

National Transport Authority

Ringsend to City Centre Core Bus Corridor Scheme

Appropriate Assessment Screening Determination

The National Transport Authority (the “NTA”) is proposing to carry out the Ringsend to City Centre Core Bus Corridor Scheme (hereafter referred to as the “**Proposed Scheme**”).

The Proposed Scheme is comprised of one main alignments in terms of the route it follows, from the City Centre to Ringsend. The Proposed Scheme is approximately 4.2km in length and commences at Talbot Memorial Bridge and proceeds eastwards towards the Tom Clarke East Link Bridge along the north and south quays. From here, it continues on through Ringsend Park and along Pigeon House Road to terminate at Sean Moore Road. The Proposed Scheme will provide full bus priority on the north quays and intermittent bus priority on the south quays along with segregated cycling facilities and improvement pedestrian facilities. The section of the Proposed Scheme from Tom Clarke East Link Bridge to Sean Moore Road comprises of a cycle route only. The Proposed Scheme is located entirely within the Dublin City Council (DCC) administrative areas.

The NTA appointed Scott Cawley Ltd. to prepare an Appropriate Assessment Screening Report for the Proposed Scheme to consider, analyse and assess whether in view of best scientific knowledge and objective information and the conservation objectives of the European site(s) (which are discussed further below), if the Proposed Scheme individually or in combination with other plans or projects is likely to have a significant effect on a European Site(s).

The NTA has received and read the Appropriate Assessment Screening Report and has considered its content and its conclusions and recommendation set out therein. Having done this, the NTA agrees with the conclusions and recommendation set out in the Appropriate Assessment Screening Report.

AA Screening Determination

The NTA has determined that an Appropriate Assessment of the Proposed Scheme is required as it cannot exclude, in view of best scientific knowledge and on the basis of objective scientific information, following the screening that the NTA has carried out, that the Proposed Scheme, either individually or in combination with other plans or projects, in the absence of mitigation, will have a significant effect on the following 19 European Site(s) (6 Special Areas of Conservation (SACs) and 13 Special Protection Areas (SPAs) in view of the conservation objectives of those site(s):-

1. North Dublin Bay SAC;
2. South Dublin Bay SAC;
3. Howth Head SAC;
4. Howth Head Coast SPA;
5. Rockabill to Dalkey Island SAC;

6. Lambay Island SAC;
7. Wicklow Mountains SAC;
8. Skerries Islands SPA;
9. Lambay Island SPA;
10. Ireland's Eye SPA;
11. North Bull Island SPA;
12. South Dublin Bay and River Tolka Estuary SPA;
13. Dalkey Island SPA;
14. Rockabill SPA;
15. Malahide Estuary SPA;
16. Baldoyle Bay SPA;
17. Rogerstown Estuary SPA;
18. The Murrrough SPA; and
19. Wicklow Mountains SPA.

The NTA has made this determination on the basis of having considered the baseline ecological environment; the extent and characteristics of the Proposed Scheme and having identified the following potential impacts:

- Habitat loss and fragmentation;
- Habitat degradation as a result of hydrological impacts;
- Habitat degradation as a result of hydrogeological impacts;
- Habitat degradation as a result of introducing/spreading non-native invasive species;
- Habitat degradation as a result of air quality impacts;
- Disturbance and displacement impacts; and
- Direct injury / mortality impacts;.

Further detail is provided below on each of the potential impacts identified.

Habitat loss and fragmentation

The Proposed Scheme does not overlap with any European site, although it is located in close proximity to Dublin Bay which is variously designated for a number of overlapping European sites. The nearest European sites to the Proposed Scheme are South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC, which are approximately 0.5km south-east of the Proposed Scheme (as the crow flies). These European sites are hydrologically connected to the Proposed Scheme via the Liffey Estuary Lower. South Dublin Bay and River Tolka Estuary SPA is approximately 2.4km downstream of the Tom Clarke East Link Bridge and South Dublin Bay SAC is located approximately 3.2km downstream to the east. Therefore, there is no potential for direct habitat loss or fragmentation.

There is potential for direct ex-situ estuarine habitat loss and fragmentation to occur, as a result of land reclamation adjacent to the Tom Clarke East Link Bridge. Habitat loss may also occur indirectly as a consequence of severe habitat degradation arising from a reduction in water quality and/or a change to the hydrological regime (see section below for further details on hydrological changes). Special Conservation Interests (SCI) species for which SPAs in the vicinity of the Proposed Scheme have been designated are known to utilise *ex situ* feeding sites in the Dublin area (i.e. South Dublin Bay and River Tolka SPA, North Bull Island SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA,

Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA and The Murrough SPA). Three potential inland feeding sites within the footprint of the Proposed Scheme were surveyed to inform this assessment this included a Small amenity grassland area next to St. Patricks Rowing Club and Tom Clarke East Link Bridge, the Gaelic pitch and amenity grassland area within Ringsend Park and a verge within Irishtown Stadium and amenity grassland area with scattered trees between the stadium and Bremen Avenue. Wintering SCI bird species were recorded at all three sites.

SCI species for which SPAs in the vicinity of the Proposed Scheme have been designated have been recorded loafing and foraging in the vicinity of the proposed Dodder Public Transport Bridge (DPTOB), during vantage point surveys. These species include herring gull, black-headed gull, lesser black-backed gull, cormorant, light-bellied brent goose, curlew, redshank and common tern (i.e. North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, Rockabill SPA, Dalkey Islands SPA and The Murrough SPA). The reclamation of land to facilitate the Proposed Scheme will result in the removal of 0.99ha estuarine habitat suitable to support these species.

In summary therefore, there is potential for impacts on SCI species associated with SPAs to occur as a result of habitat loss / fragmentation. The Proposed Scheme also has the potential to result in habitat degradation of the qualifying / special conservation interest species of European sites as the result of hydrological impacts. Therefore, there is potential for in combination effects to occur.

Habitat degradation / effects on Qualifying Interest (QI) / SCI species as a result of hydrological impacts

The Proposed Scheme is hydrologically connected to Dublin Bay via the Liffey Estuary Lower, and Ringsend Wastewater Treatment Plant . There is additional hydrological connectivity to the Royal Canal and Dodder.

The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of containments into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge point and therefore impact the downstream environment of Dublin Bay, including the following European sites: North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA and Dalkey Islands SPA. This reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within these European sites, which in turn would negatively affect the SCI bird species that rely upon these habitats as foraging and/or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that the conservation objectives of North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA and Dalkey Islands SPA are undermined.

In a potential worst case scenario, in the absence of mitigation measures, the release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, also has the potential to affect SCI bird species and QI mammal species that commute, forage and in respect of SCI birds loaf in Dublin Port i.e. birds associated with Skerries Islands SPA, Rockabill SPA and Lambay Island SPA, Ireland's Eye SPA, North Dublin Bay SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA, Rogerstown SPA, Dalkey Islands SPA, Murrough SPA, marine mammals associated with Rockabill to Dalkey Island SAC and Lambay Island SAC and the otter population associated with the Wicklow Mountains SAC. This reduction in water quality

(either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within downstream European sites, which in turn would negatively affect the SCI bird species that rely upon these habitats as foraging and / or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI and QI populations. These potential impacts could occur to such a degree that the conservation objectives of the Skerries Islands SPA, Rockabill SPA and Lambay Island SPA, Ireland's Eye SPA, North Dublin Bay SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA, Rogerstown SPA, Dalkey Islands SPA, Murrrough SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC and Wicklow Mountains SAC are undermined.

As the Proposed Scheme has the potential to result in habitat degradation and effects on the qualifying/special conservation interest species of European sites as the result of hydrological impacts, there is the potential for in combination effects to occur.

Habitat degradation as a result of hydrogeological impacts

The potential for hydrogeological impacts are highly variable depending on the nature of the proposed works at specific locations and the receiving environment ground conditions. The unmitigated hydrogeological Zone of Influence (ZOI) of the Proposed Scheme is not considered to extend to any groundwater dependent terrestrial ecosystems linked to European sites.

Habitat degradation as a result of introducing/spreading non-native invasive species

No non-native invasive plant species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 were recorded within, or in close proximity to, the Proposed Scheme. However, the desk study returned records of species listed on the Third Schedule of the (Birds and Natural Habitats) Regulations in the vicinity of the Proposed Scheme. In the absence of mitigation, there is potential for this to spread or be introduced, during construction and/or routine maintenance/management works, to terrestrial habitat areas in European sites downstream in Dublin Bay (*i.e.* North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). These in turn may result in the degradation of the existing habitats and therefore undermine the conservation objectives of these European sites.

It is not considered likely that invasive species could spread to European sites which are located a significant distance from the outfall locations of the Liffey Estuary lower (*i.e.*, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC and Dalkey Islands SPA, The Murrrough SPA).

Therefore, the Proposed Scheme has the potential to result in habitat degradation of the qualifying/special conservation interest species of European sites as the result of the spread of invasive species.

Habitat degradation as a result of air quality impacts

A reduction in air quality within the immediate vicinity of the construction works may occur as a consequence of dust deposition associated with these construction activities. This includes reduction in photosynthesis due to smothering from dust on the plants and chemical changes such as acidity to soils. Furthermore, emissions from car exhausts, and the deposition of particulate matter and heavy metals produced by engine, brake and tyre wear, can contribute to increased deposition of pollutants such as oxides of nitrogen (NO_x, NO_s), volatile organic compounds (VOCs), particulate matter (PM), heavy metals (HM) and ammonia (NH₄) in the vicinity of a road carriageway. This can affect the ecosystems and vegetation present, influencing plant growth rates and species composition, diversity, and abundance.

The unmitigated Zone of Influence for air quality effects arising from the Proposed Scheme has the potential to extend 50m from the Proposed Scheme boundary, 500m from construction compounds during

the construction phase, and up to 200m the Proposed Scheme boundary during the operational phase. However, there are no European sites present within these distances.

As the Proposed Scheme does not have the potential to result in habitat degradation of the qualifying/special conservation interest species of any European site as the result of air quality impacts, either during the construction phase or the operational phase, there is no potential for in combination effects to occur in that regard.

Disturbance and displacement impacts

A temporary and / or permanent increase in noise, vibration and / or human activity levels during the construction and / or operation of the Proposed Scheme could result in the disturbance to and/or displacement of fauna species present within the vicinity of the Proposed Scheme.

For mammal species such as otter, disturbance effects would not be expected to extend beyond 250m¹. For birds, disturbance effects would not be expected to extend beyond a distance of approximately 300m², as noise levels associated with general construction activities would attenuate to close to background levels at that distance. There are no European sites within the disturbance ZoI of the Proposed Scheme (the nearest European site(s) are the South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC located 0.5km south-east of the Proposed Scheme), however, ex situ populations of SCI and QI species associated with European sites have been recorded in the vicinity of the Proposed Scheme.

Therefore, the Proposed Scheme has the potential to result in the disturbance / displacement of the qualifying/special conservation interest species of any European site, there is the potential for in combination effects to occur in association with other activities / plans / projects.

Direct injury / mortality impacts

Considering the location of the Proposed Scheme on the Liffey Estuary Lower, in close proximity to a number of SPAs present in Dublin Bay, there is potential for the proposed DPTOB to present a collision risk to mobile SCI species which are present in the area, during the construction and operational phases. SCI bird species for which SPAs in the Dublin area have been designated have been recorded in the vicinity of the proposed DPTOB, on amenity grassland areas and loafing / feeding at the proposed DPTOB location on the Liffey Estuary Lower / Dodder_050 confluence. These species include herring gull, black-headed gull, lesser black-backed gull, cormorant, light-bellied brent goose, curlew, redshank and common tern (i.e. North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, Rockabill SPA, Dalkey Islands SPA and The Murrough SPA). Therefore, there is potential for the Proposed Scheme to result in mortality of SCI bird species associated with European sites.

¹ This is consistent with Transport Infrastructure Ireland (TII) guidance (Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes and Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes) documents. This is a precautionary distance, and likely to be moderated by the screening effect provided by surrounding vegetation and buildings, with the actual ZoI of construction related disturbance likely to be much less in reality.

² Current understanding of construction related noise disturbance to wintering waterbirds is based on the research presented in Cutts *et al.* (2009) and Wright *et al.* (2010). In terms of construction noise, levels below 50dB would not be expected to result in any response from foraging or roosting birds. Noise levels between 50dB and 70dB would provoke a moderate effect/level of response from birds, i.e. birds becoming alert and some behavioural changes (e.g. reduced feeding activity), but birds would be expected to habituate to noise levels within this range. Noise levels above 70dB would likely result in birds moving out of the affected zone, or leaving the site altogether. At c. 300m, typical noise levels associated with construction activity (BS 5228) are generally below 60dB or, in most cases, are approaching the 50dB threshold.

It is considered possible that peregrine falcon in the vicinity of the Proposed Scheme are associated with the SPA population of Wicklow Mountains SPA. Therefore, there is potential that peregrine falcons associated with the Wicklow Mountains SPA may hunt in the vicinity of the Proposed Scheme. There is potential for the proposed DPTOB to present a collision risk to hunting peregrine falcon, during the construction and operational phases. Therefore, there is potential for the Proposed Scheme to result in direct injury/mortality impacts on SCI populations of peregrine falcon associated with the Wicklow Mountains SPA.

Marine mammals associated with European sites have been recorded commuting and foraging within the Liffey Estuary Lower, in the vicinity of the Proposed Scheme. During the construction phase of the proposed DPTOB, there will be an increase of vessels in the vicinity. According to the Marine Mammal Risk Assessment prepared for the Proposed Scheme, the risk of injury and mortality is considered extremely low as marine mammals in Dublin Harbour are exposed to considerable vessel traffic on a daily basis and would be aware of their presence. There will be no increase in vessels associated with the operational phase of the Proposed Scheme. Therefore, it is not likely that the Proposed Scheme will pose a significant collision / mortality risk for marine mammals in Dublin Bay.

Otter which may be associated with the QI population of the Wicklow Mountains SAC have been recorded in the vicinity of the Proposed Scheme. Vehicular and vessel traffic associated with the operational phase of the Proposed Scheme is not likely to result in significant injury/mortality risk to QI otter populations as otter present in the vicinity of the Proposed Scheme are habituated to existing traffic and shipping levels in the vicinity of the Proposed Scheme. During the construction phase of the proposed DPTOB, there will be an increase of vessels in the vicinity as well as human and construction disturbance for a period of approximately 30 months. The risk of injury or mortality arising from the construction phase of the Proposed Scheme as a result of vessel collision is considered to be extremely low as otter present in this area are exposed to considerable vessel traffic on a daily basis and would be aware of their presence. As otter in the vicinity of the Proposed Scheme are habituated to normal traffic levels associated with Dublin City Centre it is unlikely that an increase in construction related vehicles and machinery during construction would present a significant injury/mortality risk. However, given that a proposed construction compound will be located adjacent to the River Dodder and Liffey Estuary Lower, and that there will be in-stream disturbance associated with the construction of the proposed DPTOB, there is potential for injury / mortality of otter during the construction phase of the Proposed Scheme.

Summary

The habitat loss and fragmentation, hydrological, disturbance and displacement, and direct injury and mortality impacts associated with the Proposed Scheme have the potential to affect the receiving environment and, consequently, have the potential to affect the conservation objectives supporting the QI /SCI of a European site(s). Therefore, the Proposed Scheme is likely to have significant effects on a European site(s) cannot be excluded.

In-combination effects

There is the potential for developments planned or granted, or those implemented under a range of land use and other plans, to lie either within European sites, or be situated in a location where they may be within the ZoI of the European sites which also fall within the ZoI of the Proposed Scheme.

Key development projects with potential for in-combination effects due to their size, nature and/or location include other Core Bus Corridor Schemes, MetroLink, upgrades to or new rail infrastructure, utility infrastructure including proposed or consented water utility improvement.

The potential for in combination effects between these plans and projects and the Proposed Scheme arises via the same pathways for potential effects as identified for the Proposed Scheme (i.e. habitat loss and fragmentation, hydrological, invasive species, disturbance and displacement, and direct injury and mortality impacts) which could act in combination with similar effects and pathways arising from the various plans.

Therefore, the potential for the following in combination effects arising from plans and projects cannot be ruled out:

- Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Dalkey Islands SPA, Rockabill SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA, The Murrrough SPA, and Wicklow Mountains SAC);
- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Wicklow Mountains SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);
- Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA);
- Disturbance and displacement impacts (for example ex-situ inland sites which are utilised by SCI bird species and QI mammals within the potential disturbance ZoI of the Proposed Scheme for Wicklow Mountains SAC, Wicklow Mountains SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, Dalkey Islands SPA, Rockabill SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA); and,
- Direct injury/mortality impacts (for example in ex-situ sites utilised by SCI bird species and QI mammals within the potential ZoI for Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Rockabill SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, Wicklow Mountains SPA, Wicklow Mountains SAC).

Conclusions of Screening Assessment Process

Following an examination, analysis and evaluation of the best available information, and applying the precautionary principle, it can be concluded that there is the possibility for significant effects on the following European sites, in the absence of mitigation, either arising from the project alone or in combination with other plans and projects, as a result of habitat loss and fragmentation impacts, hydrological impacts, disturbance and displacement, and direct injury / mortality impacts: North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA,

