



Your Ref: ABP-314232-22

Our Ref: **SID-DCC-2022-009 Railway Order Dart + West**

*(Please quote in all related correspondence)*

28 October 2022

The Secretary  
An Bord Pleanála  
64 Marlborough Street  
Dublin 1  
D01 V902

Via email to [sids@pleanala.ie](mailto:sids@pleanala.ie)

Re: Notification under the Planning and Development Act, 2000, as amended.

**Proposed Strategic Infrastructure Development (SID): Planning Application Ref NA29S.314232 by Coras Iompair Éireann (CIE) for Railway Order for the Dart + West project - operation, maintenance and improvement of the railway along an approximate 40km section of the existing railway line between Dublin City Centre and the M3 Parkway Station (County Meath) and a new maintenance depot to the west of Maynooth (County Kildare).**

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I refer to correspondence received in connection with the above.

Outlined below are heritage-related observations/recommendations of the Department under the stated headings.

### **Archaeology**

It is noted that the Environmental Impact Assessment Report (EIAR) submitted as part of the planning application includes a desk-based Archaeological Impact Assessment which was carried out in relation to the proposed development by IAC Ltd (EIAR Chapter 20; date July 2022). The Department has reviewed the EIAR and is broadly in agreement with the findings in relation to Archaeology and Cultural Heritage as set out therein, though would recommend the incorporation of a more wide-ranging programme of pre-construction prospection as part of the mitigation strategy.

However, two issues of particular concern remain unresolved in relation to the likely impact of this development on Recorded Monument DU013-018---- (Barrow – ring-barrow):

#### **1) Direct impact of construction groundworks**

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Chapter 20 of the EIAR sets out that no direct impacts should occur to Recorded Monument DU013-018---- (Barrow – ring-barrow) as the monument can be buffered and protected by means of an exclusion zone. However, the distance from the known edge of the upstanding monument (which is well-defined from field survey, aerial photography and previous test excavation) to the nearest construction groundworks is not specified in the EIAR and the actual footprint of the monument, relative to the proposed development, is not demarcated on any of the supplied drawings. Therefore, it cannot be confirmed that there is sufficient setback distance from the monument to allow for it to be adequately buffered and protected during construction. Key elements related to new SET buildings at Clonsilla as shown on Drawing MAY-MDC-SET-RS11-DR-Z-0003 are in very close proximity to the northwestern extent of the monument.

**2) Direct impact of siting of construction compound (Compound Code: CC-PW-S5-59970-B)**

Works Layout Plan No WP16 shows a proposed construction compound (Compound Code: CC-PW-S5-59970-B) to be located south of the rail line at Clonsilla and east of the Clonsilla Road. Recorded Monument DU013-018---- (Barrow – ring-barrow) is located centrally within the zone for this compound and occupies a substantial footprint within that zone. It is not clear if Chapter 20 of the EIAR has fully accounted for this in assessing the likely impacts to Recorded Monument DU013-018---- (Barrow – ring-barrow). The proposal to site a construction compound at this location appears to materially conflict with the measures necessary to preserve and protect the Recorded Monument during all stages of construction works (i.e. the implementation of an adequate Exclusion Zone to buffer the site from any and all direct impacts). If protection of the monument cannot be guaranteed, then the compound must be relocated.

In the event that Further Information is being requested by the Board, it may be beneficial to consider including clarification of the aforementioned points as part of the request.

Notwithstanding this, the Department advises that the following should be included as a condition of any grant of permission.

**Archaeological Requirements:**

1. All mitigation measures in relation to archaeology and cultural heritage as set out in Chapter 20 of the EIAR (IAC Ltd; date July 2022) shall be implemented in full, except as may otherwise be required in order to comply with the conditions of this Order.
2. The Construction Environment Management Plan (CEMP) shall clearly identify and highlight the location of all archaeological and cultural heritage constraints located in proximity to the proposed works—as identified in Chapter 20 of the EIAR or by any subsequent archaeological investigations associated with the project. The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or





cultural heritage environment during all phases of site preparation and construction works.

3. A Project Archaeologist shall be appointed to oversee and advise on all aspects of the scheme from design, through inception to completion.
4. In advance of the commencement of any construction works, a suitably qualified archaeologist shall be engaged to carry out an Archaeological Geophysical Survey at AAP05, AAP07, AAP09, AAP14, AAP15, AAP18, AAP19, AAP20, AAP21, AAP25, APP26 and AAP29 (as defined in Chapter 20 of the EIAR). This shall be in addition to any mitigation measures outlined in Chapter 20 of the EIAR.
  - a. The Archaeological Geophysical Survey must be carried out under licence from the National Monuments Service section of this Department and in accordance with an approved method statement; note a period of 2-3 weeks should be allowed to facilitate processing and approval of the licence application and method statement
  - b. Having completed the work, the archaeologist shall submit a written report to this Department and the Planning Authority describing the results of the geophysical survey. Where archaeological material is shown to be present, further mitigation measures will be required; these may include test excavation, redesign to allow for preservation in situ, excavation and/or monitoring as deemed appropriate. This Department will advise the Planning Authority with regard to these matters. No construction works shall commence until after the report on Archaeological Geophysical Survey has been submitted and reviewed.
5. In advance of the commencement of any construction works, a Management Plan for RMP DU013-018---- (Barrow – ring-barrow) shall be prepared and implemented following consultation with and approval by this Department and the planning authority.
  - a. The plan shall provide for the management of RMP DU013-018---- (Barrow – ring-barrow) to ensure that preservation in situ of the site can be achieved and maintained.
  - b. The plan shall be agreed in advance of the commencement of construction works to ensure that the management and co-ordination of all phases of construction works are consistent with the policies and procedures for the long term protection and preservation of RMP DU013-018---- (Barrow – ring-barrow).
  - c. The plan shall be informed by the Archaeological Geophysical Survey of AAP14.
  - d. The plan shall define appropriate Exclusion Zones to ensure that RMP DU013-018---- (Barrow – ring-barrow) shall remain secure and preserved *in-situ*. Exclusion Zones shall be fenced off for the duration of construction





works in the vicinity of the monument. No groundworks of any kind (including but not limited to advance geotechnical site investigations) and no machinery, storage of materials or any other activity related to construction will be permitted within Exclusion Zones.

6. The planning authority and this Department shall be furnished with a final archaeological report describing the results of all archaeological monitoring and any archaeological investigative work/excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the developer.

**Reason:** To ensure the continued preservation (either *in situ* or by record) of places, caves, sites, features or other objects of archaeological interest.

### **Nature Conservation**

The proposed project which is the subject of the present application involves electrification of the railway mainline west from Dublin City Centre to Maws near Kilcock, Co. Kildare, where a depot is to be established to service train rolling stock for the entire DART system. The branch railway line which splits off the mainline near Clonsilla to run northwest to the M3 Parkway near Dunboyne is also to be electrified. In the city centre the lines from Connolly Station and a new station to be built at Spencer Dock off the North Wall are in addition to be electrified to where they merge at Glasnevin Junction to form the mainline west. The line between Spencer Dock and Glasnevin runs along the northern bank of the Royal Canal, in part in a cutting. From Broombridge near Glasnevin westwards the mainline runs either immediately on the southern bank of the canal or very close to it for the entire length of the proposed project to the depot site near Kilcock. The Royal Canal has been listed as a proposed Natural Heritage Area (pNHA) because of the high biodiversity value of the flora, fauna and habitats present in both the canal channel and along its banks, which form a green corridor extending through the north side of the city to the River Liffey. To accommodate the overhead power lines for the DART railcar sets modifications will have to be made to a number of bridges on the above rail lines, and to facilitate increased train movements six level crossings are to be closed on the mainline from Glasnevin to Maynooth. A road underpass at Ashtown, a road bridge at Barberstown, and foot /cycle bridges at Coolmine, Porterstown and Clonsilla are to be installed to replace the level crossings. Because of the layout of the rail lines in relation to the Royal Canal the bridges at Barberstown, Clonsilla and Porterstown will have to span the canal as well as the railway, and construction of all of these structures will involve some loss of semi-natural habitats in the vicinity of the canal and in some cases encroachment on the pNHA.

At Louisa Bridge, west of Leixlip, the railway and the Royal Canal traverse the Rye Water Valley /Carton Special Area of Conservation (SAC) adjacent to the Louisa Bridge warm springs. These springs correspond with the priority habitat 'Petrifying springs with tufa





formation (*Cratoneurion*) and are a Qualifying Interest (QI) this SAC. On a seepage area and marsh associated with them downslope on the floodplain of the Rye the snails *Vertigo angustior* and *V. moulinsiana*, which are also QIs for the Rye Valley Water /Carton SAC, are present, and together these areas constitute the most important section of this European site. The NIS submitted in support of the present application, because of the existence of hydrological pathways between the sites of development proposed in it, via the canal and in particular by the Lyreen, a Rye tributary, from the site of the DART depot, identifies the possibility that the three QIs referred to could be adversely affected during the construction phase of the proposed development.

A number of *ex-situ* feeding areas for the light-bellied brent goose, a QI /Special Conservation (SCI) bird species for the North Bull Island Special Protection Area (SPA) and the South Dublin Bay and River Tolka Estuary SPA occur close to route of the railway mainline in the Glasnevin and Cabragh areas. Due to the possibility during the construction phase of the proposed development of disturbance to the brent goose flocks foraging in these areas and of geese colliding with the power lines over the adjacent stretches of railway line during the development's operational phase, the NIS considers if the proposed development could therefore adversely affect a QI /SCI for both these SPAs.

A comprehensive suite of measures is set out in the NIS to prevent the mobilisation of polluting materials into surface water runoff from the depot site and other works upstream of the Rye Valley Water /Carton SAC during the development's construction phase, and if diligently implemented, these should prevent any adverse effects on the SAC QIs, petrifying springs, *Vertigo angustior* and *V. moulinsiana*. Restrictions on work to the overhead power lines to daytime along stretches of the railway adjacent to the amenity grasslands utilised by the brent geese to during the periods of the year when they are present, scheduling of the construction of the sub-power station to be built on the edge of the grounds of St. Vincent's School in Glasnevin, one of the grasslands areas where the brent geese forage, to the May to September period when the geese are not present, and the installation of bird deflectors on the power lines beside the brent feeding sites when the proposed development becomes operational, are, in addition, proposed in the NIS. With the complete employment of these mitigation measures, adverse effects on the light-bellied brent goose, and consequently on the North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA, for which they are a QI /SCI species, should be avoided.

The NIS concludes that, with the implementation of the mitigation measures it prescribes, the proposed development, either individually or in combination with other plans and projects, will not adversely affect the integrity of Rye Water Valley /Carton SAC, the South Dublin Bay and River Tolka Estuary SPA and the North Bull Island SPA, or any other European site. The Department accepts this conclusion.

The Department has concerns regarding the potential impact of the proposed development on flora and fauna associated with the Royal Canal pNHA along the entire length of the scheme. The impacts of greatest magnitude and significance are likely during the construction phase of the proposed project, but other impacts are likely to occur during the





operation of DART+ West, such as higher mortality of mammals and birds due to collisions with trains, and in the case of the latter also with overhead power lines. Any increased artificial lighting will have a negative long term effect on bat species, particularly the more light-sensitive species, such as Daubenton's bat, which is largely restricted to foraging over water bodies like the canal. To evaluate the effects of negative operational impacts of the proposed development on fauna and, if possible, minimise them, continued monitoring is continued necessary.

The negative impacts of the proposed development on flora and fauna is likely to be accentuated also by the in-combination effects of the proposed construction of greenways or cycle ways along stretches of the Royal Canal in the Dublin City Council and Fingal administrative areas in the same period as the roll-out of DART+ West.

During the construction phase of DART+ West considerable clearance of treelines, hedgerows and other woody vegetation is planned on the depot site as well as within the pNHA, and direct mortality of fauna could result in this process if suitable mitigation measures are not employed to avoid casualties. The loss of this vegetation, particularly its removal from within the Royal Canal pNHA, is likely in addition to have significant, permanent negative effects on flora and fauna. Altogether, 800 m of hedgerows and 1 km of mature treelines are to be removed. 355m of the treeline to be lost is either within the Royal Canal pNHA boundary or in the immediate vicinity of the pNHA in the Ashtown and Coolmine to Clonsilla areas. Unfortunately no breeding bird surveys were carried out as part of the ecological survey work for the EIAR on the presently proposed development. Nor is it clear that any bat emergence surveys were carried out focussed on the trees to be removed in or adjacent to the pNHA in the above mentioned areas. To try and avoid bird and bat mortality during vegetation clearance, such clearance should be restricted to the period September to February outside the main bird breeding season, and focussed bat emergence surveys of the treelines to be felled and surveys of trees in these treelines for features suitable as bat roosting sites by licensed bat workers should be carried out ahead of felling. Where trees with features having a high suitability as bat roosts are identified then it may be necessary to apply for their disturbance under a derogation licence from the National Parks and Wildlife Service (NPWS) of this Department.

It is stated in the EIAR that no otter holt was identified within the proposed boundary for the proposed development, but over the majority of the Royal Canal adjacent to the proposed development no otter survey work was carried out using a boat, even though employing a boat for such work would appear essential, given that most otter holts would be likely to be situated on the inaccessible to people (i.e. the southern (railway) bank of the canal).

It is notable that almost all of the identified holts (and couches) listed in the EIAR appear to have been located by survey work carried out by boat by the otter specialist surveyor (Triturus) between the Liffey and Blanchardstown in connection with the Dublin City Council proposal for a greenway between Cross Guns Bridge, Phibsborough, and Ashtown. This Department therefore welcomes the intention stated in the EIAR of carrying out a boat borne otter survey for the rest of the Royal Canal out to the depot site before the commencement





works of this project. This survey work should be carried out as soon as possible by otter specialists (preferably over the winter of 2022-2023 when vegetation levels are low) and should include the collection of otter spraint for DNA analysis to allow the estimation of the otter population along the Royal Canal adjacent to the proposed development likely to be affected by the latter. This survey work should then be repeated a short period ahead of the commencement of works on the proposed development and the necessary licences obtained from NPWS for works to be carried out in the vicinity of holts and couches then in use by otters.

It is noted that in order to construct the proposed underpass of the Royal Canal at Ashtown a 50 m stretch of the canal is to be dewatered for up to a year, and that a 100m stretch of the canal is to be dewatered for six weeks to allow foundations to be put in place for the Ashtown pedestrian /cycle bridge. It will be necessary to maintain a route for otters past these dewatered canal sections at least during the hours of darkness and preferably at all times when work is not taking place at the underpass or bridge sites (when otters are unlikely anyway to pass by).

Of the six badger setts identified in the survey work for the EIAR, five badger setts were located within the footprint of the proposed development or within 10m of the boundary of proposed development works. Undoubtedly other setts occur in the immediate vicinity of the proposed development not identified in the survey work carried out. Two additional setts within 50 m of the Royal Canal in the vicinity of the proposed Porterstown pedestrian and cycle bridge for instance have been reported to the NPWS of this Department by ecological surveyors employed in connection with other proposed developments. While the NPWS previously issued licences allowing the destruction of setts, due to legal advice it is no longer in a position to issue such licences. Any interference with active badger setts which may be required to facilitate a proposed development consequently must be regulated by the inclusion of conditions with regards to the treatment of the setts and the badgers inhabiting them in any planning permission which may be granted for the development concerned.

It is noted from the EIAR that frogs and smooth newts were identified as breeding in three sites likely to be affected by the propose development and that it is proposed to move these amphibians from at least one of the these locations, the pond within the footprint of the compound on the Navan Road Parkway, to facilitate the proposed project. Such removals again may only be carried out under licence from the NPWS of this Department.

As outlined in the EIAR, the presence of new and modified structures spanning the Royal Canal including bridges, the diverted HV cable at Jackson's Bridge as well as heightened and lowered overhead cables and the overhead line equipment (OHLE), poses a risk of collision to certain groups of birds, particularly geese, swans and cormorants. This is due to the speed at which these birds fly, their poor eyesight and poor maneuverability.

The Department notes that to mitigate for the risk of collision with OHLE, deflectors will be installed on wires parallel to the OHLE at a number of strategic locations, including the bridges over the Royal Canal in Cabra (Ch. 50+850) and the Rye Water (76+100) as well as





in the areas where brent geese occur referred to above. Bird deflectors will also be installed at the 15 locations where overhead lines which cross the canal are being heightened or lowered, and at the high voltage cable diversion at Jackson's Bridge.

Line marking has become the preferred mitigation option in such situations worldwide. The type of deflectors to be used is not given and, therefore, the Department advises that deflectors used must be effective in heavy fog and in low-light conditions. While the effectiveness of such mitigation measures must be demonstrated before the project is approved, monitoring mitigation measures is crucial to detect any unexpected impacts requiring additional measures. The Department recommends that monitoring of the effectiveness of bird deflectors is carried out and that a suitable monitoring regime is agreed with the Local Authorities and that this is included as a condition of planning.

It is stated that increase in rail traffic as a result of the proposed development will increase the likelihood of collisions with wildlife. As outlined in the EIAR, the railway line ecological corridor is a Key Ecological Receptor (KER2) The Department notes that CIÉ provided data on animal collisions and railway incursions between March 2017 and May 2021. During this period 54 incidents were recorded, usually involving 'other small animal' (21), dogs (14) and swans (10).

The Department recommends that, given the railway lines status as a KER, as well as the presence of the adjacent Royal Canal proposed Natural Heritage Area and protected species such as otter and badger, CIÉ implements a formal wildlife collision monitoring protocol which will record collisions with protected species mentioned above as well as swans and geese. This should be implemented prior to commencement of the project and during the operational stage. Should accident 'hot spots' be recorded, additional measures may need to be put in place to curb mortality of protected species.

The All-Ireland Pollinator Plan advises against planting wildflower seed outside a garden setting. The Department agrees that wildflower seed mixes can be harmful to existing wildflower biodiversity and must not be carried out in the case of this development. There is confusion in relation to the planting of wildflower seed in the EIAR. Section 8.9.2.2 (Landscaping and Fencing) states that the landscaping plan includes the widespread planting of native Irish species of trees and shrubs and wildflower planting. However, further down this section it is stated that 'Reseeding with commercially available grass seed or wildflower mixes will be avoided.' This confusion requires resolution.

#### **Nature Conservation Recommendations**

In light of the above the Department recommends that any permission granted in response to the present SID application should be subject to the following conditions:

1. That before any works on the proposed commence a finalised CEMP incorporating all the measures set out in the NIS submitted in support of the present application to avoid the mobilisation of pollutants into surface water runoff during the construction phase of the





proposed development shall be submitted to the planning authority for its written agreement and shall be implemented in full.

**Reason:** To avoid surface water pollution which might result in adverse effects to QI habitats and species for the downstream Rye Water Valley /Carton SAC protected under the Habitats Directive (92/43/EEC).

2. That the mitigation measures set out in the NIS to avoid injury or disturbance to light-bellied brent geese during the construction and operational phases of the proposed development shall be implemented in full.

**Reason:** To conserve members of a species, namely the light-bellied brent goose, which is a Special Conservation Interest (SCI) bird species for the North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA which are protected under the Birds Directive (2009/147/EC).

3. That any clearance of woody vegetation to facilitate the construction of the proposed development shall only be undertaken in the period from September to February inclusive, i.e. outside the main bird breeding season.

**Reason:** To avoid the destruction of bird nests, eggs and nestlings.

4. That a survey all trees to be removed to facilitate the proposed development for features which could be used for roosting by bat species shall be submitted to the NPWS at least three months in advance of the felling of these trees; this survey to be carried out by licensed bat workers and involve the use of endoscopes to examine roost features where considered necessary.

**Reason:** To inform and facilitate the licensing by the NPWS of the interference with or destruction of the breeding or resting places of species, namely bat species, afforded a system of strict protection under the Habitats Directive (92/43/EEC) which may be required to allow the proposed development to proceed.

5. That a finalised lighting design scheme for the proposed development signed off on by a bat specialist and incorporating measures to minimise light spill pollution shall be submitted to the planning authority for its written agreement before the commencement of development on site, this lighting design to be implemented in full.

**Reason:** To conserve bat species which are afforded a system of strict protection under the Habitats Directive (92/43/EEC).

6. That a boat-based otter survey shall be carried out over the winter of 2022-2023 of the Royal Canal from Blanchardstown to Kilcock, this survey work also to include the collection of otter spraint on the Royal Canal from the Liffey to Kilcock and DNA analysis of this spraint; the results of this survey work to be submitted to the NPWS as soon as available; these surveys to be repeated three months ahead of the commencement works on the proposed development and the results submitted to NPWS.





**Reason:** To inform and facilitate the licensing by the NPWS of works necessary for the proposed development in the vicinity of the breeding and resting places of a species, namely otter, afforded a system of strict protection under the Habitats Directive (92/43/EEC).

7. That an Ashtown Dewatering Otter Bypass Plan shall be submitted to the planning authority for its written agreement before any dewatering of the Royal Canal is undertaken at Ashtown, this plan to provide for the passage of otters past the dewatered sections of canal during nocturnal hours and as far as possible at other times.

**Reason:** To maintain free movement along the Royal Canal of a species, namely otter, afforded a regime of special protection under the Habitats Directive (92/43/EEC).

8. That Badger Site Conservation Management Plans for shall be submitted for the written agreement of the relevant planning authorities before the commencement of the proposed development for any sites where development works will require the removal or temporary closure of a badger sett, these plans to provide for the exclusion of badgers from the setts concerned and a time table for the same.

**Reason:** To conserve a mammal species, namely badger, protected under the Wildlife Acts, 1976 to 2020.

9. That wildflower seed (including wild grass species) shall not be introduced from outside the immediate vicinity of the development without the prior written permission of the planning authority.

**Reason:** To conserve biodiversity and the genetic integrity of the local naturally occurring flora.

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

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Michael Murphy,  
Development Applications Unit