate Assessment Screening Conclusion.....	25
5.	INFORMATION TO INFORM APPROPRIATE ASSESSMENT.....	26
5.1	Identification of relevant Qualifying Features and Desk Study.....	27
5.2	River Shannon Callows SAC (000216).....	27
5.2.1.1	Identification of Individual Qualifying Features with the Potential to be Affected.....	28
5.2.1.2	Site Specific Pressures and Threats.....	30
5.2.1.3	Qualifying Interests' Specific Information.....	30
5.3	River Suck Callows SPA (004097).....	34
5.3.1.1	Identification of Individual Qualifying Features with the Potential to be Affected.....	35
5.3.1.2	Site Specific Pressures and Threats.....	37
5.3.1.3	Special Conservation Interests' Specific Information.....	37
5.4	Middle Shannon Callows SPA (004096).....	43
5.4.1.1	Identification of Individual Qualifying Features with the Potential to be Affected.....	44
5.4.1.2	Site Specific Pressures and Threats.....	46
5.4.1.3	Special Conservation Interests' Specific Information.....	46
6.	ASSESSMENT OF POTENTIAL EFFECTS & ASSOCIATED MITIGATION.....	53
6.1	Potential for Direct Effects on the European Sites.....	53
6.2	Potential for Indirect Effects on the European Sites.....	53
6.2.1	Deterioration in Water Quality.....	53
6.2.1.1	Construction Phase.....	54
6.2.1.2	Operational Phase.....	58
6.2.1.3	Decommissioning.....	58
7.	ASSESSMENT OF RESIDUAL ADVERSE EFFECTS.....	59
8.	ASSESSMENT OF CUMULATIVE EFFECTS.....	60
8.1	Plans.....	60



8.2	Projects.....	60
8.3	Conclusion of Assessment of Cumulative Effects.....	62
9.	CONCLUDING STATEMENT	63
	BIBLIOGRAPHY	64

TABLE OF FIGURES

<i>Figure 2-1 Site Location Map.....</i>	<i>6</i>
<i>Figure 2-2 Proposed Development Layout – Site A.....</i>	<i>7</i>
<i>Figure 2-3 Proposed Development Layout – Site B.....</i>	<i>8</i>
<i>Figure 2-4 Proposed Surface Water Drainage.....</i>	<i>11</i>
<i>Figure 2-5 Proposed Foul Water Drainage.....</i>	<i>12</i>
<i>Figure 4-1 European Designated Sites</i>	<i>19</i>

APPENDICES

Appendix 1; Plans and Projects

Appendix 2; Construction and Environmental Management Plan

RECEIVED: 11/09/2025

1. INTRODUCTION

1.1 Background

MKO has been appointed by Applegreen to provide the information necessary to allow the competent authority to conduct an Article 6(3) Appropriate Assessment for the construction of an EV hub, service station, and distribution centre in Ballinasloe, Co. Galway.

Screening for Appropriate Assessment is required under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive). Where it cannot be excluded that a project or plan, either alone or in combination with other projects or plans, would have a significant effect on a European Site then same shall be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives. The current project is not directly connected with, or necessary for, the management of any European Site. Consequently, the project has been subject to the Appropriate Assessment Screening process.

This Natura Impact Statement (NIS) has been prepared in accordance with:

- European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites. Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2021)
- Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018)
- Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010)
- Appropriate Assessment Screening for Development Management. Office of the Planning Regulator, Dublin 7, Ireland OPR (2021).

1.2 Statement of Authority

A baseline ecological survey was undertaken on the 3rd of June 2025 in line with NRA (2009) guidelines (Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes) by Cora Twomey (B.Sc.) and Fiona Killeen (B.Sc.) of MKO. A bat habitat appraisal and roost assessment were also carried out on the 3rd of June 2025, with a bat night walkover survey being undertaken on the 18th of June 2025 by Sara Fissolo (B.Sc.) and Pádraig Desmond (B.Sc.).

This NIS was prepared by Stephanie Corkery (B.Sc., M.Sc.) and reviewed by Pádraig Desmond. Pádraig has over 4.5 years' professional experience in ecological consultancy. He has extensive experience undertaking ecological surveys in a range of habitats and has worked on Appropriate Assessment and Ecological Impact Assessments for a wide range of projects.

1.3 Methodology

1.3.1 Appropriate Assessment Process

Screening - The purpose of the screening stage is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, either alone or in combination with other plans or projects, is likely to have significant effects on a European site in view of the site's conservation objectives.

There is no necessity to establish such an effect; it is merely necessary for the Competent Authority to determine that there may be such an effect. The need to apply the precautionary principle in making

any key decisions in relation to the tests of Appropriate Assessment has been confirmed by the case law of the Court of Justice of the European Union (CJEU). Plans or projects that have no appreciable effect on a European site may be excluded. The threshold at this first stage is a very low one and operates as a trigger in order to determine whether Appropriate Assessment of a project is required. Therefore, where significant effects are likely, uncertain or unknown at screening stage, an AA of the project will be required.

Appropriate Assessment - This stage of the process is a focused and detailed examination, analysis and evaluation by the Competent Authority of the implications of the plan or project, either alone or in combination with other plans and projects, on the integrity of a European site in view of that site's conservation objectives. Case law has established that such an Appropriate Assessment, to be lawfully conducted must:

- (i) identify, in the light of the best scientific knowledge in the field, all aspects of the Proposed Development which may, by itself or in-combination with other plans or projects, affect the conservation objectives of the European site;
- (ii) contain complete, precise and definitive findings and conclusions and may not have lacunae or gaps; and
- (iii) may only include a determination that the Proposed Development will not adversely affect the integrity of any relevant European site where the competent authority decides (on the basis of complete, precise and definitive findings and conclusions) that no reasonable scientific doubt remains as to the absence of potential adverse effects. If adverse impacts can be satisfactorily avoided or successfully mitigated at this stage, so that no reasonable doubt remains as to the absence of the identified potential effects, then the process is complete. If the assessment is negative, i.e. adverse effects on the integrity of a site cannot be excluded, then the process must proceed to stage three (assessment of alternative) and, if necessary, stage four (IROPI¹).

1.3.2 Ecological Survey Methodologies

1.3.2.1 Ecological Multidisciplinary Walkover Survey

Assessing the impacts of any project and associated activities requires an understanding of the ecological baseline conditions prior to and at the time of the project proceeding. Ecological baseline conditions are those existing in the absence of proposed activities (CIEEM 2018).

A multidisciplinary walkover survey was conducted on the 3rd of June 2025 by Cora Twomey (B.Sc.) and Fiona Killeen (B.Sc.) of MKO in line with NRA (2009) guidelines (Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes). Habitats were identified in accordance with the Heritage Council's 'Guide to Habitats in Ireland' (Fossitt, 2000). Plant nomenclature for vascular plants follows 'New Flora of the British Isles' (Stace, 2010). During the surveys, the site was searched for species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations (S.I. 477 of 2011).

1.3.3 Desk Study

The desk study undertaken for this assessment included a thorough review of the available ecological data associated with the screened-in European Sites within the Likely Zone of Influence of the Proposed Development. Sources of data included the following:

¹ IROPI - 'imperative reasons of overriding public interest', the test found in Article 6(4) of the Habitats Directive.

- Review of NPWS Conservation Objectives supporting documents, site synopsis, standard data forms and supporting documents for European Designated Sites,
- Review of online web-mappers: National Parks and Wildlife Service (NPWS)², Environmental Protection Agency (EPA)³,
- Review of the publicly available National Biodiversity Data Centre (NBDC) web-mapper⁴,
- Review of NPWS Article 17 metadata and GIS database⁵.

RECEIVED: 11/09/2025

² <https://experience.arcgis.com/experience/edf34d92e28040fd87d3d14f55d8d95f> Accessed 25th of July 2025

³ <https://gis.epa.ie/EPAMaps/> Accessed 29th of July 2025

⁴ <https://maps.biodiversityireland.ie/Map> Accessed 29th of July 2025

⁵ <https://www.npws.ie/maps-and-data/habitat-and-species-data/article-17-gis-and-metadata-downloads> Accessed 29th of July 2025

RECEIVED: 11/09/2025

2. DESCRIPTION OF PROPOSED DEVELOPMENT

2.1 Site Location

The Proposed Development site is located in County Galway in the townland of Mackney, in the south-western portion of Ballinasloe town and approximately 23km southwest of Athlone (ITM Grid Ref of approximate centre point: X 583745 Y 729679).

The Proposed Development site is situated adjacent to the M6 motorway at Junction 15 and is accessed via the R355 Regional Road

The Proposed Development site is located within a green field site adjacent to an urban area, and is currently used for low intensity agriculture

The site location in relation to the general surroundings are provided in Figure 2-1.

2.2 Characteristics of Proposed Development

2.2.1 Development Description

The Proposed Development primarily includes the construction of the new Applegreen service station within a greenfield site adjacent to an urban environment. However, the planning application also includes for the decommissioning of an existing Applegreen service station approximately 170m north of the development site. As such, there are two sites associated within this application, as per the below, and are collectively referred to as the Proposed Development site:

- Site A – Proposed site for the construction of new Applegreen service station
- Site B – Site of current Applegreen service station to be decommissioned

A description of the works to be completed in each site is provided below.

Petrogas Group Ltd seek Planning Permission for development primarily on lands to the south of Ballinasloe, Co. Galway, Site A and Site B, with a combined total area of c.4.17ha. Site A involves lands to the north east of Junction 15 on the M6 (east of Garbally Roundabout) and site B involves lands to the east of the R446, at an existing services station (Mackney, Ballinasloe, Co. Galway, Eircode H53 PC44)

The Proposed Development will consist of:

Site A (3.98ha)

- Provision of new Electric Vehicle Charging Hub for 36 vehicles (all under canopy measuring 3.22m high and including solar panels over) along with 4 no. EV HGV charging spaces (no canopy).
- Construction of single storey service station building (1,018.66sq.m) including net retail area of 100sq.m (excluding off-licence), 2 no. restaurant offers, seating area, drive-thru hatch for one of the restaurants, coffee dock, toilets, back of house area, along with external storage yard, outdoor play area and outdoor seating area. The maximum height is 11.08m high.

- All ancillary development including fuel pumps under canopy (5.6m high), underground tanks, vent pipes, HGV fuel pumps (6.7m high), new vehicular entrance off Garbally roundabout, new roundabout junction which will also facilitate future access to the lands to the north, car parking (83 – including staff, family and accessible spaces), cycle parking (16 no. spaces), HGV/Bus parking (13 no. – including 4 no. EV parking spaces), motor cycle spaces (5 no. spaces), drainage infrastructure (including SuDs measures), boundary treatments, hard and soft landscaping (including attenuation pond and bio-retention pond), internal roads, footpaths, dedicated active travel route along the northern boundary of the site from the east to west of the site, outdoor exercise and areas, outdoor picnic areas, brush and jet wash, single storey car wash plant building (12.5sq.m), roof mounted solar panels, signage (free standing and on-building), single storey bin store (67.5sq.m), single storey substation building (38.23sq.m) and lighting. All associated site and drainage works.

Site B (0.19ha)

- It is proposed to demolish all structures relating to the fuel element of the existing filling station (the fuel pumps, canopy, totem sign) and underground fuel tanks. The existing buildings containing the shop and storage will remain in situ. The car wash facility will be discontinued.

The Proposed Development site layout is shown in Figure 2-2 and Figure 2-3.

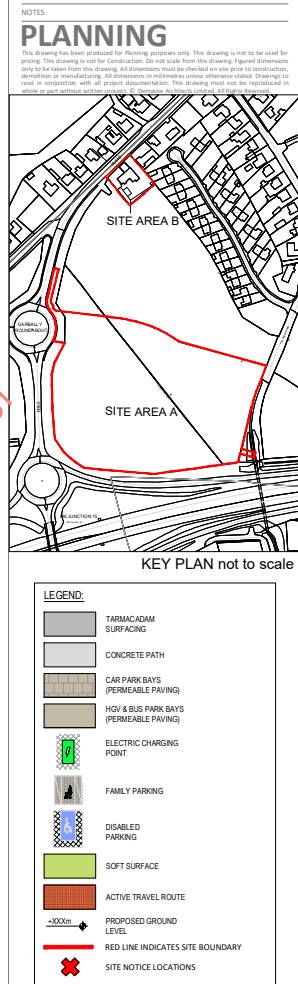


Map Legend

- Site Boundary
- WFD Watercourses



Drawing Title	
Site Location	
Project Title	
Proposed EV Charging Hub with Service Station & Distribution Centre at Junction 15, M6, Ballinasloe, Co. Galway	
Drawn By	Checked By
SC	PD
Project No.	Drawing No.
240957	Figure 2-1
Scale	Date
1:70,000	22.08.2025
MKO	
Planning and Environmental Consultants	
Tuan Road, Galway	
Ireland, H91 VW84	
+353 (0) 91 735611	
email: info@mkofireland.ie	
Website: ww.mkofireland.ie	



VEHICLES SPACES	
STANDARD CAR PARK	62 Spaces
DISABLED CAR PARK	4 Spaces
FAMILY CAR PARK	10 Spaces
EV CAR PARK	36 Spaces
BUS PARKING	6 Spaces
HGV PARKING	9 Spaces
HGV EV PARKING	4 Spaces
MOTORCYCLE PARKING	5 Spaces
CYCLE PARKING	16 Spaces
STAFF CAR PARK	7 Spaces

For Landscape details please refer to Gannon + Associate Landscape Architecture drawings pack

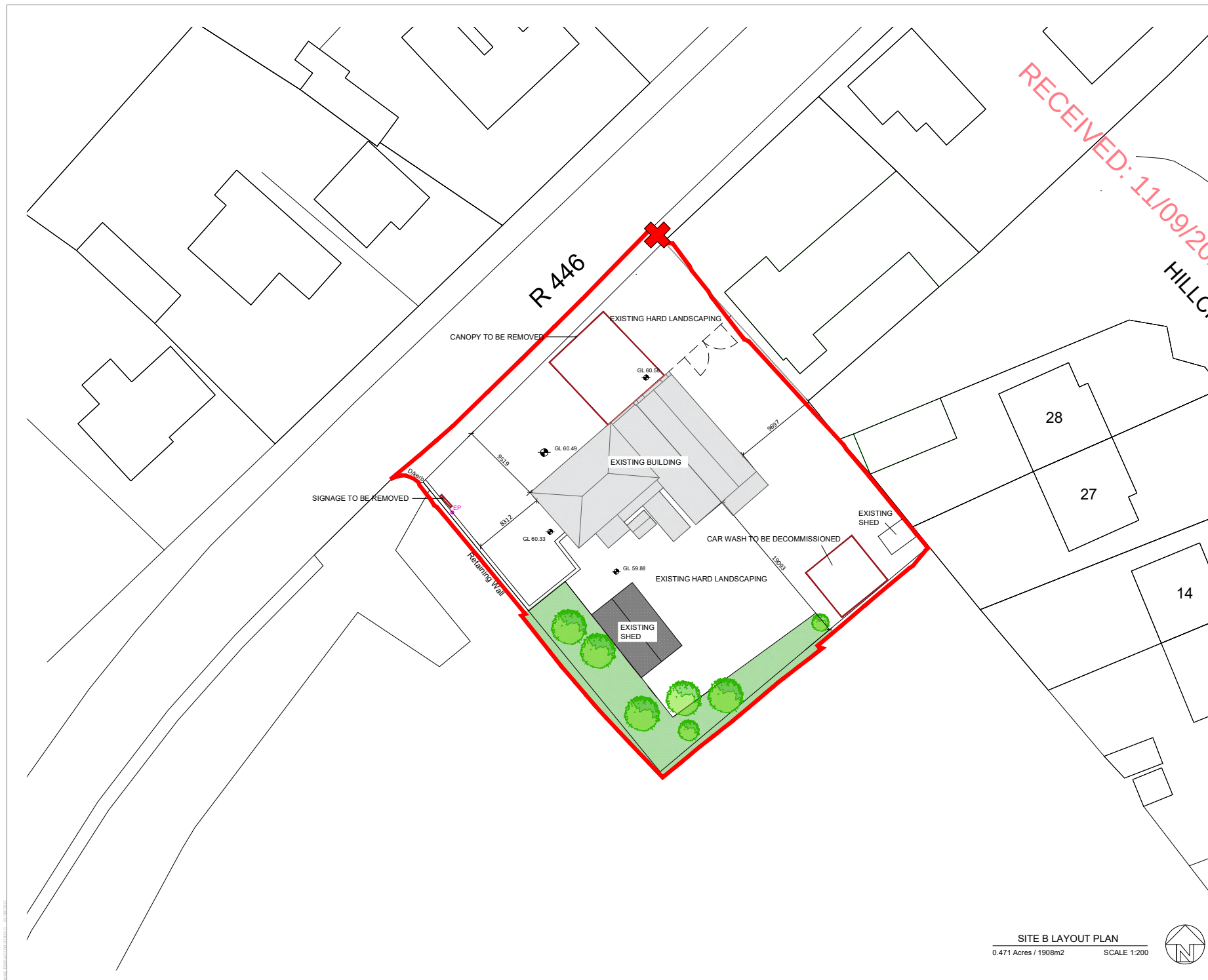
SITE LAYOUT PLAN
SCALE 1:500



REV	DATE	DESCRIPTION	BY
PROJECT			
SERVICE AREA & EV HUB			
BALLINASLOE, CO. GALWAY			
CLIENT			
PETROGAS GROUP LIMITED			
DRAWING			
SITE A, SITE PLAN		DRAWN BY	LP
AS PROPOSED		CHECKED BY	SS
PROJECT NO: 5846		SUSTAINABILITY PLANNING	APPROVED BY SS
		STATUS	P3
SCALE 1:500	SHEET	A1	DATE 14.08.2025
DRAWING NO.			REVISION
5846-DAL-DR-A-02003			

demesne
Architects + Interior Designers

Demesne Architects + Interior Designers
Diamond House, Main Street
Maynooth, Co. Kildare, W23 YB06
T: +353 (0)1 610 6900
E: info@demesne-architects.ie
W: www.demesne-architects.ie



RECEIVED: 11/09/2025

NOTES

PLANNING

This drawing has been produced for Planning purposes only. This drawing is not to be used for pricing. This drawing is not for Construction. Do not scale from this drawing. Report dimensions only to be taken from this drawing. All dimensions must be checked on site prior to construction, demolition or landscaping. All dimensions in millimetres unless otherwise stated. Drawing to read in conjunction with all project documentation. This drawing must not be reproduced in whole or part without written consent. © Demesne Architects Limited. All Rights Reserved.

KEY PLAN not to scale

LEGEND:

- PROPOSED GROUND LEVEL
- TO BE REMOVED
- RED LINE INDICATES SITE BOUNDARY
- SITE NOTICE LOCATIONS

REV	DATE	DESCRIPTION	BY
PROJECT			
SERVICE AREA & EV HUB			
BALLINASLOE, CO. GALWAY			
CLIENT			
PETROGAS GROUP LIMITED			
DRAWING			
SITE B, SITE PLAN		DRAWN BY	LP
AS PROPOSED		CHECKED BY	SS
PROJECT NO. 5846		APPROVED BY	SS
SUITABILITY		PLANNING	STATUS
P3		DATE	14.08.2025
SCALE 14.08.2025		SHEET	A1
DRAWING NO.		REVISION	
5846-DAL-DR-A-02004			

Architects + Interior Designers

Demesne Architects + Interior Designers
Demesne House, Main Street
Maynooth, Co. Kildare, W23 YB86
T: +353 (0)1 610 6900
E: info@demesne-architects.ie
W: www.demesne-architects.ie

2.2.2

Site Services

A Civil Engineering Planning Report has been prepared by Donnchadh O' Brien & Associates Consulting Engineers (DOBA) and accompanies this planning application. This report details information on foul water and surface water drainage for the Proposed Development, which are summarised in the sections below.

2.2.2.1

Drainage

As part of the Proposed Development, it is proposed to separate the surface water and wastewater drainage networks, which will serve the Proposed Development. This will provide independent connections to the local wastewater and surface water sewer networks, respectively.

2.2.2.2

Surface water drainage

There is currently no formal surface water drainage system in place within the Proposed Development site. Surface water runoff from the predominantly greenfield lands drains overland in a south-easterly direction towards the southeastern corner of the site, where it enters an existing open drainage channel. Based on a review of existing underground infrastructure, this channel appears to connect to an underground pipe network comprising a 300mm diameter concrete pipe.

The proposed surface water management has adopted a nature-based SuDS (NBS) focus approach to manage surface water produced from hard surfaces associated with the Proposed Development, through the provision of bioretention basins, bioswales, bioretention tree pits, filter drains and permeable paving and petrol / oil separator. The proposed design provides a minimum 2-stage surface water treatment process which intercepts surface water run-off at source and treats the water by filtration and treatment through natural material prior to discharging to the existing open drains at pre-development (greenfield) runoff rates.

The design and management of surface water for the Proposed Development will comply with the requirements of the Greater Dublin Strategic Drainage Study (GSDSDS). The design of the surface water network and Sustainable Drainage Systems (SuDS) measures within the application site shall include a 20% climate change factor in accordance with Galway Co. Co. Water Services requirements.

Nature based SuDS solutions will be provided in order to effectively deal with surface water on the site. These include the following:

Proposed Nature Based SuDS

- > Bioretention Areas
- > Bioswales
- > Rain Gardens
- > Tree Pits
- > Unlined Permeable Paving

Filtration System SuDS

- > Filter Drains
- > Detention Basin

Proprietary Treatment Systems

- > Petrol/Oil Separators
- > Rainwater Harvesting

The proposed surface water drainage layout is provided in Figure 2-4

2.2.2.2.1 Foul water drainage

The Proposed Development will discharge foul effluent to the public foul sewer network operated by Uisce Éireann. Wastewater generated by customer amenities, food services, and staff facilities will be collected via a gravity foul drainage network within the site and conveyed to an on-site pumping station. From the pumping station, flows will be pumped via a rising main approximately 450 metres in length to enter the Uisce Éireann wastewater network at manhole SM83309102, located to the north of the site.

The proposed foul water drainage plan is shown in Figure 2-5.

2.2.3 Fuel Storage

For fuel storage, there are 2 no. underground tank farms proposed for the Proposed Development. Tank Farm 1 will serve the car forecourt and consist of 3 no. 75,000l tanks. Tank 1 will be double-compartment tank split 37,500l (Unleaded) and 37,500l (Diesel). Tank 2 will be a multi-compartment tank split 25,000l (Super Unleaded), 25,000l (Super Diesel) and 25,000l (Petrol). Tank 3 will be a multi-compartment tank split 25,000l (Unleaded), 25,000l (Diesel), 10,000l (Super Unleaded), 10,000l (Super Diesel) and 5,000l (AdBlue). Tank Farm 2 will serve the HGV Forecourt and consist of 1 no. 75,000L tank. It will be a multi-compartment tank split 50,000l (Diesel), 15,000l (Marked Gas Oil) and 10,000l (AdBlue).

The tanks will be formed of mild steel. The inner tank shell of all tanks will have a thickness of 6mm and dished ends of 6mm. The outer shell of the tanks will have a thickness of 4mm with dished ends of 6mm. The tanks will be manufactured in accordance with BS EN12285-1 and fitted with a leak alarm system. The tanks are placed and strapped to a 300mm thick reinforced concrete base with 1 no. layer of M.S. fabric mesh reinforcement. A 250mm thick reinforced concrete slab will be placed over the tanks with 2 no. layers of M.S. fabric mesh reinforcement. All tanks are encased with pea gravel.

2.2.4 Flood Risk

A Site-Specific Flood Risk Assessment (SSFRA) has been undertaken in the Civil Engineering Planning Report has been prepared by DOBA. In accordance with planning guidelines, flood risk identification was undertaken to determine whether any flooding or surface water management issues exist that may require further investigation.

As the Proposed Development is located within Flood Zone C, a Justification Test was not required. The SSFRA concludes that the development will not adversely impact the existing hydrological regime of the area, will not increase flood risk to lands outside the ownership boundary, and will not result in unacceptable levels of flood risk within the proposed site. The development is therefore considered appropriate from a flood risk management perspective.

NOTES:

- FOR STANDARD DOBA NOTES REFER TO DRAWING 2421-DOB-XX-XX-DR-S-0001 & 2421-DOB-XX-XX-DR-S-0002
- REFER TO ARCHITECT'S DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT'S & ENGINEER'S DRAWINGS AND SPECIFICATIONS.
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE.
- REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
- ALL EXISTING SURFACES TO BE REINSTATED FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER/ARCHITECT FOR RESOLUTION
- CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER PRACTICE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
- TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES

SURFACE WATER LEGEND:

- PR. SURFACE WATER SEWER
- SMH PR. SURFACE WATER MANHOLE
- PR. SURFACE WATER INSPECTION CHAMBER
- RG PR. ROAD GULLY
- PR. TRAFFICKED PERMEABLE PAVING (REFER TO DETAIL ON DR-C-1350)
- PR. PERFORATED PIPE
- PR. PETROL INTERCEPTOR
- PR. BIORETENTION AREA
- PR. SWALE
- PR. DETENTION BASIN
- PR. GREEN ROOF
- PR. NON TRAFFICKED PERMEABLE PAVING (REFER TO DETAIL ON DR-C-1350)
- PR. ACC DRAIN
- PR. RAINWATER PIPE LOCATION INDICATIVE ONLY
- PR. DROPPED KERB
- PR. SWALES WITH PERFORATED PIPES AND FILTER DRAINS

- NOTE 1: MANHOLE COVER LEVELS ARE APPROXIMATE. ACTUAL COVER LEVELS SHOULD MATCH SURROUNDING FINISHED GROUND LEVELS U.N.O.
- NOTE 2: PIPES WITH LESS COVER THAN:
 - 600mm FOR GRASSED AREAS
 - 900mm FOR FOOTPATHS
 - 1200mm FOR ROADSTO BE SURROUNDED IN 150mm CONCRETE PROTECTION IN ACCORDANCE WITH IRISH WATER STANDARD DETAIL STD-WW-07
- NOTE 3: ALL MANHOLE COVERS LOCATED IN GRASS AREAS TO BE SURROUNDED (Min. 200mm SURROUND) IN 100mm THK C20/25 CONCRETE APRON

PLANNING ISSUE

Rev.	Note	Date	Drawn	Check
SZ P01	ISSUED FOR PLANNING	08.08.2025	KN	GB

DONNACHADH O'BRIEN & ASSOCIATES CONSULTING ENGINEERS	UNIT 3C ELM HOUSE TELECOMBURY PARK NAAS CO. KILDARE	P +353 45 984 042 enquiries@donn.co.uk
--	---	---

Client:		PETROGAS GROUP LIMITED												
Project:		APPLEGREEN BALLINASLOE												
Drawing Title:		PROPOSED SURFACE WATER LAYOUT												
Drawn By:	MD	Checked By:	AL	Approved By:	DOB	Date:	MAR 2025	Scale:	1:500	Sheet Size:	A1			
Project Number:		DOBA2421		Drawing Number:					2421-DOB-XX-SI-DR-C-0200		Status Code:	S2	Rev Number:	P01

SURFACE WATER LAYOUT

SCALE 1:500

NOTES:

- FOR STANDARD DOBA NOTES REFER TO DRAWING 2421-DOB-XX-XX-DR-S-0001 & 2421-DOB-XX-XX-DR-S-0002
- REFER TO ARCHITECT'S DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT'S & ENGINEER'S DRAWINGS AND SPECIFICATIONS.
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
- REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
- ALL EXISTING SURFACES TO BE REINSTATED FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
- CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
- TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES

WASTEWATER LEGEND:

- EX. WASTEWATER SEWER
- EX. WASTEWATER MANHOLE
- EX. WASTEWATER INSPECTION CHAMBER
- EX. WASTEWATER ACCESS JUNCTION
- EX. COMBINED SEWER
- EX. COMBINED MANHOLE
- EX. WASTEWATER RISING MAIN
- EX. WASTEWATER SEWER TO BE DECOMMISSIONED
- PR. WASTEWATER SEWER
- PR. WASTEWATER MANHOLE
- PR. WASTEWATER INSPECTION CHAMBER
- PR. WASTEWATER ACCESS JUNCTION
- PR. WASTEWATER RISING MAIN
- PR. BACKDROP IN MH
- PR. LOCAL FOUL DRAINAGE

- NOTE 1: MANHOLE COVER LEVELS ARE APPROXIMATE. ACTUAL COVER LEVELS SHOULD MATCH SURROUNDING FINISHED GROUND LEVELS U.N.O.
- NOTE 2: ALL WASTEWATER SEWERS TO BE PROVIDED WITH COVER (WITHOUT PROTECTION) IN ACCORDANCE WITH IRISH WATER STANDARD DETAIL STD-WN-07 AND CLAUSE 3.9 OF IW-CDS-5030-03.
- NOTE 3: FOR WASTEWATER SEWERS REQUIRING PROTECTION, REFER TO IRISH WATER STANDARD DETAIL STD-WN-08 AND CLAUSE 3.9 OF IW-CDS-5030-03.
- NOTE 4: ALL MANHOLE COVERS LOCATED IN GRASS AREAS TO BE SURROUNDED (Min. 200mm SURROUND) IN 100mm THK C20/25 CONCRETE APRON

MH No.	MANHOLE DIMENSION (mm)	COVER LEVEL (m)	INVERT LEVEL (m)
FIG 1.00	LC	53.590	52.240
FIG 1.01	LC	53.318	51.462
FIG 1.02	LC	53.609	50.880
FIG 1.03	LC	53.930	50.811
FMH 1.00	12000	52.877	50.032
FMH 1.01	12000	52.733	49.748
FMH 1.02	12000	52.621	49.717
FMH 1.03	12000	51.863	49.488
FIG 2.00	LC	53.116	51.766

1240M3 ABOVE GROUND, ONLINE DETENTION BASIN TO PROVIDE SURFACE FOR UP TO AND INCLUDING A 1 IN 100 YEAR STORM EVENT +30% C.C.

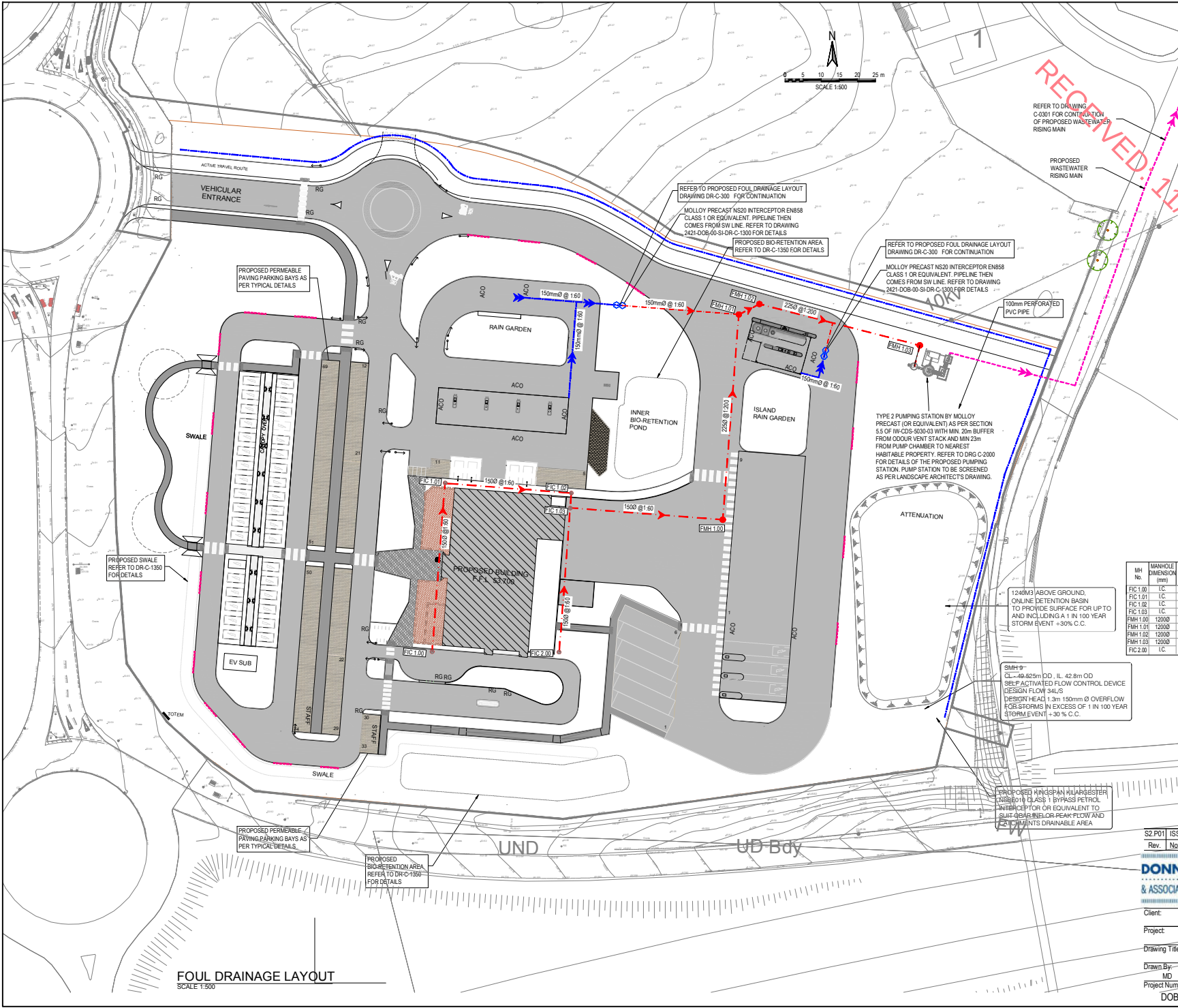
Shift 9
CL=49.625m OD, IL 42.8m OD
SELF ACTIVATED FLOW CONTROL DEVICE
DESIGN FLOW 34LS
DESIGN HEAD 1.3m 150mm Ø OVERFLOW
FOR STORMS IN EXCESS OF 1 IN 100 YEAR STORM EVENT +30% C.C.

PLANNING ISSUE

S2 P01	ISSUED FOR PLANNING	08.08.2025	KN	GB
Rev.	Note	Date	Drawn	Check
DONNACHADH O'BRIEN & ASSOCIATES CONSULTING ENGINEERS				
Client: PETROGAS GROUP LIMITED				
Project: APPLEGREEN BALLINASLOE				
Drawing Title: PROPOSED FOUL DRAINAGE LAYOUT				
Drawn By: MD	Checked By: GB	Approved By: DOB	Date: JUL 2025	Scale: 1:500
Project Number: DOBA2421	Drawing Number: 2421-DOB-XX-SI-DR-C-0300	Status Code: S2	Rev Number: P01	Sheet Size: A1

FOUL DRAINAGE LAYOUT

SCALE 1:500



3.

CHARACTERISTICS OF THE RECEIVING ENVIRONMENT

3.1

Hydrological Desk Study

The baseline hydrology of the site and surrounding area has been reviewed on the EPA web-mapper (<https://gis.epa.ie/EPAMaps/>) which was consulted on the 24/08/2025.

Regionally the Proposed Development site is located within the Upper Shannon (Catchment ID: 26D) surface water catchment. This is located within the Shannon River Basin District.

Within this catchment, the study area is located within the Suck sub-catchment (Suck_SC_100) (Sub-catchment ID: 26D_3). The study area is located within the Suck (SUCK_150) sub-basin.

With regards to local hydrology, no mapped watercourses traverse the site of the Proposed Development. The closest mapped watercourse to the site is the Loughbown Order 1 stream [EPA Code: 26L75] located approximately 730m south of the Proposed Development site. The Loughbown stream has downstream connectivity to River Suck Callows SPA, Middle Shannon Callows SPA and River Shannon Callows SAC.

The Biotic Index of Water Quality (BIWQ) was developed in Ireland by the Environmental Protection Agency (EPA). Q-values are assigned using a combination of habitat characteristics and structure of the macro-invertebrate community within the waterbody. Individual macro-invertebrate families are classified according to their sensitivity to organic pollution and the Q-value is assessed based primarily on their relative abundance within a sample.

River Basin Management Plans (RBMPs) have been published for all River Basin Districts in Ireland in accordance with the requirements of the Water Framework Directive. The online EPA Envision map viewer provides access to water quality information at individual waterbody status for all the River Basin Districts in Ireland. The EPA Envision map viewer was consulted on the 12th of December 2024 regarding the water quality status of the rivers which run within and directly adjacent to the Proposed Development site.

The River Waterbody WFD Status 2016-2021 for the Loughbown stream is 'Moderate' and the River Waterbodies Risk for this watercourse is 'At risk'. The closest Q value was taken from the River Suck 3.5 km from the site, which has been assigned with a 'Moderate' Q value status of 3-4.

The site of the Proposed Development is located partially within the Suck South and Aughrim groundwater catchments. These groundwater bodies have been identified as 'good' (as per the Water Framework Directive risk score) and are 'Not at risk'.

3.2

Results of Baseline Ecological Surveys

3.2.1

Description of Habitats and Flora with the Proposed Development Site

This section describes the habitats recorded within the Proposed Development site with associated Plates representative of the main habitats present. The Site is located within a green field site adjacent to an urban area and is currently used for low intensity agriculture. The Proposed Development site is surrounded by the M6 motorway, a housing estate, a farm road and a busy primary road (R355).

The habitats recorded within the Proposed Development site are shown in Table 3-1 below.

Table 3-1 Habitats recorded within the Study Area.

Habitat	Fossitt Code
Dry meadows and grassy verges	GS2
Stone walls and other stonework	BL1
Treelines	WL2
Buildings and artificial surfaces	BL3
Hedgerows	WL1

Site A

The Proposed Development site consists of 2 no. grassland pastures consisting of tall grassy swards, managed for summer harvest. This grassland habitat within the site is categorized as **Dry meadows and grassy verges (GS2)** (Plate 3-1 and Plate 3-2) dominated by perennial rye grass (*Lolium perenne*), Yorkshire fog (*Holcus lanatus*) and cocksfoot (*Dactylis glomerata*). Other species recorded include dandelion (*Taraxacum officinale*), sweet vernal grass (*Anthoxanthum odoratum*), red fescue (*Festuca rubra*), ribwort plantain (*Plantago lanceolata*), creeping buttercup (*Ranunculus repens*), meadow buttercup (*Ranunculus acris*), crested dog's tail (*Cynosurus cristatus*), common mouse ear (*Cerastium fontanum*), cuckoo flower (*Cardamine pratensis*), creeping thistle (*Cirsium arvense*), oxeye daisy (*Leucanthemum vulgare*), white clover (*Trifolium repens*), yarrow (*Achillea millefolium*), knapweed (*Centaurea nigra*), sorrel (*Rumex acetosa*), glaucous sedge (*Carex flacca*), red clover (*Trifolium pratense*), daisy (*Bellis perennis*), field speedwell (*Veronica persica*), ragwort (*Jacobaea vulgaris*), *Poa* spp., creeping cinquefoil (*Potentilla reptans*) and field woodrush (*Luzula campestris*). No grazing was observed during the multidisciplinary walkover survey and the Proposed Development site was entirely dry underfoot.

The grassland pastures are separated by a low stone wall categorized as **Stonewall and other stonework (BL1)** and an individual ivy-covered ash (*Fraxinus excelsior*) tree, hawthorn and elder trees with isolated bramble pockets. Sections of **Hedgerow (WL2)** were also recorded along this stonewall (Plate 3-1). A wooden fence post and railing borders the site to the west, south and east.

Site B

The site of the existing Applegreen service station to be demolished comprised entirely of hard surfaces and buildings, categorized as **Artificial surfaces and buildings (BL3)** (Plate 3-3 and Plate 3-4). A small section of **Treeline (WL2)** habitat on the eastern boundary of this site. Species recorded here include butterfly bush (*Buddleja davidii*), hawthorn (*Crataegus monogyna*), elder (*Sambucus nigra*), cow

parsley (*Anthriscus sylvestris*), herb Robert (*Geranium robertianum*), nettle (*Urtica dioica*), ragwort and bramble (*Rubus fruticosus agg.*).

No habitats listed under Annex I of the EU Habitats Directive were recorded within the site of the proposed development and no suitable supporting habitat for species listed under Annex II of the EU Habitats Directive was identified during the walkover survey. No birds listed under Annex I of EU Birds Directive, nor significant suitable habitat, were recorded within the proposed development site during the walkover survey.

A search for Invasive Alien Species (IAS), with a focus on those listed under the Third Schedule of the European Communities Regulations 2011 (S.I. 477 of 2011), was also conducted. No Third Schedule invasive plant species were found within the Proposed Development site.



Plate 3-1 View of Dry meadows and grassy verges (GS2) habitat in the south-east of the site and mature ash, hawthorn and elder trees along the Stone wall (BL1) habitat in the centre of the site.



Plate 3-2 View of the dry meadows and grassy verges (GS2) in the south of Proposed Development site.



Plate 3-3 Existing Applegreen service station classified as Buildings and artificial surfaces (BL3).



Plate 3-4 Existing Applegreen service station classified as Buildings and artificial surfaces (BL3).

4.

APPROPRIATE ASSESSMENT SCREENING

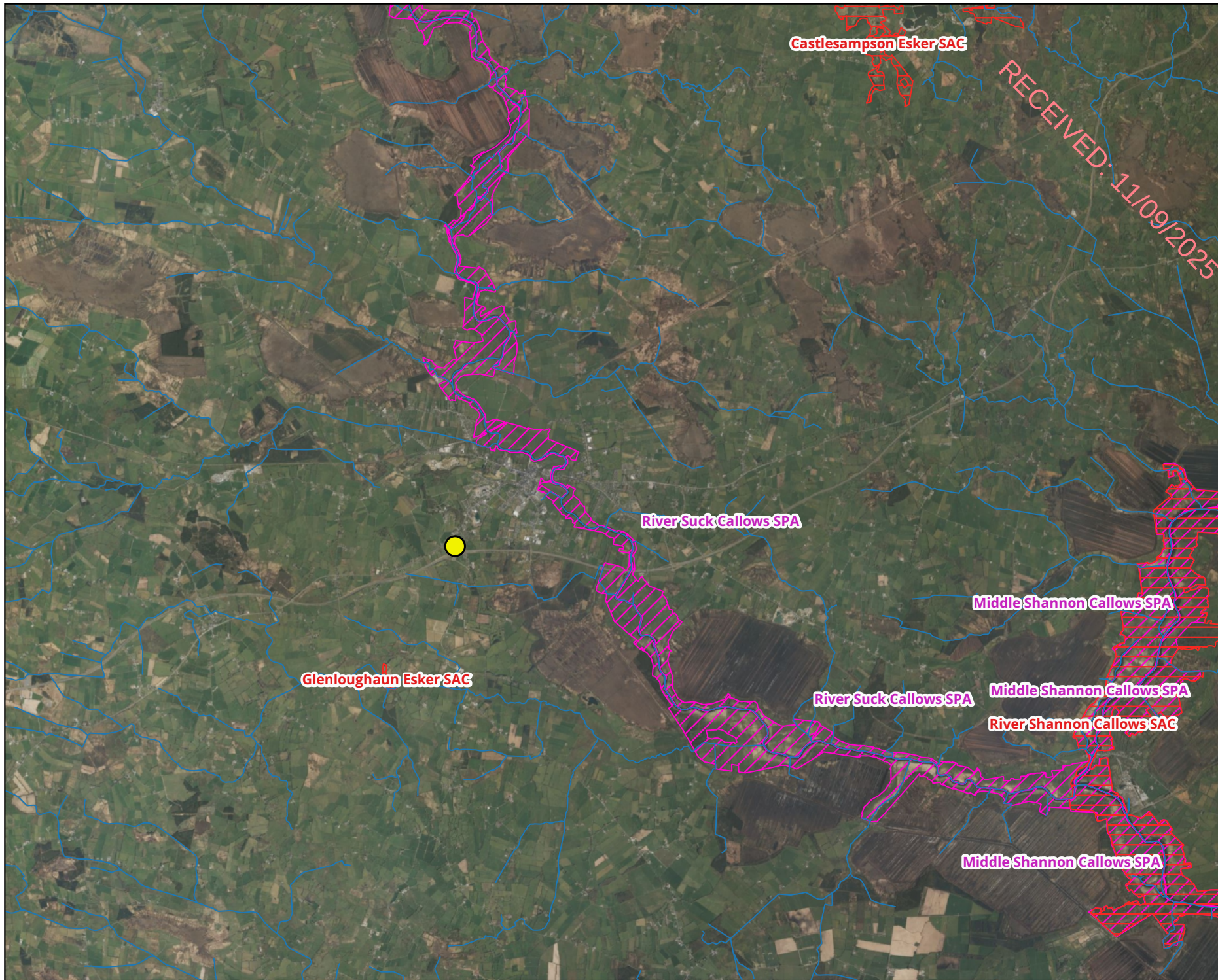
RECEIVED: 11/09/2025

4.1

Identification of Relevant European Sites

The following methodology was used to establish any European Sites upon which there is a potential for a likely significant effect to occur either individually or in combination with other plans and projects as a result of the Proposed Development:

- Initially the most up to date GIS spatial datasets for European designated sites and water catchments were downloaded from the NPWS website (www.npws.ie) and the EPA website (www.epa.ie).
- All European Sites that could potentially be affected were identified using a source-pathway - receptor model. To provide context for the assessment, European Sites surrounding the Proposed Development are shown on Figure 4-1. Information on these sites according to the site-specific conservation objectives is provided in Table 4-1.
- The catchment mapping was used to establish or discount potential hydrological connectivity between the site of the Proposed Development and any European Sites. The hydrological catchments are also shown in Figure 4-1.
- In relation to Special Protection Areas, in the absence of any specific European or Irish guidance in relation to such sites, the Scottish Natural Heritage (SNH) Guidance, '*Assessing Connectivity with Special Protection Areas (SPA)*' (2016) was consulted. This document provides guidance in relation to the identification of connectivity between Proposed Development and Special Protection Areas. The guidance takes into consideration the distances species may travel beyond the boundary of their SPAs and provides information on dispersal and foraging ranges of bird species which are frequently encountered when considering plans and projects.
- Table 4-1 provides details of all relevant European Sites as identified in the preceding steps and assesses the potential for likely significant effects on each.
- The assessment considers any likely direct or indirect impacts of the Proposed Development, both alone and in combination with other plans and projects, on European Sites by virtue of criteria including the following: size and scale, land-take, distance from the European Site or key features of the site, resource requirements, emissions, excavation requirements, transportation requirements and duration of construction, operation and decommissioning were considered in this assessment.
- The site synopses and conservation objectives of these sites, as per the NPWS website (www.npws.ie), were consulted and reviewed at the time of preparing this report.
- Where potential pathways for Likely Significant Effect are identified, the site is included within the Likely Zone of Influence and further assessment is required within the NIS.
- The potential for the Proposed Development to result in cumulative impacts on any European Sites in combination with other plans and projects was considered in the assessment that is presented in Table 4-1. Plans and projects considered include those that are listed in **Appendix 1**.



Map Legend

- Site Location
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)
- WFD Watercourses
- WFD Catchments

Microsoft product screen shots reprinted with permission from Microsoft Corporation
© Ordnance Survey Ireland. All rights reserved. Licence number CYAL50267517

Drawing Title
European Designated Sites
surrounding the site of the Proposed
Development

Project Title
Proposed EV Charging Hub with Service
Station & Distribution Centre at Junction 15,
M6, Ballinasloe, Co. Galway

Drawn By SC	Checked By PD
Project No. 240957	Drawing No. Figure 4-1
Scale 1:100,000	Date 15.07.2025

MKO
Planning and
Environmental
Consultants
Tuam Road, Galway
Ireland, H91 VW84
+353 (0) 91 735611
email: info@mkofireland.ie
Website: www.mkofireland.ie

RECEIVED: 11/09/2025

Table 4-1 Identification of European Sites within the Likely Zone of Influence

European Sites and distance from Proposed Development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie ⁶)	Conservation Objectives	Identification of Source-Pathway-Receptor chain	Potential for Likely Significant Effects (LSEs)
Special Areas of Conservation (SAC)				
Glenloughaun Esker SAC (002213) Approx. Distance: 2.7 km Hydrological connectivity: No connectivity	➤ [6210] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites)	Detailed conservation objectives for this site, (Version 1, June 2018), were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the Proposed Development is located entirely outside the boundary of this European Site. The potential for indirect effects was also considered. The QI habitat for which this SAC has been designated was not recorded within or adjacent to the Proposed Development site and therefore, there is no potential for <i>ex-situ</i> effects on this European Site. Given the distance between the Proposed Development and the SAC and the terrestrial nature of the single associated QI habitat, no potential for significant indirect effects on this SAC were identified. No pathway for likely significant effect on this European Site was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects. This site is not within the Likely Zone of Influence of the Proposed Development. Therefore, it is not considered further in this assessment.	No
River Shannon Callows SAC (000216)	➤ [6410] <i>Molinia meadows</i> on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	Detailed conservation objectives for this	There will be no direct effects as the Proposed Development is located entirely outside the boundary of this European Site.	Yes

⁶ Accessed at <<https://www.npws.ie/protected-sites/conservation-management-planning/conservation-objectives>>

RECEIVED: 11/09/2025

European Sites and distance from Proposed Development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie ⁶)	Conservation Objectives	Identification of Source-Pathway-Receptor chain	Potential for Likely Significant Effects (LSEs)
Approx. Distance: 12.9 km Hydrological connectivity: No connectivity	> [6510] Lowland hay meadows (<i>Alopecurus pratensis</i>, <i>Sanguisorba officinalis</i>) > [7230] Alkaline fens > [8240] Limestone pavements * > [91E0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)* > [1355] Otter (<i>Lutra lutra</i>)	site, (Version 1, January 2022), were reviewed as part of the assessment and are available at www.npws.ie	The potential for indirect effects was also considered. No QI habitat or significant suitable supporting habitat for any QI species for which this SAC has been designated was recorded within or adjacent to the Proposed Development site and therefore, there is no potential for <i>ex-situ</i> effects on this European Site as a result of the habitat loss or disturbance. The site of the Proposed Development and this SAC partially lie within the same WFD catchment (Upper Shannon) and groundwater catchment (Aughrim). The site is also up gradient of the Loughbown stream, which is hydrologically connected to this SAC. Therefore, taking a highly precautionary approach due to the nature of the Proposed Development, potential exists for significant effects via the deterioration of water quality arising from the runoff or percolation of pollutants into groundwaters and surface waters through the underlying limestone bedrock of the region during the construction and operational phases of the Proposed Development. This may potentially impact the downstream aquatic habitat and species of this SAC. A source pathway receptor chain was identified and in the absence of mitigation, there is potential for the Proposed Development to result in Likely Significant Effects on this European Site. Therefore, the European Site is located within the Likely Zone of Influence and is considered further in this assessment.	

RECEIVED: 11/09/2025

European Sites and distance from Proposed Development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie ⁶)	Conservation Objectives	Identification of Source-Pathway-Receptor chain	Potential for Likely Significant Effects (LSEs)
Special Protection Area (SPA)				
River Suck Callows SPA (004097) Approx. Distance: 1.8 km Hydrological connectivity: No connectivity	> [A038] Whooper swan (<i>Cygnus cygnus</i>) > [A050] Wigeon (<i>Anas Penelope</i>) > [A140] Golden Plover (<i>Pluvialis apricaria</i>) > [A142] Lapwing (<i>Vanellus vanellus</i>) > [A395] Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) > [A999] Wetlands	Detailed conservation objectives for this site, (Version 1, November 2022), were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the Proposed Development is located entirely outside the boundary of this European Site. The potential for indirect effects was also considered. Whilst the Proposed Development is located within the core foraging ranges of several SCIs of this SPA, the site is located adjacent to an urban centre, surrounded by housing estates, town roads and the M6 motorway. Therefore, no significant supporting habitat for any SCI of this SPA was recorded within or adjacent to the Proposed Development site and no potential for likely significant effects on the SPA are anticipated, as a result of <i>ex-situ</i> disturbance or habitat loss. The site of the Proposed Development and this SPA lie within the same WFD catchment (Upper Shannon) and groundwater catchment (Aughrim). The site is also up gradient of the Loughbown stream, which is hydrologically connected to this SPA. Therefore, taking a highly precautionary approach due to the nature of the Proposed Development, potential exists for significant effects on supporting wetland habitat of SCIs of the SPA via the deterioration of water quality arising from the runoff or percolation of pollutants into groundwaters and surface waters through the underlying limestone bedrock of the region during the construction and operational phases of the Proposed Development. A source pathway receptor chain was identified and in the absence of mitigation, there is potential for the Proposed Development to result in	Yes

RECEIVED: 11/09/2025

European Sites and distance from Proposed Development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie ⁶)	Conservation Objectives	Identification of Source-Pathway-Receptor chain	Potential for Likely Significant Effects (LSEs)
			Likely Significant Effects on this European Site. Therefore, the European Site is located within the Likely Zone of Influence and is considered further in this assessment.	
Middle Shannon Callows SPA (004096) Approx. Distance: 12.9 km Hydrological connectivity: No connectivity	> [A038] Whooper swan (<i>Cygnus cygnus</i>) > [A050] Wigeon (<i>Anas Penelope</i>) > [A122] Corncrake (<i>Crex crex</i>) > [A140] Golden Plover (<i>Pluvialis apricaria</i>) > [A142] Lapwing (<i>Vanellus vanellus</i>) > [A156] Black-tailed Godwit (<i>Limosa limosa</i>) > [A179] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) > [A999] Wetlands	Detailed conservation objectives for this site, (Version 1, November 2022), were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the Proposed Development is located entirely outside the boundary of this European Site. The potential for indirect effects was also considered. No significant supporting habitat for any SCI of this SPA was recorded within or adjacent to the Proposed Development site and therefore, there is no potential for <i>ex-situ</i> effects on this European Site as a result of habitat loss, disturbance, or displacement. The site of the Proposed Development and this SAC partially lie within the same WFD catchment (Upper Shannon) and groundwater catchment (Aughrim). The site is also up gradient of the Loughbown stream, which is hydrologically connected to this SPA. Therefore, taking a highly precautionary approach due to the nature of the Proposed Development, potential exists for significant effects via the deterioration of water quality arising from the runoff or percolation of pollutants into groundwaters and surface waters through the underlying limestone bedrock of the region during the construction and operational phases of the Proposed Development. This may potentially impact the downstream wetland habitat of this SPA. A source pathway receptor chain was identified and in the absence of mitigation, there is potential for the Proposed Development to result in Likely Significant Effects on this European Site. Therefore, the European Site	Yes

RECEIVED: 11/09/2025

European Sites and distance from Proposed Development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie ⁶)	Conservation Objectives	Identification of Source-Pathway-Receptor chain	Potential for Likely Significant Effects (LSEs)
			is located within the Likely Zone of Influence and is considered further in this assessment.	

4.2

Appropriate Assessment Screening Conclusion

It cannot be excluded beyond reasonable scientific doubt, in view of best scientific knowledge, on the basis of objective information and in light of the conservation objectives of the relevant European sites, that the Proposed Development, individually or in combination with other plans and projects, would be likely to have a significant effect on the following European Sites:

- River Shannon Callows SAC (000216),
- River Suck Callows SPA (004097),
- Middle Shannon Callows SPA (004096).

As a result, an Appropriate Assessment (AA) of the Proposed Development is required. Information to enable the Competent Authority to carry out an AA of the Proposed Development is presented in Sections 5 to 9 of this report.

5.

INFORMATION TO INFORM APPROPRIATE ASSESSMENT

The potential for likely significant effects on the following European Sites in the absence of any mitigation, individually or cumulatively with other plans or projects, was identified in the preceding section:

- > River Shannon Callows SAC (000216)
- > River Suck Callows SPA (004097)
- > Middle Shannon Callows SPA (004096)

The following sections consider each European Site individually to:

1. Determine which individual qualifying features have the potential to be adversely affected by the Proposed Development.
2. Provide information with regard to the Conservation Objectives and site-specific pressures and threats for those qualifying features that have the potential to be adversely affected.

RECEIVED: 11/09/2025

5.1

Identification of relevant Qualifying Features and Desk Study

5.2

River Shannon Callows SAC (000216)

The potential for likely significant effects on this SPA were identified in Table 4-1 in Section 4 above. The identified pathways for effect include the following:

- There is a potential pathway for significant indirect effects on this SAC via the deterioration of water quality arising from run-off or percolation of pollutants to surface and/or ground water during the construction and operational phases of the Proposed Development.

The Site-Specific Conservation Objectives (SSCOs) document and Natura 2000 Data Form for this designated site were reviewed during this assessment.

SSCOs: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000216.pdf

Natura 2000 Data Form:

<https://natura2000.eea.europa.eu/Natura2000/sdf/#/sdf?site=IE0000216&release=55>

Table 5-1 below lists the qualifying features of this European Site and determines, in the light of their Conservation Objectives, whether there is any complete source-pathway-receptor chain, by which adverse effects may occur.

RECEIVED: 11/09/2025

5.2.1.1 Identification of Individual Qualifying Features with the Potential to be Affected

Table 5-1 Assessment of Qualifying features potentially affected

Qualifying feature	Conservation Objective (NPWS, Version 1, January 2022)	Rationale	Potential for Adverse Effects Yes/No
[1355] Otter (<i>Lutra lutra</i>)	To maintain the favourable conservation condition of Otter (<i>Lutra lutra</i>) in River Shannon Callows SAC.	The Proposed Development will not result in any barriers to connectivity for species commuting outside of the SAC. Given the proposed works and the findings of the baseline surveys for otter, no potential for habitat destruction, loss of breeding or resting places, or direct mortality is anticipated as a result of the Proposed Development. However, otter is considered to be within the Zone of Influence of the Proposed Development. There is potential for construction works to result in the run-off of pollutants into aquatic habitats downstream of the Proposed Development site. This has the potential to impact on the conservation objectives for this species in particular in relation to fish biomass available, for example a degradation in water quality could impact on prey resource for otter. Therefore, taking a precautionary approach, there is potential for significant indirect effects on supporting foraging habitat for this species, as a result of a deterioration in water quality. Therefore, otter is assessed further in this NIS.	Yes
[7230] Alkaline fens	To maintain the favourable conservation condition of Alkaline fens in River Shannon Callows SAC.	The site of the Proposed Development partially lies within the same groundwater catchment as this SAC. According to the SSCOs for this QI habitat, unsurveyed areas of this habitat may be present within the SAC. Therefore, taking a precautionary approach, there is potential for significant indirect effects on this habitat as a result of a deterioration in groundwater quality. Therefore, Alkaline fens is assessed further in this NIS.	Yes
[6410] Molinia meadows on calcareous, peaty or clayey-	To restore the favourable conservation condition of Molinia	These QI habitats are entirely terrestrial and will not be impacted via any potential deterioration of water quality as a result of the Proposed Development. Given the terrestrial	No

Qualifying feature	Conservation Objective (NPWS, Version 1, January 2022)	Rationale	Potential for Adverse Effects Yes/No
silt-laden soils (<i>Molinion caeruleae</i>)	meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) in River Shannon Callows SAC.	nature of these QI habitats, no complete source pathway- receptor chain for any effect on these habitats as a result of the Proposed Development was identified. No further assessment is required.	
[6510] Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>)	To restore the favourable conservation condition of Lowland hay meadows (<i>Alopecuruspratensis</i> , <i>Sanguisorba officinalis</i>) in River Shannon Callows SAC.		No
[8240] Limestone pavements*	To maintain the favourable conservation condition of Limestone pavements* in River Shannon Callows SAC.		No
[91E0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)*	To maintain the favourable conservation condition of Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)* in River Shannon Callows SAC.	The Proposed Development is located outside of the SAC, as such there is no potential for direct effects on this QI habitat. On review of the SSCOs for this QI habitat, no potential to undermine the conservation objectives for this QI habitat was identified. Whilst this QI is influenced by hydrological regimes and is downstream of the Proposed Development site, as per the SSCOs, water quality is not a key attribute of this QI. Therefore, there is no potential adverse effects on this QI habitat. No further assessment is required.	No

5.2.1.2 Site Specific Pressures and Threats

As per the Natura 2000 Data Form, the site-specific threats, pressures, and activities with potential to impact on the European Site were reviewed and considered in relation to the Proposed Development. These are provided in Table 5-2.

Table 5-2 Site-specific threats, pressures and activities with potential to effect on River Shannon Callows SAC.

Negative Impacts			
Rank	Threats and Pressures		Inside/Outside
High	A03.03	Abandonment/lack of mowing	Inside
High	A04.03	Abandonment of pastoral systems, lack of grazing	Inside
High	A07	Use of biocides, hormones and chemicals	Inside
High	J02.04.01	Flooding	Inside
Low	A04.02.05	Non-intensive mixed animal grazing	Inside
Low	A10.01	Removal of hedges and copses or scrub	Inside
Low	B06	Grazing in forests/woodland	Inside
Low	C01.03.02	Mechanical removal of peat	Inside
Low	D01.01	Paths, tracks, cycling tracks	Inside
Low	F03.01	Hunting	Both
Low	G01	Outdoor sports and leisure activities, recreational activities	Inside
Low	G05.01	Trampling, overuse	Inside
Low	J02.01	Landfill, land reclamation and drying out, general	Inside
Low	J02.05	Modification of hydrographic functioning, general	Inside
Medium	A04.01	Intensive grazing	Inside
Medium	A08	Fertilisation	Inside
Medium	B02.02	Forestry clearance	Inside
Medium	J02.05.02	Modifying structures of inland water courses	Inside
Medium	J02.11	Siltation rate changes, dumping, depositing of dredged deposits	Inside
Medium	K03.04	Predation	Both

5.2.1.3 Qualifying Interests' Specific Information

[1355] Otter (*Lutra lutra*)

The conservation objective for this QI is:

'To restore the favourable conservation condition of Otter in River Shannon Callows SAC, which is defined by the following list of attributes and targets:'

The attributes and targets for this species are provided in Table 5-3 below.

Table 5-3 Targets and Attributes associated with nominated site-specific conservation objectives for Otter in River Shannon Callows SAC.

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Distribution	No significant decline	Yes - deterioration in water quality could alter distribution of this species due to prey availability.
Extent of terrestrial habitat	No significant decline. Area mapped and calculated as 282.1ha	No (impacts will not occur as a result of the Proposed Development).
Extent of freshwater (river) habitat	No significant decline. Length mapped and calculated as 146.7km	No (impacts will not occur as a result of the Proposed Development).
Couching sites and holts	No significant decline	No (impacts will not occur as a result of the Proposed Development).
Fish biomass available	No significant decline	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution and availability.
Barriers to connectivity	No significant increase	No (impacts will not occur as a result of the Proposed Development).

[7230] Alkaline Fens

The conservation objective for this QI is:

‘To restore the favourable conservation condition of Alkaline Fens in River Shannon Callows SAC, which is defined by the following list of attributes and targets.’

The attributes and targets for this species are provided in Table 5-4 below.

Table 5-4 Targets and Attributes associated with nominated site-specific conservation objectives for Alkaline Fens in River Shannon Callows SAC.

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Habitat area	Area stable or increasing, subject to natural processes	No (impacts will not occur as a result of the Proposed Development).
Habitat distribution	No decline, subject to natural processes	No (impacts will not occur as a result of the Proposed Development).
Ecosystem function: soil nutrients	Maintain soil pH and nutrient status within natural ranges	Yes - deterioration in groundwater quality and habitat degradation could result in an

		alteration in soil pH and nutrient status.
Ecosystem function: peat formation	Maintain active peat formation, where appropriate	No (impacts will not occur as a result of the Proposed Development).
Ecosystem function: hydrology - groundwater levels	Maintain, or restore where necessary, appropriate natural hydrological regimes necessary to support the natural structure and functioning of the habitat	No (impacts will not occur as a result of the Proposed Development).
Ecosystem function: hydrology - surface water flow	Maintain, or restore where necessary, as close as possible to natural or seminatural drainage conditions	No (impacts will not occur as a result of the Proposed Development).
Ecosystem function: water quality	Maintain appropriate water quality, particularly pH and nutrient levels, to support the natural structure and functioning of the habitat	Yes - deterioration in groundwater quality will result in habitat degradation.
Vegetation composition: community diversity	Maintain variety of vegetation communities, subject to natural processes	No (impacts will not occur as a result of the Proposed Development).
Vegetation composition: typical brown mosses	Maintain adequate cover of typical brown moss species	No (impacts will not occur as a result of the Proposed Development).
Vegetation composition: typical vascular plants	Maintain adequate cover of typical vascular plant species	No (impacts will not occur as a result of the Proposed Development).
Vegetation composition: native negative indicator species	Cover of native negative indicator species at insignificant levels	No (impacts will not occur as a result of the Proposed Development).
Vegetation composition: non-native species	Cover of non-native species less than 1%	No (impacts will not occur as a result of the Proposed Development).
Vegetation composition: native trees and shrubs	Cover of scattered native trees and shrubs less than 10%	No (impacts will not occur as a result of the Proposed Development).
Vegetation composition: algal cover	Cover of algae less than 2%	Yes - deterioration in groundwater quality may result in a change in algal cover..
Vegetation structure: vegetation height	At least 50% of the live leaves/flowering shoots are more than either 5cm or 15cm above ground surface depending on community type	No (impacts will not occur as a result of the Proposed Development).
Physical structure: disturbed bare ground	Cover of disturbed bare ground not more than 10%	No (impacts will not occur as a result of the Proposed Development).

Physical structure: tufa formations	Disturbed proportion of vegetation cover where tufa is present is less than 1%	No (impacts will not occur as a result of the Proposed Development).
Indicators of local distinctiveness	No decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat; maintain features of local distinctiveness, subject to natural processes	No (impacts will not occur as a result of the Proposed Development).
Transitional areas between fen and adjacent habitats	Maintain adequate transitional areas to support/protect the alkaline fen habitat and the services it provides	No (impacts will not occur as a result of the Proposed Development).

RECEIVED: 11/09/2025

5.3

River Suck Callows SPA (004097)

The potential for likely significant effects on this SPA were identified in Table 4-1 in Section 4 above.

The identified pathways for effect include the following:

- There is a potential pathway for significant indirect effects on this SPA via the deterioration of water quality arising from run-off or percolation of pollutants to surface and/or ground water during the construction and operational phases of the Proposed Development.

The Site-Specific Conservation Objectives (SSCOs) document and Natura 2000 Data Form for this designated site were reviewed during this assessment.

COs: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004097.pdf

Natura 2000 Data Form:

<https://natura2000.eea.europa.eu/Natura2000/sdf/#/sdf?site=IE0004097&release=55>

Table 5-5 below lists the qualifying features of this European Site and determines, in the light of their Conservation Objectives, whether there is any complete source-pathway-receptor chain, by which adverse effects may occur.

RECEIVED: 11/09/2025

5.3.1.1 Identification of Individual Qualifying Features with the Potential to be Affected

Table 5-5 Assessment of Qualifying features potentially affected

Qualifying feature	Conservation Objective (NPWS, Version 1, November 2022)	Rationale	Potential for Adverse Effects Yes/No
[A038] Whooper Swan (<i>Cygnus cygnus</i>)	To maintain the favourable conservation condition of whooper swan in River Suck Callows SPA.	The site of the Proposed Development is located approximately 1.8 km from the SPA and does not provide significant suitable supporting habitat for these SCI species. That said, a deterioration of water quality downstream of the Proposed Development site has the potential to result in habitat degradation and reduced prey availability which could have overall implications for maintaining a favourable conservation status for this SCI species. Therefore, these SCI species are assessed further in this NIS.	Yes
[A050] Wigeon (<i>Anas penelope</i>)	To restore the favourable conservation condition of wigeon in River Suck Callows SPA.		Yes
[A140] Golden Plover (<i>Pluvialis apricaria</i>)	To restore the favourable conservation condition of golden plover in River Suck Callows SPA.		Yes
[A142] Lapwing (<i>Vanellus vanellus</i>)	To restore the favourable conservation condition of lapwing in River Suck Callows SPA.		Yes
[A395] Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)	To restore the favourable conservation condition of Greenland white-fronted goose in River Suck Callows SPA.		Yes
[A999] Wetlands	To maintain the wetland habitats at River Suck Callows SPA as a resource for the regularly occurring	The site of the Proposed Development is partially located within the same groundwater catchment, in addition to the same WFD sub-catchment as this SPA.	Yes

RECEIVED: 11/09/2025

Qualifying feature	Conservation Objective (NPWS, Version 1, November 2022)	Rationale	Potential for Adverse Effects Yes/No
	migratory waterbirds that utilise these areas.	Therefore, taking a highly precautionary approach due to the nature of the Proposed Development, potential exists for significant effects on the wetland habitat of this SPA via the deterioration of water quality arising from the runoff or percolation of pollutants into groundwaters and surface waters during the construction and operational phases of the Proposed Development. Therefore, a complete source-pathway-receptor chain for adverse effects on supporting wetland habitat for the SCLs of the SPA was identified and it is assessed further in this NIS.	

5.3.1.2 Site Specific Pressures and Threats

As per the Natura 2000 Data Form, the site-specific threats, pressures, and activities with potential to impact on the European Site were reviewed and considered in relation to the Proposed Development. These are provided in Table 5-6.

Table 5-6 Site-specific threats, pressures and activities with potential to effect on River Suck Callows SPA.

Negative Impacts			
Rank	Threats and Pressures		Inside/Outside
Low	B	Sylviculture, forestry	Outside
Medium	A03	Mowing/cutting of grassland	Inside
Medium	E01.03	Dispersed habitation	Outside
Medium	A08	Fertilisation	Inside
High	A04	Grazing	Outside
Medium	A04	Grazing	Inside
Medium	G01.01	Nautical sports	Inside
Low	F02.03	Leisure fishing	Inside
High	A08	Fertilisation	Outside
Low	F03.01	Hunting	Inside

5.3.1.3 Special Conservation Interests' Specific Information

[A038] Whooper Swan (*Cygnus cygnus*)

The conservation objective for this SCI is:

‘To maintain the favourable conservation condition of whooper swan in River Suck Callows SPA’

The attributes and targets for this species are provided in Table 5-7 below:

Table 5-7 Targets and attributes associated with nominated site-specific conservation objectives for whooper swan in River Suck Callows SPA

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Winter population trend	Long term winter population trend is stable or increasing	Yes - deterioration in water quality and habitat degradation could alter the winter population trend.

Winter spatial distribution	Sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population target	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter spatial distribution of this SCI species.
Disturbance at wintering site	The intensity, frequency, timing and duration of disturbance occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution	No (impacts will not occur as a result of the Proposed Development).
Barriers to connectivity and site use	The number, location, shape and area of barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA	No (impacts will not occur as a result of the Proposed Development).
Forage spatial distribution, extent and abundance	Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat and available forage biomass.
Roost spatial distribution and extent	Sufficient number of locations, area and availability of suitable roosting habitat to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.
Supporting habitat: area and quality	Sufficient area of utilisable habitat available in ecologically important sites outside the SPA	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.

[A050] Wigeon (*Anas penelope*)

The conservation objective for this SCI is:

‘To maintain the favourable conservation condition of whooper swan in River Suck Callows SPA’

The attributes and targets for this species are provided in Table 5-8 below:

Table 5-8 Targets and attributes associated with nominated site-specific conservation objectives for whooper swan in River Suck Callows SPA

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Winter population trend	Long term winter population trend is stable or increasing	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter spatial distribution of this SCI species.
Winter spatial distribution	Sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population target	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter spatial distribution of this SCI species.

Disturbance at wintering site	The intensity, frequency, timing and duration of disturbance occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution	No (impacts will not occur as a result of the Proposed Development).
Barriers to connectivity and site use	The number, location, shape and area of barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA	No (impacts will not occur as a result of the Proposed Development).
Forage spatial distribution, extent and abundance	Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat and available forage biomass.
Roost spatial distribution and extent	Sufficient number of locations, area and availability of suitable roosting habitat to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.
Supporting habitat: area and quality	Sufficient area of utilisable habitat available in ecologically important sites outside the SPA	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter spatial distribution of this SCI species.

[A140] Golden Plover (*Pluvialis apricaria*)

The conservation objective for this SCI is:

‘To restore the favourable conservation condition of golden plover in River Suck Callows SPA’

The attributes and targets for this species are provided in Table 5-9 below:

Table 5-9 Targets and attributes associated with nominated site-specific conservation objectives for golden plover in River Suck Callows SPA.

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Winter population trend	Long term winter population trend is stable or increasing	Yes - deterioration in water quality and habitat degradation could alter the winter population trend.
Winter spatial distribution	Sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population target	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter spatial distribution of this SCI species.
Disturbance at wintering site	The intensity, frequency, timing and duration of disturbance occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution	No (direct impacts will not occur as a result of the Proposed Development).

Barriers to connectivity and site use	The number, location, shape and area of barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA	No (impacts will not occur as a result of the Proposed Development).
Forage spatial distribution, extent and abundance	Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat and available forage biomass.
Roost spatial distribution and extent	Sufficient number of locations, area and availability of suitable roosting habitat to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.
Supporting habitat: area and quality	Sufficient area of utilisable habitat available in ecologically important sites outside the SPA	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.

[A142] Lapwing (*Vanellus Vanellus*)

The conservation objective for this SCI is:

‘To restore the favourable conservation condition of lapwing in River Suck Callows SPA’

The attributes and targets for this species are provided in Table 5-10 below:

Table 5-10 Targets and attributes associated with nominated site-specific conservation objectives for lapwing in River Suck Callows SPA.

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Winter population trend	Long term winter population trend is stable or increasing	Yes - deterioration in water quality and habitat degradation could alter the winter population trend.
Winter spatial distribution	Sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population target	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter spatial distribution of this SCI species.
Disturbance at wintering site	The intensity, frequency, timing and duration of disturbance occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution	No (impacts will not occur as a result of the Proposed Development).
Barriers to connectivity and site use	The number, location, shape and area of barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA	No (impacts will not occur as a result of the Proposed Development).

Forage spatial distribution, extent and abundance	Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat and available forage biomass.
Roost spatial distribution and extent	Sufficient number of locations, area and availability of suitable roosting habitat to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.
Supporting habitat: area and quality	Sufficient area of utilisable habitat available in ecologically important sites outside the SPA	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.

[A395] Greenland White-fronted Goose (*Anser albifrons flavirostris*)

The conservation objective for this SCI is:

‘To restore the favourable conservation condition of Greenland White-fronted Goose in River Suck Callows SPA’

The attributes and targets for this species are provided in Table 5-11 below:

Table 5-11 Targets and attributes associated with nominated site-specific conservation objectives for Greenland White-fronted Goose in River Suck Callows SPA.

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Winter population trend	Long term winter population trend is stable or increasing	Yes - deterioration in water quality and habitat degradation could alter the winter population trend.
Winter spatial distribution	Sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population target	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter spatial distribution of this SCI species.
Disturbance at wintering site	The intensity, frequency, timing and duration of disturbance occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution	No (impacts will not occur as a result of the Proposed Development).
Barriers to connectivity and site use	The number, location, shape and area of barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA	No (impacts will not occur as a result of the Proposed Development).
Forage spatial distribution, extent and abundance	Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat and available forage biomass.

Roost spatial distribution and extent	Sufficient number of locations, area and availability of suitable roosting habitat to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.
Supporting habitat: area and quality	Sufficient area of utilisable habitat available in ecologically important sites outside the SPA	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.

[A999] Wetlands

The conservation objective for this SCI is:

‘To maintain the wetland habitats at River Suck Callows SPA as a resource for the regularly-occurring migratory waterbirds that utilise these areas’

The attributes and targets for this habitat are provided in Table 5-12 below:

Table 5-12 Targets and attributes associated with nominated site-specific conservation objectives for Wetlands in River Suck Callows SPA.

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Wetland habitat area	No significant loss to wetland habitat within the SPA, other than that occurring from natural patterns of variation	No (impacts will not occur as a result of the Proposed Development).
Wetland habitat quality and functioning	No significant impact on the quality or functioning of the wetland habitat within the SPA, other than that occurring from natural patterns of variation	Yes - deterioration in water quality has the potential to negatively impact habitat quality and functioning.

The following relevant extract has been gleaned from the NPWS site synopsis and Natura 2000 Data From for the SPA:

‘The River Suck Callows SPA is a linear, sinuous site comprising a section of the River Suck from Castlecoote, Co. Roscommon to its confluence with the River Shannon close to Shannonbridge, a distance of approximately 70 km along the course of the river. The river forms part of the boundary between Counties Galway and Roscommon. The site includes the River Suck itself and the adjacent areas of seasonally-flooded semi-natural lowland wet callow grassland. The River Suck is the largest tributary of the River Shannon’.

5.4

Middle Shannon Callows SPA (004096)

The potential for likely significant effects on this SPA were identified in Table 4-1 in Section 4 above. The identified pathways for effect include the following:

- There is a potential pathway for significant indirect effects on the SCI species of this SPA via the deterioration of water quality arising from run-off or percolation of pollutants to surface and/or ground water through the underlying limestone bedrock of the region during the construction and operational phases of the Proposed Development. This has the potential to result in habitat degradation and reduced prey availability for the associated SCI species.
- Additionally, the site of the Proposed Development several SCI bird species for which this SPA is designated

The Site-Specific Conservation Objectives (SSCOs) document and Natura 2000 Data Form for this designated site were reviewed during this assessment.

SSCOs: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004096.pdf

Natura 2000 Data Form:

<https://natura2000.eea.europa.eu/Natura2000/sdf/#/sdf?site=IE0004096&release=55>

Table 5-13 below lists the qualifying features of this European Site and determines, in the light of their Conservation Objectives, whether there is any complete source-pathway-receptor chain, by which adverse effects may occur.

RECEIVED: 11/09/2025

5.4.1.1 Identification of Individual Qualifying Features with the Potential to be Affected

Table 5-13 Assessment of Qualifying features potentially affected

Qualifying feature	Conservation Objective (NPWS, Version 1, November 2022)	Rationale	Potential for Adverse Effects Yes/No
[A038] Whooper Swan (<i>Cygnus cygnus</i>)	To maintain the favourable conservation condition of whooper swan in Middle Shannon Callows SPA.	The site of the Proposed Development is located approximately 12.9 km from the SPA and does not provide significant suitable supporting habitat for these SCI species. That said, a deterioration of water quality downstream of the Proposed Development site has the potential to result in habitat degradation and reduced prey availability which could have overall implications for maintaining a favourable conservation status for this SCI species. Therefore, these SCI species are assessed further in this NIS.	Yes
[A050] Wigeon (<i>Anas penelope</i>)	To restore the favourable conservation condition of wigeon in Middle Shannon Callows SPA.		Yes
[A122] Corncrake (<i>Crex crex</i>)	The status of corncrake as a Species of Conservation Interest for the Middle Shannon Callows SPA is currently under review.		Yes
[A140] Golden Plover (<i>Pluvialis apricaria</i>)	To maintain the favourable conservation condition of golden plover in Middle Shannon Callows SPA.		Yes
[A142] Lapwing (<i>Vanellus vanellus</i>)	To restore the favourable conservation condition of lapwing in Middle Shannon Callows SPA.		Yes
[A156] Black-tailed Godwit (<i>Limosa limosa</i>)	To restore the favourable conservation condition of Black-tailed		Yes

Qualifying feature	Conservation Objective (NPWS, Version 1, November 2022)	Rationale	Potential for Adverse Effects Yes/No
	godwit in Middle Shannon Callows SPA.		
[A179] Black-headed Gull (<i>Chroicocephalus ridibundus</i>)	To restore the favourable conservation condition of black-headed gull in Middle Shannon Callows SPA.		Yes
[A999] Wetlands	To maintain the favourable conservation condition of wetlands in Middle Shannon Callows SPA.	The site of the Proposed Development and this SPA are partially located within the same WFD catchment and groundwater catchment. Therefore, taking a highly precautionary approach due to the nature of the Proposed Development, potential exists for significant effects on the wetland habitat of this SPA via the deterioration of water quality arising from the runoff or percolation of pollutants into groundwaters and surface waters through the underlying limestone bedrock of the region during the construction and operational phases of the Proposed Development. Therefore, a complete source-pathway-receptor chain for adverse effects on supporting wetland habitat for the SCIs of the SPA was identified and it is assessed further in this NIS.	Yes

5.4.1.2 Site Specific Pressures and Threats

As per the Natura 2000 Data Form, the site-specific threats, pressures, and activities with potential to impact on the European Site were reviewed and considered in relation to the Proposed Development. These are provided in Table 5-14.

Table 5-14 Site-specific threats, pressures and activities

Negative Impacts			
Rank	Threats and Pressures		Inside/Outside
Low	A04.03	Abandonment of pastoral systems, lack of grazing	Inside
High	A04	Grazing	Inside
High	E01	Urbanised areas, human habitation	Outside
Low	D01.01	Paths, tracks, cycling tracks	Inside
High	D01.05	Bridge, viaduct	Inside
High	G01.01	Nautical sports	Inside
Medium	A08	Fertilisation	Outside
Low	A08	Fertilisation	Inside
Medium	G01.02	Walking, horse-riding and non-motorised vehicles	Inside
Low	F03.01	Hunting	Inside
Medium	F02.03	Leisure fishing	Inside

5.4.1.3 Special Conservation Interests' Specific Information

[A038] Whooper Swan (Cygnus cygnus)

The conservation objective for this SCI is:

‘To maintain the favourable conservation condition of whooper swan in Middle Shannon Callows SPA’

The attributes and targets for this species are provided in Table 5-15 below:

Table 5-15 Targets and attributes associated with nominated site-specific conservation objectives for whooper swan in Middle Shannon Callows SPA.

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Winter population trend	Long term winter population trend is stable or increasing	Yes - deterioration in water quality and habitat degradation could alter the winter population trend.
Winter spatial distribution	Sufficient number of locations, area, and availability (in terms of timing and	Yes - deterioration in water quality and habitat degradation could result in altered distribution, and

	intensity of use) of suitable habitat to support the population target	therefore the winter spatial distribution of this SCI species.
Disturbance at wintering site	The intensity, frequency, timing and duration of disturbance occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution	No (impacts will not occur as a result of the Proposed Development).
Barriers to connectivity and site use	The number, location, shape and area of barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA	No (impacts will not occur as a result of the Proposed Development).
Forage spatial distribution, extent and abundance	Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat and available forage biomass.
Roost spatial distribution and extent	Sufficient number of locations, area and availability of suitable roosting habitat to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.
Supporting habitat: area and quality	Sufficient area of utilisable habitat available in ecologically important sites outside the SPA	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.

[A050] Wigeon (*Anas penelope*)

The conservation objective for this SCI is:

‘To restore the favourable conservation condition of wigeon in Middle Shannon Callows SPA’

The attributes and targets for this species are provided in Table 5-16 below:

Table 5-16 Targets and attributes associated with nominated site-specific conservation objectives for wigeon in Middle Shannon Callows SPA.

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Winter population trend	Long term winter population trend is stable or increasing	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter population trend of this SCI species.
Winter spatial distribution	Sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population target	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter spatial distribution of this SCI species.
Disturbance at wintering site	The intensity, frequency, timing and duration of disturbance occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution	No (impacts will not occur as a result of the Proposed Development).

Barriers to connectivity and site use	The number, location, shape and area of barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA	No (impacts will not occur as a result of the Proposed Development).
Forage spatial distribution, extent and abundance	Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat and available forage biomass.
Roost spatial distribution and extent	Sufficient number of locations, area and availability of suitable roosting habitat to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.
Supporting habitat: area and quality	Sufficient area of utilisable habitat available in ecologically important sites outside the SPA	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter spatial distribution of this SCI species.

[A122] Corn Crane (*Crex crex*)

The status of corncrake as a Species of Conservation Interest for the Middle Shannon Callows SPA is currently under review. The outcome of this review will determine whether a site-specific conservation objective is set for this species.

[A140] Golden Plover (*Pluvialis apricaria*)

The conservation objective for this SCI is:

‘To maintain the favourable conservation condition of golden plover in Middle Shannon Callows SPA’

The attributes and targets for this species are provided in Table 5-17 below:

Table 5-17 Targets and attributes associated with nominated site-specific conservation objectives for golden plover in Middle Shannon Callows SPA.

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Winter population trend	Long term winter population trend is stable or increasing	Yes - deterioration in water quality and habitat degradation could alter the winter population trend.
Winter spatial distribution	Sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population target	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter spatial distribution of this SCI species.
Disturbance at wintering site	The intensity, frequency, timing and duration of disturbance occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution	No (impacts will not occur as a result of the Proposed Development).

Barriers to connectivity and site use	The number, location, shape and area of barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA	No (impacts will not occur as a result of the Proposed Development).
Forage spatial distribution, extent and abundance	Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat and available forage biomass.
Roost spatial distribution and extent	Sufficient number of locations, area and availability of suitable roosting habitat to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.
Supporting habitat: area and quality	Sufficient area of utilisable habitat available in ecologically important sites outside the SPA	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.

[A142] Lapwing (*Vanellus vanellus*)

The conservation objective for this SCI is:

‘To restore the favourable conservation condition of lapwing in Middle Shannon Callows SPA’

The attributes and targets for this species are provided in Table 5-18 below:

Table 5-18 Targets and attributes associated with nominated site-specific conservation objectives for lapwing in Middle Shannon Callows SPA.

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Winter population trend	Long term winter population trend is stable or increasing	Yes - deterioration in water quality and habitat degradation could alter the winter population trend.
Winter spatial distribution	Sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population target	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter spatial distribution of this SCI species.
Disturbance at wintering site	The intensity, frequency, timing and duration of disturbance occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution	No (impacts will not occur as a result of the Proposed Development).
Barriers to connectivity and site use	The number, location, shape and area of barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA	No (impacts will not occur as a result of the Proposed Development).
Forage spatial distribution, extent and abundance	Sufficient number of locations, area of suitable habitat and available forage	Yes - deterioration in water quality has the potential to negatively

	biomass to support the population target	impact supporting habitat and available forage biomass.
Roost spatial distribution and extent	Sufficient number of locations, area and availability of suitable roosting habitat to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.
Supporting habitat: area and quality	Sufficient area of utilisable habitat available in ecologically important sites outside the SPA	Yes - deterioration in water quality and habitat degradation could result in altered area and quality.

[A156] Black-tailed Godwit (*Limosa limosa*)

The conservation objective for this SCI is:

‘To restore the favourable conservation condition of black-tailed godwit in Middle Shannon Callows SPA’

The attributes and targets for this species are provided in Table 5-19 below:

Table 5-19 Targets and attributes associated with nominated site-specific conservation objectives for black-tailed godwit in Middle Shannon Callows SPA.

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Winter population trend	Long term winter population trend is stable or increasing	Yes - deterioration in water quality and habitat degradation could alter the winter population trend.
Winter spatial distribution	Sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population target	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter spatial distribution of this SCI species.
Disturbance at wintering site	The intensity, frequency, timing and duration of disturbance occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution	No (impacts will not occur as a result of the Proposed Development).
Barriers to connectivity and site use	The number, location, shape and area of barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA	No (impacts will not occur as a result of the Proposed Development).
Forage spatial distribution, extent and abundance	Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat and available forage biomass.
Roost spatial distribution and extent	Sufficient number of locations, area and availability of suitable roosting habitat to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.

Supporting habitat: area and quality	Sufficient area of utilisable habitat available in ecologically important sites outside the SPA	Yes - deterioration in water quality and habitat degradation could result in altered area and quality.
--------------------------------------	---	---

[A179] Black-headed Gull (*Chroicocephalus ridibundus*)

The conservation objective for this SCI is:

‘To restore the favourable conservation condition of black-headed gull in Middle Shannon Callows SPA’

The attributes and targets for this species are provided in Table 5-20 below:

Table 5-20 Targets and attributes associated with nominated site-specific conservation objectives for black-headed gull in Middle Shannon Callows SPA

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Winter population trend	Long term winter population trend is stable or increasing	Yes - deterioration in water quality and habitat degradation could alter the winter population trend.
Winter spatial distribution	Sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population target	Yes - deterioration in water quality and habitat degradation could result in altered prey distribution, and therefore the winter spatial distribution of this SCI species.
Disturbance at wintering site	The intensity, frequency, timing and duration of disturbance occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution	No (impacts will not occur as a result of the Proposed Development).
Barriers to connectivity and site use	The number, location, shape and area of barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA	No (impacts will not occur as a result of the Proposed Development).
Forage spatial distribution, extent and abundance	Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat and available forage biomass.
Roost spatial distribution and extent	Sufficient number of locations, area and availability of suitable roosting habitat to support the population target	Yes - deterioration in water quality has the potential to negatively impact supporting habitat.
Supporting habitat: area and quality	Sufficient area of utilisable habitat available in ecologically important sites outside the SPA	Yes - deterioration in water quality and habitat degradation could result in altered area and quality.

[A999] Wetlands

The conservation objective for this SCI is:

‘To maintain the favourable conservation condition of wetlands in Middle Shannon Callows SPA’

The attributes and targets for this species are provided in Table 5-21 below:

Table 5-21 Targets and attributes associated with nominated site-specific conservation objectives for wetlands in Middle Shannon Callows SPA.

Attribute	Target	Potential for Proposed Development to Undermine Conservation Objective Target in the Absence of Mitigation
Wetland habitat area	No significant loss to wetland habitat within the SPA, other than that occurring from natural patterns of variation	No (impacts will not occur as a result of the Proposed Development).
Wetland habitat quality and functioning	No significant impact on the quality or functioning of the wetland habitat within the SPA, other than that occurring from natural patterns of variation	Yes - deterioration in water quality has the potential to negatively impact habitat quality and functioning.

The following relevant extract has been gleaned from the NPWS site synopsis and Natura 2000 Data From for the SPA:

‘The Middle Shannon Callows SPA is a long and diverse site which extends for approximately 50 km from the town of Athlone to the town of Portumna; it lies within Counties Galway, Roscommon, Westmeath, Offaly and Tipperary. The site averages about 0.75 km in width though in places is up to 1.5 km wide. Water levels on the site are greatly influenced by the very small fall between Athlone and Portumna and by the weir at Meelick. The site has extensive areas of callow, or seasonally flooded, semi-natural, lowland wet grassland, along both sides of the river.’

6.

ASSESSMENT OF POTENTIAL EFFECTS & ASSOCIATED MITIGATION

This section of the NIS assesses the potential effects of the Proposed Development on the identified relevant Qualifying Interests and Special Conservation Interests. This assessment is undertaken in the absence of any mitigation and in respect of the conservation objectives of the European Site. The Conservation Objectives of the European Sites assessed was reviewed on the 25th of July 2025. The Conservation Objectives for these sites are available below:

- River Shannon Callows SAC (000216):
https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000216.pdf
- River Suck Callows SPA (004097):
https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004097.pdf
- Middle Shannon Callows SPA (004096):
https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004096.pdf

Following the initial impact assessment, mitigation is prescribed where necessary to avoid adverse effects on the Conservation Objectives of the relevant QIs/SCIs.

6.1

Potential for Direct Effects on the European Sites

There will be no direct effects on the QIs and SCIs of River Shannon Callows SAC, River Suck Callows SPA, and Middle Shannon Callows SPA. The proposed works are located entirely outside of the boundaries of these European Sites. There are no Annex I habitats associated with any European Site within the Proposed Development site. No significant supporting habitat for Annex II protected species associated with any European Sites is present within or adjacent to the site boundary. The nearest mapped watercourse is the Loughbown stream which is located 730m south of the site. The site does not support significant suitable habitat for SCI bird species associated with any European Site. No potential for direct effects on any European Site exists.

6.2

Potential for Indirect Effects on the European Sites

6.2.1

Deterioration in Water Quality

Following a highly precautionary approach, a potential pathway for indirect effects on the below listed aquatic QIs and SCIs of River Shannon Callows SAC (000216), River Suck Callows SPA (004097), and Middle Shannon Callows SPA (004096) was identified as a result of deterioration of water quality via the runoff or percolation of polluting materials to surface water or to ground waters through the underlying limestone bedrock of the region during the construction and operational phases of the Proposed Development.

QIs and SCIs of the relevant European Sites on which a potential pathway for indirect effects as a result of deterioration of water quality has been identified:

River Shannon Callows SAC (000216)

- Otter (*Lutra lutra*) [1355]
- Alkaline fens [7230]

River Suck Callows SPA (004097)

- Whooper Swan (*Cygnus cygnus*) [A038]
- Wigeon (*Anas penelope*) [A050]
- Golden Plover (*Pluvialis apricaria*) [A140]
- Lapwing (*Vanellus vanellus*) [A142]
- Greenland White-fronted Goose (*Anser albifrons flavirostris*) [A395]
- Wetlands and waterbirds [A999]

Middle Shannon Callows SPA (004096)

- [A038] Whooper swan (*Cygnus cygnus*)
- [A050] Wigeon (*Anas Penelope*)
- [A122] Corncrake (*Crex crex*)
- [A140] Golden Plover (*Pluvialis apricaria*)
- [A142] Lapwing (*Vanellus vanellus*)
- [A156] Black-tailed Godwit (*Limosa limosa*)
- [A179] Black-headed Gull (*Chroicocephalus ridibundus*)
- [A999] Wetlands

RECEIVED: 11/09/2025

6.2.1.1 Construction Phase

The construction of the Proposed Development will involve excavations and earth moving which create the potential for pollution in various forms, i.e. the generation of suspended solids and the potential for spillage of fuels associated with the refuelling of excavation machinery. There is a risk that pollutants will percolate down into groundwater or runoff into surface water.

Taking a precautionary approach and in the absence of mitigation, the works have potential to impact on water quality within the above European Sites via the the release of suspended solids or spillage of fuels, potentially having an adverse effect on the QIs/SCIs of the relevant European site.

Mitigation

Standard best practice environmental control measures and mitigations have been incorporated in the design of the development and are detailed in the Construction Environmental Management Plan (CEMP) which has been submitted as part of this planning application. These have been outlined in the following subsections.

As a pathway for potential significant impacts was identified via deterioration of water quality, the sections below set out the environmental management framework to be adhered to during the proposed works and incorporate the mitigations to ensure there is no adverse effect on the integrity of European Sites, as a result of deterioration of water quality. These include comprehensive detail regarding site set up, pollution prevention including environmental monitoring, hydrocarbon management, waste management and wastewater disposal. These are further detailed in the development CEMP, which is included in **Appendix 2** of this report.

Environmental Monitoring

- The contractor will assign a member of the site staff as the environmental officer with the responsibility for ensuring the environmental measures prescribed in this document are adhered to. Any environmental incidents or non-compliance issues will immediately be reported to the project team.

General Site Set up and Pre-Commencement Measures

- Prior to the commencement of earthworks, silt fencing will be erected around the southern boundary of the Proposed Development site. This will be embedded into the ground adjacent to the perimeter boundary. The silt fences will be left in place throughout construction until all exposed soil has revegetated.
- The appointed contractor will be fully briefed by an ecologist as to the sensitive nature of the site and the required mitigation measures.
- A site compound will be established within the site boundary. The exact location of the site compound will be established by the contractor and will be located a minimum of 30m from any watercourses. The compound will be used for storage of material, machinery, fuel, and workers facilities.
- All construction materials and substances will be stored in the site compound and the compound will be located a minimum of 30m from any watercourse.

Pollution Prevention

- Prior to the commencement of earthworks, silt fencing will be erected around the southern boundary of the Proposed Development site. This will be embedded into the ground adjacent to the perimeter boundary. The silt fences will be left in place throughout construction until all exposed soil has revegetated.
- Excavated spoil (if any) will be stockpiled and contained entirely within the confines of the site boundaries.
- During earthwork activities, the following mitigations will be adhered to:
 - Material that is not re-used will be transported off site to a designated waste facility.
 - Suitable stone material will be imported to the site to be used as backfill.
 - Stockpiling of soil during construction, should it be required, will take place in designated areas within the site boundary away from any watercourses or waterbodies.
- A silt fence will be erected around any stockpiling of material to prevent any sediment-laden run-off occurring.
- All diesel or petrol pumps required onsite will be operated within bunded units.
- Exposed surfaces will be re-vegetated as soon as possible following construction.
- The minimum number of soil/subsoils and bedrock material will be removed from site. Soil may be reused for landscaping elsewhere on the site.
- Where possible, earthworks will not be carried out during periods of heavy rainfall.
- As construction advances there may be a requirement to collect and treat surface water within the site. This will be completed using perimeter swales at low points around the construction areas, and if required water will be pumped from the swales into sediment bags prior to overland discharge allowing water to percolate naturally to ground;
- If ground water is encountered during excavations, waters will be pumped from excavation and discharged through a pipe with a silt bag attached on to an area of overland vegetation within the site boundary.
- Discharge to ground will be via a silt bag which will filter any remaining sediment from the pumped water;
- Daily monitoring and inspections of site drainage during construction will be completed by the appointed environmental officer;
- Good construction practices such wheel washers and dust suppression on site roads, and regular plant maintenance will ensure minimal risk. The Construction Industry Research and Information Association (CIRIA) provide guidance on the control and management of water pollution from construction sites ('Control of Water Pollution from Construction Sites, guidance for consultants and contractors', CIRIA, 2001), which provides information on these issues. This will ensure that surface water arising during the course of construction activities will contain minimum sediment.

RECEIVED: 11/09/2025

Earthworks

- Excavation depths will be kept to a minimum.
- Material that is not re-used will be transported off site to a designated waste facility.
- Suitable stone material will be imported to the site to be used as backfill.
- Stockpiling of soil during construction will take place in designated areas within the site boundary away from any watercourses.
- A silt fence will be erected around any stockpiling of material to prevent any sediment-laden run-off occurring.

Cement Based Products

- No batching of wet-cement products will occur on site.
- Ready-mixed supply of wet concrete products and where possible, emplacement of pre-cast elements, will take place.
- Where possible, pre-cast elements for concrete works will be used.
- No washing out of any plant used in concrete transport or concreting operations will be allowed on-site.
- Where concrete is delivered on site, only chute cleaning will be permitted, using the smallest volume of water possible.
- No discharge of cement contaminated waters to the construction phase drainage system or directly to any artificial drain or watercourse will be allowed.
- Use weather forecasting to plan dry days for pouring concrete.
- Ensure pour site is free of standing water and plastic covers will be ready in case of sudden rainfall event.

Hydrocarbon Management

- All oils and solvents used during the construction phase will be stored within specially constructed, dedicated, bunded areas within the temporary site compound.
- Refuelling of construction vehicles and the addition of hydraulic oils to vehicles, will take place in a designated area in the temporary site compound, away from drainage ditches or other features that may transmit pollutants to surface waters.
- Spill kits and hydrocarbon adsorbent packs will be stored in the refuelling area and operators will be fully trained in the use of this equipment.

Refuelling, Fuel and Hazardous Materials Storage

- Storage/refuelling will be located in and carried out in a designated area of the proposed site, located a suitable distance from excavation works. Bunded tanks will be used, and these will be inspected for leaks regularly. Spill kits will be available on site and staff will be trained in their use and in spill control. All spills shall be diverted for collection.
- Fuels, lubricants and hydraulic fluids for equipment used on the site will be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment.
- Minimal refuelling or maintenance of construction vehicles or plant will take place on site. Off-site refuelling will occur at a controlled fuelling station.
- On-site refuelling will take place by direct refuelling from the delivery truck or from fuel stored within a bunded fuel tank. Mobile measures such as drip trays and fuel absorbent mats will be used during all refuelling operations.
- Vehicles will never be left unattended during refuelling. Only dedicated trained and competent personnel will carry out refuelling operations and plant refuelling procedures shall be detailed in the contractor's method statements.

- Storage bunds/trays, if required will be constructed of an impermeable membrane (HDPC Plastic) and will have the adequate capacity to contain the volume of the liquids contained therein, if a leak/spillage does occur from one of the storage vessels.
- The storage area will contain a small bund lined with an impermeable membrane in order to prevent any contamination of the surrounding soils and vegetation.
- All site plant will be inspected at the beginning of each day prior to use. Defective plant shall not be used until the defect is satisfactorily fixed. All major repair and maintenance operations will take place off site.
- Potential impacts caused by spillages etc. during the construction phase will be reduced by keeping spill kits and other appropriate equipment on-site.
- Spill kits will be used to deal with any accidental spillage in and outside the refuelling area. Spill control measures as outlined fully in the Risk Assessment accompanying this application will be adhered to.

Spill Control Measures

In the event of minor spills and leaks from road vehicles and the onsite machinery, the following steps provide the procedure to be followed in the event of any significant spill or leak.

- Stop the source of the spill and raise the alarm to alert people working in the vicinity of any potential dangers.
- If applicable, eliminate any sources of ignition in the immediate vicinity of the incident
- Contain the spill using the spill control materials, track mats or other material as required. Do not spread or flush away the spill.
- If possible, cover or bund off any vulnerable areas where appropriate such as drains or watercourses.
- If possible, clean up as much as possible using the spill control materials.
- Contain any used spill control material and dispose of used materials appropriately using a fully licensed waste contractor with the appropriate permits so that further contamination is limited.
- Notify the applicant immediately giving information on the location, type and extent of the spill so that they can take appropriate action and further investigate the incident to ensure it has been contained adequately.
- External consultants will inspect the site and ensure the necessary measures are in place to contain and clean up the spill and prevent further spillage from occurring.
- The applicant will notify the appropriate regulatory body such as Galway County Council if deemed necessary.

Waste Management

- All waste will be collected in skips and the site will be kept tidy and free of debris at all times
- Waste oils and hydraulic fluids will be collected in leak-proof containers and removed from the site for disposal or recycling
- All construction waste materials will be stored within the confines of the site, prior to removal from the site to a permitted waste facility

Wastewater Disposal

- A self-contained port-a-loo with an integrated waste holding tank will be used at the site compounds, maintained by the providing contractor, and removed from site on completion of the construction works; No foul water will be discharged on-site during the construction

After implementation of best practice and preventive measures as described above, together with measures already incorporated in the project design, no potential for adverse impact on water quality in any European Sites exists. The measures ensure that the proposed works do not prevent or obstruct any of the QIs and SCIs from reaching favourable conservation status as per Article 1 of the EU Habitats Directive.

6.2.1.2 Operational Phase

The operational phase of the Proposed Development will result in the production of foul water from the services building and surface water runoff from roofs and hardstanding areas. If not properly treated, a potential pathway for indirect effects on water quality exists from the operational phase of the Proposed Development.

6.2.1.2.1 Surface water run-off

The Proposed Development will result in increased hard surfaces within the Proposed Development site which has the potential to result in impacts on aquatic ecological receptors as a result of deterioration in water quality arising from the run-off or percolation of pollutants, if surface water run-off is not adequately treated, during the operational phase of the Proposed Development.

In relation to surface water, all surface and storm water generated within the Proposed Development site will be collected through drainage networks and discharged from the site to the existing surface open drainage channel. This channel appears to connect to an underground pipe network comprising a 300mm diameter concrete pipe.

The surface water drainage system has been designed in accordance with the principles of SuDS in order to maintain surface water runoff levels from the site at those of the current greenfield rate. The drainage has been designed to cater for the 1 in 100 year storm event with a 20% allowance for climate change. Given the proposed treatment of surface water, significant negative effects on water quality are not anticipated as a result of surface water runoff.

6.2.1.2.1 Production of Foul Sewage

The operational phase of the Proposed Development will result in the production of foul sewage. If not adequately treated, there is potential for indirect impacts on surface and ground water quality.

Foul water generated from the Proposed Development will discharge to the public foul sewer. A pre-connection enquiry has been submitted by Donnchadh O' Brien Associates to Uisce Eireann.

Given the proposed management of foul water, significant negative effects on water quality are not anticipated as a result of foul water production.

6.2.1.2.2 On site fuel storage

For fuel storage, tanks will be formed of mild steel. The inner tank shell of all tanks will have a thickness of 6mm and dished ends of 6mm. The outer shell of the tanks will have a thickness of 4mm with dished ends of 6mm. The tanks will be manufactured in accordance with BS EN12285-1 and fitted with a leak alarm system. The tanks are placed and strapped to a 300mm thick reinforced concrete base with 1 no. layer of M.S. fabric mesh reinforcement. A 250mm thick reinforced concrete slab will be placed over the tanks with 2 no. layers of M.S. fabric mesh reinforcement. All tanks are encased with pea gravel.

There is no potential for adverse impacts on water quality during the operational stage of the development and no potential for adverse effects on any European Site.

6.2.1.3 Decommissioning

The Proposed Development is considered to be permanent. Therefore, no effects with regard to decommissioning are anticipated. Measures that are included to protect water quality during construction and operation will be employed during any potential decommissioning of the site.

7.

ASSESSMENT OF RESIDUAL ADVERSE EFFECTS

The potential for residual adverse effects on each of the individual relevant Qualifying Features of the Screened In European Sites following the implementation of mitigation, is assessed in this section of the report.

Based on the above, in view of best scientific knowledge, on the basis of objective information, there is no potential for adverse effect on the identified QIs/SCIs and their associated targets and attributes, or on any European Site Potential pathways for effect have been robustly blocked through measures to avoid impacts and the incorporation of best practice/mitigation measures into the project design.

Taking cognisance of measures to avoid impacts and best practice/mitigation measures incorporated into the project design which are considered in the preceding section, the Proposed Development will not have an adverse effect on the integrity of any European Site.

The Proposed Development will not prevent the QIs/SCIs of European Sites from achieving/maintaining favourable conservation status in the future as defined in Article 1 of the EU Habitats Directive. A definition of Favourable Conservation Status is provided below:

‘conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within the territory referred to in Article 2; The conservation status will be taken as ‘favourable’ when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.’

Based on the above, it can be concluded in view of best scientific knowledge, on the basis of objective information that the Proposed Development will not adversely affect the Qualifying Interests/Special Conservation Interests associated with any European Site.

8.

ASSESSMENT OF CUMULATIVE EFFECTS

A search and review in relation to plans and projects that may have the potential to result in cumulative and/or in-combination impacts on European Sites was conducted. This assessment focuses on the potential for cumulative in-combination effects on the European Sites where potential for adverse effects was identified in Section 4 of this report. This included a review of online Planning Registers, Development Plans and other available information and served to identify past and future plans and projects, their activities and their predicted environmental effects. A list of the plans and projects considered is provided in **Appendix 1**.

8.1

Plans

The following Development Plans have been reviewed and taken into consideration as part of this assessment:

- Galway County Development Plan 2022-2028
- 4th National Biodiversity Action Plan 2023-2027
- Northern and Western Regional Assembly – Regional Spatial and Economic Strategy 2020 – 2032

A review of the objectives of the Plans relating to European Designated Sites has been carried out and is provided in the Appendix. No potential for cumulative effects when considered in-combination with the Proposed Development has been identified, and the Proposed Development is in compliance with the relevant objectives of the Plan.

In addition, the Appropriate Assessment carried out for these Plans have been reviewed. The relevant Natura Impact Report (NIR) is found on the Galway County Council website at the following link:

- <https://www.galway.ie/en/media/Consolidated%20AA%20NIR%20for%20the%20Galway%20CDP%202022-2028.pdf>
- <https://www.nwra.ie/pdfs/rses-natura-impact-report-post-consultation.pdf>

The Appropriate Assessment carried out for the Development Plan has concluded that there is no potential for significant effects as a result of implementation of the Plan. Therefore, there is no potential for cumulative effect as a result of the Proposed Development in-combination with the Plan.

8.2

Projects

Assessment material for this in-combination impact assessment was compiled on the relevant developments within the vicinity of the Proposed Development. The material was gathered through a search of relevant online Planning Registers, reviews of relevant documents, planning application details and planning drawings, and served to identify past and future projects, their activities and their environmental impacts. All relevant projects were considered in relation to the potential for in-combination effects. All relevant data was reviewed (e.g. individual EISs/EIARs, NISs, layouts, drawings etc.) for all relevant projects where available.

The dominant land uses in the area were also considered in the assessment, these included urban activities, motorways and roads, and tillage and pastoral agriculture. No potential cumulative impacts as a result of these activities are anticipated as they are long established activities and form part of the environmental baseline of the wider area.

The potential for adverse effects on European Sites as a result of the Proposed Development was identified as a result of the following pathways:

- Deterioration of water quality during construction and operation.

Given the mitigations and the design of the Proposed Development, pathways for significant effect have been robustly blocked and therefore, there is no potential for the Proposed Development to result in cumulative effects on any European Sites, with other plans and projects in the area.

8.3

Conclusion of Assessment of Cumulative Effects

Following the detailed assessment provided in the preceding sections, it is concluded that, the Proposed Development will not result in any residual adverse effects on any European Sites, their integrity or their conservation objectives when considered on its own. There is therefore no potential for the Proposed Development to contribute to any cumulative adverse effects on any European Site when considered in-combination with other plans and projects.

In the review of the projects that was undertaken, no connection, that could potentially result in additional or cumulative impacts was identified. Neither was any potential for different (new) impacts resulting from the combination of the various projects and plans in association with the Proposed Development.

Taking into consideration the reported residual impacts from other plans and projects in the area and the predicted impacts with the current proposal, no residual cumulative impacts have been identified with regard to any European Site.

9.

CONCLUDING STATEMENT

This NIS has provided an assessment of all potential direct or indirect adverse effects on European Sites. It has also assessed the potential for in-combination effects on European site with other plans and projects.

Where the potential for any adverse effect on any European Site has been identified, the pathway by which any such effect may occur has been robustly blocked through the use of avoidance, appropriate design and mitigation measures as set out within this report and its appendices. The measures ensure that the construction and operation of the Proposed Development does not adversely affect the integrity of European sites.

Therefore, it can be objectively concluded that the Proposed Development, individually or in-combination with other plans or projects, will not adversely affect the integrity of any European Site.

BIBLIOGRAPHY

RECEIVED: 11/09/2025

- BirdWatch Ireland [online]. Available at: <http://www.birdwatchireland.ie/> [Accessed 08/07/2025]
- CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater, Coastal and Marine version 1.3. Chartered Institute of Ecological and Environmental Management, Winchester.
- Collins, J. (ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London.
- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) and Directive 2009/147/EC (codified version of Directive 79/409/EEC as amended) (Birds Directive) – transposed into Irish law as European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477/2011).
- DoEHLG (2010). Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Revision, February 2010. Department of the Environment, Heritage and Local Government.
- EC (2021) Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission.
- EC (2018). Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission.
- EC (2013). Interpretation Manual of European Union Habitats. Version EUR 28. European Commission, DG Environment.
- EC (2007). Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission. Office for Official Publications of the European Communities, Luxembourg. European Commission.
- Environmental Protection Agency [online]. Available at: <http://www.epa.ie>. [Accessed 08/07/2025].
- European Communities (Conservation of Wild Birds) Regulations, 1985, SI 291/1985 and amendments – <http://www.irishstatutebook.ie>
- European Communities (Natural Habitats) Regulations, SI 94/1997, SI 233/1998 and SI 378/2005 – <http://www.irishstatutebook.ie>
- Fossitt, J.A. (2000). A Guide to Habitats in Ireland. Dublin: The Heritage Council.
- Geological Survey of Ireland (2004). 1st Draft Spiddal GWB Description, June 2004.
- Inland Fisheries Ireland [online]. Available at: <http://www.fisheriesireland.ie/> [Accessed 08/07/2025].
- National Biodiversity Data Centre [online]. Available at: <http://www.biodiversityireland.ie/> [Accessed 08/07/2025].
- NPWS (2024). Irelands 4th National Biodiversity Plan 2023-2030. Department of Housing, Local Government and Heritage, Dublin, Ireland.

NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Habitat Assessments Volume 2. Version 1.0. Unpublished Report, National Parks and Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Species Assessments Volume 3, Version 1.0. Unpublished Report, National Parks and Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

NPWS (2022) Conservation Objectives: River Shannon Callows SAC 000216 Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2022). Conservation Objectives: River Suck Callows SPA 004097 Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2022) Conservation Objectives: Middle Shannon Callows SPA 004096. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS Protected Site Synopses and maps [online]. Available at: <http://www.npws.ie/protected-sites/> [Accessed 08/07/2025]

NRA/TII (2009). Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes. Dublin: National Roads Authority.

NRA/TII (2009). Guidelines for Assessment of Ecological Impacts of National Roads Schemes. Dublin: National Roads Authority.

OPR (2021). Appropriate Assessment Screening for Development Management. OPR Practice Note PN01 March 2021

Perrin, P.M., FitzPatrick, Ú. and Lynn, D. (2018) The Irish Vegetation Classification – An Overview of Concepts, Structures and Tools.

Preston C.D. et al. (2002). New Atlas of the British and Irish Flora. Oxford University Press.

Scottish Natural Heritage (SNH) (2016). Assessing connectivity with Special Protection Areas (SPAs). Scottish Natural Heritage, Inverness, Scotland.

Smith, G.F., O'Donoghue, P., O'Hara, K. and Delaney, E. (2011). Best practice guidance for habitat survey and mapping. Heritage Council, Kilkenny.

Stace, C. (2019). New Flora of the British Isles, 4th Edition. CandM Floristics.

Third Schedule of the European Communities (Birds and Natural Habitats) Regulations (S.I. 477 of 2011).

RECEIVED: 11/09/2025



APPENDIX 1

PLANS AND PROJECTS

1. ASSESSMENT OF CUMULATIVE EFFECTS

1.1 Plans

The following development plans have been reviewed and taken into consideration as part of this assessment:

- Galway County Development Plan 2022-2028
- Northern and Western Regional Assembly – Regional Spatial and Economic Strategy 2020 – 2032
- Ireland's 4th National Biodiversity Action Plan 2023-2030

The review focused on policies and objectives that relate to Natura 2000 sites and natural heritage. Policies and objectives relating to sustainable land use were also reviewed

RECEIVED: 11/09/2025

Table 8.1 Review of plans

Plans	Key Policies/Issues/Objectives Directly Related to European Sites, Biodiversity and Sustainable Development in The Zone of Influence	Assessment of development compliance with policy
Galway County Development Plan 2022-2028	Policy Objective NHB 1 – Natural Heritage and Biodiversity of Designated Sites, Habitats and Species ➤ Protect and where possible enhance the natural heritage sites designated under EU Legislation and National Legislation (Habitats Directive, Birds Directive, European Communities (Birds and Natural Habitats) Regulations 2011 and Wildlife Acts) and extend to any additions or alterations to sites that may occur during the lifetime of this plan. ➤ Protect and, where possible, enhance the plant and animal species and their habitats that have been identified under European legislation (Habitats and Birds Directive) and protected under national Legislation (European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011), Wildlife Acts 1976-2010 and the Flora Protection Order (SI 94 of 1999). ➤ Support the protection, conservation and enhancement of natural heritage and biodiversity, including the protection of the integrity of European sites, that form part of the Natura 2000 network, the protection of Natural Heritage Areas, proposed Natural Heritage Areas, Ramsar Sites, Nature Reserves, Wild Fowl Sanctuaries (and other designated sites including any future designations) and the promotion of the development of a green/ ecological network.	The plans were comprehensively reviewed, with particular reference to Policies and Objectives that relate to the Natura 2000 network and other natural heritage interests. The Proposed Development will not result in significant impacts on any European Site and no potential for cumulative impacts when considered in conjunction with the proposed works were identified.
Northern and Western Regional Assembly – Regional Spatial and Economic Strategy 2020 – 2032	Growth Ambition 2: Environment – Natural Region RPO 5.4 - Encourage the prioritisation of Site-Specific Conservation Objectives (SSCO) for all sites of Conservation Value, designated in EU Directive (i.e., SACs, SPAs) to integrate with the development objectives of this Strategy.	The plans were comprehensively reviewed with particular reference to Policies and Objectives that relate to the Natura 2000 network and other natural heritage interests. No potential for cumulative impacts when considered in conjunction with the current proposal were identified.

Plans	Key Policies/Issues/Objectives Directly Related to European Sites, Biodiversity and Sustainable Development in The Zone of Influence	Assessment of development compliance with policy
	RPO 5.5 - Ensure efficient and sustainable use of all our natural resources, including inland waterways, peatlands, and forests in a manner which ensures a healthy society a clean environment and there is no net contribution to biodiversity loss arising from development supported in this strategy. Conserve and protect designated areas and natural heritage areas. Conserve and protect European sites and their integrity. RPO 5.6 - Develop awareness and create a greater appreciation of the benefits of our natural heritage, including on the health, wealth and well-being of the region's ecosystem services. RPO 5.7 - Ensure that all plans, projects and activities requiring consent arising from the RSES are subject to the relevant environmental assessment requirements including SEA, EIA and AA as appropriate.	There will be no impact on designated site or other natural heritage interests as a result of deterioration of water quality. Best practice preventative measures will be implemented to avoid effects on water quality as outlined in Section 6.3 of this report. There will be no adverse effects on sensitive aquatic receptors listed as QIs/SCIs of European Sites as a result of deterioration in water quality.
Ireland's 4th National Biodiversity Action Plan 2023-2030	➤ Objective 1: Adopt a Whole-of Government, Whole of Society Approach to Biodiversity. Proposed actions include capacity and resource reviews across Government; determining responsibilities for the expanding biodiversity agenda providing support for communities, citizen scientists and business; and mechanisms for the governance and review of this National Biodiversity Action Plan. ➤ Objective 2: Meet Urgent Conservation and Restoration Needs. Supporting actions will build on existing conservation measures. Efforts to tackle Invasive Alien Species will be elevated. The protected area network will be expanded to include the Marine Protected Areas. The ambition of the EU Biodiversity Strategy will be considered as part of an evolving work programme across Government.	The Proposed Development will not result in significant effects on habitats and features of ecological importance. The Proposed Development will not impact on connectivity within the wider area and there is no potential for significant effects on water quality. There will be no adverse effects on biodiversity as a result of the Proposed Development.

RECEIVED 11/09/2025

Plans	Key Policies/Issues/Objectives Directly Related to European Sites, Biodiversity and Sustainable Development in The Zone of Influence	Assessment of development compliance with policy
	➤ Objective 3: Secure Nature's Contribution to People. Actions highlight the relationship between nature and people in Ireland. These include recognising the tangible and intangible values of biodiversity, promoting nature's importance to our culture and heritage and recognising how biodiversity supports our society and our economy. ➤ Objective 4: Enhance the Evidence Base for Action on Biodiversity. This objective focuses on biodiversity research needs, as well as the development and strengthening of long-term monitoring programmes that will underpin and strengthen future decision-making. Action will also focus on collaboration to advance ecosystem accounting that will contribute towards natural capital accounts. ➤ Objective 5: Strengthen Ireland's Contribution to International Biodiversity Initiatives. Collaboration with other countries and across the island of Ireland will play a key role in the realisation of this Objective. Ireland will strengthen its contribution to international biodiversity initiatives and international governance processes, such as the United Nations Convention on Biological Diversity.	

Other Projects

Assessment material for this in-combination impact assessment was compiled on the relevant developments within the vicinity of the Proposed Development and was verified on the 28/08/2025. The material was gathered through a search of relevant online Planning Registers, reviews of relevant documents, planning application details and planning drawings, and served to identify past and future projects, their activities, and their environmental impacts. All relevant projects were considered in relation to the potential for in-combination effects. All relevant data was reviewed (e.g., individual EISs/EIARs, layouts, drawings etc.) for all relevant projects where available. The projects considered include those listed below in Section 7.2. These consisted mainly of small-scale domestic developments and upgrades.

- Permission to construct (1) A single storey crematorium building including reflection room, ceremony room, cremator and other ancillary rooms/services, (2) Memorial garden which includes memorial wall, manmade ponds and walkways at Garbally Demesne, Ballinasloe, Co Galway: (pl ref: 13/9015)
- Permission for the construction of an extension to the rear of the existing school block (east), comprising of one room with an en-suite and circulation area and the erection of a steel storage shed, along with connections to all services and all other associated site works. The proposed development is within the curtilage of protected structures. Gross floor space of proposed works: 40 sqm (pl ref: 21828)
- Permission for the construction of 1 no. storage room, 1 no. laundry room, 1 no. porch and for the conversion of an integral garage with tools' room and boiler room into a bedroom/sensory room and en-suite (pl ref: 2560057)
- Permission to construct a single storey extension (9 sqm) to the front and a part two storey/part single storey extension (47 sqm) to the rear of the existing two-storey semi-detached dwelling, replacement of existing windows and entrance door. Gross floor space of proposed works: 45 sqm (pl ref: 23100)
- Permission to construct a first floor extension (19.75 sqm) to the side of existing dwelling house & for retention permission for existing domestic garage (56 sqm). Gross floor space of proposed works: 19.75 sqm. Gross floor space to be retained: 216 sqm (pl ref: 212335)
- Permission for the construction of a domestic garage and all associated site works. Gross floor space of proposed works: 53.88 sqm (pl ref: 2361)
- Permission for an existing Single Storey Dwelling House. Gross floor space of work to be retained: 112.75 sqm (pl ref: 2560808)
- Permission for alterations and additions to the existing dwelling house including; 1. new side and rear extensions, 2. the widening of the existing site entrance and driveway, 3. the conversion of the existing garage & 4. alterations to the fenestration and internal layout of the existing dwelling house, along with all the associated site works. Gross floor space of proposed works 31.61 sqm(extension). Demolition: 4.8 sqm (pl ref: 2560856)
- Permission for the Construction of an Integrated Constructed Wetland and ancillary development for the purpose of treatment of Pollboy Landfill leachate at Pollboy Townland. (ABP ref: JP0040)
- Permission for the continuation / resumption of use and the operation of an existing quarry including use of all existing buildings and plant and machinery. Existing buildings consist of a workshop, office/weighbridge and prefabricated canteen / stores. Machinery includes various items of mobile / semi mobile crushing and screening plant. The application and proposed development also provide for the operation of a construction and demolition (C & D) waste recycling facility within the quarry and the provision of new toilets, new wastewater treatment unit and associated percolation area. The operation of the construction and demolition (C & D) waste recycling facility will require the granting of a waste permit or waste licence. Permission was previously granted for quarrying at this site under permission ref no. PD/07/571 Permission is sought for a period of twenty years plus two years for final restoration. (Pl ref: 18/436)
-

RECEIVED: 11/09/2025



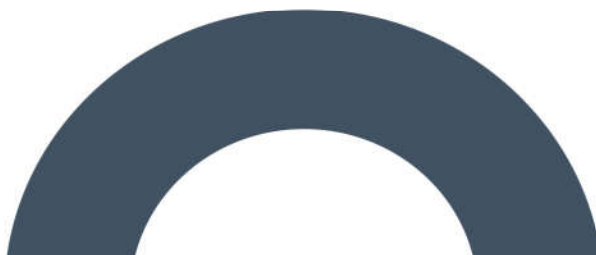
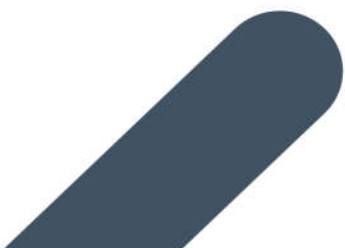
APPENDIX 2

CEMP

RECEIVED: 11/09/2025

Construction and Environmental Management plan

Proposed EV Charging Hub
with Service Station
Junction 15, M6,
Ballinasloe, Co. Galway



RECEIVED: 11/09/2025



DOCUMENT DETAILS

Client: **Petrogas Group Ltd**

Project Title: **Proposed EV Charging Hub with Service Station at Junction 15, M6, Ballinasloe, Co. Galway**

Project Number: **240957**

Document Title: **Construction and Environmental Management plan**

Document File Name: **Applegreen Ballinasloe CEMP D4 2025.09.08 – 240957**

Prepared By: **MKO
Tuam Road
Galway
Ireland
H91 VW84**



Rev	Status	Date	Author(s)	Approved By
01	D1	20/08/2025	EC	TM
02	D2	27/08/2025	EC	EOS
03	D3	28/08/2025	EC	TM/EOS
04	D4	04/09/2025	EC	TM/EOS
05	Final	08/09/2025	EC/TM	EOS

RECEIVED: 11/09/2025

Table of Contents

1.	INTRODUCTION.....	1
1.1	Scope of the Construction and Environmental Management Plan	1
1.2	Targets and Objectives.....	2
2.	SITE AND PROJECT DETAILS	3
2.1	Site Location.....	3
2.1.1	Development Description.....	3
2.2	Construction Management.....	4
2.2.1	Introduction	4
2.2.2	Overview of Proposed Construction Methodology	4
2.2.2.1	Site A Construction Methodology	4
2.2.2.2	Site B Construction Methodology	7
2.2.3	Site A Construction Methodology.....	7
2.2.3.1	Site Establishment	7
2.2.3.2	Site Excavation.....	8
2.2.3.3	Installation Of New Services and Connections	8
2.2.3.4	Service Station, Car Wash Plant Building and Substation.....	10
2.2.3.5	Roads, Car and Bicycle Parking Construction, Footpaths and Dedicated Active Travel Route.....	11
2.2.3.6	EV Charging Hub	11
2.2.3.7	Outdoor Play Area and Outdoor Seating Area.....	12
2.2.3.8	Canopy Installation.....	12
2.2.3.9	Solar Photovoltaic (PV) Installation	12
2.2.3.10	Landscaping and Ground Works.....	13
2.2.3.11	Construction Works Sequence.....	13
2.2.4	Site B Construction Methodology	14
2.2.4.1	Site Establishment	14
2.2.4.2	Decommissioning Works.....	14
2.2.4.3	Landscaping Works.....	15
2.2.4.4	Decommissioning Works Sequence	15
3.	ENVIRONMENTAL MANAGEMENT.....	16
3.1	Protecting Water Quality	16
3.1.1	Prevention Pollution Control Measures.....	16
3.1.1.1	Underground Fuel Tank Decommissioning Control Measures	18
3.1.2	Cement Based Products Control Measures	19
3.1.3	Refuelling, Fuel and Hazardous Materials Storage.....	19
3.2	Dust Control	19
3.3	Noise Control.....	20
3.4	Vibration Control.....	21
3.5	Traffic Management Proposals	22
3.6	Invasive Species Management	23
3.6.1	Site Management.....	23
3.6.2	General Biosecurity Measures.....	23
4.	RESOURCE WASTE MANAGEMENT PLAN	25
4.1	Waste Policy and Legislative Background.....	25
4.1.1	Waste Management Hierarchy.....	25
4.1.2	Resource Waste Management Plan (RWMP)	26
4.1.2.1	Design Approach.....	26
4.1.3	Construction and Decommissioning Waste Management.....	27
4.1.3.1	Decommissioning Waste Management.....	27
4.1.3.2	Construction Waste Management.....	28
4.1.4	Site Management and Implementation.....	29
5.	Environmental Management Implementation and Emergency Response	30
5.1	Roles and Responsibilities.....	30
5.1.1	Construction Manager/Site Manager.....	30

5.1.2	Environmental Manager	30
5.2	Emergency Response Plan.....	31
5.2.1	Emergency Response.....	31
5.2.2	Roles and Responsibilities.....	31
5.2.3	Initial Steps.....	32
5.2.4	Site Evacuation / Fire Drill.....	33
5.2.5	Environmental Emergency Response Procedure.....	33
5.2.5.1	Spill Control Measures.....	33
5.2.6	Contacting the Emergency Services.....	34
5.2.6.1	Emergency Communication Procedure.....	34
5.2.6.2	Contact Details.....	35
5.2.6.3	Procedure for Personnel Tracking.....	35
5.2.6.4	Induction Checklist	36
6.	MITIGATION PROPOSALS.....	37
7.	PROGRAMME OF WORKS.....	52
7.1	Construction Programme.....	52
8.	COMPLIANCE AND REVIEW	53
8.1	Site Inspections and Environmental Audits	53
8.2	Environmental Compliance	53
8.3	Corrective Action Procedure	53

TABLE OF TABLES

<i>Table 2-1 Sequence of Operations for the Construction Phase (Site A).....</i>	<i>13</i>
<i>Table 2-2 Sequence of Operations for the Decommissioning Phase (Site B).....</i>	<i>15</i>
<i>Table 4-1 Expected Waste types Arising from the Decommissioning Phase</i>	<i>27</i>
<i>Table 4-2 Expected Waste Types Arising from the Construction Phase.....</i>	<i>28</i>
<i>Table 5-1 Hazards Associated with Potential Emergency Situations</i>	<i>32</i>
<i>Table 5-2 Emergency Contacts.....</i>	<i>35</i>
<i>Table 5-3 Emergency Response Plan Items Applicable to the Site Induction Process.....</i>	<i>36</i>
<i>Table 6-1 Mitigation Measures for the Pre-Commencement and Construction Phases.....</i>	<i>38</i>
<i>Table 7-1 Phasing of Works.....</i>	<i>52</i>

TABLE OF FIGURES

<i>Figure 2-1 Site Location</i>	<i>5</i>
<i>Figure 2-2 Site Layout.....</i>	<i>6</i>
<i>Figure 5-1 Emergency response procedure - chain of command</i>	<i>32</i>

1.

INTRODUCTION

This Construction & Environmental Management Plan (CEMP) has been prepared by MKO on behalf of Petrogas Group Ltd who intend apply to Galway County Council (GCC) for planning permission for the construction of a Electric Vehicle (EV) Charging Hub and Service Station and all associated works at Ballinasloe, Co. Galway (Proposed Development). The development description is detailed in Section 2.1.1.

The CEMP provides the environmental management framework to be implemented throughout the pre-commencement and construction phases of the Proposed Development. It outlines the mitigation measures and best practice protocols designed to minimise potential environmental impacts during all stages of the works. The CEMP has been developed with reference to and is informed by the accompanying documentation prepared to support the planning application for the Proposed Development.

The CEMP to be developed by the appointed contractor will serve as a single, amalgamated document for all construction phase requirements. It will function as a central point of reference for all stakeholders, including the Planning Authority, developer and contractors alike, encompassing all construction methodologies, environmental protection measures, and drainage management protocols. This approach is intended to ensure clarity, consistency, and regulatory compliance throughout the duration of the project.

1.1

Scope of the Construction and Environmental Management Plan

This report is presented as a guidance document for the management of construction activities and waste materials generated during the proposed works and following completion. It clearly outlines the mitigation measures that are required to be adhered to in order to complete the works in an appropriate manner.

The report is divided into:

- **Section 1** provides a brief introduction as to the scope of the report, detailing the targets and objectives of this plan.
- **Section 2** outlines the site and project details, along with providing an overview of construction methodologies that will be adopted throughout the project.
- **Section 3** sets out details of the environmental controls on site which looks at noise and dust controls. Site drainage measures are also included in this section.
- **Section 4** sets out a brief overview of the Resource Waste Management Plan (RWMP) prepared by WSP Ireland Consulting Ltd
- **Section 5** sets out a fully detailed implementation plan for the environmental management of the project outlining the roles and responsibilities of the project team. The Emergency Response Plan to be adopted in the event of an emergency in terms of site health and safety and environmental protection is also included in this section.
- **Section 6** consists of a summary table of all mitigation proposals to be adhered to during the project.
- **Section 7** sets out an indicative programme for the timing of the works.
- **Section 8** outlines the proposals for reviewing compliance with the provisions of this report.

Targets and Objectives

The following key targets and objectives will inform the final detailed design including consideration of the buildability of the designs that emerge:

- Adopt a sustainable approach to the Proposed Development and ensure sustainable sources for materials supply where possible;
- Avoid any pollution incident or near miss as a result of working in, or around existing watercourses, and have emergency measures in place;
- Follow correct fuel storage and refuelling procedures;
- Implement air and noise pollution prevention measures;
- Maintain good waste management and housekeeping practices;
- Adopt reuse and recycle opportunities for materials where possible, e.g., excavated stone, soil, and subsoil material;
- Avoid vandalism;
- Monitor the works and any adverse effects they may have on the environment; and
- Provide adequate environmental training and awareness for all project personnel.

The key site objectives are as follows:

- Keep impact of works on the local environment, watercourses, habitats and wildlife to a minimum;
- Comply with all relevant water quality legislation;
- Ensure works and activities are completed in accordance with mitigation and best practice approaches as presented in the accompanying Natura Impact Statement (NIS), this CEMP, and associated planning documents;
- Ensure works and activities have minimal impact/disturbance to local landowners and the local community; and,
- Ensure works and activities have minimal impact on the natural environment.

2.

SITE AND PROJECT DETAILS

2.1

Site Location

The Proposed Development comprises two sites in Ballinasloe, Co. Galway. It primarily comprises the construction of a new EV Charging Hub and Service Station (Site A), alongside the decommissioning of all fuel-related infrastructure at the existing Service Station (Site B).

- Site A is located on lands to the northeast of Junction 15 on the M6 motorway, east of Garbally Roundabout.
- Site B is situated on lands to the east of the Regional Road R446.

The total combined area of the two sites where it is proposed to carry out works is 4.17 hectares (ha), located on the south-western fringes of Ballinasloe, Co. Galway. Athlone town is located approximately 23 kilometres (km) to the north-east. Galway City is located 57 km to the west.

The Irish Transverse Mercator (ITM) coordinates for the approximate site centre for Site A are: X: 583745, Y: 729679. ITM coordinates for the approximate site centre for Site B are: X 583797, Y 729945.

The location of the Proposed Development is shown in Figure 2-1. A layout of the Proposed Development is shown in Figure 2-2 and the description of both works area is further detailed in section 2.1.1.

2.1.1

Development Description

The Proposed Development as outlined in the Site Notice is as follows:

The Proposed Development will consist of:

Description of Works Site A

- Approximately 3.98 ha;
- Provision of new EV Charging Hub for 36 vehicles (all under canopy measuring 3.22 m high and including solar panels over) along with 4 no. EV heavy goods vehicles (HGV) charging spaces (no canopy);
- Construction of single story building (approximately 1,018.66 m²) including;
 - Net retail area of approximately 100 m² (excluding off-licence);
 - 2 no. restaurant offers;
 - Seating area;
 - Drive-through hatch for one of the restaurants;
 - Coffee dock, toilets, back of house area, along with external storage yard, outdoor play area and outdoor seating area. The maximum height is 11.08 m high.
- All ancillary development including;
 - Fuel pumps under canopy (5.6 m high);
 - Underground fuel tanks, vent pipes, HGV fuel pumps (6.7 m high);
 - New vehicular entrance off Garbally roundabout;
 - New roundabout junction which will also facilitate future access to the lands north;
 - Car parking (16 no. spaces), HGV/Bus parking (13 no. including 4 no. EV parking spaces), motor cycle spaces (5 no. spaces);
 - Drainage infrastructure (including SuDs measures);
 - Boundary treatments;

- *Hard and soft landscaping (including attenuation pond and bio-retention pond);*
- *Internal roads, footpaths, dedicated active travel route along the northern boundary of the site from the east to west of the site;*
- *Outdoor exercise and areas and outdoor picnic areas;*
- *Brush and jet wash, single storey car wash plant building (12.5 m²);*
- *Roof mounted solar panels, signage (free standing and on-building), single storey bin store (67.5 m²), single storey substation building (38.23 m²) and lighting. All associated site and drainage works.*

Description of Works Site B

- *Site area 0.19 ha;*
- *It is proposed to demolish all structures relating to the fuel element of the existing filling station (the fuel pumps, canopy, totem sign) and underground fuel tanks.*
- *The existing buildings containing the shop and storage will remain in situ. The car wash facility will be discontinued.*

2.2 Construction Management

2.2.1 Introduction

The appointed contractor for the construction of the Proposed Development will be required to comply with this CEMP and any revisions made to this document throughout the construction phase. An overview of the anticipated Construction Methodologies is provided below.

2.2.2 Overview of Proposed Construction Methodology

2.2.2.1 Site A Construction Methodology

The proposed anticipated construction methodology for Site A is summarised under the following main headings:

- Site Establishment;
- Site Excavation;
- Installation of New Services and Connections;
 - Drainage Works;
 - Fuel Storage.
- Service Station Building, Car Wash Plant Building and Substation Building;
- Roads, Car and Bicycle Parking Construction, Footpaths and Dedicated Active Travel Route;
- EV Charging Hub;
- Outdoor Play Area and Outdoor Seating Area;
- Canopy Installation;
- Solar Photovoltaic Panels (PV) Installation;
- Landscaping and Ground Works;
- Construction Works Sequence.



Map Legend

- Site Boundary
- WFD Watercourses



Site Location

Project Title
Proposed EV Charging Hub with Service Station & Distribution Centre at Junction 15, M6, Ballinasloe, Co. Galway

SC	PD
Project No. 240957	Drawing No. Figure 2-1
Scale 1:70,000	Date 22.08.2025

MKO
Planning and Environmental Consultants
Tuam Road, Galway
Ireland, H91 VW84
+353 (0) 91 735611
email: info@mkofireland.ie
Website: ww.mkofireland.ie

PLANNING PERMITS BR-03 REV C 04/09/2023



RECEIVED: 11/09/2025

NOTES

PLANNING

This drawing has been produced for Planning purposes only. This drawing is not to be used for pricing. This drawing is not for Construction. Do not scale from this drawing. Figured dimensions only to be taken from this drawing. All dimensions must be checked on site prior to construction, demolition or manufacturing. All dimensions in millimetres unless otherwise stated. Drawings to read in conjunction with all project documentation. This drawing must not be reproduced in whole or part without written consent. © Demesne Architects Limited. All Rights Reserved.

KEY PLAN not to scale

LEGEND:

- TARMACADAM SURFACING
- CONCRETE PATH
- CAR PARK BAYS (PERMEABLE PAVING)
- HGV & BUS PARK BAYS (PERMEABLE PAVING)
- ELECTRIC CHARGING POINT
- FAMILY PARKING
- DISABLED PARKING
- SOFT SURFACE
- ACTIVE TRAVEL ROUTE
- PROPOSED GROUND LEVEL
- RED LINE INDICATES SITE BOUNDARY
- SITE NOTICE LOCATIONS

VEHICLES SPACES	
STANDARD CAR PARK	62 Spaces
DISABLED CAR PARK	4 Spaces
FAMILY CAR PARK	10 Spaces
EV CAR PARK	36 Spaces
BUS PARKING	6 Spaces
HGV PARKING	9 Spaces
HGV EV PARKING	4 Spaces
MOTORCYCLE PARKING	5 Spaces
CYCLE PARKING	16 Spaces
STAFF CAR PARK	7 Spaces

For Landscape details please refer to Gannon + Associate Landscape Architecture drawings pack

SITE LAYOUT PLAN
SCALE 1:500

REV	DATE	DESCRIPTION	BY
PROJECT			
SERVICE AREA & EV HUB BALLINASLOE, CO. GALWAY			
CLIENT			
PETROGAS GROUP LIMITED			
DRAWING			
SITE A, SITE PLAN		DRAWN BY	LP
AS PROPOSED		CHECKED BY	SS
PROJECT NO. 5846		APPROVED BY	SS
SUITABILITY PLANNING		STATUS	P3
SCALE 1:500	SHEET	A1	DATE 14.08.2025
DRAWING NO.			REVISION
5846-DAL-DR-A-02003			

demesne
Architects + Interior Designers

Demesne Architects + Interior Designers
Desmond House, Main Street
Maynooth, Co. Kildare, W23 Y8X6
T: +353 (0)1 610 6900
E: info@demesne-architects.ie
W: www.demesne-architects.ie

RECEIVED: 11/09/2025

2.2.2.2 Site B Construction Methodology

The proposed anticipated construction methodology for Site B is summarised under the following main headings:

- Site Establishment;
- Decommissioning Works;
- Landscaping Works;
- Decommissioning Works Sequence.

2.2.3 Site A Construction Methodology

2.2.3.1 Site Establishment

Site A will be accessed via a new eastern arm on the existing Garbally Roundabout, by the R355 Regional Road. Fencing/hoarding will be established around the site and the proposed new access point will be kept locked outside of normal working hours.

Due to the nature of the works, appropriate signage will be provided at the site to alert road users to the construction activities and related traffic at the site.

The contractor will be required to undertake the following:

- Operate a Site Induction Process for all site staff.
- Ensure all site staff shall have current 'Safe Pass' cards.
- Maintain Site Security staff at all times.
- Install access security in the form of gates for staff.

A designated construction compound will be established within the site boundary, located approximately 30m away from any watercourses or waterbodies. The construction compound will provide site offices and welfare facilities, parking for staff, materials drop-off and storage areas, HGV set-down areas, waste storage areas, and a temporary stockpile for excavated material. Only designated personnel will be allowed to enter the Proposed Development site during the construction phase and no parking permitted for any vehicles associated with the project on the public road during the construction phase unless agreed with GCC. The construction compound will be constructed as follows:

- The area to be used as the compound will be marked out at the corners using ranging rods or timber posts;
- A layer of well graded granular material will be spread and lightly compacted to provide a hard area for site offices and storage containers;
- Areas within the compound will be constructed as site track and used as vehicle hardstanding during deliveries and for parking;
- If necessary, the compound will be temporarily fenced and secured with locked gates, although fencing would only be utilised where significant risk of danger to third parties or vandalism is envisaged; and,
- During the construction phase, a self-contained port-a-loo with an integrated waste holding tank will be used on site for toilet facilities. This will be maintained by the service contractor on a regular basis and will be removed from the site on completion of the construction phase.
- Upon completion of construction, the site compound area will be decommissioned with all stone material removed and the area restored to its original condition.

2.2.3.2 Site Excavation

Excavations will be required for the construction of the Proposed Development. All excavations will be carried out using a suitably sized excavator. Maximum excavation depths at the Proposed Development are anticipated to extend to 2 metres below ground level where the proposed underground fuel tanks are to be installed at Site A.

Excavated material that is not reused on site for backfilling will be removed off site for disposal or reuse by an appropriately licensed contractor at an appropriately licensed offsite facility. Wherever soil stripping and/or excavations are proposed the following will apply:

- The area where excavations are planned will be surveyed and all existing services will be identified.
- All relevant bodies i.e., ESB, Gas Networks Ireland, Eir, GCC etc. will be contacted and all drawings for all existing services sought.
- All plant operators and general operatives will be inducted and informed as to the location of any services.
- All plant operators and general operatives will be inducted and informed as to the identification of invasive species.
- A tracked 360-degree excavator will be used for initial excavations, and a dumper will be used to move the excavated materials to the temporary stockpile location within the site.

2.2.3.3 Installation Of New Services and Connections

A Civil Engineering Planning Report has been prepared by Donnchadh O'Brien & Associates Consulting Engineers (DOBA) and accompanies this application. It is proposed that a new 100 mm connection will serve the Proposed Development, connecting to an existing 300 mm (uPVC) watermain which runs along the eastern boundary of the site, as per Drawing No. 2421-DOB-XX-SI-DR-C0400 prepared by DOBA. Foul effluent, as per Drawing No. 2421-DOB-XX-SI-DR-C_0300 prepared by DOBA, will be collected via a new gravity foul drainage network within the on-site pumping station and conveyed through a rising main to enter the Uisce Éireann wastewater network at manhole SM8330912. For detailed information on foul and surface water drainage, see 2.2.3.3.1 below.

The installation of new services and connections will be carried out as follows:

- Surveys will be conducted in the areas planned for pipe installation excavations, and all existing services and utilities will be identified.
- All relevant bodies, i.e., Electricity Supply Board (ESB), Gas Networks Ireland, Eir, GCC etc., will be contacted and all drawings for all existing services sought.
- All plant operators and general operatives will be inducted and informed as to the location of any services.
- A road opening licence will be obtained, if required, for connection to existing services. All plant operators and general operatives will be inducted and informed as to the location of any services.
- A tracked 360-degree excavator or similar will be used to excavate trenches to the required dimensions.
- All excavated material will be stockpiled and reused for backfilling and landscaping where appropriate.
- Once the trench has been excavated the ducting/pipework will then be placed in the trench as per specification.
- The As-built location of the ducting/pipework will be surveyed using a total station/GPS.
- Backfill material will be carefully placed so as not to displace the ducting/pipework within the trench.
- The appropriate warning/marker tape will be installed above the ducts/pipes at the appropriate depths.

- The surface will be reinstated according to the original specifications or in line with the site layout requirements/standards set by GCC for drainage works.
- A Traffic Management Plan (TMP) will be prepared by the appointed contractors prior to construction works at the Proposed Development site.

2.2.3.3.1 Drainage Works

Foul Water Drainage

Foul effluent, generated by customer amenities, food services, and staff facilities, as outlined in the Infrastructure Design Report (IDR) prepared by DOBA, will be collected via a new gravity foul drainage network within the site and conveyed by an on-site pumping station and conveyed through a rising main to enter the Uisce Éireann wastewater network at manhole SM8330912, located to the north of the site.

DOBA has liaised with Uisce Éireann in relation to the Proposed Development and submitted a pre-connection enquiry to which Uisce Éireann responded with a Confirmation of Feasibility (CoF).

Surface Water Drainage

There is currently no formal surface water drainage system in place within the Proposed Development site. Surface water runoff from the predominantly greenfield lands drains overland in a south-easterly direction towards the southeastern corner of the site, where it enters an existing open drainage channel. This channel connects to an underground pipe network comprising a 300mm diameter concrete pipe to the east of the site.

The proposed surface water management has adopted a nature-based Sustainable Drainage Systems (SuDS) Nature-based Solutions (NBS) approach to manage surface water run off generated at the Proposed Development site, through the provision of bioretention basins, bioswales, bioretention tree pits, filter drains and permeable paving and petrol/oil separator. The proposed design provides a minimum 2-stage surface water treatment process which intercepts surface water run-off at source and treats the water by filtration and treatment through natural material prior to discharging to the existing open drains at pre-development (greenfield) runoff rates.

The design and management of surface water for the Proposed Development will comply with the requirements of the Greater Dublin Strategic Drainage Study (GSDSDS)¹. The design of the surface water network and SuDS measures within the application site shall include a 20% climate change factor in accordance with GCC.

2.2.3.3.2 Fuel Storage

For fuel storage, there are 2 no. underground tank farms proposed for the Proposed Development.

Tank Farm 1 will serve the car forecourt and consist of 3 no. 75,000 litre (l) tanks. Tank 1 will be double-compartment tank split 37,500 l (Unleaded) and 37,500 L (Diesel). Tank 2 will be a multi-compartment tank split 25,000 l (Super Unleaded), 25,000 l (Super Diesel) and 25,000 l (Petrol). Tank 3 will be a multi-compartment tank split 25,000 l (Unleaded), 25,000 l (Diesel), 10,000 l (Super Unleaded), 10,000 l (Super Diesel) and 5,000 l (AdBlue).

Tank Farm 2 will serve the HGV Forecourt and consist of 1 no. 75,000 l tank. It will be a multi-compartment tank split 50,000 l (Diesel), 15,000 l (Marked Gas Oil) and 10,000 l (AdBlue).

¹ Uisce Éireann (2018): 'Greater Dublin Drainage Strategy' Uisce Éireann. Ireland. Available at: <https://www.water.ie/sites/default/files/planning-sites/greater-dublin-drainage/docs/planning-documents/technical-reports/Greater%20Dublin%20Drainage%20Strategy%20Overview%20and%20Future%20Strategic%20Needs.pdf>

The tanks will be of mild steel construction and will be double skinned. The inner tank shell of all tanks will have a thickness of 6mm and dished ends of 6mm. The outer shell of the tanks will have a thickness of 4mm with dished ends of 6mm. The tanks will be manufactured in accordance with BS EN12285-1² and fitted with a leak alarm system.

The tanks are anticipated to be installed by the following methodology:

- All plant operators and general operatives will be inducted and informed as to the location of any services.
- A tracked 360-degree excavator or similar will be used to excavate the area down to a competent stratum as approved by the Design Engineer.
- A 250 mm thick reinforced concrete base, including one layer of mild steel fabric mesh reinforcement, will be poured and finished to an appropriate level.
- The tanks will be lowered into the ground by crane.
- Once in place, the tanks will be covered in pea gravel this will be levelled and compacted and a layer concrete will be poured to seal it.

2.2.3.4 Service Station, Car Wash Plant Building and Substation

As part of the Proposed Development, it is proposed to construct a new service station approximately 1,018.66 m² in area. The facility will include a new, retail space (approximately 100 m² excluding off-licence), 2 no. restaurant offers, a seating area, a drive-through hatch, coffee dock, toilets, back of house area, external storage yard, outdoor play area and outdoor seating area. The service station building will have a maximum height of 11.08m. It is also proposed to construct a new single storey car wash plant building (approximately 12.5 m²) and an onsite substation (approximately 39.23 m²).

The service station, car wash plant building, substation, and associated elements are anticipated to be constructed by the following methodology:

- A survey will be conducted in the area designated for excavations and foundations, and all existing services will be identified.
- The building works area will be marked out using ranging rods or wooden posts and the overburden stripped and removed to nearby storage area for later use in landscaping.
- All plant operators and general operatives will be inducted and informed as to the location of any services.
- A tracked 360-degree excavator or similar will be used to excavate the area down to a competent stratum as approved by the Design Engineer.
- The dimensions of the foundation areas will be set to meet the requirements of each component.
- The foundations will be excavated down to the level indicated by the Project Engineer. The foundations will be shuttered and poured with reinforced concrete.
- The substation will be constructed with masonry blockwork. The block work walls will be built up from the footings to damp-proof course (DPC) level and the floor slab constructed, having first located any ducts or trenches required by the follow on mechanical and electrical contractors;
- The block work walls will be built up from the footings to damp proof course level and the floor slab constructed, having first located any ducts or trenches required by the follow on mechanical and electrical contractors;

² The British Standards Institution (BSI) (2019): 'BS EN 12285: Workshop fabricated steel tanks – Part 1: Horizontal cylindrical single skin and double skin tanks for the underground storage of flammable and non-flammable water polluting liquids other than for heating and cooling of buildings' BSI. UK. Available at: <https://www.normsplash.com/Samples/BSI/113751844/BS-EN-12285-1-2018-en.pdf>

- The block work will then be raised to wall plate level and the gables & internal partition walls formed. Scaffold will be erected around the outside of the building for this operation;
- Any concrete flooring slabs will be lifted into position using an adequately sized mobile crane or equivalent.
- The roof trusses will then be lifted into position using a telescopic load all or mobile crane depending on site conditions. The roof trusses will then be felted, battened, tiled and sealed against the weather.
- Windows, electrics, plumbing and all other building components and services will be installed in as timely a manner as is possible.
- Perimeter fencing will be erected.
- The buildings will be inspected and certified by the project design engineer at the appropriate stages of construction.
- The construction and components of the substation have been designed to ESB/Eirgrid specifications.

2.2.3.5 Roads, Car and Bicycle Parking Construction, Footpaths and Dedicated Active Travel Route

The Proposed Development will include the provision of 16 car parking spaces, HGV/bus parking (13 no. including 4 no. EV) and motor cycle spaces (5 no.). Further to this, a footpath and a dedicated active travel route are also proposed to serve the Proposed Development.

The proposed car parking areas and other areas of hardstanding are anticipated to be constructed using the following methodology:

- All plant operators and general operatives will be inducted and informed as to the location of any services.
- The area where excavations and areas of hardstanding are to be installed will be surveyed.
- The area of the car parking and other hardstanding areas will be marked out and the soil and overburden stripped will be stockpiled for later use in landscaping.
- A tracked 360-degree excavator or similar will be used to excavate the area down to a competent stratum as approved by the Design Engineer.
- A wrapped geotextile will be laid down. This will help suppress weed growth, minimise sinking, strengthen the base and prevent the escape of fines.
- A layer of permeable aggregate in the form of clause 804 gravel or crushed concrete will then be installed. This layer will be compacted and checked for correct levels.
- In the case of areas of tarmac hardstanding tarmac will be applied. The tarmac will also be compacted.
- In the case of areas of concrete hardstanding, shutters/formwork will be installed on the areas where the concrete for the path surfaces will be poured.
- Concrete will then be poured and levelled until the appropriate levels are reached. Concrete will be allowed to cure for an appropriate time period prior to removal of the concrete shutters.

2.2.3.6 EV Charging Hub

The Proposed Development will include the provision of a new EV Charging Hub for 36 no. vehicles (all under a canopy measuring 3.22m high and including solar panels over) along with 4 no. EV HGV charging spaces (no canopy).

The proposed EV Charging Hub is anticipated to be constructed using the following methodology:

- The area where excavations and areas of hardstanding are to be installed will be surveyed.
- The area of the EV Charging Hub will be marked out and the soil and overburden stripped will be stockpiled and used in landscaping.
- A tracked 360-degree excavator or similar will be used to excavate the area down to a competent stratum as approved by the Design Engineer.
- A layer of aggregate in the form of clause 804 gravel or crushed concrete will then be installed. This layer will be compacted and checked for correct levels.
- Permeable paving will be applied and compacted.
- Other ancillary works, such as the installation of cabling and ducting, will also be required.

2.2.3.7 Outdoor Play Area and Outdoor Seating Area

The construction works for a new outdoor play area and outdoor seating area are anticipated to utilise the following construction methodology:

- A suitable surface will be installed as per the Landscape Design Rationale prepared by Gannon and Associates.
- The various outdoor play area and outdoor seating area components will be brought on site.
- The play area components and seating area components will be securely fastened e.g., slides, seats, tables and benches.
- Prior to commissioning of the new play area and seating area components the appropriate safety checks will be carried out by competent personnel.

2.2.3.8 Canopy Installation

As part of the Proposed Development, canopies will be constructed over the EV charging hub (approximately 3.22m high) and fuel pumps (approximately 5.6m high) to provide weather protection and support the installation of rooftop solar panels, the methodology of which is outlined in Section 2.2.3.9 below. The anticipated methodology for canopy installation is as follows:

- The canopy footprint will be surveyed and set out to ensure correct alignment with EV charging hub and fuel pumps.
- Excavations will be carried out to the required depth for reinforced concrete bases to support canopy columns.
- Foundations poured to design specifications.
- Prefabricated steel canopy columns and beams will be brought onsite. These canopy columns will be secured to the reinforced concrete bases.
- A mobile crane will be used to lift and position the steel canopies which will then be connected to the connected to the steel support columns.
- Steelwork will be bolted/welded together in accordance with design engineer's specifications.
- Electrical cabling for lighting will be integrated into the canopy structure.

2.2.3.9 Solar Photovoltaic (PV) Installation

Roof mounted Solar PV panels will be installed on top of the new EV Charging Hub canopy as well as the roof of the proposed service station building as per Drawing No. 5846-DAL-DR-A-02007 prepared by Demesne Architects and Interior Designs. A methodology for the installation of the Solar PV panels is described below:

- Fixing of the canopy mounted systems will be by thin sheet screw or rivet. A watertight seal is provided by neoprene ring on the thin sheet screw and rubber plates.

- Mounting structures will be designed to the appropriate size and will be installed to withstand adverse or extreme weather conditions.
- The panels will be hoisted on to the canopy and mounted on steel frames.
- Other ancillary works, such as the installation of cabling and ducting, will also be required.

2.2.3.10 Landscaping and Ground Works

A Landscape Design Rationale (LDR) has been provided by Gannon & Associates for the Proposed Development. Prior to completion of works on the development site, landscaping works will be carried out. These works will involve the use of plant and machinery in order to carry out tasks such as earth moving.

The LDR includes soft and hard landscaping to include the creation of a public footpath as a concrete area, incorporating seating areas, outdoor play area, ornamental plants and trees with a woodland mix to enhance biodiversity.

2.2.3.11 Construction Works Sequence

Table 2-1 Sequence of Operations for the Construction Phase (Site A)

Item No.	Construction Works
1.	Site setup
2.	Disconnection of services
3.	Soft strip of materials within existing structures
4.	Foundation excavation and formation level establishment
5.	Foundations: formwork and steel reinforcement installation
6.	Masonry: precast element installation, brickwork and stonework, including insulation installation
7.	Window/door installation
8.	Plastering/rendering (external)
9.	Painting (external)
10.	Internal services (electrical and plumbing)
11.	Plastering (internal)
12.	Floors: precast elements installation or sand and cement screed
13.	Services connection: electrical, sewage, telecoms, fuel storage
14.	Painting (internal)
15.	Tiling: floors, walls, etc.
16.	Carpentry fix: doors, window boards, skirtings, etc.

Item No.	Construction Works
17.	Car parking spaces construction
18.	Landscaping

RECEIVED: 11/09/2025

2.2.4 Site B Construction Methodology

2.2.4.1 Site Establishment

Site B will be accessed via the existing site entrance by the R446 Regional Road. Fencing/hoarding will be established around the site and access to the site will be kept locked outside of normal working hours.

Due to the nature of the works, appropriate signage will be provided at the site to alert road users to the decommissioning activities and related traffic at the site.

The contractor will be required to undertake the following:

- Operate a Site Induction Process for all site staff.
- Ensure all site staff shall have current 'Safe Pass' cards.
- Maintain Site Security staff at all times.
- Install access security in the form of gates for staff.

Only designated personnel will be allowed to enter the Proposed Development site during the construction phase and no parking permitted for any vehicles associated with the project on the public road during the construction phase unless agreed with GCC.

2.2.4.2 Decommissioning Works

As part of the Proposed Development, as outlined in Section 2.1.1, a number of works will be carried out at the existing Applegreen Service Station (Site B). These works will involve the decommissioning of all structures relating to the fuel element of the existing Applegreen Service Station. The fuel pumps, canopy, totem sign and underground fuel tanks will be decommissioned.

The works are anticipated to be carried out in accordance with the following methodology:

- Pre-check of the site for any hazards or existing services. These checks will be carried out by a competent person(s). Any services connections (electrical) will be disconnected prior to works.
- An inventory of the waste types e.g., metals etc that will be generated by the decommissioning works will be carried out.
- The existing canopy and totem will be disassembled and removed by a crane.
- The concrete will be broken to access the underground fuel tanks which will be removed by crane.
- Prior to the removal of the tanks from their existing location underground, the following measures will be implemented:
 - Suitable fire-fighting equipment and emergency spill response materials will be retained on site during this phase.
 - All decommissioning works will be supervised by a competent foreman at all times and all leaks and spills monitored and controlled to prevent spread of contamination.

- Any liquid in the tanks and fuel lines will be pumped out, including liquid requiring a hand pump to remove, avoiding loss to of product to the ground.
- The contents of the tanks will be transferred to a tanker for offsite disposal or recycling at a licensed facility. Any solids or sludge will also be removed for offsite disposal.
- Once the tank has been emptied of any residual liquids, the tank will be made safe by removing any vapours that may remain. This can be done by filling the tank with inert gas or water. Any water used to remove residues from the tank will need to be removed and transported to a waste treatment facility for appropriate treatment.
- Fuel lines will be cleaned and removed from the site. The soils surrounding the tanks and associated infrastructure will be inspected and tested to ensure that no hydrocarbons are present.
- If required, laboratory analysis of excavated materials surrounding the tanks will be carried out.
- Transport and disposal of waste liquid will be in accordance with all applicable regulations.
- Waste disposal documentation will be retained for validation purposes.
- The area will be backfilled with stone/gravel and capped with a layer of concrete and the fuel tanks will be removed offsite to a facility for recycling.
- Decommissioning works will be completed by a specialist contractor using appropriate equipment and tools and a mechanical excavator if required.
- The majority of the waste generated during the decommissioning of the existing service area utilities will consist of metal and steel. This material will be segregated from all other waste components and sent by an authorised waste collector to an authorised waste recovery facility.
- Mitigation and control measures in relation to the decommissioning works which will be carried out at Site B are listed in Section 3.1.1.1 below.

2.2.4.3 Landscaping Works

Prior to completion of works on the development site, landscaping works will be carried out. These works will involve the use of plant and machinery in order to carry out tasks such as earth moving.

2.2.4.4 Decommissioning Works Sequence

Table 2-2 Sequence of Operations for the Decommissioning Phase (Site B)

Item No.	Construction Works
1.	Site setup
2.	Disconnection of services
3.	Soft strip of materials within existing structures
4.	Complete decommissioning of existing structures to be removed and removal of materials
5.	Landscaping

3.

ENVIRONMENTAL MANAGEMENT

It is the responsibility of the appointed main contractor to implement an effective environmental management system and ensure the requirements as set out in the following sections are implemented in full.

The following sections provide a summary of the proposed site-specific measures and procedures for the implementation of an effective environmental management system.

3.1

Protecting Water Quality

The site does not contain any watercourses or drains. The nearest waterbody to the Proposed Development site is the Loughbown Stream (EPA Code: 26L75 – Order 1) which is approximately 730m south of the site boundary. The nearest drain runs just outside the southern boundary of Site A.

Prior to the commencement of any construction activities, the necessary mitigation measures will be put in place to ensure that no silt laden runoff generated at the site will flow to any watercourses or drains, thus ensuring the protection of surface water during the works. This will involve confirming the location of all existing services and delineating between drainage systems. Surface waters will be managed to ensure the prevention of runoff from the site work areas. Stockpiling of soil during construction, should it be required, will take place in designated areas within the site boundary.

Particular emphasis will also be placed on hazardous materials entering the surface water management system including spills or leaks of fuel oils. Section 5.2 provides an Emergency Response Plan for dealing with spillages which may result in adverse environmental effects.

Excavation works have the potential to encounter sub-surface and groundwater. If groundwater is encountered during excavations, it will be pumped out and discharged through a pipe with an attached silt bag onto an area of overland vegetation within the site boundary. The discharge area will be surrounded by a layer of silt fencing, if deemed necessary.

3.1.1

Prevention Pollution Control Measures

The following measures will be put in place to prevent the transportation of silt laden water or pollutants from entering the wider environments including nearby waterbodies:

- Prior to the commencement of earthworks, silt fencing will be erected around the southern boundary of the Proposed Development site. This will be embedded into the ground adjacent to the perimeter boundary. The silt fences will be left in place throughout construction until all exposed soil has revegetated.
- The appointed contractor will be fully briefed by an ecologist as to the sensitive nature of the site and the required mitigation measures.
- A site compound will be established within the site boundary. The exact location of the site compound will be established by the contractor and will be located a minimum of 30m from any watercourses. The compound will be used for storage of material, machinery, fuel, and workers facilities.
- All construction materials and substances will be stored in the site compound and the compound will be located a minimum of 30m from any watercourse.
- Excavated spoil will be stockpiled and contained entirely within the confines of the site boundaries.
- During earthwork activities, the following mitigations will be adhered to:
 - Excavated materials that is not re-used will be transported off site to a designated waste facility.
 - Suitable stone material will be imported to the site to be used as backfill.

- Stockpiling of soil during construction, should it be required, will take place in designated areas within the site boundary away from any watercourses or waterbodies.
- A silt fence will be erected around any stockpiling of material to prevent any sediment-laden run-off occurring.
- All diesel or petrol pumps required onsite will be operated within bunded units.
- Exposed surfaces will be re-vegetated as soon as possible following construction.
- Where possible, earthworks will not be carried out during periods of heavy rainfall.
- As construction advances there may be a requirement to collect and treat surface water within the site. This will be completed using perimeter swales at low points around the construction areas, and if required water will be pumped from the swales into sediment bags prior to overland discharge allowing water to percolate naturally to ground;
- If groundwater is encountered during excavations, waters will be pumped from excavation and discharged through a pipe with a silt bag attached on to an area of overland vegetation within the site boundary.
- Discharge to ground will be via a silt bag which will filter any remaining sediment from the pumped water. The discharge area will be surrounded by a layer of silt fencing, if deemed necessary.
- Daily monitoring and inspections of site drainage and silt fencing during construction will be completed by the appointed environmental officer;
- Good construction practices such as wheel washers and dust suppression on site roads, and regular plant maintenance will ensure minimal risk. The Construction Industry Research and Information Association (CIRIA) provide guidance on the control and management of water pollution from construction sites ('Control of Water Pollution from Construction Sites, guidance for consultants and contractors', CIRIA, 2001)³, which provides information on these issues. This will ensure that surface water arising during the course of construction activities will contain minimum sediment.

Details of control measures which will be implemented at the site, if required, are included in the Plates below.



Plate 3-1 Silt Bag with water being pumped through.



Plate 3-2 Silt Bag under inspection

³ Construction Industry Research and Information Association (CIRIA) (2001); 'Control of Water Pollution from Construction Sites: Guidance for Consultants and Contractors'. CIRIA UK. Available at: <https://www.ciria.org/>

RECEIVED: 11/09/2025

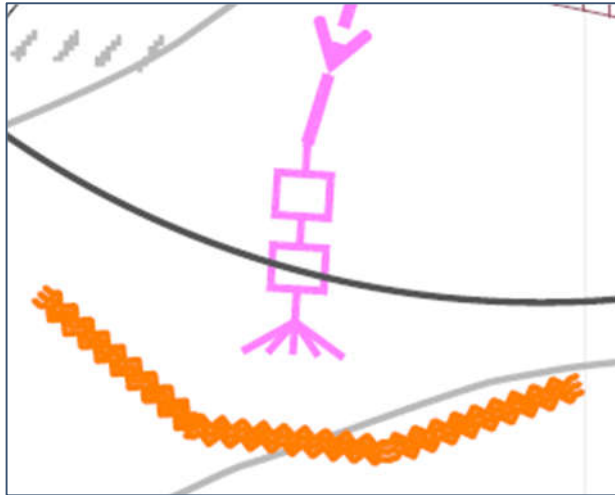


Plate 3-3 Inductive Silt Fence surrounding the discharge from a Silt Bag.



Plate 3-4 Embedded Silt Fence

3.1.1.1 Underground Fuel Tank Decommissioning Control Measures

The decommissioning of the existing fuel tanks at Site B has the potential to impact soils and ground waters in the area. In order to ameliorate the potential risk of any such negative effects, the following control measures will be implemented:

- Tanks and associated infrastructure will be decommissioned in accordance with Environment Agency guidelines, PPG2 , PPG27 , the Health and Safety Executive guide CS 15: *Cleaning and gas freeing of tanks containing flammable residues and Department of Environment, Food and Rural Affairs (DEFRA) guidance; Prevent Groundwater Pollution from Underground Fuel Storage Tanks.*
- Prior to decommissioning it will be necessary to survey the site, using ground penetrating radar and electromagnetic detection equipment to identify the location of the underground fuel tank and associated infrastructure. It may also be necessary to use trial pits/holes to positively identify the depth and location of infrastructure.
- Suitable fire-fighting equipment and emergency spill response materials will be retained on site during this phase.
- All decommissioning works will be supervised by a competent foreman at all times and all leaks and spills monitored and controlled to prevent spread of contamination.
- Spill kits will be kept on site in case of accidental spillage

3.1.2

Cement Based Products Control Measures

The following mitigation measures are proposed to avoid release of cement leachate from the site:

- No batching of wet-cement products will occur on site.
- Ready-mixed supply of wet concrete products and where possible, emplacement of pre-cast elements, will take place.
- No washing out of any plant used in concrete transport or concreting operations will be allowed on-site.
- Where concrete is delivered on site, only chute cleaning will be permitted, using the smallest volume of water possible.
- No discharge of cement contaminated waters to the construction phase drainage system or directly to any artificial drain or watercourse will be allowed.
- Use weather forecasting to plan dry days for pouring concrete.
- Ensure pour site is free of standing water and plastic covers will be ready in case of sudden rainfall event.

3.1.3

Refuelling, Fuel and Hazardous Materials Storage

The following measures are proposed to avoid release of hydrocarbons at the site:

- Storage/refuelling will be located in and carried out in a designated area of the proposed site, located a suitable distance from excavation works. Bunded tanks will be used, and these will be inspected for leaks regularly. Spill kits will be available on site and staff will be trained in their use and in spill control. All spills shall be diverted for collection.
- Fuels, lubricants and hydraulic fluids for equipment used on the site will be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment.
- On-site refuelling will take place by direct refuelling from the delivery truck or from fuel stored within a bunded fuel tank. Mobile measures such as drip trays and fuel absorbent mats will be used during all refuelling operations.
- Vehicles will never be left unattended during refuelling. Only dedicated trained and competent personnel will carry out refuelling operations and plant refuelling procedures shall be detailed in the contractor's method statements.
- Storage bunds/trays, if required will be constructed of an impermeable membrane (HDPC Plastic) and will have the adequate capacity to contain the volume of the liquids contained therein, if a leak/spillage does occur from one of the storage vessels.
- The storage area will contain a small bund lined with an impermeable membrane in order to prevent any contamination of the surrounding soils and vegetation.
- All site plant will be inspected at the beginning of each day prior to use. Defective plant shall not be used until the defect is satisfactorily fixed. All major repair and maintenance operations will take place off site.
- Potential impacts caused by spillages etc. during the construction phase will be reduced by keeping spill kits and other appropriate equipment on-site.
- Spill kits will be used to deal with any accidental spillage in and outside the refuelling area. Spill control measures as outlined fully in the Risk Assessment accompanying this application will be adhered to.

3.2

Dust Control

Construction dust can be generated from many on-site activities such as excavation and backfilling. The extent of dust generation will depend on the type of activity undertaken, the location, the nature of the dust, i.e., soil, sand, etc and the weather. In addition, dust dispersion is influenced by external factors such as wind speed and direction and/or, periods of dry weather. Construction traffic movements also

have the potential to generate dust as they travel along the public road. The measures below will also prevent construction debris arising on the public road network.

Proposed measures to control dust include:

- The designated public roads outside the site and along the main transport routes to the site will be regularly inspected by Site Management for cleanliness and cleaned as necessary.
- Material handling systems and material storage areas, if required will be designed and laid out to minimise exposure to wind.
- Water misting will be utilised on-site as required to mitigate dust in dry weather conditions, if required.
- A road sweeper will be employed, if necessary, to clean the public roads of any residual debris that may be deposited on the public roads leading away from the construction works.
- On site wheel washing will be undertaken as required for construction vehicles to remove any debris prior to leaving the site,
- The transport of soils, aggregates or other material, which has the potential to generate dust, will be undertaken in tarpaulin-covered vehicles where necessary.
- Daily inspection of construction sites to examine dust measures and their effectiveness.
- All construction related traffic will have speed restrictions on un-surfaced areas within the site to 15 kph.
- The use of barriers such as debris netting on scaffolding around the Service Station building (Site A) to block dust escaping.
- Daily inspection of construction sites to examine dust measures and their effectiveness.

3.3

Noise Control

The operation of plant and machinery, including construction vehicles, is a source of potential noise impacts. Construction phase noise is typically assessed in light of guidance set out in British Standard BS 5228-1:2009+A1:2014 *Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 1: Noise* (2014)⁴, as well as the National Roads Authority (NRA) (now TII) document *Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes* (2014)⁵. Although the NRA document is not directly relevant to the Proposed Development, it has seen increasing application to non-road projects in recent years in the absence of any specific Irish guidance.

Proposed measures to control noise include:

- All plant will be maintained in satisfactory condition, and in accordance with manufacturer requirements. Maintenance and lubrication of bearings and other moving parts will be undertaken as specified by the manufacturer.
- Exhaust and silencer systems on plant will be maintained in a satisfactory condition and operating correctly at all times. Defective silencers will be immediately replaced.
- Plant and machinery with low inherent potential for generation of noise and/or vibration will be selected.
- Where practical, separation distances to any locations of frequent human use where noise would have the potential to interfere with typical activities will be maximised through appropriate on-site positioning of plant.

⁴ The British Standards Institution (BSI) (2009): *BS 5228-1:2009+A1:2014: Code of practice for noise and vibration control on construction and open sites – Part 1: Noise* BSI. UK. Available at: https://www.warrington.gov.uk/sites/default/files/2020-08/cf53_bs_5228_pt1-2009a1-2014.pdf

⁵ Transport Infrastructure Ireland (TII) (2014): *Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes* TII. Ireland. Available at: https://www.tii.ie/media/nv0bnge2/guidance_for_the_treatment_of_noise_during_the_planning_of_national_road_schemes.pdf

- The requirement to house continuously operating plant in sound-attenuating enclosures or casings will be assessed on-site.
- Equipment not in active use will be shut down.
- On-site tracks and roadways used regularly by heavy goods vehicles (HGVs) will be maintained in reasonable condition, and free of potholes and defects which may give rise to rattling of empty HGV bodies.
- Training will be provided by the Site Management to drivers to ensure smooth machinery operation/driving, and to minimise unnecessary noise generation. HGV drivers will be instructed to extend care and courtesy to other road users, and to avoid unnecessary revving of engines.
- Off-site queuing of HGVs will be prohibited.
- All construction plant used on-site will be required to comply with maximum sound power levels set out in Directive 2000/14/EC of the European Parliament and of the Council of 8 May 2000 on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors, implemented in Ireland by the European Communities (Noise Emission by Equipment For Use Outdoors) Regulations, 2001 (S.I. 632 of 2001), as amended by the European Communities (Noise Emission by Equipment for Use Outdoors) (Amendment) Regulations, 2006 (S.I. 241 of 2006).
- The proposed construction working hours will be 07:00 – 19:00 Monday to Friday and 08:00 – 16:30 on Saturday. Construction will not take place at the site on Sundays or Public Holidays.

There is no published statutory Irish guidance relating to the maximum permissible noise and vibration level that may be generated during the construction phase of a project. Local authorities normally control construction activities by imposing limits on the hours of operation and consider noise and vibration limits at their discretion. However, there are several publications commonly used in Ireland to set appropriate construction criteria.

The Transport Infrastructure Ireland (TII) publication Guidelines for the Treatment of Noise and Vibration in National Road Schemes⁵ contains information on the permissible construction noise levels for various hours of operation. The maximum noise level limits as per time of day in the publication are listed below:

- Monday to Friday 07:00 to 19:00hrs 80 decibel (dB)
- Monday to Friday 19:00 to 22:00hrs 65 dB
- Saturdays 08:00 to 16:30hrs 75 dB
- Sundays & Bank Holidays 08:00 to 16:30hrs 65 dB

All complaints of noise received during the construction phase will be logged in a register and investigated immediately. Details of follow-up action will be included in the register.

3.4

Vibration Control

Vibration standards can be considered in two varieties: those dealing with human comfort and those dealing with cosmetic or structural damage to buildings. For example, vibration is perceptible at around 0.5 mm/s in the case of road traffic, however at higher magnitudes, this vibration may become an annoyance. Guidance relevant to the protection of building structures is contained in the following documents:

- British Standard BS 7385: 1993: Evaluation and Measurement for Vibration in Buildings Part 2: Guide to Damage Levels from Ground Borne Vibration⁶.
- British Standard BS 5228: 2009+A1 2014: Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 2: Vibration⁷.

Vibration can be more difficult to control than noise, and there are few generalisations which can be made about its control. It should be borne in mind that vibration can cause disturbance by causing structures to vibrate and radiate noise in addition to perceptible movement. The following mitigation measures will be implemented at the site during the decommissioning and construction phase to control vibration levels:

- The hours of working should be planned, and account should be taken of the effects of vibration upon persons in areas surrounding site operations and upon persons working on site, considering the nature of land use in the areas concerned and the duration of work.
- Where reasonably practicable, low vibration working methods should be employed. Consideration should be given to use of the most suitable plant, reasonable hours of working for operations which might give rise to perceptible vibrations, and economy and speed of operations.
- Vibration should be controlled at source and the spread of vibration should be limited.
- Where reasonably practicable, plant and/or methods of work causing significant levels of vibration at sensitive premises should be replaced by other less intrusive plant and/or methods of working.
- Vibration from stationary plant (e.g. generators, pumps, compressors) can, in some instances, prove disturbing when located close to sensitive premises or when operating on connected structures. In these instances, equipment should be relocated or isolated using resilient mountings
- On those parts of a site where high levels of vibration are likely to be a hazard to persons working on the site, prominent warning notices should be displayed.
- Off-site fabrication – in a method statement/risk assessment the contractor will highlight any activity that may cause significant vibration levels and include measures in helping to mitigate these emission levels.
- Equipment is to be task specific.
- Best practice vibration control measures will be employed by the contractor.
- A designated member of staff will be appointed as the point of contact for any queries or complaints from nearby local residents.

3.5

Traffic Management Proposals

The proposed traffic management measures to be adopted during the construction works are summarised below. Please note that this is not an exhaustive list, and it will be updated accordingly by the appointed contractor in consultation with the local authority.

- Warning signs/advanced warning signs will be installed at appropriate locations in advance of the construction site access locations.
- A site-specific Construction Traffic Management Plan will be agreed upon between the contractor and GCC prior to works starting.

⁶ The British Standards Institution (BSI) (1993): 'BS 7385-2: 1993: Evaluation and measurement for vibration in buildings - Part 2: Guide to damage levels from groundborne vibration' BSI. UK. Available at: <https://www.normsplash.com/Samples/BSI/193746945/BS-7385-2-1993-en.pdf>

⁷ The British Standards Institution (BSI) (2014): 'BS 5228-2:2009+A1:2014: Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration' BSI. UK. Available at: <https://www.omegawestdocuments.com/media/documents/43/CD43.12%20-%204%20Code%20of%20practice%20for%20noise%20and%20vibration%20control%20on%20construction%20and%20open%20sites%20part%202%20vibration;.pdf>

- Construction and delivery vehicles will be instructed to use only the approved and agreed means of access; and movement of construction vehicles will be restricted to these designated routes.
- Appropriate vehicles will be used to minimise environmental impacts from transporting construction material, for example the use of dust covers on HGVs carrying dust producing material.
- Speed limits of construction vehicles to be managed by appropriate signage, to promote low vehicular speeds.
- Parking of site vehicles will be managed and will not be permitted on public road, unless proposed within a designated area that is subject to traffic management measures and agreed with GCC.
- Deliveries of construction materials will be planned to ensure that the materials are delivered only as they are required and will avoid peak hours when possible.

The site will not be open to members of the public. When vehicles are entering the site, or leaving the site, these movements will be supervised by designated members of staff who will act as road marshals. The construction site gates will be kept closed when not in use and monitored by a designated member of staff.

3.6 Invasive Species Management

MKO conducted multidisciplinary surveys to search for Invasive Alien Species (IAS), focusing on those listed under the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011). These surveys were carried out by a qualified ecologist.

No invasive species were found onsite as part of site investigations and walkovers. Should invasive species be encountered onsite during the construction phase, an invasive species management plan will be prepared. The treatment and control of invasive alien species will follow guidelines issued by the National Roads Authority – *The Management of Noxious Weeds and Non-native Invasive Plant Species on National Roads* (NRA 2010)⁸ and the Environment Agency – *The Knotweed Code of Practice: Managing Japanese Knotweed on Development Sites* (Version 3, amended in 2013) (EA 2013)⁹. To prevent the introduction of any invasive species to the site best practice control methods are summarised in the following sections.

3.6.1 Site Management

Careful preparation of the site and planning of the works is crucial to successful prevention of introduction of invasive species. There are no invasive species on-site however, in the event that an invasive species is encountered, an invasive species management plan will be prepared, and the non-exhaustive list of biosecurity measures as set out in Section 3.6.2 will be adopted and shall be followed by all on-site personnel. Only those who have been inducted into biosecurity measures on-site may enter the contaminated zones within the works areas.

3.6.2 General Biosecurity Measures

- A risk assessment and method statement must be provided by the Contractor prior to commencing works.

⁸Transport Infrastructure Ireland (TII) (2010): *The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads* TII. Ireland. Available at: <https://www.tii.ie/media/rtmi2ebi/management-of-noxious-weeds-and-non-native-invasive-plant-species-on-national-road-schemes.pdf>

⁹Environment Agency (EA) (2013): *The Knotweed Code of Practice: Managing Japanese Knotweed on Development Sites (Version 3, amended in 2013)* EA. UK. Available at: https://assets.publishing.service.gov.uk/media/5a80853fe5274a2e8ab509d8/LIT_2695.pdf

- Fences will be erected around areas of infestation, as confirmed by test pits, and warning signs shall be erected.
- A designated wash-down area will be created, where power-washed material from machinery can be contained, collected and disposed of with other contaminated material. This area will contain a washable membrane or hard surface.
- Stockpile areas will be chosen to minimise movement of contaminated soil.
- Stockpiles will be marked and isolated.
- Contaminated areas which will not be excavated will be protected by a root barrier membrane if they are likely to be disturbed by machinery. Root barrier membranes will be protected by a layer of sand above and below and topped with a layer of hardcore.
- The use of vehicles with caterpillar tracks within contaminated areas will be avoided to minimise the risk of spreading contaminated material.
- Any material that is imported onto any site will be verified by a suitably qualified ecologist to be free from any invasive species listed on the 'Third Schedule' of Regulations 49 & 50 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I 477 of 2011). This will be carried out by searching for rhizomes and plant material.
- Any soils or subsoils contaminated with invasive species will be sent for disposal to an authorized waste facility.
- A suitably qualified ecologist will be on site to monitor and oversee the implementation of invasive species remedial works.

Plant and equipment which is operated within an area for the management of materials in contaminated areas will be decontaminated prior to relocating to a different works area. The decontamination procedures will take account of the following:

- Personnel may only clean down if they are familiar with the plant and rhizome material and can readily identify it.
- Decontamination will only occur within designated wash-down areas.
- Vehicles will be cleaned using stiff-haired brush and pressure washers, paying special attention to any areas that might retain rhizomes, e.g., wheel treads and arches.
- All runoff will be isolated and treated as contaminated material. This will be disposed of in already contaminated areas.

4.

RESOURCE WASTE MANAGEMENT PLAN

A RWMP has been prepared by WSP Ireland Ltd for this Proposed Development and accompanies this application to GCC. The contents of this RWMP are briefly summarised here.

The RWMP shall detail how the construction materials are proposed to be managed primarily as resources on Site where possible to prevent waste generation as encouraged by 'A Waste Action Plan For a Circular Economy, Ireland's National Waste Policy. 2020-2025' (DECC, 2020). Materials not suitable for use on the Site to complete the overall Project will be primarily recovered and recycled offsite under appropriate waste authorisation and where disposal will be considered as the least favourable waste management option for the project.

The main objectives of the RWMP are as follows:

- Promote an integrated approach to waste and resource management throughout the Proposed Development's lifecycle and set out appropriate responsibilities;
- Promote sustainable waste and resource management in line with the waste management hierarchy;
- Provide an outline for the management of waste arising from construction phase works for the Proposed Development in accordance with relevant Irish and EU waste management legislation.

The RWMP outlines methods to achieve waste prevention, maximise reuse and recycling of resources (both onsite and offsite) and, recovery/disposal of waste. The RWMP also includes recommendations for the management of various anticipated waste streams.

4.1

Waste Policy and Legislative Background

The RWMP describes the applicable legal and policy framework for C&D waste management in Ireland (both nationally and regionally). The Waste Framework Directive sets down basic requirements for handling waste and defines what defines "waste". It provides a set of requirements that EU member states must adhere to. The waste directives are implemented in Ireland by the Environmental Protection Agency Act 1992, the Waste Management Act 1996, as amended, the Waste Management (Amendment) Act 2001, European Communities (Waste Directive) Regulations 2011-2020 and the Protection of the Environment Act 2003. Waste Policy and legislation in Ireland is implemented by the EPA and local authorities.

4.1.1

Waste Management Hierarchy

The waste management hierarchy sets out the most efficient way of managing in the following order:

Prevention and Minimisation:

The primary aim of the RWMP will be to prevent and thereby reduce the amount of waste generated at each stage of the project. The prevention and minimisation of waste of this development will be developed by implementing effective on-site materials management in terms of both material acquisition and storage on site.

Reuse of Waste:

Reusing as much material generated on-site as possible will reduce the quantities of waste that will have to be disposed of off-site to recovery or waste facilities. Site management will be required to encourage the appropriate reuse of materials where possible as well as identify re-use opportunities to achieve ultimate goal of waste reduction. Construction waste will arise on the project mainly from excavation and unavoidable construction waste including excess materials and packaging waste.

Appropriate measures will be implemented to ensure that minimal waste is generated during construction. These are as follows:

- All waste will be collected in skips and the site will be kept tidy and free of debris at all times.
- All construction waste materials will be stored within the confines of the site, prior to removal from the site to a permitted waste facility.
- Ordering of materials should be on an 'as needed' basis to prevent over supply to site. Co-ordination is required with suppliers enabling them to take/buy back surplus stock.
- Request that suppliers use least amount of packaging possible on materials delivered to the site.
- Ensuring correct storage and handling of goods to avoid unnecessary damage that would result in their disposal.
- Ensuring correct sequencing of operations.
- Use reclaimed materials in the construction works.
- Hazardous waste will be kept separate from all other construction waste to prevent contamination and removed appropriately.
- Concrete can be reused as aggregate for roads cable trench backfilling materials
- Plastic packaging etc. can be used to cover materials on site or reused for the delivery of other materials.

At all times during the implementation of the RWMP, disposal of waste to landfill will be considered only as a last resort.

Recycling of Waste:

There are a number of established markets available for the beneficial use of construction waste such as using waste concrete as fill for new roads. If some of the construction materials cannot be reused on site, then recycling is the favoured option.

All waste that is produced during the construction phase including dry recyclables will be sent directly for subsequent segregation at an appropriately licenced facility. The low volume of such material that is anticipated to be generated at the Proposed Development is the justification for adopting this method of waste management.

4.1.2 Resource Waste Management Plan (RWMP)

4.1.2.1 Design Approach

It is understood that the client has considered a designing out waste approach early in the design of the overall Proposed Development by establishing the potential for any reusable site assets such as existing building and infrastructure, soils and other materials. The client has considered the following:

- Re-use of site assets and infrastructure
- Designing out waste by pre-fabrication off site for modular components;
- Designing for modern methods of construction;
- Including circularity principles in design;

- Re-use of soils for landscaping;
- Optimum recovery of assets/resource on site; and
- Assessing proposed site levels and material balance to minimise excavations and muck off from site

The design proposal is deemed to provide substantial economic savings and provides a high level of sustainability through design that incorporates waste prevention, re-use, and recycling of resources on Site.

Where possible, offsite waste disposal associated with the volume of removal of construction arisings will be designed out and potential HGV movements through the local road network will also be reduced. The design approach for designing out waste, re-use, recycling, green procurement, offsite construction, materials optimisation and design for flexibility and deconstruction are discussed in the RWMP.

4.1.3 Construction and Decommissioning Waste Management

4.1.3.1 Decommissioning Waste Management

Prior to the commencement of any decommissioning works, a full audit of waste material that will be generated will be carried out. A list of expected waste types that may be generated has been drawn up and the European List of Waste (LoW) Codes pertaining to each waste type is included in Table 4-1.

Table 4-1 Expected Waste types Arising from the Decommissioning Phase

Materials	Example	LoW Code
Cables	Electrical wiring	17 04 11
Concrete	Surfacing, flooring material	17 01 01
Metals	Rebar, reinforced steel joists, lead flashing, powder coated aluminium, copper water service pipes, fuel tanks	17 04 07
Mixture of inert material	Sand, stones, plaster, brick, rock	17 01 07
Plastic	PVC frames, electrical fittings	17 02 03
Soil & Stones	Overburden, soil, subsoil	17 05 04
Canteen Waste	Miscellaneous waste from site staff	20 01 08

The majority of waste generated by the decommissioning works will consist of soil and stones (from the excavation works) and concrete rubble (from the removal of fuel tanks). These materials will be segregated from all other waste components and sent by an authorised waste collector to an authorised waste recovery facility. This waste material will be transferred to a Materials Recovery Facility (MRF) by a fully licensed waste contractor where the waste will be sorted into individual waste streams for recycling, recovery or disposal.

4.1.3.2 Construction Waste Management

The first significant quantity of waste to be generated during the construction phase of the project will be as a result of excavation. Although a quantity of this material will be used for landscaping, backfilling and general restoration of excavated areas, it is anticipated that a small quantity of this material will be disposed of off-site by a licenced haulier to an authorised waste recovery facility. The remaining volume of waste material will not be large enough to warrant any further segregation, therefore, the remaining waste generated will be deposited into a single skip. This waste material will be transferred to a MRF by a fully licensed waste contractor where the waste will be sorted into individual waste streams for recycling, recovery or disposal.

Waste generated post excavation on site will be managed in the waste storage area where the various waste components will be segregated into a number of waste categories in accordance with a general waste segregation policy and placed into individual skips. The categories for segregation will include timber, metal, cardboard and plastics. This material will be removed by authorised waste collection contractors for recycling and recovery at various licensed facilities. The remaining volume of waste material which cannot be allocated to any of these four waste streams will be disposed of in a general waste skip. This general waste will be subject to constant monitoring by site management to ensure that potential reusable and recyclable material is not being disposed of therein. Other waste mitigation measures which will be implemented at the site are as follows;

- All waste will be collected in skips and the site will be kept tidy and free of debris at all times.
- Waste oils and hydraulic fluids will be collected in leak proof containers and removed from the site for disposal or recycling. It is also essential that all empty oil containers and other hazardous wastes should be disposed of in accordance with the requirements of the Waste Management Act, 1996.
- All construction waste materials will be stored within the confines of the site, prior to removal from the site to a licensed waste facility.
- A self-contained port-a-loo with an integrated waste holding tank will be used within the confines of the site. This unit will be maintained by the providing contractor and removed from site upon completion of the construction works.
- No wastewater will be discharged on-site during the construction phase.

The expected wastes arising from the works including the individual List of Waste (LoW) codes are outlined in Table 4-2.

Table 4-2 Expected Waste Types Arising from the Construction Phase

Materials	Example	LoW Code
Cables	Electrical wiring	17 04 11
Concrete	Surfacing, flooring material	17 01 01
Insulation	Cavity & Floor Insulation	17 06 04
Tiles and ceramics	Wall and floor tiles	17 02 03
Metals	Rebar, reinforced steel joists, lead flashing, powder coated aluminium, copper water service pipes, fuel tanks	17 04 07
Mixture of inert material	Sand, stones, plaster, brick, rock	17 01 07

Materials	Example	LoW Code
Plastic	PVC frames, electrical fittings	17 02 03
Soil & Stones	Overburden, soil, subsoil	17 05 04
Wood	Frames and doors, MDF	17 02 01
Paint	Interior paint finish	08 01 11
Canteen Waste	Miscellaneous waste from site staff	20 01 08

4.1.4

Site Management and Implementation

Site Management will ultimately be the responsibility of the Contractor. Control of the Site including waste management will be transferred to the Contractor at commencement of the Construction project. The Design Team or client representative may set recommended tasks for the contractor to follow in the works specification.

The RWMP which has been prepared by WSP accompanies this application.

RECEIVED: 11/09/2025

5. Environmental Management Implementation and Emergency Response

5.1 Roles and Responsibilities

5.1.1 Construction Manager/Site Manager

The Construction Manager/Site Supervisor will have overall responsibility for the organisation and execution of all related environmental activities as appropriate, in accordance with regulatory and project environmental requirements. The duties and responsibilities of the Construction Manager/ Site Supervisor will include:

- Ensure that all works are completed safely and with minimal environmental risk; Approve and implement the CEMP and supporting environmental documentation, and ensure that all environmental standards are achieved during the construction phase of the project;
- Take advice from the site Environmental Manager on legislation, codes of practice, guidance notes and good environmental working practice relevant to their work;
- Ensure compliance through audits and management site visits;
- Ensure timely notification of environmental incidents; and,
- Ensure that all construction activities are planned and performed such that minimal risk to the environment is introduced;
- Provide full and adequate supervision and site administration during the progress of the works;
- Appoint suitably qualified foreman, craftsman, domestic subcontractors, and specialists;

5.1.2 Environmental Manager

The main contractor appointed to carry out the works onsite will be required to provide a level of supervision onsite in the form of an Environmental Manager who will also fulfil the role of Waste Manager. Due to the scale of activity proposed for the site, this role can be adopted by a Site Manager/Foreman as part of their duties. In general, this Environmental Manager will maintain responsibility for monitoring the works and Contractors/Sub-contractors from an environmental perspective. The Environmental Manager will act as the regulatory interface on environmental matters by reporting directly to the client and liaising with GCC and other statutory bodies as required. The duties of the appointed Environmental Manager are summarised as follows:

- Maintain and update as required the Construction Phase CEMP and supporting environmental documentation and review/approval of contractor method statements.
- Undertake inspections and reviews to ensure the works are carried out in compliance with the CEMP.
- Monitor the implementation of the CEMP, particularly all proposed/required Environmental mitigation measures.
- Generate environmental reports as required to show environmental data trends and incidents and ensure environmental records are maintained throughout the construction period.
- Advise site management/contractor/sub-contractors on:
 - Prevention of environmental pollution and improvement to existing working methods.
 - Changes in legislation and legal requirements affecting the environment.
 - Suitability and use of plant, equipment and materials to prevent pollution.

- Environmentally sound methods of working and systems to identify environmental hazards.
- Ensure proper mitigation measures are initiated and adhered to during the construction phase.
- Liaise with Project Team and present the findings of site audits/inspections that are completed.
- Ensure adequate arrangements are in place for site personnel to identify potential environmental incidents.
- Ensure that details of environmental incidents are communicated in a timely manner to the relevant regulatory authorities, initially by phone and followed up as soon as is practicable by email.
- Provide full supervision of the decommissioning of the existing underground fuel tanks and fuel lines. Monitoring will also be carried out by the Site Manager, if required.
- Support the investigation of incidents of significant, potential or actual environmental damage, and ensure corrective actions are carried out, recommend means to prevent recurrence and communicate incident findings to relevant parties.
- Identify environmental training requirements and arrange relevant training for all levels of site-based staff/workers; and
- Fulfil the role of Waste Manager and implement the objectives of the RWMP as set out in Section 4 above.

5.2 Emergency Response Plan

5.2.1 Emergency Response

The Emergency Response Plan (ERP) is presented in this section of the CEMP. It details the procedures to be followed in the event of an emergency, covering site health and safety and environmental protection measures.

The site ERP specifies the required response protocols and defines the responsibilities of all personnel in the event of an emergency. The ERP will be subject to ongoing updates and require submissions from the contractor, Project Supervisor and suppliers as the construction phase progresses. For sub-contractors governed by their own emergency response procedures, a bridging arrangement will be implemented to ensure integration of procedures within this document thereby maintaining consistency and coordination across all site operations.

This is a working, live document that requires continuous updating throughout the works of the Proposed Development.

5.2.2 Roles and Responsibilities

The chain of command during an emergency response sets out who is responsible for coordinating the response. The Site Manager/Environmental Manager will lead the emergency response which makes him responsible for activating and coordinating the emergency response procedure. The other site personnel who can be identified at this time who will be delegated responsibilities during the emergency response are presented in

. In a situation where the Site Manager/Environmental Manager is unavailable or incapable of coordinating the emergency response, the responsibility will be transferred to the next person in the chain of command outlined in

. This will be updated throughout the various stages of the project.

RECEIVED: 11/09/2025

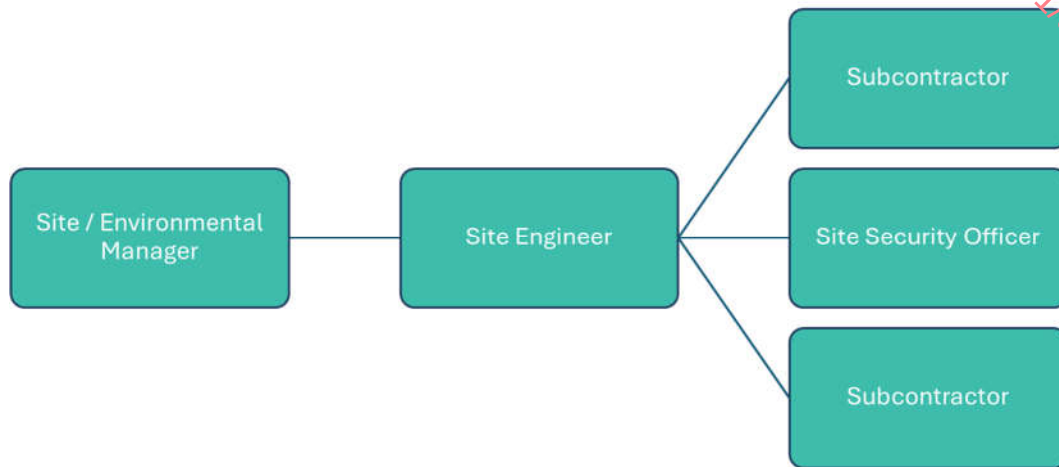


Figure 5-1 Emergency response procedure - chain of command

5.2.3 Initial Steps

In order to establish the type and scale of potential emergencies that may occur, the following hazards have been identified as being potential situations that may require an emergency response in the event of an occurrence.

Table 5-1 Hazards Associated with Potential Emergency Situations

Hazard	Emergency Situation
Construction Vehicles: Dump trucks, tractors, excavators, cranes etc.	Collision or overturn which has resulted in operator or third-party injury.
Abrasive wheels/Portable Tools.	Entanglement, amputation or electrical shock associated with portable tools.
Contact with services.	Electrical shock or gas leak associated with an accidental breach of underground services.
Fire	Injury to operative through exposure to fire.
Falls from heights including falls from scaffold towers, scissor lifts, ladders and roofs.	Injury to operative after a fall from a height.
Sickness	Illness unrelated to site activities of an operative e.g., heart attack, loss of consciousness, seizure.

In the event of an emergency situation associated with, but not restricted to, the hazards outlined in Table 5-1 the Site Manager will carry out the following:

- Establish the scale of the emergency situation and identify the number of personnel, if any, have been injured or are at risk of injury.
- Where necessary, sound the emergency siren/foghorn that activates an emergency evacuation on the site.
- Make safe the area if possible and ensure that there no identifiable risk exists with regard to dealing with the situation e.g., if a machine has turned over, ensure that it is in a safe position so as not to endanger others before assisting the injured.
- Contact the required emergency services or delegate the task to someone if he is unable to do so. If delegating the task, ensure that they follow the procedures for contacting the emergency services as set out in Section 5.2.6
- Take any further steps that are deemed necessary to make safe or contain the emergency incident e.g., cordon off an area where an incident associated with electrical issues has occurred.
- Contact any regulatory body or service provider as required e.g., ESB Networks the numbers for which as provided in Section 5.2.6.2.
- Contact the next of kin of any injured personnel where appropriate.

5.2.4 Site Evacuation / Fire Drill

A site evacuation/fire drill procedure will provide basis for carrying out the immediate evacuation of all site personnel in the event of an emergency. The following steps will be taken:

- Notification of the emergency situation. Provision of a siren or foghorn to notify all personnel of an emergency situation.
- An assembly point will be designated in the construction compound area and will be marked with a sign. All site personnel will assemble at this point.
- A roll call will be carried out by the Site Security Officer to account for all personnel on site.
- The Site Security Officer will inform the Site Manager when all personnel have been accounted for. At this time the Site Manager will decide the next course of action which will be determined by the situation that exists at that time. The Site Manager will advise all personnel accordingly.

All personnel will be made aware of the evacuation procedure during site induction. The Fire Services Acts of 1981 and 2003 require the holding of fire safety evacuation drills at specified intervals and the keeping of records of such drills.

5.2.5 Environmental Emergency Response Procedure

5.2.5.1 Spill Control Measures

Every effort will be made to prevent an environmental incident during the construction and operational phase of the proposed project. Oil/Fuel spillages are one of the main environmental risks that will exist on the proposed site which will require an emergency response procedure. The importance of a swift and effective response in the event of such an incident occurring cannot be over emphasised. The following steps provide the procedure to be followed in the event of such an incident.

- Stop the source of the spill and raise the alarm to alert people working in the vicinity of any potential dangers.
- If applicable, eliminate any sources of ignition in the immediate vicinity of the incident.
- Contain the spill using the spill control materials, track mats or other material as required. Do not spread or flush away the spill.
- If possible, clean up as much as possible using the spill control materials.

- All vehicles will be suitably serviced and maintained to avoid any leaks or spillage of oil, petrol or diesel. All scheduled maintenance will not be carried out on the public highway.
- Contain any used spill control material and dispose of used materials appropriately using a fully licensed waste contractor with the appropriate permits so that further contamination is limited.
- Notify the Environmental Manager immediately giving information on the location, type and extent of the spill so that they can take appropriate action.
- External consultants will inspect the site and ensure the necessary measures are in place to contain and clean up the spill and prevent further spillage from occurring.
- The applicant will notify the appropriate regulatory body such as GCC if deemed necessary.

Environmental incidents are not limited to just fuel spillages. Therefore, any environmental incident must be investigated in accordance with the following steps:

- The Environmental Manager must be immediately notified.
- If necessary, the Environmental Manager will inform the appropriate regulatory authority. The appropriate regulatory authority will depend on the nature of the incident.
- The details of the incident will be recorded on an Environmental Incident Form which will provide information such as the cause, extent, actions and remedial measures that were used following the incident. The form will also include any recommendations made to avoid reoccurrence of the incident.
- If the incident has impacted on an ecologically sensitive receptor, such as a sensitive habitat, protected species or designated conservation site (e.g., SPA or SAC), the Environmental Manager will liaise with an Ecologist.
- If the incident has impacted on a sensitive receptor such as an archaeological feature the Environmental Manager will liaise with an Archaeologist.
- A record of all environmental incidents will be kept on file by the Environmental Manager and the Main Contractor. These records will be made available to the relevant authorities such as GCC and the EPA if required.

The Environmental Manager will be responsible for any corrective actions required as a result of the incident, e.g., an investigative report, formulation of alternative construction methods or environmental sampling, and will advise the Main Contractor as appropriate.

5.2.6 Contacting the Emergency Services

All staff members will know the address and location of the site as it may be necessary to liaise with the emergency services on the ground in terms of locating the site. This may involve providing an escort from a designated meeting point that may be located more easily by the emergency services.

5.2.6.1 Emergency Communication Procedure

In the event of requiring the assistance of the emergency services the following steps should be taken:

- Stay calm. It is important to take a deep breath and not get excited. Any situation that requires 999/112 is, by definition, an emergency. The dispatcher or call-taker knows that and will try to move things along quickly, but under control.
- Know the location of the emergency and the number you are calling from. This may be asked and answered a couple of times but do not get frustrated. Even though many emergencies call centres have enhanced capabilities meaning they are able to see your location on the computer screen they are still required to confirm the information. If for some reason you are disconnected, at least emergency crews will know where to go and how to call you back.

- Wait for the call-taker to ask questions, then answer clearly and calmly. If you are in danger of assault, the dispatcher or call-taker will still need you to answer quietly, mostly "yes" and "no" questions.
- If you reach a recording, listen to what it says. If the recording says your call cannot be completed, hang up and try again. If the recording says all call takers are busy, WAIT. When the next call-taker or dispatcher is available to take the call, it will transfer you.
- Let the call-taker guide the conversation. He or she is typing the information into a computer and may seem to be taking forever. There is a good chance, however, that emergency services are already being sent while you are still on the line.
- Follow all directions. In some cases, the call-taker will give you directions. Listen carefully, follow each step exactly, and ask for clarification if you do not understand.
- Keep your eyes open. You may be asked to describe victims, suspects, vehicles, or other parts of the scene.
- Do not hang up the call until directed to do so by the call taker.

All staff members will know the address and location of the site as it may be necessary to liaise with the emergency services on the ground in terms of locating the site. This may involve providing an escort from a designated meeting point that may be located more easily by the emergency services.

5.2.6.2 Contact Details

A list of emergency contacts is presented in Table 5-2.

Table 5-2 Emergency Contacts

Hazard	Emergency Situation
Emergency Services – Ambulance, Fire, Gardaí	999/112
Hospital –Portiuncula University Hospital	090 964 8200
ESB Emergency Services	1850 372 999
Bórd Gais Emergency	1850 20 50 50
Gardaí – Ballinasloe Garda Station	090 963 1890
Health and Safety Coordinator - Health & Safety Services	TBC
Health and Safety Authority	1890 289 389
Project Supervisor Construction Stage (PSCS): TBC	TBC
Project Supervisor Design Stage (PSDS): TBC	TBC
Client – Petrogas Group Ltd	TBC

5.2.6.3 Procedure for Personnel Tracking

All operatives on site without any exception will have to undergo a site induction where they will be required to provide personal contact details which will include contact information for the next of kin.

In the event of a site operative becoming involved in an emergency situation where serious injury has occurred, and hospitalisation has taken place, it will be the responsibility of the Site Manager or next in command if unavailable to contact the next of kin to inform them of the situation that exists.

5.2.6.4 Induction Checklist

Table 5-3 provides a list of items highlighted in this ERP which must be included or obtained during the mandatory site induction of all personnel that will work on the site. This will be updated throughout the various stages of the project.

Table 5-3 Emergency Response Plan Items Applicable to the Site Induction Process

ERP Items to be included in the Site Induction	Status
All personnel will be made aware of the evacuation procedure during site induction.	
In the case of remote sites, it may be necessary to liaise with and assist the emergency services on the ground in terms of locating the site. This may involve providing an escort from a designated meeting point that may be located more easily by the emergency services. This should form part of the site induction to make new personnel and sub-contractors aware of any such arrangement or requirement if applicable.	
All operatives on-site without any exception will have to undergo a site induction where they will be required to provide personal contact details which will include contact information for the next of kin.	

6.

MITIGATION PROPOSALS

This section of the CEMP groups together all environmental mitigation measures relating to the Proposed Development works. The CEMP will be finalised subsequent to any permission granted by GCC and will be updated prior to construction to include, inter alia, any additional requirements pursuant to relevant planning conditions imposed. Mitigation measures identified in the NIS will also be incorporated into this section to ensure compliance with ecological and environmental requirements.

By presenting the mitigation proposals in the below table format, it is intended to provide an easy to audit list that can be reviewed and reported on during the Proposed Works.

Table 6-1 Mitigation Measures for the Pre-Commencement and Construction Phases

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
Pre-Commencement Phase				
1	CEMP Section 5.1.2	The main contractor appointed to carry out the works onsite will be required to provide a level of supervision onsite in the form of an Environmental Manager who will also fulfil the role of Waste Manager. Due to the scale of activity proposed for the site, this role can be adopted by a Site Manager/Foreman as part of their duties. In general, this Environmental Manager will maintain responsibility for monitoring the works and Contractors/Sub-contractors from an environmental perspective. The Environmental Manager will act as the regulatory interface on environmental matters by reporting directly to the client and liaising with GCC and other statutory bodies as required.		
Construction Phase				
Protecting Water Quality				
2	CEMP Section 3.1.1 and NIS Section 6	➤ Prior to the commencement of earthworks, silt fencing will be erected around the southern boundary of the Proposed Development site. This will be embedded into the ground adjacent to the perimeter boundary. The silt fences will be left in place throughout construction until all exposed soil has revegetated. ➤ The appointed contractor will be fully briefed by an ecologist as to the sensitive nature of the site and the required mitigation measures. ➤ A site compound will be established within the site boundary. The exact location of the site compound will be established by the contractor and will be located a minimum of 30m from any watercourses. The compound will be used for storage of material, machinery, fuel, and workers facilities. ➤ All construction materials and substances will be stored in the site compound and the compound will be located a minimum of 30m from any watercourse.		

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
		➤ Excavated spoil will be stockpiled and contained entirely within the confines of the site boundaries. ➤ During earthwork activities, the following mitigations will be adhered to: ○ Excavated materials that is not re-used will be transported off site to a designated waste facility. ○ Suitable stone material will be imported to the site to be used as backfill. ○ Stockpiling of soil during construction, should it be required, will take place in designated areas within the site boundary away from any watercourses or waterbodies. ➤ A silt fence will be erected around any stockpiling of material to prevent any sediment-laden run-off occurring. ➤ All diesel or petrol pumps required onsite will be operated within bunded units. ➤ Exposed surfaces will be re-vegetated as soon as possible following construction. ➤ Where possible, earthworks will not be carried out during periods of heavy rainfall. ➤ As construction advances there may be a requirement to collect and treat surface water within the site. This will be completed using perimeter swales at low points around the construction areas, and if required water will be pumped from the swales into sediment bags prior to overland discharge allowing water to percolate naturally to ground; ➤ If groundwater is encountered during excavations, waters will be pumped from excavation and discharged through a pipe with a silt bag attached on to an area of overland vegetation within the site boundary. ➤ Discharge to ground will be via a silt bag which will filter any remaining sediment from the pumped water. The discharge area will be surrounded by a layer of silt fencing, if deemed necessary. ➤ Daily monitoring and inspections of site drainage and silt fencing during construction will be completed by the appointed environmental officer; ➤ Good construction practices such wheel washers and dust suppression on site roads, and regular plant maintenance will ensure minimal risk. The Construction Industry Research and Information Association (CIRIA) provide guidance on the control and management of water pollution from construction sites ('Control of Water Pollution from Construction Sites, guidance for		

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
		consultants and contractors', CIRIA, 2001)¹⁰, which provides information on these issues. This will ensure that surface water arising during the course of construction activities will contain minimum sediment. The decommissioning of the existing fuel tanks at Site B has the potential to impact soils and ground waters in the area. In order to ameliorate the potential risk of any such negative effects, the following control measures will be implemented: ➤ Tanks and associated infrastructure will be decommissioned in accordance with Environment Agency guidelines, PPG2 , PPG27 , the Health and Safety Executive guide CS 15: <i>Cleaning and gas freeing of tanks containing flammable residues and Department of Environment, Food and Rural Affairs (DEFRA) guidance; Prevent Groundwater Pollution from Underground Fuel Storage Tanks.</i> ➤ Prior to decommissioning it will be necessary to survey the site, using ground penetrating radar and electromagnetic detection equipment to identify the location of the underground fuel tank and associated infrastructure. It may also be necessary to use trial pits/holes to positively identify the depth and location of infrastructure. ➤ Suitable fire-fighting equipment and emergency spill response materials will be retained on site during this phase. ➤ All decommissioning works will be supervised by a competent foreman at all times and all leaks and spills monitored and controlled to prevent spread of contamination. ➤ Spill kits will be kept on site in case of accidental spillage		
Cement Base Products Control Measures				
3	CEMP Section 3.1.2	➤ No batching of wet-cement products will occur on site.		

¹⁰ Construction Industry Research and Information Association (CIRIA) (2001): 'Control of Water Pollution from Construction Sites: Guidance for Consultants and Contractors'. CIRIA UK. Available at: <https://www.ciria.org/>

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
	and NIS Section 6	➤ Ready-mixed supply of wet concrete products and where possible, emplacement of pre-cast elements, will take place. ➤ No washing out of any plant used in concrete transport or concreting operations will be allowed on-site. ➤ Where concrete is delivered on site, only chute cleaning will be permitted, using the smallest volume of water possible. ➤ No discharge of cement contaminated waters to the construction phase drainage system or directly to any artificial drain or watercourse will be allowed. ➤ Use weather forecasting to plan dry days for pouring concrete. ➤ Ensure pour site is free of standing water and plastic covers will be ready in case of sudden rainfall event.		
Refuelling, Fuel and Hazardous Materials Storage				
4	CEMP Section 3.1.3 and NIS Section 6	➤ Storage/refuelling will be located in and carried out in a designated area of the proposed site, located a suitable distance from excavation works. Bunded tanks will be used, and these will be inspected for leaks regularly. Spill kits will be available on site and staff will be trained in their use and in spill control. All spills shall be diverted for collection. ➤ Fuels, lubricants and hydraulic fluids for equipment used on the site will be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment. ➤ On-site refuelling will take place by direct refuelling from the delivery truck or from fuel stored within a bunded fuel tank. Mobile measures such as drip trays and fuel absorbent mats will be used during all refuelling operations. ➤ Vehicles will never be left unattended during refuelling. Only dedicated trained and competent personnel will carry out refuelling operations and plant refuelling procedures shall be detailed in the contractor's method statements. ➤ Storage bunds/trays, if required will be constructed of an impermeable membrane (HDPC Plastic) and will have the adequate capacity to contain the volume of the liquids contained therein, if a leak/spillage does occur from one of the storage vessels.		

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
		➤ The storage area will contain a small bund lined with an impermeable membrane in order to prevent any contamination of the surrounding soils and vegetation. ➤ All site plant will be inspected at the beginning of each day prior to use. Defective plant shall not be used until the defect is satisfactorily fixed. All major repair and maintenance operations will take place off site. ➤ Potential impacts caused by spillages etc. during the construction phase will be reduced by keeping spill kits and other appropriate equipment on-site. ➤ Spill kits will be used to deal with any accidental spillage in and outside the refuelling area. Spill control measures as outlined fully in the Risk Assessment accompanying this application will be adhered to.		
Spill Control Measures				
5	CEMP Section 5.2.5.1 and NIS Section 6	Every effort will be made to prevent an environmental incident during the construction and operational phase of the proposed project. Oil/Fuel spillages are one of the main environmental risks that will exist on the proposed site which will require an emergency response procedure. The importance of a swift and effective response in the event of such an incident occurring cannot be over emphasised. The following steps provide the procedure to be followed in the event of such an incident. ➤ Stop the source of the spill and raise the alarm to alert people working in the vicinity of any potential dangers. ➤ If applicable, eliminate any sources of ignition in the immediate vicinity of the incident. ➤ Contain the spill using the spill control materials, track mats or other material as required. Do not spread or flush away the spill. ➤ If possible, clean up as much as possible using the spill control materials. ➤ All vehicles will be suitably serviced and maintained to avoid any leaks or spillage of oil, petrol or diesel. All scheduled maintenance will not be carried out on the public highway.		

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
		➤ Contain any used spill control material and dispose of used materials appropriately using a fully licensed waste contractor with the appropriate permits so that further contamination is limited. ➤ Notify the Environmental Manager immediately giving information on the location, type and extent of the spill so that they can take appropriate action. ➤ External consultants will inspect the site and ensure the necessary measures are in place to contain and clean up the spill and prevent further spillage from occurring. ➤ The applicant will notify the appropriate regulatory body such as GCC if deemed necessary. ➤ top the source of the spill and raise the alarm to alert people working in the vicinity of any potential dangers. ➤ If applicable, eliminate any sources of ignition in the immediate vicinity of the incident. ➤ Contain the spill using the spill control materials, track mats or other material as required. Do not spread or flush away the spill. ➤ If possible, clean up as much as possible using the spill control materials. ➤ Contain any used spill control material and dispose of used materials appropriately using a fully licensed waste contractor with the appropriate permits so that further contamination is limited. ➤ Notify the Environmental Manager immediately giving information on the location, type and extent of the spill so that they can take appropriate action. ➤ External consultants will inspect the site and ensure the necessary measures are in place to contain and clean up the spill and prevent further spillage from occurring. ➤ The applicant will notify the appropriate regulatory body such as GCC if deemed necessary. Environmental incidents are not limited to just fuel spillages. Therefore, any environmental incident must be investigated in accordance with the following steps: ➤ The Environmental Manager must be immediately notified.		

RECEIVED: 11/09/2025

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
		➤ If necessary, the Environmental Manager will inform the appropriate regulatory authority. The appropriate regulatory authority will depend on the nature of the incident. ➤ The details of the incident will be recorded on an Environmental Incident Form which will provide information such as the cause, extent, actions and remedial measures that were used following the incident. The form will also include any recommendations made to avoid reoccurrence of the incident. ➤ If the incident has impacted on an ecologically sensitive receptor, such as a sensitive habitat, protected species or designated conservation site (e.g., SPA or SAC), the Environmental Manager will liaise with an Ecologist. ➤ If the incident has impacted on a sensitive receptor such as an archaeological feature the Environmental Manager will liaise with an Archaeologist. ➤ A record of all environmental incidents will be kept on file by the Environmental Manager and the Main Contractor. These records will be made available to the relevant authorities such as GCC and the EPA if required. The Environmental Manager will be responsible for any corrective actions required as a result of the incident, e.g., an investigative report, formulation of alternative construction methods or environmental sampling, and will advise the Main Contractor as appropriate.		
Dust Control				
6	CEMP Section 3.2	Construction dust can be generated from many on-site activities such as excavation and backfilling. The extent of dust generation will depend on the type of activity undertaken, the location, the nature of the dust, i.e., soil, sand, etc and the weather. In addition, dust dispersion is influenced by external factors such as wind speed and direction and/or, periods of dry weather. Construction traffic movements also have the potential to generate dust as they travel along the public road. The measures below will also prevent construction debris arising on the public road network.		

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
		Proposed measures to control dust include: ➤ The designated public roads outside the site and along the main transport routes to the site will be regularly inspected by Site Management for cleanliness and cleaned as necessary. ➤ Material handling systems and material storage areas, if required will be designed and laid out to minimise exposure to wind. ➤ Water misting will be utilised on-site as required to mitigate dust in dry weather conditions, if required. ➤ A road sweeper will be employed, if necessary, to clean the public roads of any residual debris that may be deposited on the public roads leading away from the construction works. ➤ On site wheel washing will be undertaken as required for construction vehicles to remove any debris prior to leaving the site, ➤ The transport of soils, aggregates or other material, which has the potential to generate dust, will be undertaken in tarpaulin-covered vehicles where necessary. ➤ Daily inspection of construction sites to examine dust measures and their effectiveness. ➤ All construction related traffic will have speed restrictions on un-surfaced areas within the site to 15 kph. ➤ The use of barriers such as debris netting on scaffolding around the Service Station building (Site A) to block dust escaping. ➤ Daily inspection of construction sites to examine dust measures and their effectiveness. ➤		
Noise Control				
7	CEMP Section 3.3	The operation of plant and machinery, including construction vehicles, is a source of potential noise impacts. Construction phase noise is typically assessed in light of guidance set out in British Standard BS 5228-1:2009+A1:2014 <i>Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 1: Noise</i>		

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
		(2014)¹¹, as well as the National Roads Authority (NRA) (now TII) document <i>Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes</i> (2014)¹². Proposed measures to control noise include: ➤ All plant will be maintained in satisfactory condition, and in accordance with manufacturer requirements. Maintenance and lubrication of bearings and other moving parts will be undertaken as specified by the manufacturer. ➤ Exhaust and silencer systems on plant will be maintained in a satisfactory condition and operating correctly at all times. Defective silencers will be immediately replaced. ➤ Plant and machinery with low inherent potential for generation of noise and/or vibration will be selected. ➤ Where practical, separation distances to any locations of frequent human use where noise would have the potential to interfere with typical activities will be maximised through appropriate on-site positioning of plant. ➤ The requirement to house continuously operating plant in sound-attenuating enclosures or casings will be assessed on-site. ➤ Equipment not in active use will be shut down. ➤ On-site tracks and roadways used regularly by heavy goods vehicles (HGVs) will be maintained in reasonable condition, and free of potholes and defects which may give rise to rattling of empty HGV bodies. ➤ Training will be provided by the Site Management to drivers to ensure smooth machinery operation/driving, and to minimise unnecessary noise generation. HGV drivers will be instructed to extend care and courtesy to other road users, and to avoid unnecessary revving of engines. ➤ Off-site queuing of HGVs will be prohibited.		

¹¹ The British Standards Institution (BSI) (2009): *BS 5228-1:2009+A1:2014: Code of practice for noise and vibration control on construction and open sites – Part 1: Noise* BSI. UK. Available at: https://www.warrington.gov.uk/sites/default/files/2020-08/cf53_bs_5228_pt1-2009a1-2014.pdf

¹² Transport Infrastructure Ireland (TII) (2014): *Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes* TII. Ireland. Available at: https://www.tii.ie/media/nv0bnge2/guidance_for_the_treatment_of_noise_during_the_planning_of_national_road_schemes.pdf

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
		➤ All construction plant used on-site will be required to comply with maximum sound power levels set out in Directive 2000/14/EC of the European Parliament and of the Council of 8 May 2000 on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors, implemented in Ireland by the European Communities (Noise Emission by Equipment For Use Outdoors) Regulations, 2001 (S.I. 632 of 2001), as amended by the European Communities (Noise Emission by Equipment for Use Outdoors) (Amendment) Regulations, 2006 (S.I. 241 of 2006). ➤ The proposed construction working hours will be 07:00 – 19:00 Monday to Friday and 08:00 – 16:30 on Saturday. Construction will not take place at the site on Sundays or Public Holidays.		
Vibration Control				
8	CEMP Section 3.4	Vibration standards can be considered in two varieties: those dealing with human comfort and those dealing with cosmetic or structural damage to buildings. For example, vibration is perceptible at around 0.5 mm/s in the case of road traffic, however at higher magnitudes, this vibration may become an annoyance. Guidance relevant to the protection of building structures is contained in the following documents: ➤ British Standard BS 7385: 1993: Evaluation and Measurement for Vibration in Buildings Part 2: Guide to Damage Levels from Ground Borne Vibration¹³. ➤ British Standard BS 5228: 2009+A1 2014: Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 2: Vibration¹⁴. Vibration can be more difficult to control than noise, and there are few generalisations which can be made about its control. It should be borne in mind that		

¹³ The British Standards Institution (BSI) (1993): 'BS 7385-2: 1993: Evaluation and measurement for vibration in buildings - Part 2: Guide to damage levels from groundborne vibration' BSI. UK. Available at: <https://www.normsplash.com/Samples/BSI/193746945/BS-7385-2-1993-en.pdf>

¹⁴ The British Standards Institution (BSI) (2014): 'BS 5228-2:2009+A1:2014: Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration' BSI. UK. Available at: <https://www.omegawestdocuments.com/media/documents/43/CD43.12%20-%204%20Code%20of%20practice%20for%20noise%20and%20vibration%20control%20on%20construction%20and%20open%20sites%20part%202%20vibration;.pdf>

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
		vibration can cause disturbance by causing structures to vibrate and radiate noise in addition to perceptible movement. The following mitigation measures will be implemented at the site during the decommissioning and construction phase to control vibration levels: ➤ The hours of working should be planned, and account should be taken of the effects of vibration upon persons in areas surrounding site operations and upon persons working on site, considering the nature of land use in the areas concerned and the duration of work. ➤ Where reasonably practicable, low vibration working methods should be employed. Consideration should be given to use of the most suitable plant, reasonable hours of working for operations which might give rise to perceptible vibrations, and economy and speed of operations. ➤ Vibration should be controlled at source and the spread of vibration should be limited. ➤ Where reasonably practicable, plant and/or methods of work causing significant levels of vibration at sensitive premises should be replaced by other less intrusive plant and/or methods of working. ➤ Vibration from stationary plant (e.g. generators, pumps, compressors) can, in some instances, prove disturbing when located close to sensitive premises or when operating on connected structures. In these instances, equipment should be relocated or isolated using resilient mountings ➤ On those parts of a site where high levels of vibration are likely to be a hazard to persons working on the site, prominent warning notices should be displayed. ➤ Off-site fabrication – in a method statement/risk assessment the contractor will highlight any activity that may cause significant vibration levels and include measures in helping to mitigate these emission levels. ➤ Equipment is to be task specific. ➤ Best practice vibration control measures will be employed by the contractor. ➤ A designated member of staff will be appointed as the point of contact for any queries or complaints from nearby local residents.		

RECEIVED: 11/09/2025

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
Traffic Management Measures				
9	CEMP Section 3.5	➤ Warning signs/advanced warning signs will be installed at appropriate locations in advance of the construction site access locations. ➤ A site-specific Construction Traffic Management Plan will be agreed upon between the contractor and GCC prior to works starting. ➤ Construction and delivery vehicles will be instructed to use only the approved and agreed means of access; and movement of construction vehicles will be restricted to these designated routes. ➤ Appropriate vehicles will be used to minimise environmental impacts from transporting construction material, for example the use of dust covers on HGVs carrying dust producing material. ➤ Speed limits of construction vehicles to be managed by appropriate signage, to promote low vehicular speeds. ➤ Parking of site vehicles will be managed and will not be permitted on public road, unless proposed within a designated area that is subject to traffic management measures and agreed with GCC. ➤ Deliveries of construction materials will be planned to ensure that the materials are delivered only as they are required and will avoid peak hours when possible. The site will not be open to members of the public. When vehicles are entering the site, or leaving the site, these movements will be supervised by designated members of staff who will act as road marshals. The construction site gates will be kept closed when not in use and monitored by a designated member of staff.		
Invasive Species Management				
10	CEMP Section 3.6.1	Careful preparation of the site and planning of the works is crucial to successful prevention of introduction of invasive species. There are no invasive species on-site however, in the event that an invasive species is encountered, an invasive species management plan will be prepared, and the non-exhaustive list of biosecurity		

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
		measures as set out in Section 3.6.2 will be adopted and shall be followed by all on-site personnel. Only those who have been inducted into biosecurity measures on-site may enter the contaminated zones within the works areas.		
11	CEMP Section 3.6.2	➤ A risk assessment and method statement must be provided by the Contractor prior to commencing works. ➤ Fences will be erected around areas of infestation, as confirmed by test pits, and warning signs shall be erected. ➤ A designated wash-down area will be created, where power-washed material from machinery can be contained, collected and disposed of with other contaminated material. This area will contain a washable membrane or hard surface. ➤ Stockpile areas will be chosen to minimise movement of contaminated soil. ➤ Stockpiles will be marked and isolated. ➤ Contaminated areas which will not be excavated will be protected by a root barrier membrane if they are likely to be disturbed by machinery. Root barrier membranes will be protected by a layer of sand above and below and topped with a layer of hardcore. ➤ The use of vehicles with caterpillar tracks within contaminated areas will be avoided to minimise the risk of spreading contaminated material. ➤ Any material that is imported onto any site will be verified by a suitably qualified ecologist to be free from any invasive species listed on the 'Third Schedule' of Regulations 49 & 50 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I 477 of 2011). This will be carried out by searching for rhizomes and plant material. ➤ Any soils or subsoils contaminated with invasive species will be sent for disposal to an authorized waste facility. ➤ A suitably qualified ecologist will be on site to monitor and oversee the implementation of invasive species remedial works. Plant and equipment which is operated within an area for the management of materials in contaminated areas will be decontaminated prior to relocating to a		

Mitigation Measure	Reference Location	Mitigation measures	Audit Result	Action Required
		different works area. The decontamination procedures will take account of the following: ➤ Personnel may only clean down if they are familiar with the plant and rhizome material and can readily identify it. ➤ Decontamination will only occur within designated wash-down areas. ➤ Vehicles will be cleaned using stiff-haired brush and pressure washers, paying special attention to any areas that might retain rhizomes, e.g., wheel treads and arches. ➤ All runoff will be isolated and treated as contaminated material. This will be disposed of in already contaminated areas.		

RECEIVED: 11/09/2025

7.

PROGRAMME OF WORKS

7.1

Construction Programme

The construction phase of the Proposed Development will take approximately 18-24 months to complete. This is typically broken down into several phases. An example of the indicative programme of works is outlined in Table 7-1 below. The construction programme will be finalised on appointment of a contractor before commencement of the development.

Table 7-1 Phasing of Works

Phase No.	Description	Scope of works
Phase 1	Site Setup	This occurs from months 1-3 and includes laying the matting or gravel for the site setup and machinery mobilisation (Site A and B).
Phase 2	Decommissioning	This occurs from months 4-6. It includes decommissioning of fuel related structures (Site B).
Phase 3	Foundations	This occurs from months 7-9. It includes digging laying foundations and other preparatory works (Site A).
Phase 4	Building Structures	This occurs from months 9-15. It includes building the main structures within the site, car parking and other elements of the Proposed Development (Site A).
Phase 5	Internal Fit Out	This occurs from months 15-18. It includes the fitting out of the buildings and civils connections (Site A).
Phase 6	Close Out	This occurs in the last months of construction (months 18-24) any landscaping works if required followed by machinery demobilisation and site disassembly.

RECEIVED: 11/09/2025

8.

COMPLIANCE AND REVIEW

8.1

Site Inspections and Environmental Audits

Routine inspections of activities will be carried out on a daily and weekly basis by the Site Environmental Manager/Construction Manager as appointed by the applicant to ensure all controls to prevent environmental impact, relevant to the construction activities taking place at the time, are in place.

Environmental inspections will ensure that the works are undertaken in compliance with this CEMP. Environmental site inspections will be carried out by suitably trained staff.

8.2

Environmental Compliance

The following definitions shall apply in relation to the classification of Environmental Occurrences during the infilling works:

Environmental Near Miss

An occurrence which if not controlled or due to its nature could lead to an Environmental Incident.

Environmental Incident

Any occurrence which has potential, due to its scale and nature, to migrate from source and have an environmental impact beyond the site boundary.

Environmental Non-Compliance

Non-fulfilment of a requirement and includes any deviations from established procedures, programs and other arrangements related to the CEMP.

8.3

Corrective Action Procedure

A corrective action is implemented to rectify an environmental issue on-site. Corrective actions will be implemented by the Construction Manager, as advised by the Site Environmental manager. Corrective actions may be required as a result of the following.

- > Environmental Audits.
- > Environmental Inspections and Reviews.
- > Environmental Incidents; and,
- > Environmental Complaints.

A Corrective Action Notice will be used to communicate the details of the action required to the main contractor. A Corrective Action Notice is a form that describes the cause and effect of an environmental problem on site and the recommended corrective action that is required. The Corrective Action Notice, when completed, will include details of close out and follow up actions. If an environmental problem occurs on site that requires immediate attention direct communications between the Construction Manager and the Site Environmental manager will be conducted. This in turn will be passed down to the site staff involved. A Corrective Action Notice will be completed at a later date.

RECEIVED: 11/09/2025

RECEIVED: 11/09/2025



APPENDIX 1

***Resource Waste
Management Plan***



RECEIVED: 11/09/2025

Petrogas Group Limited
**Electric Vehicle Charging Hub and
Service Area**

Resource Waste Management Plan (RWMP)

2025-07-14

IE0037098.5365



Document distribution

Petrogas Group Limited

Electric Vehicle Charging Hub and Service Area

Resource Waste Management Plan (RWMP)

2025-07-14

IE0037098.5365.B0

Prepared for

Petrogas Group Limited

Submitted to

Galway County Council

Prepared by

WSP Ireland Consulting Ltd
Town Centre House, Dublin Rd, Naas, Co Kildare
T +353 45 810 200

Quality control	Name	Date
Prepared by:	Rab Kassie Sheeran	14/07/2025
Reviewed by:	Ruth Treacy	30/07/2025
Approved by:	Ruth Treacy	06/08/2025

Rev	Date	Details
01	2025-08-18	B0

Table of contents

1.	Introduction	5
1.1	Overview of the Project	5
1.2	Purpose of this Document	6
1.3	Objective	6
1.4	WASTE POLICY & LEGISLATIVE BACKGROUND	6
1.5	Legislation	8
1.6	Plans	10
1.6.1	Galway County Development Plan	10
1.6.2	National Waste Policy	10
1.6.3	National Waste Management Plan	11
2.	Description of Site and Works	12
2.1	Existing Site	12
2.2	Demolition and Construction Phase Sequencing	12
3.	Roles and Responsibilities	15
3.1	Role of the Client	15
3.2	Role of the Client Advisory Team	15
3.3	Role of the Contractor	16
4.	Project Resource Targets	19
5.	Design Approach	20
5.1	Construction	20
5.2	Design for Green Procurement	21
5.3	Design for Off-Site Construction	21
5.4	Design for Materials Optimisation during Construction	21
6.	Resource and Waste Management	22
6.1	Waste Prevention and Minimisation	22
6.2	Waste/Resource Generation & Quantification	24
6.3	Construction Arisings	24
6.4	Proposed Waste Management Options	26
6.5	Management of Wastes & Resources	26
6.6	Management of Stockpiles	26
6.6.1	Soils and Stones	27
6.6.2	Asbestos	28
6.6.3	Plasterboard/Gypsum Materials	28
6.6.4	Metals	28

RECEIVED: 11/09/2025

6.6.5	Timber and Wood	28
6.6.6	Plastic	28
6.6.7	Wastes from Construction Sites Offices and Staff	29
6.6.8	Other Wastes	29
6.6.9	Hazardous Wastes	29
6.7	Cost of Waste Management	29
7.	Site Management	30
7.1	Resource Manager Responsibility	30
7.2	Authorised Waste Collection & Receiving Facilities	30
7.2.1	Waste Contractors	31
7.3	Record Keeping and Reporting	32
7.4	Procedures for Audits	32
7.5	Monitoring, Continual Improvement and Review	32
7.6	Communication with Local Authority and Other Stakeholders	33
8.	Review and Document Control	34
	Table 3-1 - Responsibilities	17
	Table 6-1 - Construction Arisings, LoW and Estimated Quantities/Volume.	24
	Table 6-2 - Waste Types and LoW	25
	Table 7-1 - Waste and LoW	31
	Table 7-2 - Waste Type and LoW	31
	Table 8-1 - Document Review and Version Updates	34
	Figure 1-1 - Waste Hierarchy	7
	Figure 1-2 - Linear vs. Circular Economy	8
	Figure 2-1: Site Location	12

1. Introduction

WSP Ireland Consulting Ltd (WSP) has been commissioned to prepare a Resource Waste Management Plan (RWMP) on behalf of Petrogras Group Limited, the developer, seeking Planning Permission for development primarily on lands to the south of Ballinasloe, Co. Galway, Site A and Site B, with a combined total area of c. 4.17ha. Site A involves lands to the north east of Junction 15 on the M6 (east of Garbally Roundabout) and site B involves lands to the east of the R446, at an existing services station (Mackney, Ballinasloe, Co. Galway, Eircode H53 PC44). The proposal is hereafter referred to as the 'Site', 'Proposed Development' or 'Project'.

1.1 Overview of the Project

The proposed development will consist of:

Site A (3.98ha)

Provision of new Electric Vehicle Charging Hub for 36 vehicles (all under canopy measuring 3.22m high and including solar panels over) along with 4 no. EV HGV charging spaces (no canopy).

Construction of single storey service station building (1,018.66sq.m) including net retail area of 100sq.m (excluding off-licence), 2 no. restaurant offers, seating area, drive-thru hatch for one of the restaurants, coffee dock, toilets, back of house area, along with external storage yard, outdoor play area and outdoor seating area. The maximum height is 11.08m high.

All ancillary development including fuel pumps under canopy (5.6m high), underground tanks, vent pipes, HGV fuel pumps (6.7m high), new vehicular entrance off Garbally roundabout, new roundabout junction which will also facilitate future access to the lands to the north, car parking (83 – including staff, family and accessible spaces), cycle parking (16 no. spaces), HGV/Bus parking (13 no. – including 4 no. EV parking spaces), motor cycle spaces (5 no. spaces), drainage infrastructure (including SuDs measures), boundary treatments, hard and soft landscaping (including attenuation pond and bio-retention pond), internal roads, footpaths, dedicated active travel route along the northern boundary of the site from the east to west of the site, outdoor exercise and areas, outdoor picnic areas, brush and jet wash, single storey car wash plant building (12.5sq.m), roof mounted solar panels, signage (free standing and on-building), single storey bin store (67.5sq.m), single storey substation building (38.23sq.m) and lighting. All associated site and drainage works.

Site B (0.19ha)

It is proposed to demolish all structures relating to the fuel element of the existing filling station (the fuel pumps, canopy, totem sign) and underground fuel tanks. The existing buildings containing the shop and storage will remain in situ. The car wash facility will be discontinued.

1.2 Purpose of this Document

The RWMP shall detail how the construction materials are proposed to be managed primarily as resources on Site where possible to prevent waste generation as encouraged by 'A Waste Action Plan For a Circular Economy, Ireland's National Waste Policy. 2020-2025' (DECC, 2020). Materials not suitable for use on the Site to complete the overall Project will be primarily recovered and recycled offsite under appropriate waste authorisation and where disposal will be considered as the least favourable waste management option for the project.

This document is considered a 'live document' and should be updated as information becomes available or where there is any significant change to the overall resource and waste management strategy for the project.

1.3 Objective

The objective of this RWMP is to ensure that the construction materials are managed appropriately to prevent waste arising during the project and that unavoidable waste generated is managed in accordance with applicable legislation, local authority plans and policies and national and regional waste management targets. This RWMP shall inform the appointed Main Contractor's operational RWMP.

The main objectives of the RWMP are as follows:

- Promote an integrated approach to waste and resource management throughout the Proposed Development's lifecycle and set out appropriate responsibilities;
- Promote sustainable waste and resource management in line with the waste management hierarchy; and
- Provide an outline for the management of waste arising from construction phase works for the Proposed Development in accordance with relevant Irish and EU waste management legislation.

The RWMP outlines methods to achieve waste prevention, maximise reuse and recycling of resources (both onsite and offsite) and, recovery/disposal of waste. The RWMP also includes recommendations for the management of various anticipated waste streams.

This plan has been developed to establish specific objectives and guidelines prior to the demolition and construction works and to be flexible to allow the plan to evolve throughout the construction phases as required by the Main Contractor.

1.4 WASTE POLICY & LEGISLATIVE BACKGROUND

The RWMP describes the applicable legal and policy framework for C&D waste management in Ireland (both nationally and regionally).

The Waste Framework Directive sets down basic requirements for handling waste and defines what defines "waste". It provides a set of requirements that EU member states must adhere to. The waste directives are implemented in Ireland by the Environmental Protection Agency Act 1992, the Waste Management Act 1996, as amended, the Waste Management (Amendment) Act 2001, European Communities (Waste Directive) Regulations 2011-2020 and the Protection of the Environment Act 2003. Waste Policy and legislation in Ireland is implemented by the EPA and local authorities.

The Waste Framework Directive sets down some basic waste management principles. It requires that waste be managed as follows:

- Without endangering human health and harming the environment;
- Without risk to water, air, soil, plants or animals;
- Without causing a nuisance through noise or odours; and
- Without adversely affecting the countryside or places of special interest.

The Waste Framework hierarchy sets out that preventing waste is the preferred option with disposal of waste to landfill being the last option considered when managing waste as illustrated in the Waste Hierarchy in **Figure 1-1**.



Figure 1-1 - Waste Hierarchy

Traditionally Ireland's waste management behaviour has been linear with disposal of waste being the main waste management option utilised. Ireland has committed to transitioning from a linear waste economy to a circular economy and Ireland's National Waste Policy and objectives were set out in 'A Waste Action Plan for a Circular Economy' issued in September 2020 actively moving towards waste prevention, recovery, recycling and re-use.

Figure 1-2 below provides an infographic on linear model versus circular economy.

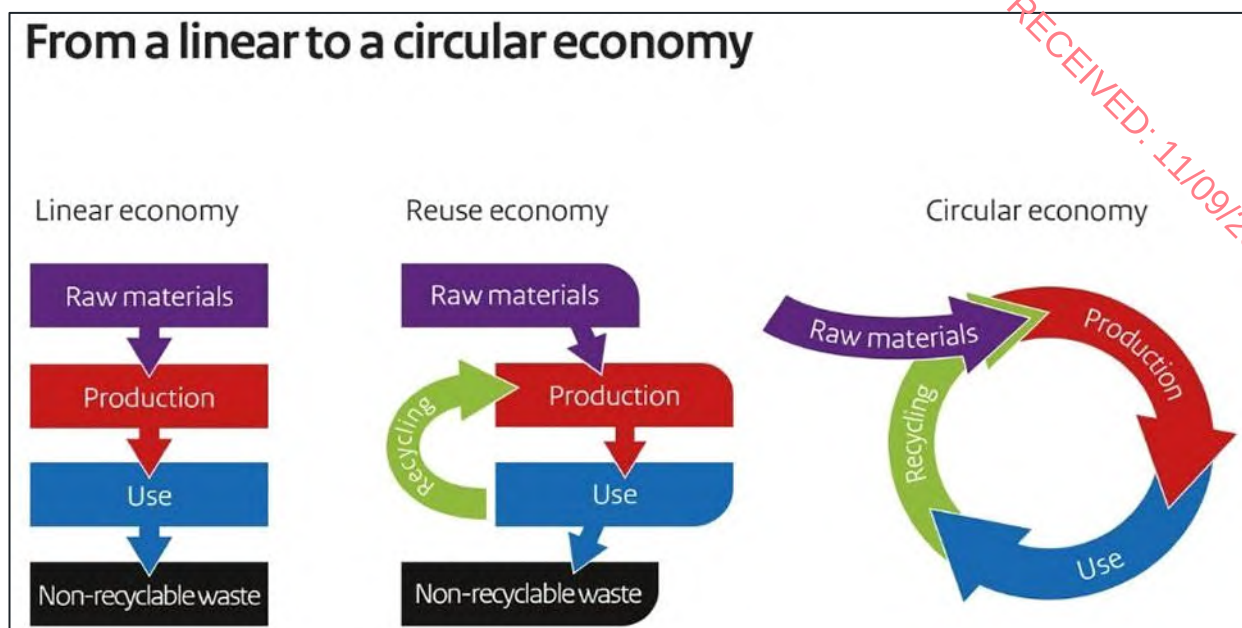


Figure 1-2 - Linear vs. Circular Economy

The Circular Economy Act was implemented in July in 2022 and implements many of the actions in the Government's Waste Action Plan for a Circular Economy and the forthcoming Circular Economy Strategy and will put that strategy on a statutory footing. The key focus areas of the Waste Action plan with respect to Construction waste are:

- Reducing the use of virgin resources;
- Keeping materials in the economy as long as possible;
- Maintaining their intrinsic value/quality as high as possible; and
- Reducing hazardous substances in products and waste.

The EPA issued 'Best Practice Guidelines for the Preparation of Resource Management Plans for Construction & Demolition Projects' in November 2021. The guidelines provide a practical and informed mechanism to document the prevention and management of C&D wastes and resources from design to construction or demolition of a project. The guidelines provide clients, developers, designers, practitioners, contractors, sub-contractors and competent authorities with a unified approach to preparing and determining Resource and Waste Management Plans (RWMP's) for the construction and demolition sector in Ireland.

The EU 'Guidelines for the waste audits before demolition and renovation works of buildings' (May 2018) provides best practice guidelines for the assessment of waste streams prior to demolition or renovation through pre demolition audits. The objective of the guidance is to maximise recovery of resources from demolition for beneficial reuse and recycling.

1.5 Legislation

The main legislation that governs waste management in Ireland and relates to the C&D activities at the Proposed Development site are:

- Waste Framework Directive 2008/98/EC. The Waste Framework Directive (Directive 2008/98/EC) sets down basic requirements for all EU member states for handling waste, and it also defines what is meant by “waste”. To comply with the Directive EU member states must:
 - Waste disposal must not be allowed to constitute a public nuisance, (e.g. through noise, unpleasant odours, or the degradation of places of special natural interest);
 - Ensure that the waste disposal does not present a risk to air, water, soil, plants, and animals;
 - Prohibit uncontrolled disposal of waste or illegal dumping;
 - Establish an integrated and effective network of waste disposal plants,
 - Ensure a proper licence system for waste collection and disposal operations; and
 - Audit and inspect entities involved in waste collection and disposal.
- Landfill Directive 1999/31/EC. This Directive seeks to further the aims of the 1991 Directive in relation to the role of the landfill. It aims to prevent, or reduce as far as possible, the negative effects on the environment from landfilling waste. In order to achieve this, it seeks to:
 - End co-disposal of hazardous and non-hazardous waste in landfill;
 - Introduce rigorous technical requirements for landfills and waste;
 - Phase in the prohibition of landfilling specific wastes including liquid hazardous waste, other hazardous waste, whole tyres, and shredded tyres;
 - Oblige operators to pre-treat all hazardous waste and all other wastes; and
 - Introduce phased targets for the reduction of biodegradable waste being landfilled at 2010, 2013 and 2020.
- Waste Management Act 1996 (No. 10 of 1996) as amended 2001 (No. 36 of 2001), 2003 (No. 27 of 2003) and 2011 (No 20 of 2011). Sub-ordinate and associated legislation include:
 - European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) as amended;
 - Waste Management (Collection Permit) Regulations 2007 (S.I. No. 820 of 2007) as amended;
 - Waste Management (Facility Permit and Registration) Regulation 2007 (S.I. No. 821 of 2007) as amended;
 - Waste Management (Licensing) Regulations 2000 (S.I. No. 185 of 2000) as amended;
 - European Union (Packaging) Regulations 2014 (S.I. No. 282 of 2014) as amended;
 - Waste Management (Planning) Regulations 1997 (S.I. No. 137 of 1997) as amended;
 - Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015);
 - European Communities (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014);
 - Waste Management (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended;
 - Waste Management (Shipments of Waste) Regulations 2007 (S.I. No. 419 of 2007) as amended; and
 - European Communities (Transfrontier Shipment of Waste) Regulations 1994 (SI 121 of 1994).
- Environmental Protection Act 1992 (S.I. No. 7 of 1992) as amended;
- Litter Pollution Act 1997 (Act No. 12 of 1997) as amended; and
- Planning and Development Act 2000 (S.I. No. 30 of 2000) as amended.

These Acts and subordinate regulations enable the transposition of relevant European Union Policy and Directives into Irish law.

1.6 Plans

1.6.1 Galway County Development Plan

With regards to local strategy, the adopted Galway County Development Plan (CDP) 2022-2028 is the most divisional policy document applicable to the Proposed Development. This LA Development Plan contains the Council's policy (in Chapter 7 – Infrastructure, Utilities and Environmental Protection) that pertains to waste management. This CDP states that the appropriate management of waste is essential to sustainable development. The following Objectives relevant to the Proposed Development plan to implement the waste management policy:

- **WM 1** – a Support the implementation of the Connacht and Ulster Waste Management Plan 2015-2021 or any updated version of this document within the lifetime of the plan. This Plan was superseded by the National Waste Management Plan for a Circular Economy 2024-2030.
- **WM 2** – Support and promote the circular economy principles, prioritising prevention, reuse, recycling and recovery, and to sustainably manage residual waste. New developments will be expected to take account of the provisions of the Waste Management Plan for the Region and observe those elements of it that relate to waste prevention and minimisation, waste recycling facilities, and the capacity for source segregation.
- **WM 3** – Support and facilitate the provision of adequate waste recovery and disposal facilities for the county.
- **WM 4** – To require that all waste disposal shall be undertaken in compliance with the requirements of the Environmental Protection Agency and relevant Waste Management Legislation.
- **WM 5** – Construction Environment Management Plans shall be prepared in advance of the construction of relevant projects and implemented throughout. Such plans shall incorporate relevant mitigation measures which have been integrated into the Plan and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development.
- **WM 7** – considered necessary and support the provision of additional recycling infrastructure throughout the county.
- **WM 8** – Promote and facilitate communities to become involved in environmental awareness activities and community based recycling initiatives or environmental management initiatives that will lead to local sustainable waste management practices.
- **WM 9** – Encourage and support the provision of separate collection of waste in accordance with the requirements of the Waste Management (Food Waste) Regulations 2009, the Waste Framework Directive Regulations, 2011 and other relevant legislation.

1.6.2 National Waste Policy

In September 2020, the Department of Communications, Climate Action and Environment published 'Ireland's National Waste Policy 2020-2025' (A Waste Action Plan for a Circular Economy). This new national waste policy will inform and give direction to waste planning and management in Ireland over the coming years. The policy shifts the focus from waste disposal and treatment to ensure that materials

and products remain in productive use for longer. This aims to prevent waste and supports reuse through discouraging the wasting of resources and rewarding circularity.

The policy document contains over 200 measures across various waste areas including C&D. C&D waste related goals of the policy are to:

- Revise the 2006 Best Practice Guidelines for C&D waste;
- Streamline by-product notification and end-of-waste decision making processes; and
- Working group to develop national end-of-waste applications for priority waste streams.

The policy identifies the need to promote waste prevention in the first instance and the need to plan for C&D wastes at the earliest possible stage in a construction project.

1.6.3 National Waste Management Plan

The National Waste Management Plan for a Circular Economy 2024- 2030 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. This plan supersedes existing Regional Waste Plans. It was determined that a single Waste Management Plan supersede the 3 existing Regional Waste Plans.

Objectives of the National Waste Management align with the following United Nation Sustainable Development Goal (SDG) targets:

- 12.1 – Implement sustainable consumption and production framework'
- 12.2 – Sustainable management and use of natural resources;
- 12.3 – Halve global per capita food waste;
- 12.4 – Responsible management of chemicals and waste;
- 12.5 – Substantially reduce waste generation;
- 12.8 – Promote understanding of sustainable lifestyles;
- 12.C – Remove distortions encouraging wasteful consumption; and
- 17.14 – Enhance policy coherence for sustainable development.

The Plan states its commitment to the transition to a circular economy through increased capture of high-quality materials maximising circular potential and using secondary materials from reuse, repair and recycling activities.

2. Description of Site and Works

2.1 Existing Site

As mentioned in the overview above, the Proposed Development encompasses an area of ca. 13.8 Ha. The site is located off the R446 to the north and west, and is bounded by the M6 motorway to the south. The Proposed Development will occur principally at an undeveloped green area (Area A), with some demolition and redevelopment works taking place on the existing site (Area B) to the north of the main Site See Figure 2-1.

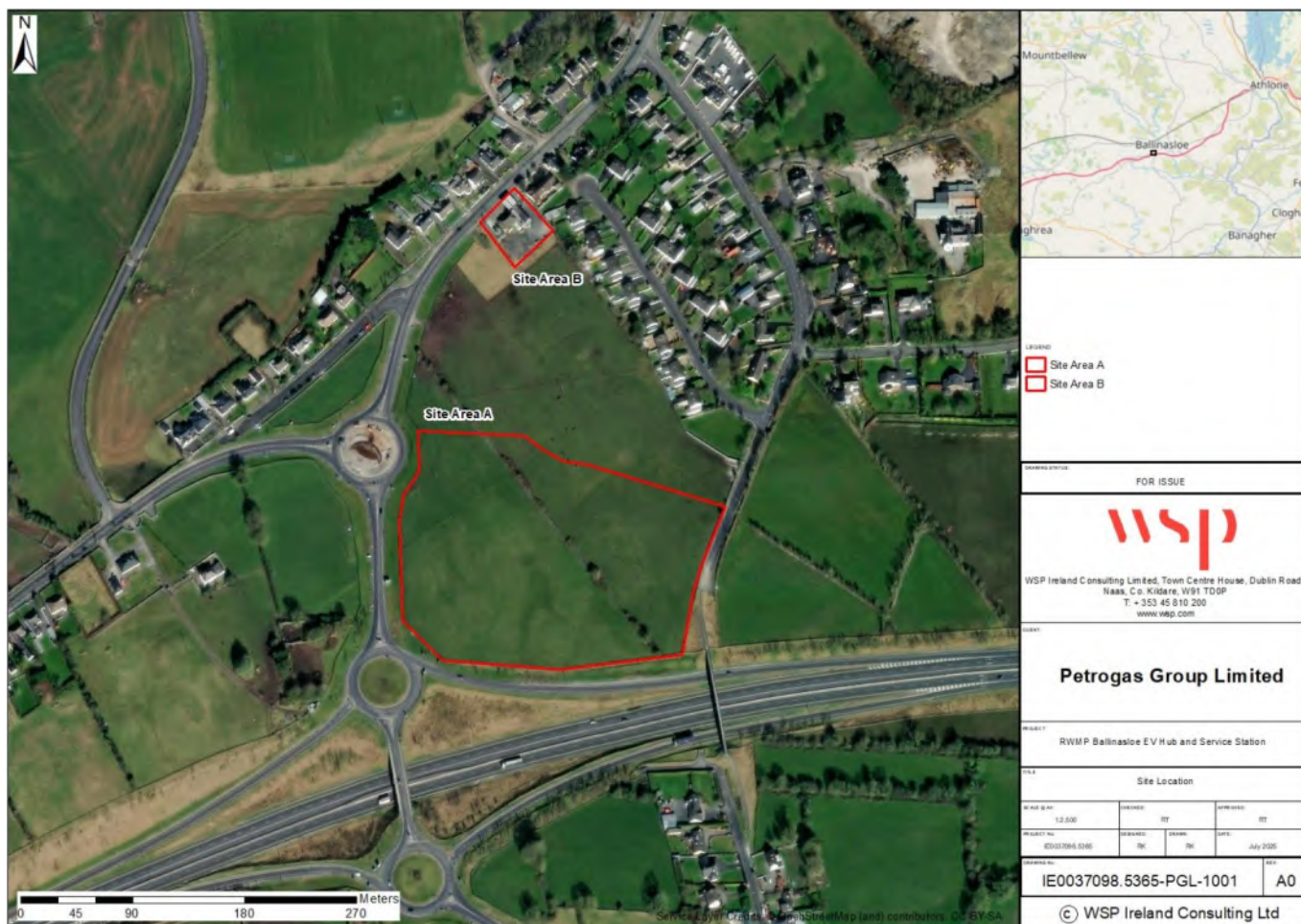


Figure 2-1: Site Location

2.2 Demolition and Construction Phase Sequencing

The demolition and construction phase of the Proposed Development will include follow the below proposed sequence:

Demolition Sequence (Site B)

- Removal of existing underground fuel tanks
- Removal of existing general vehicle fuel pumps with an over canopy including ancillary signage)
- Removal of existing storage sheds (56.3 sqm) and existing extensions (20sqm approx.) and lean-to.
- Removal and replacement of existing gates and fencing
- Removal of existing hard landscaping re replacement with grass, paving and shrubs

Construction Sequence (Site B)

- The existing shop and storage building (former dwelling) are to be kept in situ (for non-service station activity).
- New rendering to existing wall, approximately 1.2m high to mark boundary with road R446 in line with neighbouring wall.
- New double gates, 4.6m wide in powder coated aluminium
- New windows and doors to existing building

Construction Sequence (Site A)

Site A will include the construction/development of:

- New entrance from existing roundabout
- New roundabout within the site and associated roads and footpaths
- New carwash area and associated plant room
- New 36m x10m car fuelling forecourt and over canopy to facilitate 8no. pumps
- New 17m x10.45 HGV fuelling area and over canopy
- New service building of 1032.8 sqm to include;
 - Retail space 100 sqm
 - Coffee Dock 95 sqm
 - Seating area 173 sqm
 - Food preparation area including food concession and burger offer 118.4 sqm
 - Back of house 220.4 sqm
 - Circulation 245.1 sqm
 - Toilet facilities 71.2 sqm
 - 2no. Drive thru collection booths
- 250 sqm Exterior seating and play area

RECEIVED: 11/09/2025

- 225 sqm Delivery yard attached to Service Building
- 36no. EV parking spaces and canopy over
- ESB substation
- 67.4 sqm Bin/ refuse store
- 50 sqm Air/water service area
- 16no. bike spaces
- 7no. staff parking
- 10no. family parking
- 4no. Accessible parking
- 62no. car parking
- 6no. coach parking
- 9no. HGV parking
- 4no. HGV EV parking
- 58 sqm Drivers exercise and picnic area
- Bio retention pond
- Landscaping

3. Roles and Responsibilities

The Best Practice Guidelines on the Preparation of Resource Waste Management Plans for Construction and Demolition Projects promotes that a Resource Manager should be appointed. The Resource Manager role may be performed by a number of different individuals over the life-cycle of the Project; however, it is intended to be a reliable person chosen from within the Contracting Team, with adequate knowledge and understanding of waste practices and waste legislation, who takes the responsibility to ensure that the objectives and measures within the Resource Waste Management Plan are complied with. The Resource Manager shall have the authority to ensure the objective and obligations of the RWMP are met. The role will include activities such as conducting waste checks/audits and adopting construction methodology that is designed to facilitate maximum reuse and/or recycling of waste.

3.1 Role of the Client

The 'Client' is typically the party that funds the project and are also usually the original 'waste producer' which means anyone whose activities produce waste or anyone who carries out pre-processing, mixing or other waste operations. For the purposes of this document, the 'Client' can be interpreted to be the 'waste holder' which means the waste producer or legal person who is in possession of the waste or resource until such time it is legally transferred to another party. The Client is the body establishing the aims and the performance targets for the project (often in conjunction with the 'Client Advisory Team' described below).

- The Client should require the preparation and submission of a preliminary RWMP as part of the design and planning submission;
- The Client should commission the preparation and submission of an updated RWMP as part of the construction tendering process;
- The Client should ensure that the RWMP is agreed and submitted to the local authority prior to commencement of works on site; and
- The Client should request the end-of-project RWMP from the Contractor.

3.2 Role of the Client Advisory Team

The Client Advisory Team or Design Team is formed of consultants and engineers and are responsible for:

- Drafting and maintaining the RWMP through the design, planning and procurement phases of the project.
- Appointing a Resource Manager (RM) to track and document the design process, inform the Design Team and prepare the preliminary RWMP.

- Including details and estimated quantities of all projected waste streams with the support of Environmental consultants/scientists. This should 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 and construction work with the support quantity surveyors.
- Handing over of the RWMP to the selected Contractor at commencement of construction for the development of the RWMP in a similar fashion to how the safety file is handed over to the Contractor for updating and maintaining as a 'Live' document for the duration of the works.
- Working with the Contractor as required to meet the performance targets for the project.

3.3 Role of the Contractor

The contractor shall implement this RWMP. They shall be responsible for:

Preparing, implementing, and reviewing the RWMP through construction stage (including the management of all suppliers and sub-contractors) as per the requirements of these guidelines; Identifying a designated and suitably experienced and knowledgeable Resource Manager (RM) at construction stage who will be responsible for implementing the RWMP:

- Identifying suitably permitted/licenced haulier hauliers with the appropriate waste collection permits, to be engaged to transport each of the resources / wastes off-site;
- Implementing waste management practices whereby waste/resource materials generated on site are to be segregated, reused and recycled as far as practicable;
- Providing and operating a mobile-crusher to crush concrete for reuse and in compliance with national end of waste criteria
- Identifying all destinations for resources and resources taken off-site. As above, any resource that is legally a 'waste' must only be transported to an authorised waste facility;
- Clarification and implementation of any other statutory waste management obligations, which could include on-site processing;
- Full records of all resources (both wastes and other resources) should be maintained for the duration of the project (records should include waste/resource description, LoW Code where applicable and tonnage/volumes and
- Preparing a RWMP Implementation Review Report at project handover.

Table 3-1 - Responsibilities

Responsible Party	Responsibility	Project Stage
Client	■ Appointment of competent Main Contractor and Design Team ■ Responsible for waste management for lifespan of the project including all documentation	■ Project commencement and tender award ■ All project stages (Design, and construction stage)
Main Contractor	■ Resource Waste Management Plan ■ Updating and implementation of RWMP ■ Appoint authorised waste management contractors ■ Appoint trained and competent Contractor	■ Project Implementation ■ Project Implementation ■ Construction Stage ■ Construction Stage
Resource Manager	■ RWMP Implementation ■ Ensure that's the objectives of both the RWMP and the contractors RWMP are put in place. ■ Waste characterisation. Selection of techniques and ■ design to minimize waste and to maximize recovery and recycling of waste during the project ■ Maintenance of Waste Documentation for 3 years. ■ Completion of Final Waste Management Report ■ Educate colleagues, site staff, external contractors and sup-pliers about alternatives to conventional construction waste disposal	■ Project Implementation ■ Construction stage ■ Construction stage ■ Project Design Phase and during project implementation ■ Post-construction stage ■ Post-construction stage ■ Construction stage
Design Team	■ Identification of Key Waste Streams ■ Design to minimize waste generation in lifecycle of completed construction. ■ Adequately provide for waste management in tender	■ Project Design Stage ■ Project Design Stage ■ Procurement Stage

Responsible Party	Responsibility	Project Stage
	documents and declare all relevant information & data	

4. Project Resource Targets

Project specific resource and waste management targets for the site have not yet been set and this information should 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 target of 70% of waste is fully re-used, recycled, or recovered. Typical Key Performance Indicators (KPIs) that may be used to set targets include (as per guidelines):

- Weight (tonnes) or Volume (m^3) of waste generated per construction value;
- Weight (tonnes) or Volume (m^3) of waste generated per construction floor area (m^2);
- 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.

5. Design Approach

It is understood that the client has considered a designing out waste approach early in the design of the overall Proposed Development by establishing the potential for any reusable site assets such as existing building and infrastructure, soils and other materials. The client has considered the following:

- Re-use of site assets and infrastructure
- Designing out waste by pre-fabrication off site for modular components;
- Designing for modern methods of construction;
- Including circularity principles in design;
- Re-use of soils for landscaping;
- Optimum recovery of assets/resource on site; and
- Assessing proposed site levels and material balance to minimise excavations and muck off from site.

The design proposal is deemed to provide substantial economic savings and provides a high level of sustainability through design that incorporates waste prevention, re-use, and recycling of resources on Site.

Where possible, offsite waste disposal associated with the volume of removal of construction arisings will be designed out and potential HGV movements through the local road network will also be reduced. The design approach for designing out waste, re-use, recycling, green procurement, offsite construction, materials optimisation and design for flexibility and deconstruction are discussed below.

5.1 Demolition

The primary demolition phase of the Project consists of the removal of underground fuel tanks, vehicle fuel pumps and canopy (Site B). Irish legalisation necessitates that sites are decommissioned safely in accordance with Health and Safety and Waste Management legislation. The removal will involve a specialist contractor who will employ best practice techniques and conduct a preliminary assessment. They will manage the decommissioning process which includes site preparation, fuel removal, tank cleaning, tank removal and disposal.

The contractor will provide certification that the tank has been decommissioned, and maintain records of fuel disposal, tank cleaning. Environmental considerations will also be appraised.

The majority of metal/steel columns and roof of the canopy will be removed and recycled by authorised waste collectors and facilities.

5.2 Construction

The main construction phase largely comprises elements of construction, assembly and development of a service building and service forecourt area, Electric Vehicle charging Hub and all associated drainage

and infrastructure works. Designing out waste through the reuse of the Site itself, its building assets and offsite construction – many components and elements of the construction are to be manufactured offsite reducing the potential to generate waste at the Site. This is a key element in the design approach employed by the developer.

Further design out waste initiatives considered was maximising material balance for the enabling and groundworks stage of construction was designing the formation levels for construction to avoid unnecessary import or export of materials to and from the site.

5.3 Design for Green Procurement

The contractor will discuss proposed design solutions, encourage innovation in supply chain and recognise sustainable approaches. The contractor shall also discuss options for packaging reduction with subcontractors/suppliers using measures such as 'Just-in-Time' delivery and use ordering procedures that avoid excessive waste.

5.4 Design for Off-Site Construction

Components of this development will be manufactured Off-Site. This will limit offcuts of these elements on-site reducing waste. It will also curb the likelihood of on-site breakages as constructed units are often more resistant to damage. The manufacturers also produce construction sets that are made to measure with components numbered for assembly, eliminating over-ordering, and wasting of materials.

5.5 Design for Materials Optimisation during Construction

As explained above Section 5.3, materials are already proposed to be optimised. This avoids ordering a very large amount of virgin aggregate and concrete for the same purpose which is an efficient use of material and aligns with the EPA's Circular Economy Programme.

6. Resource and Waste Management

The Main Contractor will be responsible for defining and maintaining resource management across the site during the construction phase. There will be correct segregation of waste materials. The prevention, reuse, recycling, recovery and disposal of waste and by-products will be performed as the construction phases progress and the materials are generated.

The off-site handling of waste generated by the Proposed Development are subject to the required statutory authorisations under the Waste Management Act, there is also a requirement that the management of waste complies with the Waste Hierarchy. This hierarchy outlines that waste prevention and minimisation are the first priority in managing wastes, followed by waste reuse and recycling with disposal being considered as a last resort (see Figure 1-1). The EU Waste Directive (2008/98/EC) also mandates that hazardous waste generation should be avoided or at least minimised.

6.1 Waste Prevention and Minimisation

The following waste minimisation measures will be implemented during the course of the works:

- On site segregation: all waste/resource materials generated during construction stage to appropriate categories;
- Design for efficiency for use of materials and processes that generate less waste;
- Avoid over-ordering, purchase only the quantities needed;
- Use durable materials, choose long-lasting, reusable items over disposables;
- Select recyclable or biodegradable materials to reduce landfill or incineration impact;
- Segregation waste streams to improve recycling and reuse potential; and
- Track waste generation to identify trends and opportunities for reduction.

7. Waste Streams

Non-hazardous Waste Streams

- Topsoil, sub soil, stones, made ground fill from excavations;
- Concrete from demolition works;
- Excess new concrete, brick, tiles and ceramics;
- Excess plasterboard;
- Scrap metal;
- Cardboard and other packaging;
- Plastic including wrapping and packaging;
- Waste wood;
- Paper;
- Glass;
- Waste from portable site toilets;
- Canteen and food waste; and
- Damaged materials.

Hazardous Waste Streams

- Soil and stones containing hazardous substances such as hydrocarbons from historic refilling activities (if found to arise post soil sampling & analysis).
- Hydrocarbons contained in old tanks for removal. To be drained and managed appropriately

All waste assessed by the Resource Manager as 'not suitable for reuse' will be stored in skips or other suitable receptacles in a designated area of the site, to prevent cross contamination between waste streams.

Uncontaminated excavated material (top-soil, sub soil, etc.) will be segregated, stockpiled and re-used on site in preference to importation of clean fill, where possible.

All soil materials identified for re-use off site will be subject to testing and quality assurance controls to be protective of the environment.

Where possible, the contractor will ensure that all waste leaving site will be recycled or recovered.

7.1 Waste/Resource Generation & Quantification

Quantities of construction resource/waste materials may vary depending on methodologies of construction. Therefore, the difficulty of estimating resource/waste quantities is noted which depends on the approach of the appointed Main Contractor. During construction these quantities may be subject to change during the phase.

This RWMP incorporates the provisions to promote sustainable waste management in line with the waste hierarchy, and also focus on integrating good site management practices to ensure efficiency and reduce potential for any other negative environmental effects.

This project comprises of construction activities and the main wastes and resources generated by the project are listed below in Table 7-1.

Other potential waste/resource sources on the site are also included in Table 7-2.

Estimated quantities are also provided and should be updated as the project advances.

Table 7-1 - Construction Arisings, LoW and Estimated Quantities/Volume.

Waste/Resource Material	LoW Code	Estimated Quantities (t or m3)
Masonry (tiles, ceramics, plaster)	17-03-02	1 T
Soil and stone	17-05-04	1000 m ³
Mixed waste	17-09-04	5 T
Metals	17-04-05	10 T
Concrete	17-01-01	450T
Timber	17-02-01	1.5 T

7.2 Construction Arisings

It is anticipated that the majority of resources/wastes generated will be suitable for reuse, recovery or recycling and will therefore be segregated to facilitate the reuse, recovery and/or recycling, wherever possible.

A non-exhaustive list of construction waste categories which may be generated during the construction phase of the Proposed Development have been identified below and the appropriate European Waste Catalogue Code for these wastes has been identified in Table 6-2. These LoW's only apply to construction and demolition materials that have no further use at the Site and meet the definition of waste. Where materials have a beneficial use either on site or offsite these materials should not be considered waste (subject to meeting certain criteria, e.g. soil and stone being notified as by-product).

Table 7-2 - Waste Types and LoW

Waste Material	LoW/EMC Code
Concrete, Bricks, Tiles and Ceramics	17 01
Bricks	17 01 01
Tiles	17 01 02
Ceramics	17 01 03
Mixture of concrete, bricks tiles & ceramics	17 01 07
Wood, Glass and Plastic	17 02
Wood	17 02 01
Glass	17 02 02
Plastic	17 02 03
Bituminous mixtures containing other than those mentioned in 17 03 01	17 03 02
Metals (including their alloys)	17 04
Aluminium	17 04 02
Iron and Steel	17 04 05
Mixed Metals	17 04 07
Soil and stones, other than those mentioned in 17 05 03*	17 05 04
Insulation and Construction Materials	17 06 04
Gypsum based construction material	17 08 02
Mixed Construction and Demolition Waste other than those mentioned in 17 09 01, 17 09 02, 17 09 03	17 09 04
Paper and Cardboard	20 01 01
Wood other than that mentioned in 20 01 37	20 01 38
Soil and Stones	20 02 02
Mixed Municipal Waste	20 03 01
Hydraulic oils	13 01 01*
Fuel oils and diesel	13 07 01*
Aqueous liquid waste other than those mentioned in 16 10 01 (to be considered for portable toilet wastes)	16 10 02

7.3 Proposed Waste Management Options

The Main Contractor is responsible for defining and maintaining resource and waste storage areas across the site during the construction phase. These areas will be secured and provide for appropriate segregation of materials. The relocation of these areas will be planned appropriately as works progress. The Main Contractor will implement waste management policies whereby resource and waste materials generated on site are to be segregated as far as practicable.

The Main Contractor will ensure that all wastes which arise from the construction of the Proposed Development will be removed from site by an approved waste contractor. These contractors will be required to hold a valid waste collection permit. Furthermore, all waste materials which are required to be disposed off-site will be reused, recycled, recovered or disposed of at an appropriate facility which holds appropriate registration, permit or license. The Contractor will retain on file up-to-date copies of the relevant collection permits, and facility registrations, permits and licenses.

Other written records of the waste arisings will be maintained as per Section 7 of this RWMP.

7.4 Management of Wastes & Resources

Resource/Waste

Quantities of materials/wastes identified below are based on estimates for a development of this size and scale. Waste volumes will also be dependent on whether construction components are arriving on site prefabricated or require fabrication with raw materials on site which results in higher residual wastes being generated. These quantities will be tracked and assessed for improvement opportunities throughout the course of the build.

7.5 Management of Stockpiles

Wastes generated during works will be segregated and temporarily stored onsite (pending removal or for re-use on site) in accordance with a pre-determined segregation and storage strategy. While waste classification and acceptance at a waste facility is pending, materials for recovery/disposal shall be stockpiled as follows:

- Stockpile number;
- Origin (i.e. location and depth of excavation)
- Approximate volume of stockpile
- Date of creation;
- Description and Classification of material;
- Date sampled;
- Date removed from site;
- Disposal / recovery destination; and
- Photograph

Wastes for removal onsite will be segregated into separate skips by LoW/EWC codes pending collection by the prescribed Authorised Waste Collector – these are outlined in Section 7.2 below.

Waste storage, fuel storage and stockpiling and movement are to be undertaken with a view to protecting any essential services (electricity, water, etc) and to protect any existing surface and new water drains.

Waste will be stored on site, including concrete, asphalt and soil stockpiles, in such a manner as to:

- Prevent environmental pollution (bundled and / or covered storage, minimise noise generation and implement dust / odour control measures, as may be required); and
- Maximise waste segregation minimise potential cross contamination of waste streams and facilitate subsequent re-use, recycling and recovery.

7.5.1 Soils and Stones

Volumes of soils are to be excavated on site during the development of the Site. It is expected that these volumes will arise from topsoil stripping and from localised excavations for tank pulls, drainage and utilities and reduction of site levels to formation level.

The Soil and Stone Recovery & Disposal Capacity (Update Report 2020) recommends that proposed developments with demolition and excavation processes exhaust all reuse possibilities before sending to recovery or disposal facilities. Provisions in the EC (Waste Directive) Regulations 2011 provide for the reclassification of waste as resources, and this is address under Article 27 (by-product) and Article 28 (end-of- waste).

When certain criteria can be demonstrated by the economic operator, Article 27 allows for the declaration of a material as a by-product rather than a waste. This instrument is well established for soils and stone. The classification of soils and stone as a by-product can have significant economic benefits and allow for the handling of these materials outside waste legislation. There are also large environmental benefits through facilitating a circular economy approach.

These decisions made by the economic operator must be notified to the EPA. This is considered by the EPA on a case-by-case basis and the EPA then takes a risk-based approach in making their determination. This determination has an advisory period of 10 weeks. For this declaration the economic operator is required to demonstrate that all four of the by-product conditions are met:

1. The further use of the soil and stone is certain;
2. The soil and stone can be used without any further processing other than normal industrial practice;
3. The soil and stone are produced as an integral part of a production process; and,
4. Further use is lawful fulfilling relevant product, environmental and health protection requirements for the specific use and will not lead to overall adverse environmental or human health impacts.

The Main Contractor should seek advice on this process from an appropriately qualified consultant.

In September 2024 the Environmental Protection Agency (EPA) published Explanatory Note for National by-product criteria for Greenfield Soil and Stone BP-N002/2024 Version 1.2. This Criteria allows for greenfield soil and stone from undeveloped land, destined for use at another development with granted

planning permission or exemption, as an alternative more efficient system to the single case notification system. By-Product status can be automatically attained through demonstrating compliance with these National By-Product Criteria without waiting on a by-product determination from the Agency. The Criteria will be utilised if appropriate.

Where required, the Main Contractor is responsible for ensuring permits, issued by the National Waste Collection Permit Office (NWCPO), are held by each waste collection contract in accordance with Waste permitting, licences & Documentation under the Waste Management (Collection Permit) Regulations 2007.

Any potentially hazardous soil and stone arising from the Project will be managed as per Section 6.1 of this report.

7.5.2 Asbestos

There is an existing service station structure and unroofed derelict building onsite to be demolished on Area B, however it is believed that there is no asbestos within the structures.

However, an Asbestos Survey may be required to confirm the presence of ACMs.

7.5.3 Plasterboard/Gypsum Materials

The use and supply of plasterboard and gypsum materials will be monitored on the construction site to avoid wastage. The Contractor will ensure gypsum wastes are appropriately segregated in and stored in a water-tight receptacle for onward recycling.

Given the cost of plasterboard and gypsum materials it is estimated that waste volumes will be minimised as far as practicable.

7.5.4 Metals

Metals from demolition works will be segregated in appropriate skips or other receptacles in accordance with the authorised waste collectors' requirements. The contractor shall liaise with the metal waste contractor as to the segregation streams relevant to their site. The majority of metal waste will be recycled.

7.5.5 Timber and Wood

Timber and wood products will be segregated accordingly. The contractor shall ensure that appropriate segregation is maintained to exclude materials containing glues, preservatives, paints, varnishes, etc.

Waste timber production will vary during the course of the demolition and construction phases.

Timber shall be reused on the Site where possible to limit the volume of timber going offsite as a waste.

7.5.6 Plastic

Appropriate waste and 'off-cut' construction plastic (hard plastic) will be segregated appropriately in accordance with the waste contractor's requirements and recycled appropriately. Soft plastics and plastic wrapping shall be segregated for offsite recycling where possible. Small amount of plastics will be placed

in the mixed C&D skip and segregated offsite at the waste facility where no feasible to have a separate plastics skip.

7.5.7 Wastes from Construction Sites Offices and Staff

During the course of the construction phase waste will be generated from employees on the site. These will encompass general refuse, mixed dry recyclables, food wastes and wastes from onsite portafos. These wastes will be managed by appropriately licenced and specialised waste contractors. These wastes will be collected and stored separately from the C&D wastes generated through construction activities.

7.5.8 Other Wastes

As required and depending on the stage of the construction, the contractor will determine if other waste streams need appropriate segregation. These streams may include: glass, bricks and tiles. These needs will be periodically assessed and evaluated by the contractor.

Excess fresh concrete (17 01 01) will be returned to concrete supplier.

7.5.9 Hazardous Wastes

Other than the aforementioned, hazardous waste arisings are not anticipated however the appropriate waste management practices will be employed, and the management of all hazardous waste streams will be coordinated in conjunction with the Contractor's Site Health and Safety Manager.

7.6 Cost of Waste Management

Re-iterating the Waste Hierarchy (Figure 1-1) it is clear that the cost of waste management reflects this top-down pyramid. Therefore, incentivising this project to first prevent waste from being created as is outlined above will reduce the cost of waste management and overall construction costs.

Reuse of material also is beneficial to cost as virgin material that is manufactured or mined and subsequently transported to Site may well be in excess of reuse costs. The Proposed Development will reuse appropriate, soils and topsoil for landscaping purposes.

Scrap metal, wood, plastics, and other wastes will be assessed by the main contractor/resource manager. Metal salvage waste costs can be offset by rebates. Acceptable plastic and wood will also be returned from the site to the supplier under appropriate return schemes where available.

Disposal costs for landfill are typically (est.) €160.00 per tonne including the €85per tonne landfill levy (Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015)) and an imminent waste recovery levy of €10 per tonne to come into effect in September 2025 (DECC, 2023). This price is non-inclusive of skip hire and collection costs which can widely vary. Thus, the Proposed Development will endeavour to accord with the Waste Hierarchy to prevent, reuse and recycle before disposal of waste where appropriate.

8. Site Management

Site Management will ultimately be the responsibility of the Contractor. Control of the Site including waste management will be transferred to the Contractor at commencement of the Construction project. The Design Team or client representative may set recommended tasks for the contractor to follow in the works specification.

8.1 Resource Manager Responsibility

- Agree and revise as necessary any commitments or targets included in the RWMP developed at design/planning with the Client for acceptance and adoption in the RWMP for construction;
- Allocate responsibility for resource management to one or more individuals of sufficient seniority to put the relevant procedures into practice. Nominate a suitably qualified Resource Manager with expertise in waste and resource management to implement the RWMP;
- The RM will be required to update the plan as required to reflect new resource streams, work practices, suppliers or resource management options as required;
- The RM will be responsible for delivery of all training and induction in relation to resource management;
- The RM will be responsible for ensuring site infrastructure is supplied and maintained as fit for purpose;
- The RM will be responsible for conducting all relevant internal site audits including audits of subcontractor operations;
- The RM will be available as required for any Local Authority or other audits undertaken;
- The RM will be responsible for maintaining site records for waste and resources exported offsite and ensuring these are undertaken by suitably authorised operators to suitably authorised sites; and
- The RM will be engaged with relevant individuals who have access to ordering and stock-control records to ensure supply chain initiatives have been adopted.

8.2 Authorised Waste Collection & Receiving Facilities

All waste removed from site must be carried out by a contractor with a current waste collection permit for the waste codes to be collected.

All residual resources legally classified as a 'waste' taken from site must be sent to suitably authorised waste facilities for disposal or recovery. The following authorisations are applicable:

- Certificate of Registration (CoR) from the Local Authority (issued to private sector);
- Waste Facility Permit (WFP) from the Local Authority; and
- Licenced Landfill.

8.2.1 Waste Contractors

The Main Contractor will nominate only authorised Waste Collectors and Facilities from the list available at <http://www.nwcpo.ie/permitsearch.aspx> for each relevant LoW Code. This RWMP document will be updated by the Contractor at the pre-construction and main construction when they have been selected. A list of authorised provisional intended Waste Collection Contractors and a list Waste Facility Permit holders.

Waste Collection Contractors

- Pandagreen – NWCPO-13-11193-06

The above NWCPO contractor will be used to collect the following waste streams:

Table 8-1 - Waste and LoW

Waste/Resource Material	LoW Code
Masonry	17-03-02
Soil and stone	17-05-04
Mixed waste	17-09-04
Metals	17-04-05
Concrete	17-01-01
Timber	17-02-01

Other authorised Waste Collection Contractors from the NWCPO register will be engaged if capacity issues are affecting the above contractor.

Waste Facilities

- Pollboy Landfill Facility – W0027-02;
- Walsh Waste Ltd – WFP-G-24-0004-02.

The above authorised waste facilities will be used as the final destination for the following waste streams:

Table 8-2 - Waste Type and LoW

Waste/Resource Material	LoW Code
Masonry	17-03-02
Soil and stone	17-05-04
Mixed waste	17-09-04

Waste/Resource Material	LoW Code
Metals	17-04-05
Concrete	17-01-01
Timber	17-02-01

Other authorised Waste Facilities from the NWCPO register will be engaged if capacity issues are affecting the above facilities.

8.3 Record Keeping and Reporting

Waste contractors have not been appointed at this stage of the project. Prior to commencement on site the Main Contractor will update the RWMP with the authorised waste contractors' details for each waste type (name, permit numbers, authorised waste sites etc.). Waste handling and all documentation will be monitored in accordance with the procedures outlined.

The Site Manager will maintain a copy of all waste collection permits. A specific waste docket must be issued to the authorised collector. If being transported to another site, a copy of the waste permit or EPA Waste Licence for that site must be provided to the contractor.

As well as a waste collection docket, a receipt from the 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 system to be maintained on-site.

8.4 Procedures for Audits

The waste audit procedures represent a systematic study of the site's waste management practices. The purpose of the waste auditing is to identify any problems with the site's waste procedures and also the benefits of prevention and minimisation that is in place.

The audit will be a 'self-audit' process carried out by the Resource Manager and/or appointed team member/contractor. The RM will create an Audit Plan and identify the appropriate frequency at which the audits are to be conducted over the course of the construction phase. The waste audit will document details of the quantity, type and composition of all waste removed from the site.

The audit process will identify appropriate performance and waste output or re-use targets. As appropriate, corrective actions will be identified if targets have not been met.

The audit findings will highlight any corrective actions that may need to be taken in relation to waste management procedures or site practices. These corrective actions will be tracked in order to identify root-causes as appropriate.

8.5 Monitoring, Continual Improvement and Review

As noted in Section 1, this document is considered a 'live document' and should be updated as information becomes available or where there is any significant change to the overall resource and

waste management strategy for the project. To ensure that this RWMP remains 'fit-for-purpose' for the duration of the project, it will be regularly reviewed on a bi-annual basis and updated in order to ensure that legal requirements and the objectives of the RWMP are being met and that best practice is followed. Furthermore, this will ensure that improvements and additional mitigations can be implemented as and when required.

Project specific resource and waste management targets and KPIs for the site (see Section 4) will be audited by the Resource Manager throughout the construction phase (see Section 7.4). The results of these audits will be used to update the RWMP, as required, to ensure that the RWMP is effective in ensuring that construction works are meeting environmental targets and legal requirements.

Reviews of the RWMP will be undertaken and recorded by the Resource Manager in a short report format and will document the following:

- Any changes to the project design or construction activities,
- Any updates or changes to relevant legislation or best practice guidelines,
- A summary of the results of audits undertaken in the period,
- Shortcomings identified in the RWMP where KPIs, legislative requirements and/or targets/objectives have not been met,
- Details of any recommendations for improvements and/or additional mitigation measures to be included in the RWMP.

The findings of the reviews will be reported to the client and other staff members as required. A log will be kept including a summary of the update and a record of the review. Any additional mitigation measures identified for inclusion in the RWMP will be communicated to site personnel as part of environmental awareness training and/or toolbox talks, where appropriate.

8.6 Communication with Local Authority and Other Stakeholders

The results of the audits may be documented in a periodic summary report which will outline the types, quantities of waste arisings and their final treatment method. These audit reports should be retained and where requested, be sent to the appropriate persons in the local authority's Waste or Environment Department where requested.

Where BREEAM (Building Research Establishment Environmental Assessment Method), LEED (Leadership in Energy and Environmental Design), IGBC (Irish Green Building Council) or other sustainability performance is being assessed, key performance indicators shall be established, e.g., an 85% overall recycling target, successes and failures will be recorded, and action plans will be developed to address any issue which arise. Inspections of the waste storage areas will be undertaken on a weekly basis, issues relating to housekeeping, inappropriate storage and / or segregation will be actioned at the earliest practicable opportunity.

9. Review and Document Control

This RWMP a live, working document and shall be subject to a review of its effectiveness by the site engineer together with the site person in charge. Any significant changes must be reflected in this document.

Table 9-1 - Document Review and Version Updates

Version	Review Date	Review Comments and Changes Made to RWMP	Accepted and Signed Off

Table 9-1 and waste logs from the site will be formatted in Microsoft Excel and up to update digital versions will be available for inspection.



RECEIVED: 11/09/2025





RECEIVED: 11/09/2025