



CONSULTANTS IN ENGINEERING,
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PLANNING

CLAREMORRIS CLOSED LANDFILL REMEDIATION PROJECT

PLANNING AND ENVIRONMENTAL REPORT

Prepared for: **Mayo County Council**



Comhairle Contae Mhaigh Eo
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Abstract: This document consists of a Planning and Environmental Report and has been developed in support of a Section 177AE application to An Bord Pleanála for approval of the Claremorris Closed Landfill Remediation project. The document reports on the Planning and Environmental considerations associated with the project.

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1. INTRODUCTION

1.1 Background

Fehily Timoney and Company (FT) have been engaged by Mayo County Council to prepare a Section 177AE Planning Application to An Bord Pleanála (APB) for the Claremorris Closed Landfill Remediation project.

A Tier 1, Tier 2 and Tier 3 Risk Assessments have been carried out on the closed landfill in accordance with the EPA's Code of Practice: Environmental Risk Assessment for Unregulated Waste Disposal. Mayo County Council subsequently applied for a Closed Landfill Certificate of Authorisation (CoA) from the Environmental Protection Agency (EPA). A Certificate of Authorisation Ref: H0319-01 was issued for the site on 19th August 2021. Mayo County Council propose carrying out the Claremorris Closed Landfill Remediation project in compliance with this Certificate of Authorisation.

The purpose of certificates of authorisation is to specify control and remediation measures required at a closed landfill to ensure that waste disposed or recovered in the closed landfill is not causing, or is not likely to cause, environmental pollution. A Certificate of Authorization is developed by the EPA to ensure compliance with the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations, 2008.

Screening for Appropriate Assessment by the Environmental Protection Agency (EPA) identified the potential for a likely significant effect or effects on two European sites; on the Lough Carra/Mask Complex SAC (site code: 001774) and Lough Mask SPA (site code: 004062)..

A Stage 2 Appropriate Assessment (Natura Impact Statement) of the potential impact on the Lough Carra/Mask Complex SAC was therefore required. This Stage 2 Report has been completed and is included in this application.

Given a Stage 2 Appropriate Assessment (Natura Impact Statement) is required for the project, planning consent for the project must be sought from An Bord Pleanála under Section 177AE of the Planning and Development Act, as amended. A Section 177AE application has therefore been prepared for the project. This document consists of a Planning and Environmental Report and has been developed in support of the Section 177AE application to An Bord Pleanála for approval of the Claremorris Closed Landfill Remediation project. The document reports on the Planning and Environmental considerations associated with the project and has been laid out as follows:

- Section 2 - Project Description
- Section 3 - Planning Considerations
- Section 4 - Conclusions



1.2 Accompanying Documents

The following documents accompany this document and the Section 177AE application for the project generally:

1. An **EIA Screening Assessment Report** (Reference: P21-287 Claremorris EIA Screening) - This assessment was carried out to determine whether an Environmental Impact Assessment Report in accordance with Directive 2014/52/EU is required for the project. This document involved an examination and an assessment of potential environmental impacts having regard to proposed environmental mitigation measures. It was determined that neither a Mandatory EIAR nor Sub-threshold EIAR is required for the project.

The following relevant document is appended to the EIA Screening Assessment Report:

- Appendix 1: Certificate of Authorisation (Licence number: H0319-01) Claremorris Historical Landfill.
2. A **Natura Impact Statement** (Reference: P21-287 NIS) – This assessment was carried out to determine whether the project would have an adverse effect on the integrity of a European (Natura 2000) site, either individually or in combination with other plans or projects. This assessment concluded on the basis of objective scientific information, the proposed development will not, either alone nor in combination with other plans or projects, have an adverse effect on the integrity of a European (Natura 2000) site.
 - Appendix 1: EPA Appropriate Assessment Screening Determination
 3. A **Construction Environmental Management Plan** (Reference: P21-287_CEMP) – This document reports on the Environmental Management Plan (which defines development works environmental mitigation measures), Health and Safety Plan and Emergency Response Procedures to be adopted and implemented during the construction phase of the proposed development. The following relevant documents are appended to the Construction Environmental Management Plan:
 - Appendix 1: Certificate of Authorisation (Licence number: H0319-01).
 - Appendix 2: Invasive Species Management Plan.



1.3 Accompanying Drawings

The following drawings accompany this document and the Section 177AE application for the project. These drawings have been enclosed with the Section 177AE Planning Application.

Drawing No.	Drawing Title
P21-287-0100-0001	Site Location Map
P21-287-0100-0002	Existing Site Survey
P21-287-0100-0003	Land Ownership Map
P21-287-0100-0004	Health and Safety
P21-287-0100-0005	Site Clearance Plan
P21-287-0100-0006	Existing and Proposed Monitoring Locations
P21-287-0100-0007	Proposed Site Layout
P21-287-0100-0008	Traffic Management
P21-287-0100-0009	Proposed Landfill Capping Area
P21-287-0100-0010	Proposed Formation Levels
P21-287-0100-0011	Proposed Final Cap Restoration Contours
P21-287-0100-0012	Proposed Cut/Fill Plan
P21-287-0100-0013	Proposed Cut/Fill Sections
P21-287-0100-0014	Proposed Location for Japanese Knotweed Burial
P21-287-0101-0001	European Sites within the Zone of Interest
P21-287-0200-0001	Proposed Under Liner Gas Collection
P21-287-0200-0002	Proposed Over Liner Gas Collection
P21-287-0300-0001	Proposed Surface and Sub-Surface Drainage
P21-287-0200-0002	Proposed Surface Water Sections
P21-287-CPO-0001	CPO of Lands Not Registered



1.4 Description of the Site

Claremorris historical landfill is located in the townland of Clare, Claremorris, Co. Mayo. The site is approximately 800m south-east of Claremorris town. The historic landfill capping area footprint is 3.8ha and is located within a larger application site consisting of open land which has an area of 5.6ha. The site is currently vacant and in an overgrown state. Neighbouring land uses include agricultural grassland, cutaway bogland, commercial forestry and residential properties located approximately 280m to the west of the site. An electrical substation is also located approximately 150m to the north of the site. The site is bound by the Dublin-Westport Railway line to the north, the Knock-Claremorris Bypass (N17) to the West, commercial forestry to the south and agricultural land (boggy ground) occupies the remaining land to the east of site.

The site operated as a landfill accepting municipal waste from 1982 to March 1996. The site was capped with boulder clay, but no remediation works have been completed.

Waste deposited at the site is understood to comprise of municipal and commercial wastes to depths of 6.5m below ground level (BGL). The interpreted landfill extent covers an area of 32,000 m² and initial calculations estimate an interred waste volume of approximately 168,000 – 297,623m³ at the site.

The western portion of the site (raised area) is inhabited by rough grassland and scrub. The eastern half of the site forms part of an area of harvested, drained peatland.

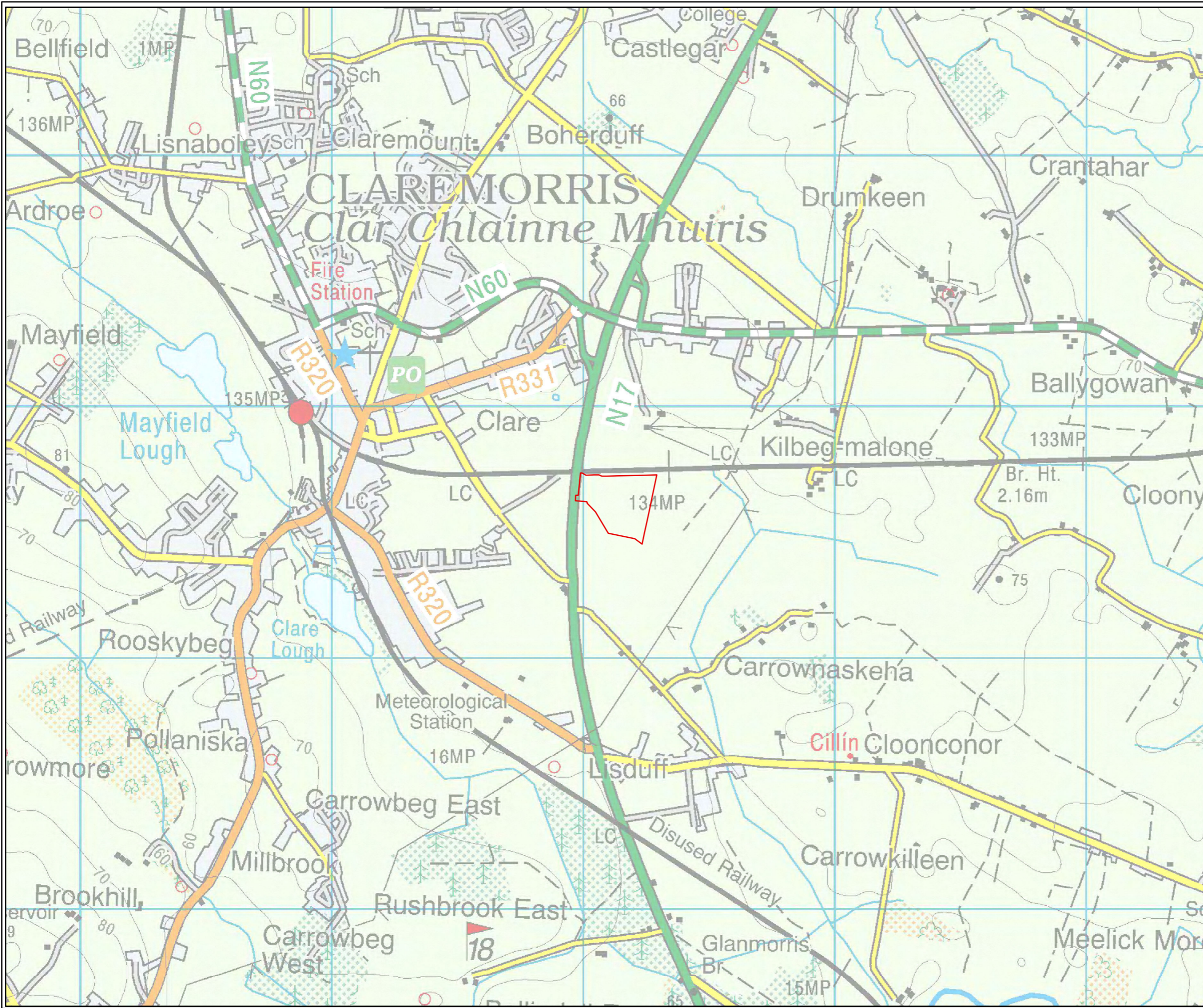
The site generally falls from south to north towards the railway and west to east towards the harvested and drained peatland. The KILBEG-MALONE (EPA code: 30K3711), a 1st order stream crosses the eastern portion of the site travelling in a southern direction. After flowing for 44km, this stream ultimately enters Lough Mask via the LISDUFF 30 (EPA code: 30L4313) and Robe River (EPA code: 30R0115).

The site currently:

- Has a shallow soil cap with an established grass and shrub cover.
- Is drained by a watercourse along the western and northern boundary of the site which ultimately discharge to the Kilbeg-Malone River.
- Is secured by stock proof fencing along the western boundary of the site.

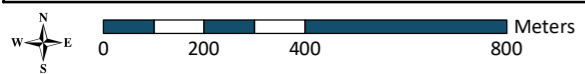
Invasive species identified on site include, Japanese Knotweed (*Fallopia japonica*), Winter Heliotrope (*Petasites fragrans*) and Cherry Laurel (*Prunus laurocerasus*). An Invasive Species Management and Treatment Plan will be developed to address the required works for invasive species in the site.

A Site Location Map drawing showing the site and its immediate environs is enclosed with this planning application (Drawing Reference: P21-287-0100-0001).



Legend
 Site Boundary

TITLE:	Site Location
PROJECT:	Claremorris Historic Landfill
FIGURE NO:	1.1
CLIENT:	Mayo County Council
SCALE:	1:15000
REVISION:	0
DATE:	06/05/2022
PAGE SIZE:	A3





1.5 Site Ownership

The majority of the application site, as defined by the Red Line Boundary, is under the ownership of the Applicant, Mayo County Council. A portion of land ca. 0.74 ha in size situated at the southern end of the application site is not under the ownership of the Applicant. The title to this land is Unregistered. Mayo County Council propose acquiring this land through the completion of a Compulsory Purchase Order. Since c. 1982, Mayo County Council have carried out landfill operations and aftercare activities on this parcel of land. Historically.

A Land Ownership Map delineating lands owned by the Applicant and Unregistered Lands within the boundary of the application site accompanies this planning application (Drawing Ref: P21-287-0100-0003).



2. PROJECT DESCRIPTION

2.1.1 Overview Description of the Project

Mayo County Council proposes to seek the approval of An Bord Pleanála for the completion of Closed Landfill Remediation Works at a Closed Landfill site in Clare, Claremorris, County Mayo.

The application site, as defined by the red line boundary in the accompanying drawings, is 5.6ha in size. The extent of the waste body on-site is 3.2ha. The proposed capping area within the application site is 3.8ha in size.

The proposed development will consist of the following:

- The development of a site access road
- The development of a temporary site compound and office area.
- Site clearance, including the removal of an existing gate, existing timber post and wire fencing and clearance of existing vegetation
- Grading/profiling of the existing site area.
- Installation of an engineered landfill capping system covering an area of 3.8 hectares.
- The installation of stock proof fencing, and a new access gate on-site.
- Landscaping of the final formation of the capping area using a high value native grass cover.

The following will be carried out on-site following on from completion of the proposed development works:

- Ongoing environmental monitoring.
- Oxidation of methane in landfill gas
- Maintenance of engineered cap on-site.
- Maintenance of surface water drainage system on-site.

2.1.2 Detailed Description of the Project

A detailed description of the proposed project is contained in Section 2 of the Environmental Impact Assessment Screening Report which accompanies this Section 177AE Planning Application to the Board. To avoid reiteration and the possibility of conflicting information being presented within the application, the reader is advised to refer to the aforementioned section/report to develop an understanding of the project. The Planning and Environmental Assessment undertaken and reported upon in this document has had regard to this project description.



3. PLANNING CONSIDERATIONS

3.1 Relevant Planning History

Existing development at Claremorris Closed Landfill was not subject to any planning process, application or grant of planning permission.

A Part 8 Planning Consent for the development of a 5 MW Solar PV Farm which covers most of the application site as well as lands to the east of the application site was previously made by Mayo County Council. The Proposed Development subject to the Part 8 Planning Application was granted approval at the Claremorris-Swinford Municipal District Meeting held at Mayo County Council Offices, Kilcorman Road, Claremorris, on Wednesday 4th of March 2020. This development has not commenced but can be seen as ‘committed development’ at the application site.

No other Planning Applications or Grants of Planning Permission exist at the application site.

3.2 Planning Policy Context and Project Compliance with Planning Policy

3.2.1 Mayo County Development Plan 2014 – 2020

The Mayo County Development Plan 2014 – 2020 is the relevant statutory plan which guides the use and development of the subject site. Under the current Plan, it is the policy of the County Council to support the sustainable development of the countryside and rural villages in the County.

The Plan has eight main goals for the future development of the County and the policies and objectives outlined in the Plan are to assist in achieving these goals. Goal 7 of the Plan aims to ‘protect and enhance the natural environment’. The Plan also outline six integrated Strategies that have a common aim of achieving the goals of the Plan. Each Strategy includes a policy to assist in achieving the goals of the Plan, and supporting objectives to achieve that policy. The Environment, Heritage & Amenity Strategy outlines the importance of protecting and enhancing the natural and built environment, cultural heritage and amenities and how these are integral to the overall sustainable development of the County.

The following Policies/Objectives are defined in the current Mayo County Development Plan:

- WQ-01 - It is an objective of the Council to implement the Western River Basin District Management Plan “Water Matters” 2009-2015 to ensure the protection, restoration and sustainable use of all waters in the County, including rivers, lakes, ground water, coastal and transitional waters, and to restrict development likely to lead to deterioration in water quality or quantity.
- LP-01 - It is an objective of the Council, through the Landscape Appraisal of County Mayo, to recognise and facilitate appropriate development in a manner that has regard to the character and sensitivity of the landscape and to ensure that development will not have a disproportionate effect on the existing or future character of a landscape in terms of location, design and visual prominence.
- NH-01 (g) - It is an objective of the Council to protect, enhance, conserve and, where appropriate restore; surface waters, aquatic and wetland habitats and freshwater and water- dependent species through the implementation of all appropriate and relevant Directives and transposed legislation.



- TV-02 – It is an objective of the Council to support the improvement and enhancement of the physical fabric and environment, of the smaller towns and villages through measures in co-ordination with CLÁR and Leader Programmes, Derelict Sites Legislation and the Development Management Process.
- NH-08 - It is an objective of the Council to assist in the control of native and non-native invasive or harmful species which represent a serious threat to our environment, fresh water systems and lakes.

It is considered that the proposed remediation works will aid in achieving the above objectives through the overall enhancement of water quality and significant improvement on the visual amenity of the immediately surrounding area given the ground clearance and the more aesthetically appealing site grading/profiling and landscaping that will be carried out as part of the development. It is therefore considered that the proposed development complies with the plan.

3.2.2 Draft Mayo County Development Plan 2021 – 2027

The strategic aim of the Draft Plan is to continue to protect and enhance the county's natural heritage and biodiversity and ensure that networks of green and blue infrastructure are identified, created, protected and enhanced to provide a wide range of environmental, social and economic benefits to communities.

The following Policies/Objectives are defined in the Draft Plan:

- *NEP 1 – 'To support the protection, conservation and enhancement of the natural heritage of County Mayo, 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 and Wild Fowl Sanctuaries (and other designated sites including any future designations)'.*
- *NEP 21 – 'To manage, protect and enhance surface water and ground water quality to meet the requirements of the Water Framework Directive'.*
- *NEO 4 – 'To protect and enhance biodiversity and ecological connectivity in County Mayo, including woodlands, trees, hedgerows, semi-natural grasslands, rivers, streams, natural springs, wetlands, stonewalls, geological and geo-morphological systems, other landscape features and associated wildlife, where these form part of the ecological network.'*

The rationale for the remediation of the site is to protect the receiving waters and downstream human and ecological receptors from any future pollution incidents, thereby supporting the policies/objectives of the Draft Plan.

- *NEO 14 – 'To ensure that where the presence of invasive species is identified at the site of any proposed development or where the proposed activity has an elevated risk of resulting in the presence of these species, details of how these species will be appropriately managed and controlled will be required'.*

The control and eradication of invasive species will be carried out in accordance with the accompanying Invasive Species Management Plan. This plan will prevent the spread of identified non-native invasive species within and without the site and reduce the potential risk for the introduction and/or spread of new invasive species within the site pre, during and post remediation.



3.2.3 Connacht Ulster Regional Waste Management Plan

The local authorities recognize the need to address legacy, historic and closed licensed landfill in the region for the plan period (2015-2021). The risk to environmental receptors, such as ground and surface water, from waste buried at these sites needs to be tackled and minimized. A clear process to remediate sites has been discussed with the Department of the Environment, Community and Local Government (DECLG). These communications have shaped the policy and implications actions in the plan. The local authorities are committed to targeting and addressing the highest risk sites as soon as possible, subject to funding from the DECLG being made available.

The following Policy/Objective is defined in the Plan:

- Policy G2: Roll-out the plan for remediation historic closed landfill prioritizing actions to those sites which are the highest risk to the environment and human health.

The progression and completion of the Claremorris Closed Land Remediation Project will accord with and support the Policy and Policy Actions defined above in the Connacht-Ulster Regional Waste Management Plan. The Remediation Plan will be in accordance with the EPA's Closed Landfill Certificate of Authorization for the landfill. Based on the rationale for the remediation of the site, and the policies outlined above, it is considered that the project therefore complies with this plan.

3.2.4 River Basin Management Plan 2018–21 / Draft River Basin Management Plan 2022–27

The River Basin Management Plan 2018 – 2021 / Draft River Basin Management Plan 2022 – 2027 both set out the measures necessary to protect and improve the quality of Ireland's waters. Good water quality contributes to protecting human health by improving the quality of drinking water sources and bathing waters.

The River Basin Management Plans from Ireland stem from the EU Water Framework Directive. The Directive is linked to, and reinforces, other EU environmental directives including directives relating to the protection of biodiversity.

Strong and targeted action is now needed to protect water from further decline and to restore water quality where past activities have caused damage. The remediation of the site will help to achieve this as the proposed engineered cap will prevent rainwater ingress and the generation of landfill leachate on-site. This in turn will ensure greater levels of protection of the receiving environment including underlying groundwater and receiving downstream surface waters and therefore is complementary of the Plan.

Many of the measures needed to protect and improve water quality can also deliver benefits for nature, air quality and climate change as the proposed remedial works will result in the management of landfill gas emissions on site and will also significantly improve the visual amenity of the immediately surrounding area given the ground clearance and the more aesthetically appealing site grading/profiling and landscaping that will be carried out as part of the development.



3.3 Justification for the Project

The Proposed Development will reduce environmental risk associated with the historic landfill site and will have a positive impact on the receiving environment.

The development of an engineered cap above the body of deposited waste will prevent rainwater ingress and the generation of landfill leachate on-site. This in turn will ensure greater levels of protection of the receiving environment including underlying ground and groundwater, receiving downstream surface waters (Lough Carra/Mask Complex SAC) which are protected under the Water Framework Directive, and receiving European (Natura 2000) sites.

The current water quality status of the KILBEG-MALONE (EPA code: 30K3711), LISDUFF 30 (EPA code: 30L4313) and Robe River (EPA code: 30R0115) water bodies is good. The prevention of landfill leachate from entering these water bodies will help to maintain their good water quality status and therefore the proposed remediation works on site will be supportive of the objectives set out in the Water Frameworks Directive and the River Basin Management Plan.

The proposed development will also result in the controlled management of landfill gas emissions and will prevent the release of uncontrolled landfill gas emissions, thereby contributing to improved ambient air quality in the vicinity of the landfill site.

The proposed development will reduce environmental risk on-site and support enhancing the amenity value of the site in accordance with the Mayo County Development Plan 2014-2020 and the Draft Mayo County Development Plan 2021-2027. The management and reduction of environmental risk at this historic landfill will also accord with and support policy regarding landfill remediation defined in the Connacht Ulster Region Waste Management Plan.

It can therefore be seen that there is robust justification for the proposed development.



4. CONCLUSIONS

The proposed development aligns with and supports planning policy defined in the Mayo County Development Plan 2014-2020 and the Draft Mayo County Development Plan 2021 - 2027. It is likely that that proposed development will result in significant positive environmental impacts, namely improved ground and groundwater quality underlying the site, improved water quality at receiving surface water bodies and improved ambient air quality in the vicinity of the site.

The EIA Screening Report has concluded that no element of the proposed development is likely to have a significant adverse impact on the receiving environment (with the adoption of proposed mitigation measures). A Construction Environmental Management Plan will be in place to ensure environmental protection during development works.

The Natura Impact Statement has concluded on the basis of objective scientific information, the proposed development will not, either alone nor in combination with other plans or projects, effect the integrity of any European (Natura 2000) site.

Given all the above, the proposed development is considered to adhere to principles of proper planning and sustainable development. Therefore, the proposed development should be granted approval by An Bord Pleanála.



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