

Addendum to Appropriate Assessment Screening Report Previously Prepared for Project G Planning Application on behalf of ADSIL

Re: Proposal (1) to install underground fibre ducting from the proposed new ADSIL High Technology Data Storage Facility in Cruiserath, Dublin 15 to existing ADSIL industrial facilities nearby in the IDA Blanchardstown Snugborough Business & Technology Park, (2) for two power connection route options (Option 1 and Option 2) from the proposed Data Storage Facility to the existing Corduff 220kV Air Insulated Switchgear (AIS) Substation located to the north east of the proposed site and (3) fibre connection to proposed data storage facility.

September 2017

Addendum to Screening Assessment as required under Article 6(3) of the Habitats Directive (Council Directive 92/43/EEC)

Prepared by:

**Dr Janice Fuller MCIEEM,
Consultant Ecologist,
Ballyshea,
Craughwell,
Co. Galway**

For inspection purposes only.
Consent of copyright owner required for any other use.

Table of Contents

Introduction.....	4
Legislative background	4
Stage 1 of Appropriate Assessment Process: Appropriate Assessment Screening	5
Description of the proposed project	5
Description of the existing environment	11
Identification of Natura 2000 sites	12
Elements of the Project Likely to Give Rise to Impacts	13
Screening Matrices for Appropriate Assessment	13
Description of any Likely Direct, Indirect or Secondary Impacts of the Project on Natura 2000 sites	13
Description of any Likely Changes to Natura 2000 sites.....	14
Description of any Likely Impacts on Natura 2000 sites as a whole.....	15
Indicators of Significance as a Result of the Identification of Effects.....	15
Description of any Likely Impacts of the Project on Natura 2000 sites.....	15
Conclusions on the Screening Process.....	17
References	18

For inspection purposes only.
Consent of copyright owner required for any other use.

Introduction

This Appropriate Assessment Screening Report presents the results of screening a proposal to install underground fibre ducting from the proposed new ADSIL High Technology Data Storage Facility in Cruiserath to existing ADSIL industrial facilities in the nearby IDA Blanchardstown Snugborough Business & Technology Park, and for two power connection route options (Option 1 and Option 2) from the proposed Data Storage Facility to the existing Corduff 220kV Air Insulated Switchgear (AIS) Substation, which is located to the north east of the proposed site and the fibre connection route.

Article 6(3) of the EU Habitats Directive requires that all plans and projects must be screened to determine if there are any potential impacts on Natura 2000 sites i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). The screening process aims to establish whether a full Appropriate Assessment (and Natura Impact Statement) is required in a particular case.

A screening report provides the information necessary for the Competent Authority to complete an Appropriate Assessment Screening. Dr Janice Fuller MCIEEM is a Consultant Ecologist with over ten years' experience of ecological survey, habitat assessment and monitoring. She was commissioned to conduct the Appropriate Assessment Screening Report.

Legislative background

The legislative background has already been provided in the Appropriate Assessment Screening Report submitted with the planning application.

For inspection purposes only:
Consent of copyright owner required for any other use.

Stage 1 of Appropriate Assessment Process: Appropriate Assessment Screening

Description of the proposed works

The proposed new ADSIL High Technology Data storage Facility in Cruiserath (Figure 1) requires the installation of fibre ducting along two routes from the proposed facility in Cruiserath to existing ADSIL facilities nearby in the IDA Blanchardstown Snugborough Business & Technology Park. The proposed routes for these two connections are shown in Figure 2 and are shown in cyan and orange colours. The cyan route connects the proposed facility to the existing facilities via the R121 (to the south of the proposed Data Storage Facility site) and Ballycoolin Road and is c. 1.3km in length. The orange route connects the proposed facility to the existing facilities via the R121 (to the south of the proposed Data Storage Facility site), Blanchardstown Road North and an internal road in the IDA Blanchardstown Snugborough Business & Technology Park. This route is c. 2km in length.

The two routes will run parallel to each other along the R121 until the roundabout at the Ballycoolin Road where they will split and follow separate routes to the existing facilities. It is understood that suitable ducting infrastructure is already in place at the site boundary of the existing facilities and will be installed as part of site works at the proposed facility in Cruiserath so that the proposed routes assessed herein are between the site boundaries.

Both routes will require the installation of 6 no. 160mm diameter uPVC ducts for fibre optic cable. The ducts will be encased in concrete within the trench and backfilled with suitable soil cover and surface reinstatement. The optimum depth of the trench required for installation of the ducts is 1.32m below ground level (bgl), however this will vary along the length of each route depending on ground conditions, existing services and the location of the ducting below either road carriageway or footpath/verge.

The optimum width of each trench will be 1.07m however this may also vary slightly depending on conditions encountered. The trench backfilling and reinstatement will be as per the engineer's specification and it is anticipated that all of the material excavated will require removal off-site for reuse or disposal.

It is assumed that the trenches for the ducting will be excavated in the road carriageway, where possible, with short sections crossing verges and footpaths at either end of both routes. A short section (c. 50m) of the orange route will also cross a verge from Blanchardstown Road North into the Blanchardstown Business Park. The entire length of both routes will, therefore, be excavated in previously disturbed ground.

Two options for the grid connection are proposed (Figures 3a & b).

Grid connection: Option 1

This proposed power connection route will be from the proposed new Data Storage Facility in Cruiserath to the existing Corduff 220kV Air Insulated Switchgear (AIS) Substation (Figure 2a). It will comprise a double 110kV circuit located in the carriageway of the new dual carriageway recently constructed by Fingal County Council (FCC). The estimated length of the route is c. 2.5kms. The route will require construction through 4 No. roundabouts.

As illustrated in Figure 3a, the proposed underground route of the ducting is from the proposed substation on the Data Storage Facility development site to the adjacent public road (R121), following the existing road northwards, eastwards and finally southwards to the existing Corduff 220kV Substation.

This route can be divided into three main sections as follows:

Section 1 – Route through the proposed Data Storage Facility development site which is currently a greenfield site. The EIS for which was submitted with the planning application for the proposed development includes a thorough assessment of the impact of excavations at the site.

Section 2 – Route in the existing dual carriageway. The route follows the R121 adjacent to the proposed Data Storage Facility site northwards through the roundabout at Tyrellstown Town Centre turning right at the next roundabout on the link road towards the N2. The route continues through the next roundabout and turns right at the subsequent roundabout towards the south. The cable continues for approx. 300m in this direction before

entering the existing Corduff 220kV Substation site. This section of the route has been previously developed as a roadway and there are other services laid beneath the roadway along this entire section of the route.

Section 3 – Route from the edge of the dual carriageway to the existing Corduff 220kV Substation. This section is less than 50m in length and may be described as partially greenfield although it is likely that the majority of the route will be through land previously disturbed during road construction or construction of the Corduff 220kV Substation.

Grid connection: Option 2

As illustrated in Figure 3b, this proposed route of the ducting is from the proposed substation on Data Storage Facility site, through the site to the existing ESB wayleave along the northern boundary of the site, continuing along the wayleave through the northern portion of the Bristol Myers Squibb (BMS) site and through 'greenfield' lands to the east of BMS to the existing Corduff 220kV Substation. The length of this route option is 1.3km.

This route can be divided into three main sections as follows:

Section 1 – Route through the proposed Data Storage Facility site which is currently a greenfield site. The Environmental Impact Statement (EIS) which was submitted with the planning application for the proposed development includes a thorough assessment of the impact of excavations at the site.

Section 2 - Route along the wayleave. The wayleave contains c. 7 x 110kV cables and has been extensively disturbed for the installation of the cable ducts.

Section 3 – Route through 'greenfield' lands to the north-east of BMS to the existing Corduff 220kV Substation. However, it is understood that this portion of the route is also somewhat disturbed from the installation of other ducts.

It is understood that the power cables for the grid connections will be a standard XLPE copper cables. (Note: XLPE is an abbreviated designation of cross-linked polyethylene). XLPE does not contain oil and thus is free from failures due to oil migration in oil-filled cables.

The installation of the ducting for the power cable will require the excavation of two trenches along the route. The trenches will typically run parallel to each other along the full length of the route at a minimum centre to centre distance of 3m under carriageway and 4m under green areas. Five separate ducts will be installed in each trench.

As advised by the project engineers, Clifton Scannell Emerson Associates (CSEA), the optimum depth of excavation required to facilitate installation of the ducting is 1.375m below ground level (bgl), however this may vary depending on ground conditions and existing services. The optimum width of each trench will be 1.65m, however this may also vary slightly depending on conditions encountered. The trench backfilling will be as per the engineer's specification and it is likely that all of the material excavated will require removal off-site for appropriate reuse, recover and/or disposal.

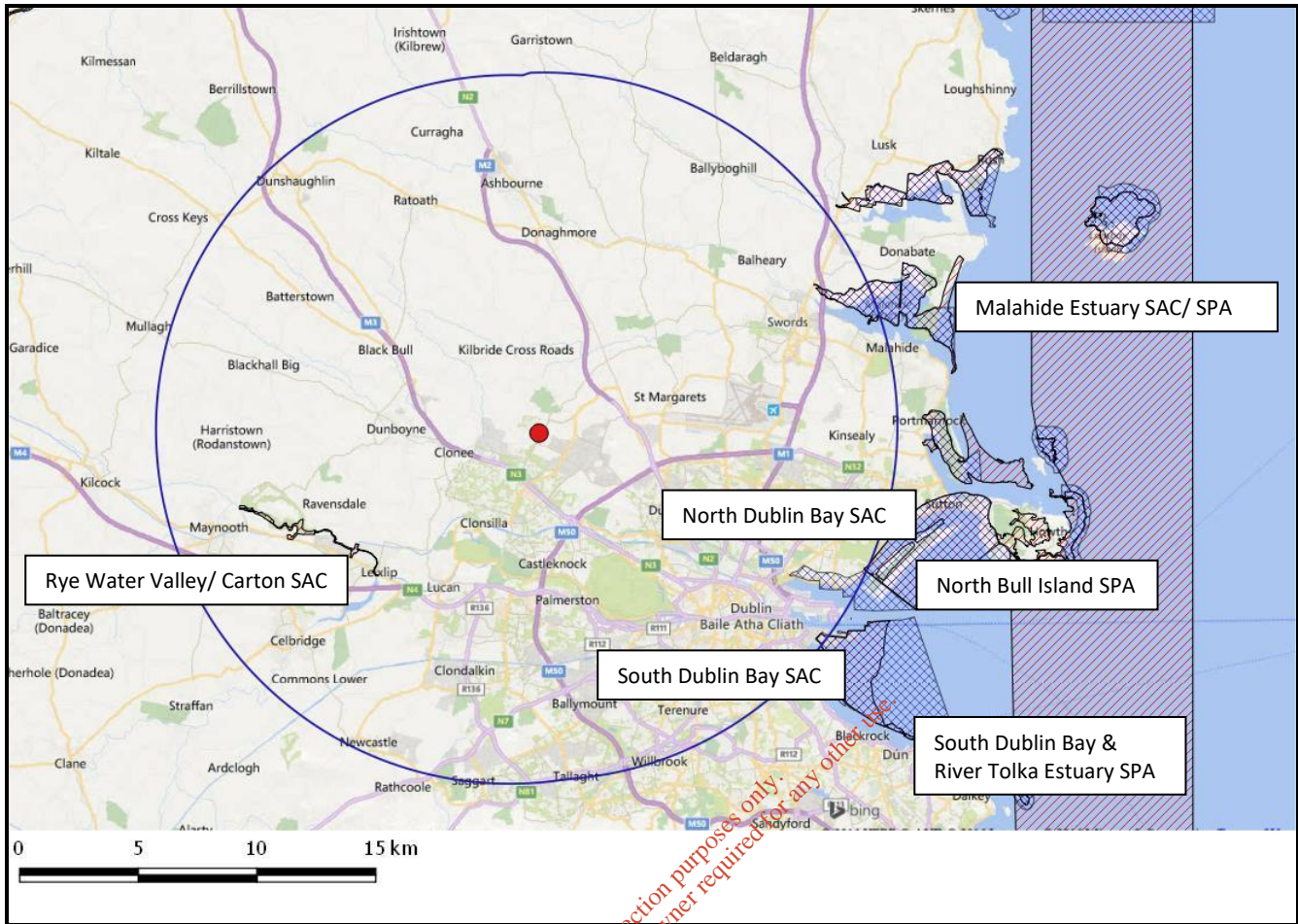


Figure 1. Location of proposed Data Centre (with associated fibre and grid connection routes) in Cruiserath (red dot), north of Mulhuddart. The locations of European sites within the Zone of Influence (15km) outlined in blue (Special Areas of Conservation in red shading and Special Protection Areas in blue shading) are also shown (www.bingmaps.com).

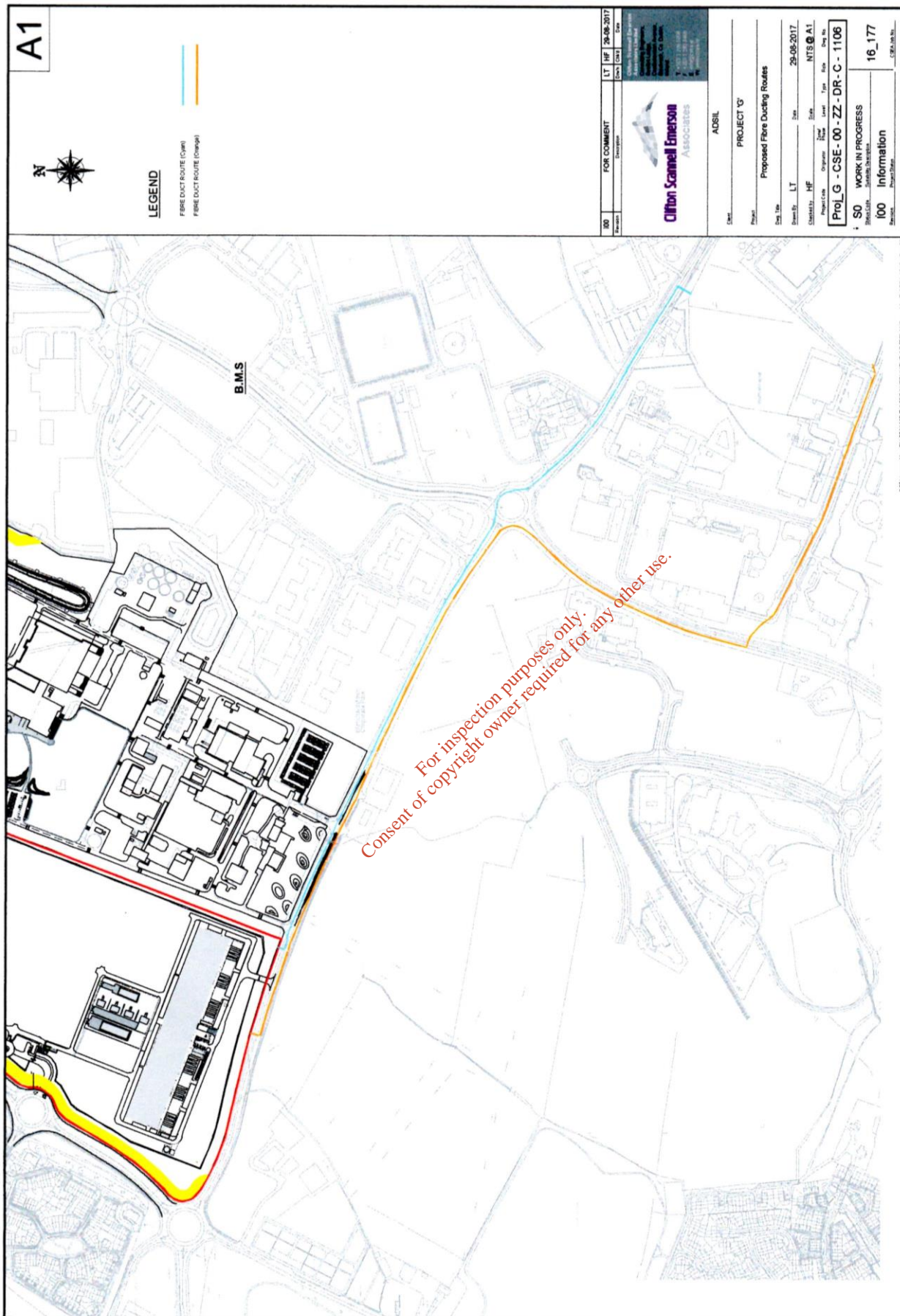


Figure 2 Location of the proposed route for the fibre ducting in cyan and orange.

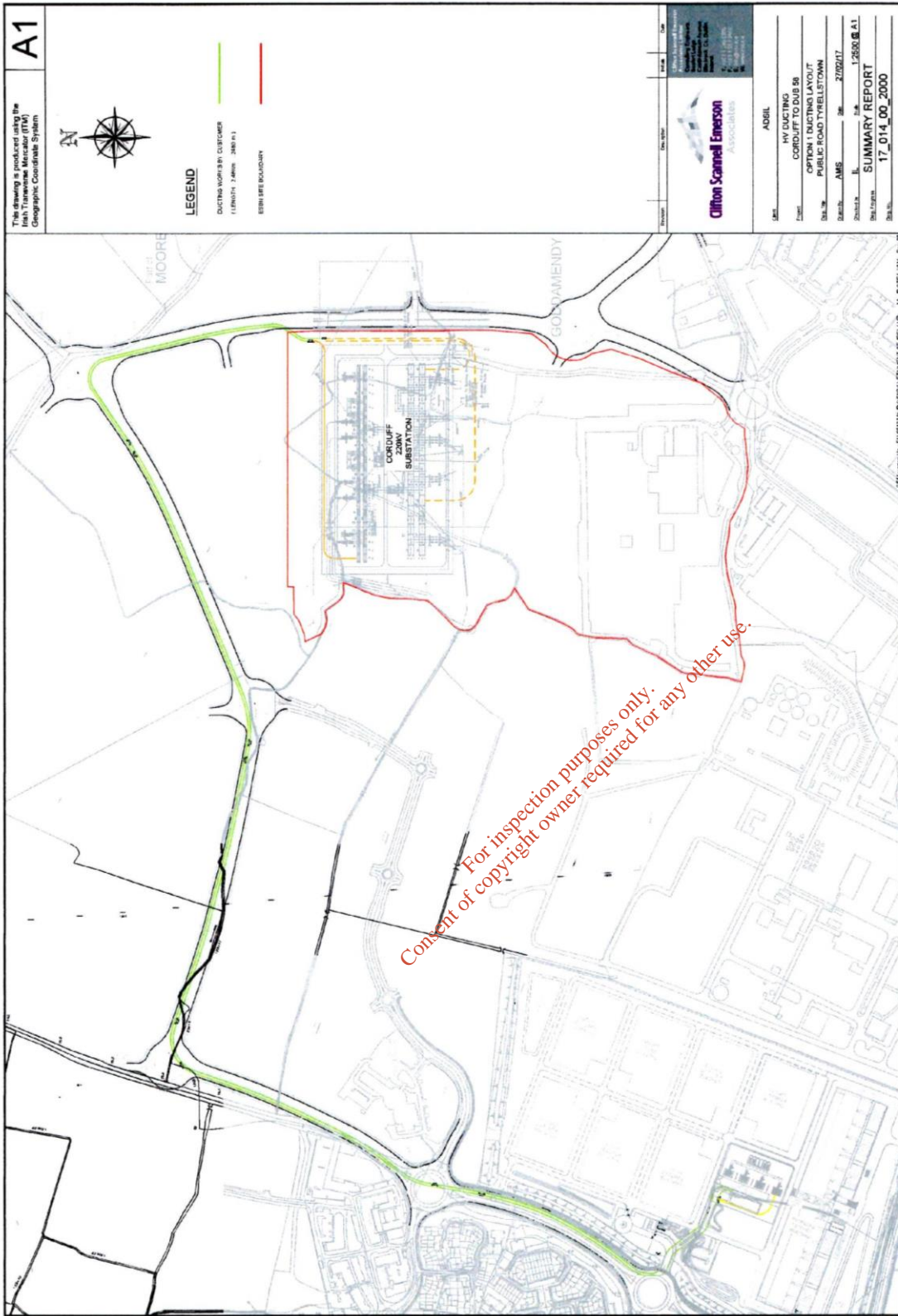


Figure 3a Location of the proposed Option 1 grid connection route (in green)

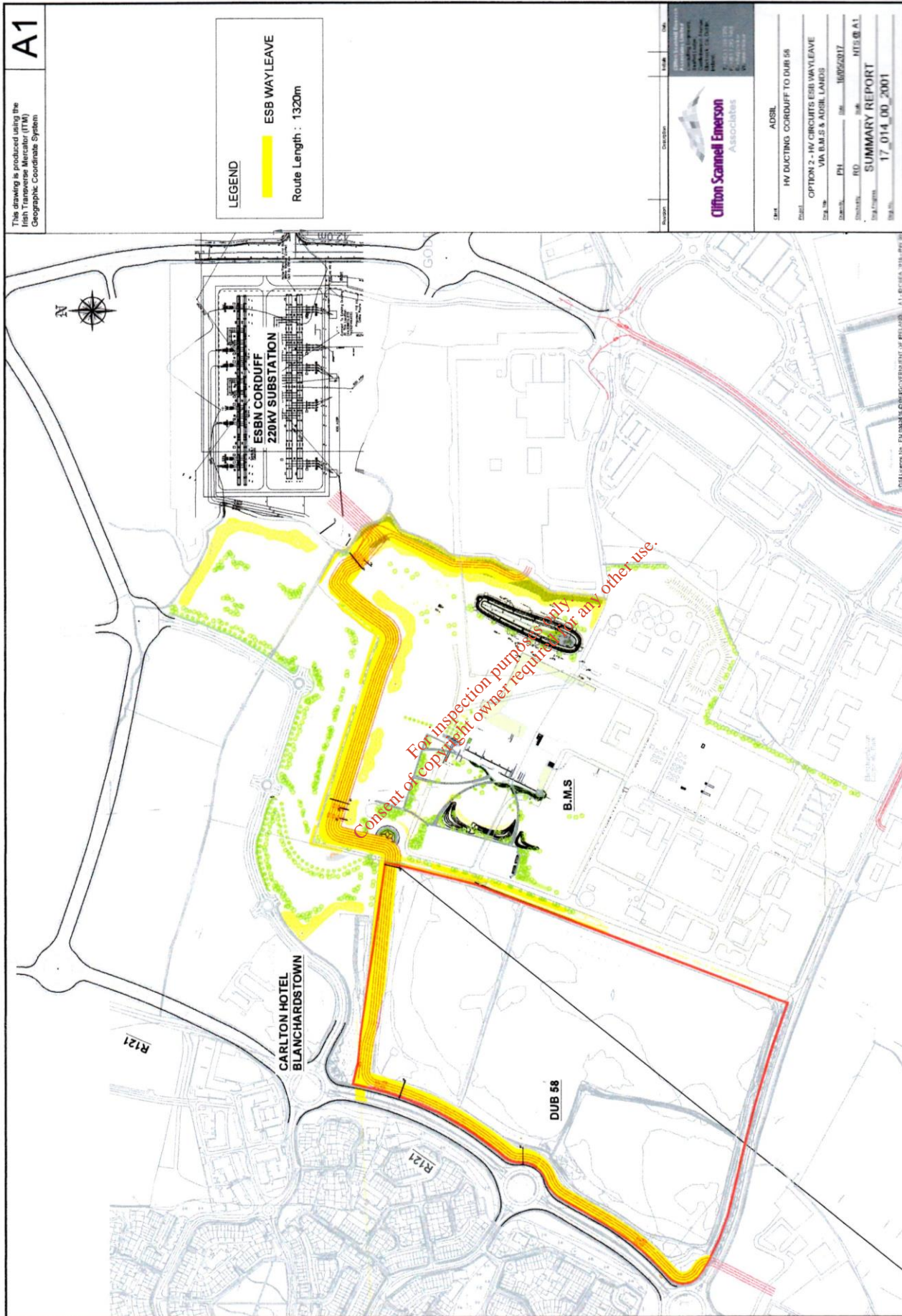


Figure 3b Location of the proposed Option 2 for grid connection route through ESB wayleave (yellow)

Description of the existing environment

The description of the existing environment has already been provided in the Appropriate Assessment Screening Report submitted with the planning application.



Figure 4. Aerial view showing the approximate fibre routes (orange and cyan) from existing ADSIL facilities (bottom right hand corner) to the proposed ADSIL data storage facility in Cruiserath (approximate boundary shown in red)

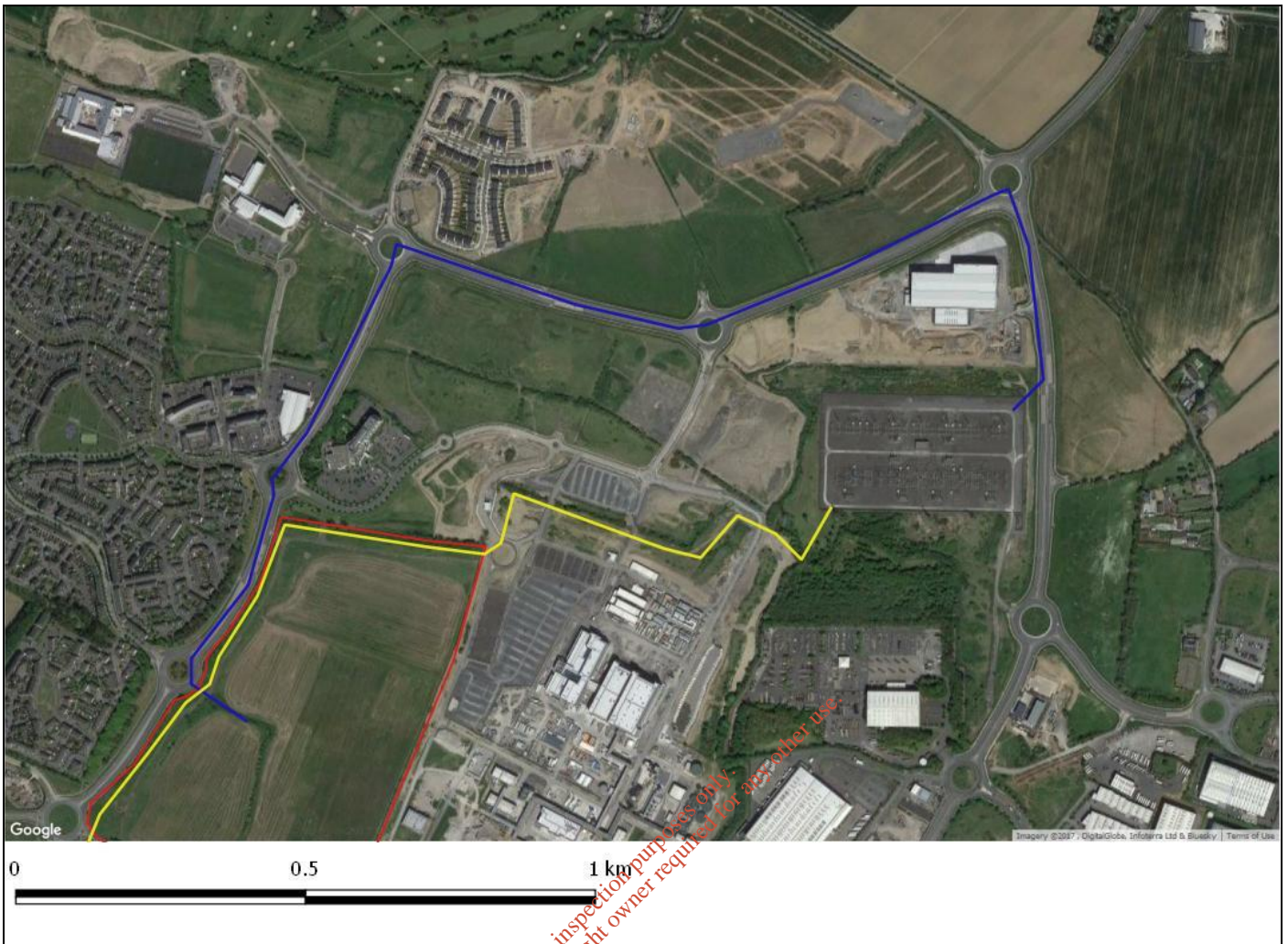


Figure 5. Aerial view showing the approximate grid connection routes (Option 1- blue, Option 2- yellow) from the proposed ADSIL data storage facility in Cruiserath (approximate boundary shown in red) to the ESB Corduff Sub-station

Identification of Natura 2000 sites

Nature 2000 sites have already been identified in the Appropriate Assessment Screening submitted with the planning application.

Elements of the Works Likely to Give Rise to Impacts

The Natura 2000 sites in Dublin Bay (>8km from the proposed data storage facility development site) are connected by two potential pathways with the proposed development site at Cruiserath i.e. potentially via surface water generated along the fibre ducting and/or grid connection routes during construction and discharged into Dublin Bay via the local sewer network and the River Tolka.

During construction phase, excavation and backfilling of the two trenches required, and removal of excavated materials, could lead to sediment run-off if not properly managed. The Construction Environmental Management Plan (CEMP) that will be prepared in relation to the works will ensure best practice construction and should cover all potentially polluting activities and include an emergency response procedure. The construction period will be relatively short (a matter of weeks) and the area involved is small.

Noise and physical disturbance associated with construction activity may disturb wildlife locally but this will be short-lived.

Screening Matrices for Appropriate Assessment

The following section includes a number of screening matrices designed to assess the potential for the proposed development to give rise to significant impacts on the conservation objectives or overall integrity of the Natura 2000 sites within 15km of the proposed development sites. These matrices are based on those contained within the European Commission guidance document “Assessment of plans and projects significantly affecting Natura 2000 sites- Methodology Guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission, 2001”.

Description of any Likely Direct, Indirect or Secondary Impacts on Natura 2000 sites

Any likely direct, indirect or secondary impacts of the proposed works (data storage facility, fibre and grid connections), both alone and in combination with other plans or projects, on SACs or SPAs by virtue of the following criteria: size and scale, land-take, distance from the Natura 2000 site(s) or key features of the site, resource requirements (such as water abstraction), emissions (disposal to land, water or air), excavation requirements, transportation requirements and duration of construction, operation, decommissioning are presented in Table 1.

Table 1 Likely impacts of the project on Natura 2000 sites

Likely Direct, Indirect or Secondary Impacts on the Natura 2000 sites	
Size and Scale	As the proposed development (i.e. fibre-ducting and grid connection routes for data storage facility) is not located within any European site, no direct impact on any Natura 2000 site is predicted owing to the size and scale of the project. The nearest Natura 2000 site for the proposed development site is >8km distance. Indirect impacts are not predicted as there are limited hydrological connections between the proposed development site and Natura 2000 sites, which might impact on water quality in Dublin Bay. There are no hydrological connections with the Rye Valley.
Land-take	None. Works will not result in any land take within the Natura 2000 network.
Distance from Natura 2000 site(s) or key features of the site(s)	As no works are proposed within any Natura 2000 sites, there is no potential for direct impacts on these sites. The closest Natura 2000 site is the Rye Valley/Carlton SAC (8.7km distance).
Resource Requirements	None predicted, as no resources from any Natura 2000 sites will be exploited in the course of the proposed development
Emissions	There will be no direct emission from the proposed development to any Natura 2000 site. Any emissions from the proposed development either during the construction or operational phase are unlikely to impact on any Natura 2000 sites as the nearest site is >8km distance.
Excavations	There will be excavation mostly within the existing road network or previously

	disturbed land for the fibre ducting and grid connection routes. Excavation has the potential to give rise to an increase in silt-laden run off to watercourses and an associated deterioration in water quality. The Natura 2000 sites within the Zone of Influence are >8km from the development site. Any silt-laden surface run-off will be channeled into the attenuation ponds allowing sediments to settle.
Transportation requirements	Transport to the proposed development site will be on the existing road network and no new routes are required.
Duration of construction, Operation and Decommissioning	Construction phase is estimated to be a matter of weeks and the fibre and grid connection routes are expected to be operational for the foreseeable future.
Cumulative impacts with other plans and projects	None predicted. It is considered that there will be no significant impact on Natura 2000 sites associated with this project, and no significant cumulative negative impacts of this project in combination with other land-use activities or infrastructural projects in the surrounding area. The site is surrounded by industrial and residential developments although it is close to the rural fringe of west County Dublin.

Description of any Likely Changes to Natura 2000 sites

Any likely changes to the Natura 2000 sites as a result of the development proposal (data centre facility, fibre connection and grid connection) are described below in Table 2 with reference to the following criteria: reduction of habitat area, disturbance to key species, habitat or species fragmentation, reduction in species density, changes in key indicators of conservation value (e.g. water quality etc.) and climate change.

Table 2. Likely changes to the Natura 2000 sites

Likely changes to the Natura 2000 sites	
Reduction of Habitat Area	None. There will be no reduction of any habitat area within any Natura 2000 site as a result of the proposed development.
Disturbance to Key Species	None predicted as the proposed development site does not support any of the Qualifying Interests or Special Conservation Interests for the Natura 2000 sites in the Zone of Influence.
Habitat or Species Fragmentation	None predicted as the proposed development site does not support any of the Qualifying Interests or Special Conservation Interests for the Natura 2000 sites in the Zone of Influence.
Reduction in Species Density	There is no potential for direct or indirect reduction in species density. There are no direct hydrological connections between the proposed development site and Natura 2000 sites in Dublin Bay although there are limited indirect hydrological connections. There are no hydrological connections with the Rye Valley. The proposed development site does not support any of the Qualifying Interests or Special Conservation Interests for the Natura 2000 sites in the Zone of Influence.
Changes in Key Indicators of Conservation Value	There are no direct hydrological connections between the proposed development site and Natura 2000 sites in Dublin Bay although there are limited indirect hydrological connections. There are no hydrological connections with the Rye Valley. No changes in key indicators are predicted.
Climate Change	The development is likely to have a neutral impact on climate change.

Description of any Likely Impacts on Natura 2000 sites as a whole

No direct impacts are predicted on any Natura 2000 site as a result of the proposed works. The primary pathway for indirect impacts on Natura 2000 sites resulting from the proposed works is the surface water network but the CEMP will ensure best practice construction. The usual protocols for bunding areas for storage of any fuels, oils, cement etc. will apply.

There is no suitable habitat on the proposed development site for any of the qualifying features/ special conservation interests.

Indicators of Significance as a Result of the Identification of Effects

Indicators of significance are provided below in Table 3 for any impacts identified above in terms of loss, fragmentation, disruption, disturbance and changes to key elements of the site, such as water quality.

Table 3 Indicators of significance as a result of the identification of effects

Indicators of significance as a result of the identification of effects	
Loss	The potential for direct or indirect loss of suitable habitat for qualifying interests of SACs in the zone of influence is not likely to be significant due to the limited nature of hydrological connections between the sites and the proposed development site. The potential for indirect loss of habitat for special conservation interests of SPAs within 15km is not likely to be significant as there is no suitable habitat within the proposed development site.
Fragmentation	The potential for fragmentation of habitats or populations qualifying interests/ special conservation interests of Natura 2000 sites in the zone of influence is not likely to be significant due to the limited nature of indirect hydrological connections or other pathways between the sites and the proposed development site.
Disruption	The potential for disruption of ecological processes in Natura 2000 sites in the zone of influence is not likely to be significant due to the limited nature of indirect hydrological connections or other pathways between the sites and the proposed development site.
Disturbance	Any potential for disturbance of special conservation interest / qualifying interest populations is not likely to be significant as there is no suitable habitat for these species on the proposed development sites.
Changes to key elements of the site	The potential for changes to key elements of the Natura 2000 sites is not likely to be significant due to the limited nature of hydrological connections and lack of other pathways between the sites and the proposed development site. The potential for indirect loss of habitat for special conservation interests of SPAs within 15km is low as there is no suitable habitat within the proposed development site.

Description of any Likely Impacts of the Project on Natura 2000 sites

Table 4 summarises the potential for likely significant impacts of the project on the individual Natura 2000 sites within 15km of the proposed development.

Table 4 Summary of potential for likely significant impacts on the Natura 2000 site as a result of the proposed development

Natura 2000 site	Potential for likely significant impacts
Malahide Estuary SAC	There is considered to be no possibility of either direct or indirect impacts on the qualifying interests (coastal habitats and species) due to the distance between the SAC and the proposed development site (13km) and the lack of direct hydrological connections.
South Dublin Bay SAC	There is considered to be no possibility of either direct or indirect impacts on the qualifying interests (coastal habitats) due to the distance between the SAC and the proposed development site (14km) and the lack of direct hydrological connections.
North Dublin Bay SAC	There is considered to be no possibility of either direct or indirect impacts on the qualifying interests (coastal habitats and species) due to the distance between the SAC and the proposed development site (15km) and the lack of direct hydrological connections.
Rye Water Valley/ Carton SAC	There is considered to be no possibility of either direct or indirect impacts on the qualifying interests (petrifying springs, narrow-mouthed whorl snail and Desmoulin's whorl snail) due to the distance between the SAC and the proposed development site (8.7km) and the lack of direct hydrological connections.
South Dublin Bay and River Tolka Estuary SPA	There is considered to be no possibility of either direct or indirect impacts on the special conservation interests (several species of birds listed in Table 2) due to the distance between the SPA and the proposed development site (14km) and the lack of direct hydrological connections.
Malahide Estuary SPA	There is considered to be no possibility of either direct or indirect impacts on the special conservation interests (several species of birds listed in Table 2) due to the distance between the SPA and the proposed development site (13km) and the lack of direct hydrological connections.
North Bull Island SPA	There is considered to be no possibility of either direct or indirect impacts on the special conservation interests (several species of birds listed in Table 2) due to the distance between the SPA and the proposed development site (12km) and the lack of direct hydrological connections.

Conclusions on the Screening Process

On the basis of the screening matrices detailed above, which consider the potential impacts of the proposed development on Natura 2000 sites in the absence of mitigation measures (not considered at the screening stage), it is considered that the proposed data storage facility project is not likely to have any significant impacts on any Natura 2000 sites, alone or in combination with the grid connection options and fibre connection other plans or projects in the area.

For inspection purposes only.
Consent of copyright owner required for any other use.

References

AA Guidance

Department of Environment, Heritage and Local Government, 2010 revision. Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities.

EC Environment Directorate-General, 2000. Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC.

European Commission. 2001. Assessment of Plans and Projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 93/43/EEC.

European Commission, January 2007. Clarification of the Concepts of Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence. Opinion of the European Commission

European Commission, January 2007. Guidelines for Good Practice Appropriate Assessment of Plans Under Article 6(3) Habitats Directive (International Workshop on Assessment of Plans under the Habitats Directive, 2011)

NPWS Circular 1/10 & PSSP 2/10. Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.

Other references

Balmer, D.E., Gillings, S., Caffrey, B.J., Swann, R.L., Downie, I.S. & Fuller, R.J. 2013. Bird Atlas 2007-11: the breeding and wintering birds of Britain and Ireland. BTO Books, Thetford.

Fossitt, J. 2000. Guide to Habitats in Ireland. The Heritage Council, Kilkenny.

NPWS (2013) The Status of Protected EU Habitats and Species in Ireland. Overview Volume 1. Unpublished Report, National Parks & Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland. Editor: Deirdre Lynn

Websites accessed (September 2017)

National Parks and Wildlife Service (Natura 2000 site synopses, conservation objectives etc.)
www.npws.ie