

ECOLOGICAL PLANNING CONDITIONS – ROAD ABANDONMENT SITE (WITHOUT PREJUDICE)

1. Road-Specific Ecological Baseline and Impact Assessment Condition

No works associated with the proposed replacement road, abandonment of the existing U1244 Road (referred by the applicant as 'Crockanboy Road'), associated earthworks, drainage, watercourse crossings, fencing, gates, barriers, lighting or ancillary infrastructure shall commence until a Road-Specific Ecological Baseline Survey and Ecological Impact Assessment has been completed and submitted to and approved in writing by DfI following consultation with NIEA, Loughs Agency and the public in both Northern Ireland and the Republic of Ireland.

The assessment shall relate specifically to the complete road development and shall not rely solely upon the fact that parts of the road corridor spatially overlap ecological surveys previously undertaken for the wider Infrastructure Site.

The assessment shall:

- identify the complete construction and operational footprint of the replacement road;
- include the carriageway, cuttings, embankments, drainage infrastructure, working areas, fencing, gates, barriers, bridge or other watercourse crossings and all temporary works;
- identify the appropriate ecological zone of influence for each receptor;
- collate and spatially reanalyse all existing ecological survey information relevant to the road corridor;
- clearly identify which parts of the road and associated zone of influence were and were not covered by earlier surveys;
- identify the age, methodology, spatial coverage and limitations of those earlier surveys;
- undertake additional targeted surveys where existing information is absent, incomplete, out of date or was not designed to assess the effects of the road;
- assess each relevant ecological receptor separately; and
- identify avoidance, mitigation, compensation and monitoring measures.

Reason

To ensure that the ecological effects of the replacement road and road abandonment are assessed as development components in their own right and are not inferred

merely from partial spatial overlap with surveys undertaken for other elements of the mine development.

2. Detailed Habitat Survey and Habitat-Loss Assessment Condition

Prior to commencement of road works, a detailed habitat survey shall be undertaken across the complete road construction footprint and an appropriate surrounding zone of influence.

The survey shall include:

- current Phase 1/UKHab or equivalent habitat mapping;
- NVC or other detailed vegetation survey where necessary to characterise peatland, wet heath, mire, marshy grassland, rush pasture or other habitats of conservation interest;
- hedgerows, earth banks, treelines, woodland and riparian vegetation;
- peatland and wetland condition;
- water-dependent habitats; and
- habitat connectivity.

The subsequent assessment shall quantify separately:

- permanent habitat loss;
- temporary construction loss;
- habitat affected by cut-and-fill earthworks;
- embankment footprint;
- drainage influence;
- edge effects;
- fragmentation;
- functional habitat loss; and
- habitat requiring restoration or compensation.

Existing Area A habitat surveys shall be reviewed and incorporated where relevant but shall not substitute for detailed road-specific assessment where the previous survey methodology or spatial coverage is insufficient.

Reason

To establish accurately the type, extent, condition and ecological function of habitat affected by the full road development rather than the nominal width of the carriageway alone.

3. Road-Specific Breeding and Wintering Bird Assessment Condition

No vegetation clearance, earthworks or road construction shall commence until an updated ornithological assessment specifically addressing the replacement-road corridor and its appropriate zone of influence has been completed and approved in writing by DfI in consultation with NIEA.

The assessment shall include:

- breeding-bird survey over the complete road corridor and appropriate surrounding habitat;
- sufficient seasonal survey effort to determine the presence and breeding status of sensitive receptors;
- early-season, dawn and dusk survey where relevant to species detectability;
- wintering-bird survey where suitable habitat is present;
- mapping of territories and areas of repeated use;
- assessment of functional breeding, foraging, roosting and commuting habitat;
- species-specific disturbance and displacement distances;
- assessment of construction and operational disturbance;
- assessment of vehicle collision risk;
- assessment of lighting effects; and
- assessment of fragmentation or severance of territories and habitat.

Existing bird records and previous Area A surveys shall be reanalysed specifically in relation to the road, together with relevant third-party records.

Reason

To determine the specific effects of road construction and operation on birds where previous surveys were not designed principally to assess the replacement-road corridor or its associated disturbance and fragmentation effects.

4. Species-Specific Disturbance and Functional Habitat-Loss Assessment Condition

Following completion of the receptor surveys, a species-specific assessment of disturbance, displacement and functional habitat loss arising from the road shall be submitted to and approved in writing by DfI in consultation with NIEA.

The assessment shall:

- identify sensitive ecological receptors;
- apply appropriate species-specific disturbance or displacement distances;
- calculate the amount of habitat falling within those zones;
- distinguish physical habitat destruction from habitat remaining physically present but rendered less suitable or functionally unavailable;
- identify severance of breeding, foraging, resting and commuting habitat;
- assess changes in landscape connectivity; and
- identify compensatory habitat required for any unavoidable functional loss.

Reason

To ensure that the ecological effect of the road is assessed by reference to habitat functionality and receptor sensitivity and not solely by the physical area occupied by the carriageway.

5. Badger Survey, Movement and Road-Mortality Assessment Condition

No road works shall commence until an updated badger survey has been undertaken across the complete replacement-road corridor and an appropriate surrounding zone of influence.

The survey and assessment shall identify:

- all active and inactive setts;
- sett classification;
- territory and foraging habitat;
- existing movement routes;
- locations where the road or fencing may sever movement;
- potential road-crossing points;
- construction disturbance;
- operational vehicle mortality risk; and
- cumulative effects with other roads and mine infrastructure.

A Badger Protection and Connectivity Plan shall thereafter be submitted to DfI in consultation with NIEA identifying necessary crossings, fencing modifications, exclusion measures, buffers, licensing requirements and mitigation.

Reason

To protect badgers and maintain functional connectivity where the wider EclA already recognises that road infrastructure can fragment habitat linking setts and disturb animals using adjoining habitat.

6. Bat Activity and Habitat-Connectivity Assessment Condition

Prior to removal or alteration of hedgerows, treelines, woodland, riparian vegetation or other linear habitat associated with the road, a road-specific bat survey and impact assessment shall be undertaken.

The assessment shall address:

- potential roost features;
- commuting routes;
- foraging habitat;
- use of hedgerows, treelines, earth banks and riparian corridors;
- severance or widening of gaps in linear habitat;
- road lighting;
- vehicle headlights;
- collision risk;
- loss of dark corridors; and
- cumulative fragmentation with the wider mine development.

Where functional flight lines or commuting features would be severed, an approved mitigation scheme shall provide equivalent replacement connectivity prior to removal of the affected feature.

Reason

To protect bat roosts, foraging habitat and functional movement corridors where the main EclA already recognises loss and fragmentation of bat flight lines and commuting routes as an impact pathway.

7. Pollanroe Burn Crossing – Ecological Assessment Condition

No bridge, culvert, drainage outfall or other works affecting the Pollanroe Burn or its riparian corridor shall commence until a detailed ecological assessment of the crossing has been submitted to and approved in writing by DfI following consultation with NIEA and Loughs Agency.

The assessment shall address:

- riparian habitat loss;
- channel and bank disturbance;
- shading and lighting;
- mammal passage;
- otter movement;
- construction disturbance;
- sediment mobilisation;
- changes in flow;
- road drainage;
- downstream ecological effects; and
- connectivity with the Owenreagh River.

The crossing shall be designed so far as practicable to retain an unobstructed natural mammal and ecological corridor along both banks.

Reason

To protect the Pollanroe Burn and its functional connection with the Owenreagh system and to ensure that the specific ecological effects of the proposed road crossing are assessed and mitigated.

8. Updated Otter Survey and Passage Assessment Condition

Prior to works affecting the Pollanroe Burn or any associated riparian habitat, an updated otter survey shall be undertaken over the complete zone of influence of the road and watercourse crossing.

The survey shall include, insofar as lawful access permits:

- the Pollanroe Burn upstream and downstream of the proposed crossing;
- the connection between the Pollanroe Burn and Owenreagh River;
- riparian habitat capable of supporting holts, couches or lying-up sites;
- regular marking locations;

- commuting routes; and
- potential crossing points.

Where access cannot be obtained, the assessment shall expressly identify that limitation and adopt an appropriate precautionary approach.

The road-crossing design shall maintain safe passage for otter and avoid the creation of a barrier or increased road mortality risk.

Reason

To reflect the changed otter baseline and ensure that the road assessment takes account of current rather than solely historical use of the Pollanroe corridor. The 2024 report expressly records regular otter sprainting at Pollanroe Bridge and accepts that baseline conditions have changed since 2015/16.

9. Road Drainage and Ecological Protection Scheme Condition

No construction of the replacement road shall commence until a detailed Road Drainage and Ecological Protection Scheme has been submitted to and approved in writing by DfI in consultation with NIEA.

The Scheme shall identify:

- the complete drainage catchment of the road;
- drainage pathways and discharge points;
- predicted flow volumes;
- treatment of sediment and contaminants;
- accidental-spillage controls;
- attenuation;
- construction-stage drainage;
- erosion controls;
- effects upon peat and wetland hydrology;
- Pollanroe Burn outfalls;
- downstream ecological receptors; and
- monitoring arrangements.

The ecological assessment shall consider the road drainage cumulatively with other discharges and runoff arising from the mine development.

Reason

To prevent deterioration of aquatic, riparian and wetland habitats and to ensure that road drainage is assessed cumulatively with other mine-related hydrological pressures.

10. Peatland, Hydrology and Wet-Habitat Protection

Condition

Prior to commencement of road earthworks through or adjacent to peatland or wet habitat, a detailed Peat and Wet-Habitat Protection Plan shall be approved in writing by DfI following consultation with NIEA, Loughs Agency and the public in both Northern Ireland and the Republic of Ireland.

It shall specify:

- peat depth and condition;
- extent of excavation;
- drainage effects;
- groundwater and surface-water interactions;
- temporary storage;
- peat reinstatement;
- ground-pressure controls;
- erosion and sediment control;
- protection of adjoining peat and wetland habitat;
- hydrological monitoring; and
- remedial measures where drying, erosion or habitat deterioration occurs.

Reason

To protect peatland and water-dependent habitats from direct and indirect effects arising from substantial cut-and-fill and embankment construction.

11. Fencing and Terrestrial Wildlife Connectivity Condition

Prior to installation of road fencing, security fencing, barriers or gates, a Terrestrial Wildlife Connectivity Plan shall be submitted to and approved in writing by DfI and NIEA.

The Plan shall demonstrate how the design will:

- maintain badger and other mammal movement;

- avoid trapping or funnelling animals onto the carriageway;
- retain connectivity between habitat blocks;
- provide appropriately located mammal passes or other crossing structures where required;
- integrate culverts and bridges with wildlife movement; and
- avoid unnecessary impermeable barriers.

Reason

To prevent the replacement road and associated security infrastructure from creating avoidable fragmentation or barriers to terrestrial wildlife movement.

12. Road Lighting and Dark-Corridor Strategy Condition

No permanent or temporary road lighting shall be installed until a road-specific Ecological Lighting Strategy has been submitted to and approved in writing by DfI and NIEA.

The Strategy shall:

- identify bat commuting routes and other light-sensitive receptors;
- retain dark corridors along riparian, woodland and hedgerow features;
- define maximum lux levels at ecological receptors;
- use directional and shielded lighting;
- minimise unnecessary operating periods; and
- require post-installation verification.

Reason

To prevent artificial lighting associated with the road from causing avoidable disturbance, habitat avoidance or fragmentation of nocturnal wildlife corridors.

13. Operational Wildlife Mortality and Disturbance Monitoring Condition

Prior to opening of the replacement road to operational traffic, a Wildlife Mortality and Disturbance Monitoring Plan shall be submitted to and approved in writing by DfI and NIEA.

The Plan shall include:

- inspection for mammal and bird casualties;

- identification of recurrent mortality locations;
- monitoring of sensitive breeding or resting sites adjacent to the road;
- recording of wildlife movement through bridges, culverts and designated crossing structures;
- defined ecological trigger thresholds; and
- mandatory remedial action where unexpected mortality or displacement occurs.

Reason

To verify predicted operational effects and ensure that unforeseen road mortality, barrier or disturbance effects are identified and effectively mitigated.

14. Cumulative Road and Mine Ecology Assessment Condition

Prior to commencement of the replacement road, an updated cumulative ecological assessment shall be submitted to and approved in writing by DfI and NIEA.

The assessment shall consider the replacement road together with:

- the DSF;
- mine access road;
- haul roads;
- internal roads;
- lighting;
- fencing;
- peat excavation;
- drainage;
- blasting;
- traffic;
- watercourse works; and
- associated habitat loss and restoration.

The assessment shall address cumulative:

- habitat loss;
- functional habitat loss;

- fragmentation;
- disturbance;
- species displacement;
- road mortality;
- lighting effects;
- hydrological change; and
- impacts upon ecological connectivity.

Reason

To ensure that the ecological effects of the replacement road are not assessed in isolation from the other development components with which it will operate.

15. Road Ecological Mitigation and Management Plan Condition

Following completion of the approved road-specific surveys and assessments and prior to commencement of any road works, a Road Ecological Mitigation and Management Plan shall be submitted to and approved in writing by DfI and NIEA.

The Plan shall incorporate all avoidance, mitigation, compensation, monitoring and remedial measures arising from the road-specific ecological assessment and shall specify:

- responsibilities;
- timing;
- species-specific protection measures;
- working restrictions;
- habitat restoration;
- compensation;
- ecological monitoring;
- trigger thresholds; and
- mandatory remedial action.

Reason

To ensure that mitigation for the road is derived from a specific assessment of its actual ecological effects rather than being assumed from general mitigation prepared for the wider Infrastructure Site.

16. Ecological Clerk of Works – Road Construction Condition

A suitably qualified Ecological Clerk of Works shall be appointed before commencement of replacement-road works and retained throughout all ecologically sensitive road construction, watercourse crossing, vegetation clearance, reinstatement and abandonment works.

The ECoW shall have authority to suspend works where:

- previously unidentified protected species or breeding sites are encountered;
- an active nest is identified;
- a badger sett, otter resting site or bat roost is encountered;
- unrecorded priority habitat is identified;
- approved ecological working methods are not being followed;
- unexpected damage to peatland, watercourses or sensitive habitat occurs; or
- weather or ground conditions create an unacceptable ecological risk.

Reason

To ensure effective implementation of road-specific ecological safeguards and provide immediate protection where unexpected ecological constraints arise during works.