GALWAY COUNTY COUNCIL

N59 Maam Cross to Oughterard Road Project

REVISED SCHEDULE OF ADDITIONAL MITIGATION MEASURES & ENVIRONMENTAL COMMITMENTS

23rd October 2025

SUMMARY OF ADDITIONAL MITIGATION MEASURES & ENVIRONMENTAL COMMITMENTS

INTRODUCTION

This document summarises the additional mitigation measures and environmental commitments proposed as part of the N59 Maam Cross to Oughterard Road Project.

The following text shown in **bold** is additional to that indicated in Chapter 18 of Volume 2 of the EIS.

<table>
<tr><th>No.</th><th>Description</th></tr>
<tr><td>1.2</td><td>The Environmental Operation Plan shall include a fully developed Construction Stage Erosion and Sediment Control Plan (CESCP). The CESCP shall be based on the Preliminary Erosion and Sediment Control Plan (included in Appendix 5 of this EIS), and it shall include all of the controls, mitigations and monitoring details specified in same.

Prior to the commencement of construction, the Construction Stage Erosion and Sediment Control Plan and all method statements will be finalised by the construction stage contractor and will be subject to the approval of Galway County Council ~~and the agreement of NPWS and IFI~~. Same will be required to include all of the measures and controls described in the Preliminary Erosion and Sediment Control Plan. ~~This final construction stage plan will be described to the level of detail agreed with NPWS and with methods approved by NPWS and shall incorporate their requirements in this regard.~~

Meteorological conditions which trigger the undertaking of scheduled activities have been set and are included at Appendix 1.
Turbidity trigger levels are set out which determine the level at which investigation of the specific work activity will be undertaken and any necessary corrective actions implemented. This is also included at Appendix 1.
The EOP shall be made available to the public on Galway County Council’s website.</td></tr>
<tr><td>5.3</td><td>Vibration from construction activities shall be limited to the following values (Allowable vibration velocity (Peak Particle Velocity expressed in mm/s) at the closest part of any sensitive property to the source of vibration): -

• At frequency of less than 10Hz 8mm/s;
• At frequency of 10 to 50Hz 12.5mm/s; and
• At frequency of 50 to 100Hz (and above) 20mm/s.

The following minimum setback distances shall be observed in relation to blasting in the vicinity of the sensitive watercourses:
<table>
<tr><th></th><th colspan="6">Weight of Explosive Charge (kg)</th></tr>
<tr><td>Habitat</td><td>0.5</td><td>1</td><td>5</td><td>10</td><td>25</td><td>50</td></tr>
<tr><td>General Fish</td><td>7m</td><td>10m</td><td>15m</td><td>20m</td><td>35m</td><td>50m</td></tr>
<tr><td>Fish Spawning</td><td>15m</td><td>20m</td><td>45m</td><td>65m</td><td>100m</td><td>143m</td></tr>
</table></td></tr>
</table>

No.	Description
5.5	The Contractor undertaking the construction of the works shall be obliged to undertake trial blasting in order to ensure blasting activities do not exceed permissible levels. Blasting trials shall follow the recommendations of NRA *'Guidelines for the Treatment of Noise and Vibrations in National Roads Schemes'* (NRA, 2004). Noise and vibration monitoring shall be carried out at the nearest sensitive properties during critical stages of any rock blasting being carried out. **The results of the noise level monitoring will be made available for inspection at the offices of Galway County Council, Roads Section, Second Floor 2, County Buildings, Prospect Hill, Galway City within 1 week of the measuring of the noise level. The results shall also be made available to the public on Galway County Council's website within 1 week of the measuring of the noise level**.
7.1	**Invasive Species Management** The Contractor undertaking the construction of the works shall be obliged to manage non-native invasive plant species within the lands made available in accordance with: • *'Guidelines for the Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads'* (NRA 2010) ***Invasive Species Management shall be in accordance with the requirement outlined in 9.3.5 of the NIS.*** Where Non-Native Invasive Plant Species are found within designated sites **or the Owenriff Fresh Water Pearl Mussel Catchmen**t, only physical methods of eradication are to be applied. **All such physical methods shall only be carried out when the construction mitigation and control measures are in place including all measures listed in the Erosion and Sediment Control Plan**.
7.4	**Material Deposition and Peat Restoration Areas** The measures, controls and mitigations described in the Preliminary Erosion and Sediment Control Plan shall be implemented in full. Material Deposition Areas shall reseeded with a verge grassland mix, similar to the species composition found in the locality, using a high concentration seed mix to encourage rapid re-colonisation to help control the spread of invasive species and rehabilitate the area. The overall aim for the Peat Restoration Areas is to try to maintain a water environment conducive to the establishment of a wet peat habitat that will encourage natural colonisation by peatland vegetation. In addition to blocking up drains it is proposed to mulch the cleared surface vegetation from cutover bog in the vicinity and distribute it over the finished peat surface. **All peat and unsuitable soft soils below the proposed perimeter berms will be excavated and replaced with acceptable Class 6A or 1C granular engineering fill in accordance with NRA Specification for Road Works.**

No.	Description
7.8	**Watercourses (ER4)** Mitigation measures are as set out in Sections 14.5 (Surface Water) of this EIS and the principal measures as detailed in Table 18.9 for Surface Water (Hydrology). **Elements of the scheme, including culvert design, realignments and construction methodologies will follow the relevant National Roads Authority (NRA) guidelines:-** • ***Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes* (NRA 2008a).** • ***Guidelines for the Treatment of Otters during the Construction of National Road Schemes* (NRA, 2008b).** • ***Guidelines on The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads* (NRA, 2008c).** **In addition measures for the mitigation of impacts on fisheries and aquatic ecology outlined in the following documents:-** • **Murphy, D.F. (2004). Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites. Eastern Regional Fisheries Board, Dublin.** • **Kilfeather, P.J. (2007) Maintenance and protection of the inland fisheries resource during road construction and improvement works. Southern Regional Fisheries Board, Clonmel, Co. Tipperary.** • **SEPA (1996) SEPA Guidelines for Water Pollution Prevention from Civil Engineering Contracts. Scottish Environmental Protection Agency.**

Appendix 1

Rainfall Forecasting N59 Maam-Oughterard

Weather Forecast Services

Weather forecast information will be obtained from at least three sources including Met Éireann, Yr.no, and AccuWeather.com. The most pessimistic forecast will be used initially until a picture of which forecast is the more accurate for the area is established. All forecasts shall be ground verified.

Forecasts

Longer term 5 and 10day forecasts for work activity planning
Shorter term 12hr, 24hr and 3-day forecasts during construction (rainfall forecasts updated every 3hours.).

Planning/ scheduling of work

Use longer term forecast of 5 and 10day forecasts to plan/schedule high risk activities so as to coincide with forecasted dry periods.

Implementation of Works

Use 12 hour and 3 day forecast during the construction process to manage and reduce risk

Proposed Rainfall Triggers

Activities should cease or protective measures implemented if the following rainfall amounts are forecasted

A Protective High Risk Activities (Schedule 1 Activities)
6 hour rainfall exceeding 3mm
12hour rainfall exceeding 4mm
24hour rainfall exceeding 5mm
No overland flow or pathway for water movement
Conditions on the ground match the forecast

B High Risk Activities (Schedule 2 Activities)
6 hour rainfall exceeding 6mm
12hour rainfall exceeding 8mm
24hour rainfall exceeding 10mm
Conditions on the ground match the forecast

B Intermediate Risk Activities (Schedule 3 Activities)
6 hour rainfall exceeding 9mm
12hour rainfall exceeding 12mm
24hour rainfall exceeding 15mm
Conditions on the ground match the forecast

Schedule 1 **Protective High Risk Activities** **(non exhaustive)**	
1	**Installation of boundary fencing and silt fencing**
2	**Installation of Erosion and Sediment Control facilities**
3	**Removal of Erosion and Sediment Control Facilities**
Schedule 2 **High Risk Activities** **(non exhaustive)**	
1	**Excavation and Transportation of Peat**
2	**Intercepting and diversion of land drains intersection the site boundary**
3	**Excavation within 5m of a minor watercourse**
4	**Excavation within 10m of a Discovery Watercourse**
5	**Any in stream work or bank works**
6	**Installation of the crash deck on Letterfore and Glengowla Bridges**
7	**Installation of over-pumping facilities**
8	**Concrete works associated with watercourse crossings**
	Schedule 3 **Medium Risk Activities** **(non exhaustive)**
1	**Trimming of slopes and preparation for landscaping**
2	**Hedge/ Tree Removal**
3	**Installation of utilities**
4	**Site Clearance involving the removal of cover vegetation/ topsoil**
5	**Concrete works associated with retaining walls**
6	**Any other activities with a risk of causing erosion or generating sediment laden runoff**

Turbidity Investigatory Levels

The continuous turbidity meters will be installed as per the Erosion and Sediment Control Plan at locations upstream and downstream of the works. The meters will be calibrated to take readings at 5 minute intervals. Where the difference in turbidity readings between the upstream and the downstream readings equals or exceeds 5 NTUs for a minimum period of 30 minutes an "intervention required" signal will be automatically sent to the EAO. The EAO will immediately investigate the site using a portable handheld turbidity meter. The EAO will establish whether or not the elevated turbidity readings are as a result of the works. Where this is the case, the EAO will have the necessary powers under the construction contract to instruct the contractor to take immediate corrective actions including stopping of sediment generating works if considered appropriate.

The EAO will also take handheld turbidity readings and check the integrity of the silt fencing and other mitigation measures regularly on a daily basis.