MARSTON

PLANNING CONSULTANCY

Senior Administrative Officer,
Planning Department,
South Dublin County Council,
County Hall,
Town Centre,
Tallaght,
Dublin 24

Our Ref: 21047

22nd August 2021

Re : Planning and Development Act 2000-2021 and the statutory regulations (as amended). Application by Vantage Data Centers Dub 11 Ltd. for development for the demolition of the abandoned single storey dwelling and associated outbuildings (206sqm); and the construction of 2 no. two storey data centres with plant at roof level of each facility and associated ancillary development that will have a gross floor area of 40,589sqm, plus a temporary gas powered generation plant if required; at this site of 8.7 hectares to the south of the New Nangor Road (R134); and on land within the townlands of Ballybane and Kilbride within Profile Park, Clondalkin, Dublin 22.

Dear Sir / Madam,

We, Marston Planning Consultancy, 23 Grange Park, Foxrock, Dublin, D18 T3Y4 are instructed by Vantage Data Centers Dub 11 Ltd. to make the above application to South Dublin County Council. The application is for development with a gross floor area of 40,589sqm that will include 2 no. two storey data centers and ancillary elements including emergency generators, parking and vehicular routes, landscaping, attenuation and all other associate development on a site of 8.7ha. within a land holding bounding New Nangor Road (R134) to the north; agricultural fields to the east; the Grange Castle Motor Company to the west; and Falcon Avenue within Profile Park to south; and all set within Profile Park, Clondalkin, Dublin 22.

The description of the proposed development as set out within the public notices is as follows:

The development will consist of the demolition of the abandoned single storey dwelling and associated outbuilding (206sqm); and the construction of 2 no. two storey data centers with plant at roof level of each facility and associated ancillary development that will have a gross floor area of 40,589sqm that will consist of the following:

- 1 no. two storey data center (Building 11) that will be located to the south of the site and will have a gross floor area of 24,667sqm. It will include 22 no. emergency generators located at ground floor level within a compound to the western side of the data center with associated flues that will be 22.3m in height;
- 1 no. two storey data center (Building 12) that will be located to the north of the site, and to the immediate north of Building 11 and will have a gross floor area of 12,915sqm. It will include 11 no. emergency generators located at ground floor level within a compound to the western side of the data center with associated flues that will be 22.3m in height;
- Each of the two data centers will includes data storage rooms, associated electrical and mechanical plant rooms, loading bays, maintenance and storage spaces, office administration areas, and plant including PV panels at roof level as well as a separate house generator for each facility that will provide emergency power to the admin and ancillary spaces. Each generator will include a diesel tank and there will be a refuelling area to serve the proposed emergency generators;
- The overall height of each data center apart from the flues and plant at roof level is c. 14.23m above the finished floor level;
- Construction of internal road network and circulation areas, with main entrance off Falcon Avenue to the south, as well as a secondary vehicular access off Legacy Drive to the south-west, both from within Profile Park; footpaths, provision of 144 no. car parking spaces, and 66 no. cycle parking spaces;
- single storey step-up substation (38sqm) as well as 2 no. single storey switch substations (121sqm);
- AGI Gas Regulator compound that include 3 no. single storey buildings (134sqm)

- construction of a gas powered generation plant in the form of a 13m high single storey building with a gross floor area of 2,714sqm that will contain 10 gas generators with associated flues that will be 25m in height, and grouped in pairs and threes. The Gas Plant will be located to the west of Building 11;
- Ancillary site development works, that will include reorientation of the Baldonnel Stream, biodiversity management initiatives, attenuation ponds and the installation and connection to the underground foul and storm water drainage network, and installation of utility ducts and cables, that will include the drilling and laying of ducts and cables under the internal road network within Profile Park. Other ancillary site development works will include hard and soft landscaping, lighting, fencing, signage, services road, entrance gates, sprinkler tanks and pump room; and
- A temporary gas powered generation plant within a fenced yard containing 21 no. generator units in containers, each with associated flues (each 25m high), 12 transformers and 10 containers of controls to be located to the west of, and associated with the first phase of Building 11, and will be required for a period of up to 2 years if connection to the national grid is delayed. This temporary plant will not be built if the connection to the national grid is in place prior to the operation of Building 11.

The development will be accessed from Falcon Avenue and Legacy Drive from within the Profile Park Business Park that contains an access from the New Nangor Road (R134). An Environmental Impact Assessment Report (EIAR) has been submitted with this application.

The Proposed Development is intended to be built over four phases. The first phase (1A) of which will include, if required, the construction of a temporary gas powered generation plant within a fenced yard containing 21 no. generator units in containers, each with associated flues (each 25m high) as well as associated elements as well as the northern block of Building 11 (Building 11.1). The temporary gas powered generation plant will only be built if connection to the national grid is delayed. This temporary plant will not be built if the connection to the national grid is in place prior to the operation of Building 11.1. For clarity purposes this is clearly set out within the planning notices that accompany the application, and the impact of this being and not being built is assessed within the Environmental Impact Assessment Report (EIAR) that accompanies this application.

We refer the Planning Authority that it is proposed to undertake the stream realignment and all elements of the biodiversity management plan and landscaping to the north of the site, as well as landscaping to the west and east of the site within this first phase of the proposed development.

The second phase (1B) (which will form the first phase, if the temporary gas powered generation plan is not required), will form the construction of the southern block of the permanent gas powered generation plant towards the south-west of the site. The third phase (2A) will include the construction of the southern block of Building 11 (Building 11.2); with the final phase (2B) including for the construction of Building 12 and the northern block of the permanent gas powered generation plant towards the west of Building 11.1.

Why should permission be granted?
The planning rationale for the Proposed Development can be summarised as:

- The proposed development is to be located on a site that is zoned EE that has the objective '*To provide for Enterprise and Employment Related Uses*' under the South Dublin County Development Plan 2016-2022. The acceptability of data centres on EE zoned lands is well established, with several examples of such developments, within Profile Park, Grange Castle and wider area;
- The need for the realignment of the Baldonnel Stream is fully justified and a Biodiversity Management Plan; and draft Construction and Environmental Management Plan for the stream works will ensure that the biodiversity and environment of the stream and the corridor in which it passes will be significantly improved as a result of the proposed development;
- The architectural design and masterplan approach has positively responded to the overall development of the site and context ensuring it integrates well with the established pattern of development as well as providing positive biodiversity gains throughout the site but particularly to its north along its public boundary;
- The national and local planning policy context is supportive of the development of Information Communication Technology (ICT) infrastructure, including data centre development such as this, as they underpin Ireland's international position as a location for ICT;

- The proposed development has been prepared to accord with the relevant policies, objectives and standards of the South Dublin County Development Plan 2016-2022 particularly in relation to green infrastructure; and
- The proposed development will be compatible with its surroundings and the pattern of development in the vicinity, which comprises for the most part of similar large industrial type buildings and data centres.

Summary of pre-application consultations

Pre-application consultations have been undertaken with the Planning Authority prior to the lodgement of this application. A formal pre-application meeting was held with the Council on the 28th January 2020 that included representatives of the Planning, and Roads/Transportation, Parks, Sanitary Services and Heritage Departments. The relevant issues discussed during the course of the pre-application meeting are addressed within this report and the accompanying application documents.

In addition, the relevant environmental specialists have liaised directly and independently with statutory bodies (including the Water Services and Parks Departments of SDCC, Irish Water, Eirgrid, ESB, NPWS, and the Department of Defence etc.) by correspondence during the course of the preparation of the application and EIA Report. Prior to the commencement of development the applicant will seek to enter into water and wastewater connection agreements with Irish Water. Further details on this are outlined within the Engineering Planning Report by Pinnacle Consulting Engineers.

Whilst the gross floor area of the proposed development is 40,589sqm this includes a number of incidental areas. With reference to the area schedule that accompanies this report, we respectfully request that the floor area to which the development contribution should be applicable under the Development Contribution Scheme made by South Dublin County Council should be 37,582sqm.

Mitigation and design around realignment of the Baldonnel Stream

The design approach is one that seeks to minimise the visual impact of the Proposed Development on the public realm and this led to mitigation in design and the overall master planning of the site. A key factor in the overall master planning approach was the Baldonnel Stream, and as outlined both within the Design Statement and EIAR, an exercise was undertaken to seek to retain the stream in its current location, whilst also achieving the required floor area of development to meet the business model of the applicant. This master planning exercise is made more complicated by the need to incorporate a permanent back up power supply due to the Flexible Demand requirements of Eirgrid.

Despite an extensive modelling exercise, it was assessed that the only way to achieve this would be to increase the data centre to being three storey, which would require a bespoke design of an excessive height that would set an undesirable precedent for the Profile Park / Grange Castle area.

Having assessed the environmental quality of the stream, which is currently of low ecological value, it was agreed by the design team, that the best approach was to seek to realign the stream whilst maximsing the biodiversity gain and increasing the ecological quality of the stream to a moderate ecological value on completion of the works. It is proposed that the realignment will occur within the first year of development, which will both maximise ecological benefit as part of the development, as soon as possible, but also enable the first phase of development to occur in a location away from this stream realignment to minimise environmental risk. A Biodiversity Management Plan (by Neo Environmental Ltd. and Ramboll) and an Outline Construction and Environmental Management Plan (by Pinnacle Consulting Engineers) for the stream realignment accompanies this application. The overall strategy is aimed at achieving the maximum level of biodiversity gain, landscaping and attenuation as part of Phase 1A of the Proposed Development.

This report, should be assessed in conjunction with the submitted architectural drawings; EIA Report as well as engineering and other details. These plans provide both detailed information in terms of the nature and extent of the proposal as well as an assessment of the environmental impact of the scheme including mitigation measures to address potential impacts.

The assessment of the application under the EIA Report has clearly determined that with appropriate mitigation the proposal will not have a negative impact on its environment. The mitigation proposed is both reasonable and based on best planning and environmental practice that will facilitate the integration of the

development within the existing and expanding land uses, whilst respecting the amenity of existing residential uses and the ecology, amenity and environment of the area.

1. Compliance with Statutory Regulations

The plans and particulars which accompany this application have been screened by reference to the Planning and Development Regulations 2001 (as amended), as set out below.

- The Site Location Map has been prepared on an OS base to a scale of 1:2,500 for the application. An Ordnance Survey Datum local benchmark is indicated on the Map. The application site is outlined in red on this map. The OS map indicates the location of all six site notice locations.
- The Proposed Site Layout Plan is to a scale of 1:500, and indicates the location of the application site in relation to the surrounding environment. Relevant features (such as buildings, trees and roads) adjoining or in the vicinity of the application site are all shown. The drawing indicates the roof plan of the proposed data centres and other buildings.
- An Existing Site Layout Plan is to a scale of 1:500, indicates the existing site and the abandoned dwelling and outbuilding to be demolished.
- As per article 22(2)(iv), the site notice positions (6 no.) are shown clearly on the Site Location Map. These positions are conspicuous and meet the requirements of article 19(1)(c) as they are located at the existing main vehicular and pedestrian entrance to the site from a public road, and at the site itself fully in accordance with Article 19 of the Regulations.
- All other statutory plans, elevations and sections, unless otherwise stated, are drawn to scales of not less than 1:200, in accordance with Article 23(1)(b) and (2) of the Regulations. This ensures that a detailed level of information is provided to the Planning Authority to enable their full assessment of the application.
- The proposed floor and roof plans and elevations for the buildings are indicated on drawings submitted with the application. These drawings show the levels pertaining to the site. Floor levels are shown on all plans, sections and elevations of the proposed development. All levels are relative to Ordnance Survey Datum.
- The principal dimensions including height of the different elements of the proposed development and the site are indicated on the plans, elevations and sections as lodged with this application in accordance with article 23(1)(f).
- All drawings are clearly coloured and marked to distinguish the proposal, in accordance with article 23(1)(e).
- All OS mapping is appropriately identified in accordance with article 23(1)(g).
- The north point is indicated on all relevant maps and plans in accordance with article 23(1)(h).
- The newspaper notice appeared in the Irish Daily Star, and which is recognised as an appropriate newspaper for a planning application in this area.

The legal interest of the applicant in making this application is fully set out in the application package.

2. Site analysis

The Proposed Development is to be located on a site of c. 8.7 hectares that consists of a primarily greenfield site within the Profile Park Business Park. The site includes the abandoned and unoccupied single storey property and outbuilding (206sqm) that is located to the south of, and abounding the New Nangor Road, Dublin 22. This property and associated outbuilding are proposed to be demolished as part of the Proposed Development. The northern boundary with the New Nangor Road remains rural in form. The site is an irregular parcel of land and covers a total area of approximately 8.7ha. and is relatively flat at between 72m and 73.5m Above Ordnance Datum (m AOD) with the lowest part of the site being where the stream enters the culvert under the site to the west.

The site is bounded by the recently realigned New Nangor Road (R134) to the north with further industrial development (Kilcarbery Park and other developments) to its north that includes the Microsoft data centre campus; by a residential property and agricultural lands to the east; by Falcon Avenue and further lands within Profile Park to the south; and the Grange Castle Motor Company site to the west. There is an existing

vehicular access, that includes some road works, off a roundabout on Falcon Avenue within Profile Park into the site to the south / south-east. Further access points into the site are located to the south-west within Profile Park.

Aerial view of Proposed Development site in context (source: Google Earth)

The existing Baldonnel steam runs through the site in a south-east to north-west direction, flowing towards the north-west; where it enters into an underground culvert below the Grange Castle Motor Company site that is a section 22 landfill site. This culvert offers a significant restriction to the natural flow of the stream. The stream borders but is located outside of the site to the south-east. The stream passes through a low quality environment and offers little in terms of the quality of its biodiversity

View to North along eastern length of the Baldonnel stream (left) with poor quality tree line and northern part of stream looking east (right)

There are strong hedgerows along the western and eastern boundaries that includes some trees. Further trees are located around the abandoned residential property to the north of the site, as well as forming stubs

of trees at the east and west boundary where the townland boundary between Ballybane and Kilbride crossed the centre of the site.

The lands have been previously subject to a geophysical survey by Archaeological Consultancy Services Ltd. under licence no. 20R0080 that indicated a number of anomalies that are unlikely to form archaeological features. Further investigation trenching was undertaken under licence from the National Monuments Service, Department of Culture, Heritage and the Gaeltacht on behalf of South Dublin County Council.

Large areas of the surrounding lands to the south and north within the Grange Castle Business Park and Profile Park have been developed in the past 10-15 years and are occupied by industrial campuses including pharmaceutical, data centres and food manufacturing uses The closest occupied residential property is located c. 15m east of the north-east boundary of the site along the New Nangor Road.

The overall site is located between the N4 and N7 national primary roads and is served by a road network that has recently undergone an upgrade as well as Falcon Avenue within Profile Park that provides access into this part of the Business Park from the New Nangor Road.

Planning history of the site

An extant permission granted in December 2020 under Reg. Ref. SD20A/0124 exists on the site for the construction Distribution Warehouse Building comprising warehousing and ancillary areas at ground floor and support offices, staff areas and plant across two floors; and car parking, cycle parking, security gatehouse, landscaping and boundary treatments (including security fencing and gates). The permission also includes for the demolition of the abandoned dwelling that forms part of the current application. The road infrastructure in place within Profile Park was granted under the permission consented under Reg. Ref. SD06A/0568. This application also proposed the diversion of the stream but with no biodiversity mitigation, and this element of the application was subsequently withdrawn at Further Information stage.

3. Pre-application consultations

A pre-application meeting (PP0064/21) was held with South Dublin County Council in respect of the proposed development via Microsoft Teams on the 23rd June and the 19th July 2021. The formal pre-application meeting was attended by Tracy McGibbon (Senior Executive Planner); Sarah Watson (Planning Officer); Brian Harkin (Water and Drainage) as well as Oisin Egan, Ronan Toft, Fionnuala Collins, Aws Taki, and Yasir Khan; with representatives of the Project Architects, Engineers; Environmental Consultants and Marston Planning Consultancy.

This part of the Planning Report sets out key points discussed during the course of the pre-application consultations and demonstrates how the submitted application responds to the issues raised.

Stream realignment

The need to address the stream realignment in both policy terms, and its justification from an environmental perspective became a clear requirement of the pre-planning process. It was noted by the wider design team during the pre-planning meetings that there was an intrinsic need to realign the stream based on the business case of the applicant and that a significant level of work in terms of test fitting had been undertaken into trying to avoid this requirement.

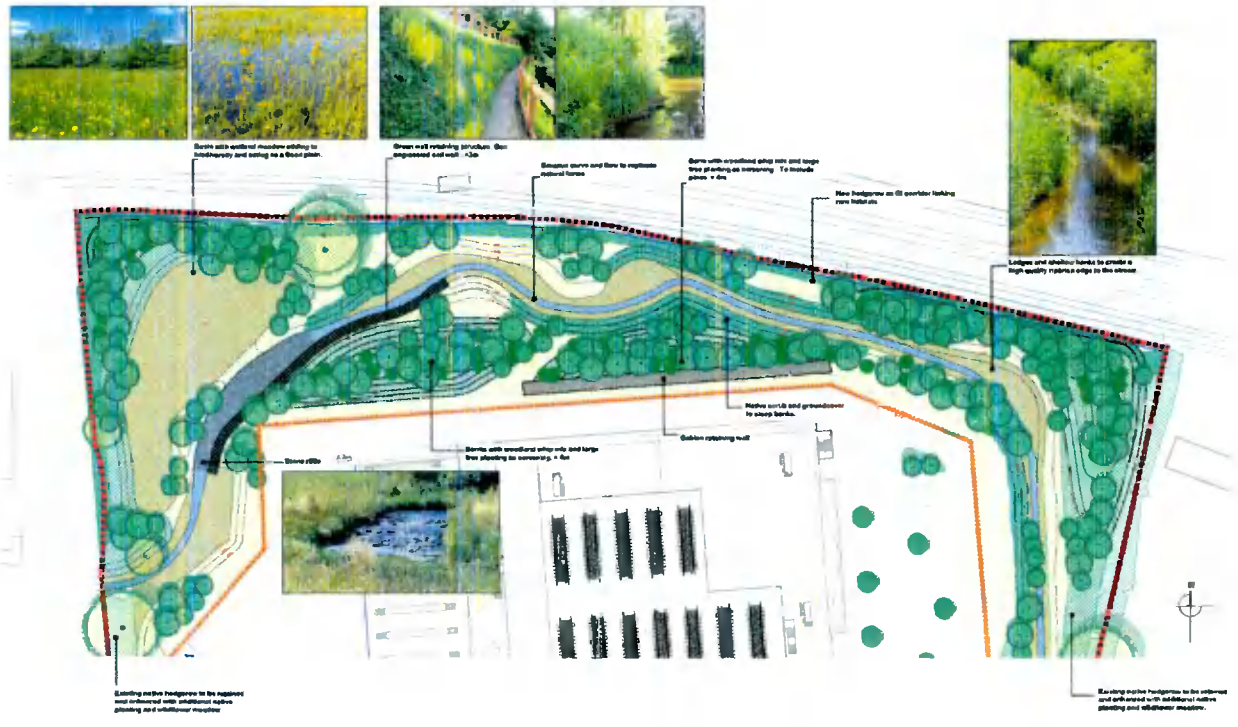
It was outlined that the survey of the stream had indicated that the species diversity within the stream was low; and it had steep banks and was 2m wide in places and had a substrate of mud and gravel. Its existing western alignment was largely open with patches of dense vegetation mostly of iris and watercress with no trees along the western 170m with a tree line of poor quality trees along the eastern length of the stream. The low species diversity and its small size led to a conclusion by the consultant ecologists that the biodiversity value of the stream was classified as being of local importance higher value, with the main reason for the higher value being that it is not a common habitat within the local area. The approach was therefore to seek the maximum biodiversity gain from the proposed stream realignment.

The stream realignment will create microhabitats for a wider range of species and will create riffles and pools along the new stream realignment that will offer habitat improvements. These positive changes will be further enhanced by the planting of wildlflower meadow in the flood area basin either side of the stream.

This will be further supplemented by the significant planting, including of mature trees and berms, along the realigned stream, that will create diverse habitat that will create foraging and sheltering opportunities for invertebrates, which extends into providing foraging habitats for bats and birds.

The addition of aquatic species, such as yellow iris and watercress, already present within the stream, will enhance the vegetated sections of the stream. Specific planting and maintenance of the created habitats as well as adding artificial habitats such as hibernacula, bat and bird boxes and insect holes will increase the biodiversity of the new stream corridor. Sensitive management of the created habitats will ensure that the habitats are in place for the long-term.

The ultimate goal of the re-orientation of the stream will be to improve the local biodiversity of the site and local area as well as creating biodiversity links, that will encourage species found in the wider environment to the site. The details of this are clearly set out in the Stream and biodiversity landscape drawing (excerpt below) by Kevin Fitzpatrick Landscape Architecture as well as the Biodiversity Management Plan by Neo Environmental Ltd undertaken in collaboration with Ramboll.



Stream realignment plan (Source: Kevin Fitzpatrick Landscape Architecture)

The proposed phasing of development within the site will enable the landscaping, attenuation and biodiversity gains to the site to be delivered within the early phases of the proposed development. It is intended that the realignment of the stream will occur within Phase 1A/B that includes the north block of Building 11 and the southern part of the Gas Plant. The Aggreko Plant will only be required if there is a delay in achieving the permanent power to the site and if it is not required the stream diversion will occur within Phase 1A.

The early phasing of the stream realignment and biodiversity management plan will ensure that within the lifetime of the permission the biodiversity gains are already well established and maturing. This is clearly set out under the Biodiversity Management Plan, with a construction methodology set out under the Outline Construction and Environmental Management Plan submitted with this application, that has been undertaken by Pinnacle Consulting Engineers.

Attenuation

The initial pre-planning meeting set out an attenuation strategy similar to that of the logisitic warehousing permission that was granted under Reg. Ref. SD20A/0124. Despite the planning precedent that existed for this level of underground attenuation in a recently permitted development on this site, the Council raised

significant concerns over the level of proposed underground attenuation due to the level of overall development being proposed.

It was noted that the level of storm water attenuation is significantly compromised due to the need to provide flood compensatory areas due to the constraints of the culvert under the Bolands Garage site. In order to address the Council's concerns a significant reduction in impermeable surfaces and increase in permeable areas was proposed, and accepted by the Council. This involved the introduction of permeable asphalt and gravel areas, as well as an attenuation pond along the southern boundary of the site. These measures enable the maximisation of sustainable urban drainage on site with only a 700cum underground attenuation taken now proposed compared to the 2,500cum underground tank permitted under the logistic warehousing permission.

Positive biodiversity gain

There is a need to ensure that all hedgerows are retained, and that there should be no net loss in biodiversity. We respectfully submit that with the positive changes being made to boundaries and stream, as well as generally high levels of semi-mature planting throughout the site there will be a net biodiversity gain in the proposed scheme. The baseline biodiversity assessment included a bat survey of all buildings on site fully in accordance with best practice and the results have been incorporated within the EIA Report. Further bat surveys will be undertaken prior to the demolition of these buildings.

The landscape approach in providing berms, mature native planting, as well as mixes of other planting will as well as providing a natural screen to the Proposed Development, even at year 1 of operations, will also create wildlife and biodiversity corridors around the site that will connect with existing planting and hedgerows.

The need for development to be set back from the Baldonnel Stream was raised within the meeting. Policy G3, Objective 2 of the County Development Plan requires a biodiversity zone of not less than 10metres from the top of the bank of all watercourses within the County and this is adhered to under the proposal. In accordance with this Objective a 10metre corridor on each side of, and along the length of the realigned stream has been provided.

The landscape plan accompanying this application proposes heavy landscaping throughout and particularly to the north between the stream and the Proposed Development, and including the replanting of the stream banks where it has been realigned. Existing hedgerows and other vegetation will be retained wherever possible and strengthened with native planting. This will create commuting and foraging corridors within the Proposed Development site for a range of fauna species. A woodland belt is proposed along the northern boundary of the site either side of the realigned stream. Large, semi-mature tree planting has been proposed for this area and will provide an immediate ecological corridor within the site. This will be further aided by proposed bat boxes and bird boxes. All of these measures, will ensure that the Proposed Development fully accords with Policy G3, Objective 2 of the County Development Plan and provide a net biodiversity gain for the site.

Further consultation

The need for the applicant to consult with the Department of Defence due to the position of the site within the Department of Defence Inner Zone was raised at the meeting, including the potential for the attenuation ponds to attract birds. At the time of the application no further response has been received. We wish to outline that given the proximity to Casement Aerodrome, the operation of cranes should be co-ordinated with Air Corps Air Traffic Services, no later than 28 days before use. We wish to confirm the applicant's acceptance of such a condition and requirement.

Furthermore, we note that the attenuation and flood relief ponds are designed to act as such rather than just artificial ponds that would more likely attract birds. Added to the fact that they are located close to the data centres and within a busy and well-lit business park, from our experience of similar attenuation ponds on other sites in the area where they have not attracted birds in great numbers beyond that already in the area, the potential concern over this issue is one that does not need to be further addressed.

Photomontage views
It was outlined where the photomontages would be taken from and this was deemed as being acceptable with the need for an addition view from the N7 to the south that is provided within the final application documentation. This additional and all other views have been incorporated into the Landscape and Visual Impact chapter of the EIA Report.

Energy Statement
It was noted during the pre-application meeting that submission of an energy statement is a requirement under section 11.7.6 of the County Development Plan. In accordance with this requirement, an energy statement has been prepared and is submitted with the application.

Environmental Impact Assessment Report
It was noted at the pre-application meeting that an EIA Report was under preparation to accompany the planning application. The current application is duly accompanied by an EIA Report prepared by Ramboll and other specialised consultants. The Non-Technical Summary provides an overview of the EIA Report, which demonstrates that, subject to the mitigation measures proposed, it will not have a negative impact on its environment

4. Description of the Proposed Development

The Proposed Development is to develop 2 no. two-storey data centres and ancillary elements with a gross floor area of 40,589sqm. In order to facilitate the proposed development it is proposed to demolish the abandoned dwelling and associated buildings along the New Nangor Road, Clondalkin, Dublin 22.The proposed data centres are referred to as Buildings 11 and 12, with Building 11 to the south, to be developed over two phases. The southern data center would be built in two phases of equal capacity, referred to as DUB 11.1 and DUB 11.2.

The two data centers would be constructed across the site, north to south in order to reduce the visual bulk of the development as it faces New Nangor Road. The northern data center (Building 12) would be set back and screened by the extensive berms and planting along the realigned watercourse of the Baldonnel Stream.

Building 11, which is two storey and will form two adjoined structures known as building 11.1 and 11.2, is located to the south of the site and will have a gross floor area of 24,667sqm. It will include 22 no. emergency generators located at ground floor level within a compound to the western side of the data center with associated flues that will be 22.3m in height.

Building 12, which is also two storey, is located to the immediate north of Building 11 and will have a gross floor area of 12,915sqm. It will include 11 no. emergency generators located at ground floor level within a compound to the western side of the data center with associated flues that will be 22.3m in height.

Each of the two data centers will includes data storage rooms, associated electrical and mechanical plant rooms, loading bays, maintenance and storage spaces, office administration areas, and plant including PV panels at roof level as well as a separate house generator for each facility that will provide emergency power to the admin and ancillary spaces. Each generator will include a diesel tank and there will be a refuelling area to serve the proposed emergency generators. The generators will provide power for the data centres in the unlikely event of a utility power failure. The overall height of each data center apart from the flues and plant at roof level is c. 14.23m above the finished floor level.

The location of the ancillary office administration space of each building will provide an element of visual interest and animation along each of these frontages. The design of the buildings has been carefully considered by Burns and McDonnell Architects in order to complement the adjoining land uses. High quality, durable materials and finishes are proposed throughout, as illustrated within the Architectural Drawing pack and Design Statement. The massing of the buildings has been broken down through the use of vertical elements as well as the use of the external staircases for green walls in the form of vertical planting.

Car and Bicycle parking

It is proposed to provide 144 no. dedicated car parking spaces including 8 no. disabled accessible spaces that will be accessed from Falcon Avenue within Profile Park, which is accessed via a security checkpoint from the New Nangor road (R134). A secondary access to the site will be provided off Legacy Drive within Profile Park to provide independent access to the gas plant and substations. The car parking is broken down into smaller components through the use of planters that break down the rows of parking spaces as well as further greening the proposed development site.

These spaces will include 14 number spaces, 10%, that will be provided with Electric Vehicle charging (EV) points in line with the County Development Plan. All other car parking spaces will be future proofed through the inclusion of ducting to allow the rapid future installation of additional EV charging points as adoption increases. The car parking provision is considered to be sufficient and an appropriate level of spaces based on the level of staffing along with maintenance contractors and visitors for the proposed data centres.

The proposed development shall include a total of 66 no. covered bicycle parking spaces, located in 3 no. clusters) close to building entrances. The bicycle parking provision is considered appropriate and adequate to encourage the use of active transit modes by staff accessing the proposed development.

The proposed car and cycle facilities are located in close proximity to the administration and staff facilities within each data centre, thereby maximising accessibility for future staff, for further details please refer to the Traffic Chapter of the EIA Report prepared by Ramboll that accompanies this application.

Need for the Power Plant

The Proposed Development includes the construction of a gas powered generation plant that will be constructed in a phased basis to provide permanent back-up power, to the Proposed Development. This will form a 13m high single storey building with a gross floor area of 2,714sqm that will contain10 gas generators with associated flues that will be 25m in height, and grouped in pairs and threes. The Gas Plant will be located to the west of Building 11.

The permanent power supply to the overall development of the entire site will be provided via the proposed two storey 110kV GIS Substation with associated transformer compound that will be applied for under a separate application that will be located to the south of the Proposed Development site. This will be connected via an 110kV transmission line from a suitable connection to the west to be determined by Eirgrid. The application for the provision of the 110kV substation and transmission lines, which do not form part of this application, may be determined as Strategic Infrastructure Development (SID) through the pre-application consultations with the Board. The GIS Substation and transmission line will be designed to support power demand for the full development of the Proposed Development of the site.

There is a requirement for the Power Plant to provide a back-up power solution to the Proposed Development due to the Flexible Demand requirements of Eirgrid. This requires a back-up solution to the National Grid above that of the temporary diesel generators, once the Proposed Development is connected to the National Grid. This is due to the constrained nature of the National Grid within the Greater Dublin area. Flexible Demand is defined by Eirgrid as:

> *"Flexible demand is electrical load for a data centre that must be reduced on instruction from EirGrid via the National Control Centre (NCC). Where capacity availability in a particular area is constrained, EirGrid will reserve the right to apply flexible demand arrangements and this will be reflected as a requirement for connection offers for new data centres in that area. EirGrid identify constrained areas as areas where there is a risk or potential risk that the level of demand may be greater or has the potential to become greater than the level of supply currently available or that will be available in the coming years. Such risks are caused by the unavailability of electricity supply in a particular area to meet the demand requirements in the same area. At present, EirGrid has identified the greater Dublin region as constrained. Flexible demand is electrical load for a data centre that must be reduced on instruction from EirGrid via the National Control Centre (NCC). Where capacity availability in a particular area is constrained, EirGrid will reserve the right to apply flexible demand arrangements and this will be reflected as a requirement for connection offers for new data centres in that area. EirGrid identify constrained areas as areas where there is a risk or potential risk that the level of demand may be greater or has the potential to become greater than the level of supply currently available or that will be available in the coming years. Such risks are caused by the unavailability of electricity supply in*

a particular area to meet the demand requirements in the same area. At present, EirGrid has identified the greater Dublin region as constrained."

Generators and diesel storage
In the event of a loss of power supply i.e. temporary grid blackout, diesel powered back-up generators will be provided to maintain power supply. These generators are designed to automatically activate and provide power to the data centres pending restoration of mains power. (An uninterruptible power source is also provided for the short-term transition from mains power to diesel generators).

The data centres will be served by a total of 33 no. back-up diesel generators. Each generator will also include a diesel belly tank with a single refuelling area to serve the proposed emergency generators. It is anticipated, based on the Operator's experience, that back-up generators will rarely be used. They will be tested periodically to maintain operational readiness. The assessment of the impact of these emissions is presented in the EIA Report.

The Plant's generator units would use medium voltage cabling in conduit/tray to make the connections. The Power Generation Facility service loads would derive from two single ended 400V switchgear lineups that would serve various panelboards and motor control centers throughout the plant. Two new 11 kV/400 V transformers, power by the new 12 kV switchgear line ups, would serve the 400 V gear and plant loads. The Power Utility would provide two 110 kV lines to source the substation. Two 100 MVA 110/20 kV Transformers would be installed at the proposed EirGrid substation to the south to provide two independent 20 kV feeds to two separate prefabricated switchgear buildings. Two 20kV sectionalizing breakers would be installed in each of the switchgear buildings to provide a means of load transfer in the event of a transformer outage. Each 20 kV switchgear building would provide eight underground feeds to the Data Center for complete redundancy which would run to the west of the buildings.

Data Centre Facility Operation
Once operational, each data centre facility will "go live" and serve data customers on an ongoing basis. The server systems and the supporting infrastructure will be monitored by site staff and faults identified and remedied as required. Staff are primarily required onsite for security, ongoing monitoring and maintenance of plant and equipment.

Temporary Gas Powered generation Plant
A temporary gas powered generation plant within a fenced yard containing 21 no. generator units in containers, each with associated flues (each 25m high), 12 transformers and 10 containers of controls to be located to the west of, and associated with the first phase of Building 11, and will be required for a period of up to 2 years if connection to the national grid is delayed. This temporary plant will not be built if the connection to the national grid is in place prior to the operation of Building 11. We would request a suitable condition be attached to any grant of permission that outlines the time restriction to this temporary power plant, and that it is only to be built in the event of permanent power not being available on day one of operation of the data center development.

Access, landscaping and other developments
The proposed development also includes the reorientation of the Baldonnel Stream, biodiversity management initiatives, attenuation ponds and the installation and connection to the underground foul and storm water drainage network. These have already been significantly detailed within section 3 of this Planning Report.

The development will be enclosed with landscaping to all frontages. It is proposed to create a campus level of finish as opposed to an industrial form of development, with heavy landscaping throughout and particularly to the north and either side of the realigned Baldonnel Stream. The approach is to provide a landscape master plan that will be phased in two parts. The first phase will provide for all landscaping and attenuation to the north, east and west of the development; with the landscaping around the south to be implemented on completion of the Proposed Development. The northern landscaping, realigned stream and attenuation of the site will therefore be in place prior to the commencement of construction of Building 11.1.

Ancillary development
The development also includes for all ancillary development works, that will include 1 no. attenuation area and 1 no. flood compensatory pond; and the installation and connection to the underground foul and storm water drainage network, and installation of utility ducts and cables that will include the drilling and laying of ducts and cables. Other ancillary site development works will include hard and soft landscaping, lighting, fencing, signage, services road, entrance gate, pump rooms and sprinkler tanks. There will also be a single storey step-up substation (38sqm) as well as 2 no. single storey switch substations (121sqm) to be located to the west of the site; as well as the construction of an AGI Gas Regulator compound that include 3 no. single storey buildings (134sqm) to the south-west of the site.

Material and façade treatment
The design team have selected different materials, architectural style and detailing, to be implemented throughout the proposed development. The northern and southern data centers would predominately comprise sandwich panels in white, light grey and dark grey, consistent with the surrounding data centers. The approach to materials is to use good quality materials in a restrained way with a limited palette of colours and finishes. The material palette detailing is displayed in Figure 4.2 of the EIA Report as well as on the architectural drawings submitted with the application. The elevations are further broken down by the use of the external staircases for vertical planting.

Related development
It is also proposed to apply under a separate planning application to construct a permanent 110kV GIS Substation and two 110kV underground transmission lines from the proposed permanent substation to the existing connections. The provision of the permanent substation and transmission lines will be subject to its own application. Subject to pre-planning consultations with An Bord Pleanála this may be determined as being Strategic Infrastructure Development.

The cumulative effect of the Proposed Development together with other relevant developments, including the above, has been considered in the EIA Report.

5. National and Regional Planning context

National Planning Framework
The National Planning Framework (NPF) was published in February 2018 setting out a vision for Ireland in land use and planning terms to 2040. The NPF replaced the National Spatial Strategy once it was adopted as the long term land use and planning vision for Ireland.

National Strategic Outcome 6 of the NPF relates to the creation of *"A Strong Economy Supported by Enterprise, Innovation and Skills"*. This strategic outcome is underpinned by a range of objectives relating to job creation and the fostering of enterprise and innovation. The following objective, relating to Information and Communications Technology (ICT) infrastructure (including datacentres) is included under National Strategic Outcome 6:

"Promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities."

The Proposed Development comprises the provision of three new data centres and associated ancillary development, in a location which is well suited and serviced to accommodate such a use. The NPF also states under National Strategic Outcome 6:

"Ireland is very attractive in terms of international digital connectivity, climatic factors and current and future renewable energy sources for the development of international digital infrastructures, such as data storage facilitys. This sector underpins Ireland's international position as a location for ICT and creates added benefits in relation to establishing a threshold of demand for sustained development of renewable energy sources."

The NPF is favourably disposed to the location of ICT infrastructure in Ireland, and the Proposed Development, which comprises of such ICT infrastructure, is therefore considered to be wholly in accordance with this key body of national planning policy.

Regional Spatial and Economic Strategy for the Eastern and Midlands Regional Assembly
The Regional Spatial and Economic Strategy (RSES) for the Eastern and Midlands Regional Assembly (EMRA) includes Regional Policy Objective (RPO) 8.25 which states the following:

"Local Authorities shall:

- *Support and facilitate delivery of the National Broadband Plan.*
- *Facilitate enhanced international fibre communications links, including full interconnection between the fibre networks in Northern Ireland and the Republic of Ireland.*
- *Promote and facilitate the sustainable development of a high-quality ICT network throughout the Region in order to achieve balanced social and economic development, whilst protecting the amenities of urban and rural areas.*
- *Support the national objective to promote Ireland as a sustainable international destination for ICT infrastructures such as data storage facilitys and associated economic activities at appropriate locations.*
- *Promote Dublin as a demonstrator of 5G information and communication technology."*

The site is therefore considered to be an appropriate location for the development of data centres under this Strategy.

6. Local Planning Context

South Dublin County Development Plan 2016-2022
The South Dublin County Development Plan is the statutory planning document that covers the entire South Dublin administrative area. The Plan was adopted in June 2016. The Proposed Development is to be located within an area zoned EE (Enterprise and Employment) under the County Development Plan with the stated aim:

"*To provide for enterprise and employment related uses."*

The proposed use is a permitted use under this zoning. Significant precedent exists for the establishment of this use on other EE zoned lands in the area. EE zoned areas are established economic industrial areas running essentially in an arc northwards from City West to and including Profile Park, Grange and Grange Castle. The Proposed Development constitutes a significant investment in the Profile Park Business Park at this strategic location identified for development of this nature. The proposal will contribute a high value added employment use in a location well suited to the proposed use having regard to its proximity to transport infrastructure and its zoning under the County Development Plan.

It is the policy of the Council to support sustainable enterprise and employment growth in South Dublin and in the Greater Dublin Area, whilst maintaining environmental quality. A number of policies relating to Green Infrastructure were assessed having regard to the realignment of the Baldonnel Stream and other elements of the proposal and these are summarised in the following:

GREEN INFRASTRUCTURE (G) Policy 1 Overarching	***Commentary***
It is the policy of the Council to protect, enhance and further develop a multifunctional Green Infrastructure network by building an interconnected network of parks, open spaces, hedgerows, grasslands, protected areas, and rivers and streams that provide a shared space for amenity and recreation, biodiversity protection, flood management and adaptation to climate change. G1 Objective 1: To establish a coherent, integrated and evolving Green Infrastructure network across South Dublin County with parks, open spaces, hedgerows, grasslands, protected areas, and rivers and streams forming the strategic links and to integrate the objectives of the Green Infrastructure Strategy throughout all relevant Council plans, such as Local Area Plans and other approved plans.	*The current stream is disconnected from the wider biodiversity around the site caused in part if not primarily by the Bolands garage site; and the recent agricultural use of the lands. This has led to flooding and previous hedgerow removal on the site. The diversion of the stream will enable a biodiversity corridor to be created between this site around the robust hedgerow around the Bolands Garage site and to significant planting permitted around the Amazon site to the west; as well as along the diverted stream and new planting within the proposed site to the hedgerows and planting to the east of the site that connects to the wider biodiversity corridors further east around the Grange Castle Golf Course. The proposal will therefore enable and facilitate an improved interconnected biodiversity network, as well as improved flood management.*
GREEN INFRASTRUCTURE (G) Policy 3 Watercourses Network It is the policy of the Council to promote the natural, historical and amenity value of the County's watercourses; to address the long term management and protection of these corridors and to strengthen links at a regional level.	*The aim of the diversion of the stream is to address the long term management, and recognising its poor current quality to seek a strategy that through appropriate management and biodiversity measures will enable the protection and significant enhancement of the new stream corridor.*

G3 Objective 1: *To promote the natural, historical and amenity value of the County's watercourses and address the long term management and protection of these corridors in the South Dublin Green Infrastructure Strategy*	*The existing stream has a low environmental and amenity value. The aim is via appropriate enhancement measures that will include a Biodiversity Management Plan, as well as a CEMP to avoid construction works impacting upon the realigned stream that will facilitate an enhanced watercourse within the site.*
G3 Objective 2: To maintain a biodiversity protection zone of not less than 10 metres from the top of the bank of all watercourses in the County, with the full extent of the protection zone to be determined on a case by case basis by the Planning Authority, based on site specific characteristics and sensitivities. Strategic Green Routes and Trails identified in the South Dublin Tourism Strategy, 2015; the Greater Dublin Area Strategic Cycle Network; and other government plans or programmes will be open for consideration within the biodiversity protection zone, subject to appropriate safeguards and assessments, as these routes increase the accessibility of the Green Infrastructure network.	*The proposal will maintain and enhance a biodiversity protection zone of 10m from the top of the bank of the rerouted stream. The proposed rerouting of the stream as detailed at our meeting last week will enable an enhanced biodiversity corridor to be achieved that creates linkages, where there is currently none within this business park and its wider environs.*
G3 Objective 3: To ensure the protection, improvement or restoration of riverine floodplains and to promote strategic measures to accommodate flooding at appropriate locations, to protect ground and surface water quality and build resilience to climate change.	*The proposal seeks to ameliorate the flooding issues on the site caused by the Bolands Garage site. Flooding compensatory areas have been provided to allow for climate change with appropriate levels of above ground level attenuation provided.*
G3 Objective 4: To uncover existing culverts and restore the watercourse to acceptable ecological standards and for the passage of fish, where possible.	*The culvert to our west within the Bolands garage site is not in our control but clearly the site has the potential to be redeveloped in the future. The diversion of the stream and the significant benefits it will have on the biodiversity of the site, immediate local area, and wider area will ensure that the highest ecological standards are met.*
ET3 Objective 5: To ensure that all business parks and industrial areas are designed to the highest architectural and landscaping standards and that natural site features, such as watercourses, trees and hedgerows are retained and enhanced as an integral part of the scheme.	*The proposal seeks to achieve the highest possible architectural and landscaping standards. The existing stream, whilst a natural site feature, offers little currently (low value) in terms of biodiversity and it is largely not visible to the public. The aim is to create an improved biodiversity corridor out of the diverted stream that will maximise its benefit to the wider environment and its route will be highly identifiable and form a natural feature within the scheme. This will be improved further by the significant level of new planting along the new stream.* *A range of design fits were undertaken prior to seeking to consult with the Planning Authority. A critical part of this is the need for the client to achieve 12 modules on site to make the project viable. Alternative layouts that included a west-east alignment or a data centre of greater height were considered but discounted as they could not be fitted on the site or were contrary to the established data centres in the area.* *It should be noted that the need under the Data Centre Connection Offer Process now requires that all offers will be flexible and that during grid events that sites will be required to reduce demand on the national grid. This requires the applicant to provide a gas power plant and other suitable infrastructure on site that will feed into the national grid when required. This is an important differentiation from other individual gas plants that seek to provide power to data centres on a permanent basis. The need to accommodate such infrastructure on this site reduces the flexibility for site planning and is one of the reasons that generates the need for the stream diversion in this instance.* *In our considered opinion the facilitating of the stream diversion in this instance is an integral part of the scheme that would be implemented in line with the first data centre being built. The aim would be to have the stream diverted within the first planting season after permission is granted and to ensure that both a biodiversity management plan for the stream is implemented by consulting ecologists as well as implementing a Construction and Environmental Management Plan to protect any pollution of the stream. This would require the implementation of the BMP to form part of the contract of the contractors; and identify actions for the successful diversion of the stream. The BMP will also set out a schedule of monitoring from the project ecologists both during and after construction for several years both during and after completion of development.*

The nature of the overall design has been informed by a site analysis of environmental issues. This has included noise and air quality objectives. The enhancement and creation of new bio-diversity corridors to

fully integrate the scheme into the surrounding environment to ensure that direct and cumulative effects on biodiversity are addressed in the overall design. Suitable attenuation and sustainable drainage systems have also informed the design. This mitigation of design also increases native tree planting within the site from its current position. The design incorporates SUDS fully in accordance with policies of the Plan.

In conclusion, it is considered that the proposal is in accordance with the policies and objectives of local land use planning policy as set out under the South Dublin County Development Plan 2016-2022.

7. Environmental Impact Assessment Report

The requirement for EIA for certain types and scales of development is set out in the EIA Directives (2011/92/EU and 2014/52/EU), European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (the bulk of which came into operation in September 2018), the European Communities (Environmental Impact Assessment) Regulations 1989-2006, Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001-2021. It should be noted that the EIA Report is prepared by Ramboll in accordance with the 2011 EIA Directive (2011/92/EU), as amended by the 2014 EIA Directive.

The EIA Directives list those projects for which an EIA is mandatory (Annex I) and those projects for which an EIA may be required (Annex II). With regard to Annex II projects, Member States can choose to apply thresholds or use case by case examination or a combination of both to assess where EIA is required. In Ireland, a combination of both has been applied.

The project proposed is not listed under Annex I EIA Directives and it is not above the relevant threshold as set out in the Planning and Development Regulations 2001-2021 for Annex II projects. The threshold for "*industrial estate development projects, where the area would exceed 15 hectares*" as set out in Part 2 of Schedule 5 of the Regulations was considered to be most relevant threshold in the context of the Proposed Development in the subject location. The Proposed Development site area does not meet this threshold and therefore an EIA Report is not statutorily required for the Proposed Development.

However, the scale and nature of the proposed development provides the potential for significant effects on the environment and the Applicant has therefore decided to undertake an EIA on this basis. We note that this has been the case for all data centers within the area. Accordingly, a formal EIA Screening exercise with SDCC was not deemed necessary.

The main objective of an EIA, as set out in Article 3(1) of the 2014 EIA Directive, is to identify, describe and assess the direct and indirect significant impacts of a project on population and human health, biodiversity, land, soils, water, air & climate (including noise), material assets, cultural heritage and the landscape and the interaction between the aforementioned factors. The EIA Report reports on the findings of the EIA process and informs the Planning Authority, statutory consultees, other interested parties and the public in general about the likely effects of the project on the environment.

8. Appropriate Assessment

A screening report has been completed for the Proposed Development, as required under the Habitats and Birds Directive (92/43/EEC and 79/409/EEC) and is included as a stand-alone report undertaken by Scott Cawley, Consulting Ecologists. This document forms part of the application. The AA screening process has identified that seven European sites lie within 15km of the Proposed Development; with another two hydrologically connected to the Proposed Development site via the River Liffey.

Following an examination, analysis and evaluation of the relevant information, including in particular, the nature of the project and its potential relationship with European sites and their conservation objectives, as well as considering other plans and projects, and applying the precautionary principle, it is the professional opinion of the AA authors of the report that there is no potential for likely significant effects on any European sites.

9. Flood Risk Assessment

A site specific Flood Risk Assessment has been undertaken for the site and forms a stand-alone report that forms part of this application. The assessment concluded that the development is not at risk of flooding. The

assessment indicates that the Proposed Development would not adversely impact on the flood risk for other neighbouring properties. Further detail is provided in Chapter 8 – Hydrology of the EIA Report and the accompanying site specific Flood Risk Assessment undertaken by Kilgallen Consulting with Pinnacle Consulting Engineers that forms a stand-alone document as part of the planning application. Given the inland location of the site, it is not at risk from sea level rise.

10. Conclusion

The nature of the proposal fully accords with the zoning, policies and objectives of the County Development Plan and best practice in terms of compliance with putting forward suitable mitigation measures within the design and construction process to more than adequately mitigate environmental impacts of the development and impact on the single nearby residential property.

The proposed development is in accordance with the policies and objectives of the National Planning Framework, Regional Spatial and Economic Strategy for the Eastern and Midlands Regional Assembly, and the South Dublin County Development Plan 2016-2022.

It has been demonstrated within this report, as well as within the accompanying drawings, documents and EIA Report that the proposed development provides a suitable and appropriate use for the subject lands. The design and master planning of the site has taken into account any issues and discussions raised within the pre-application meeting with South Dublin County Council prior to lodgement of this application. The design and layout of the proposed development also provides for an appropriate use of the subject site that is cognisant of existing and permitted surrounding land uses.

In particular the realignment of the Baldonnel Stream within the site, despite the restriction on the western boundary of the site cause by the culvert underneath the Bolands Garage site, is proposed to the highest possible ecological, biodiversity and landscape standards. The details of how the stream will be diverted, and how the realignment will be managed so as to mitigate impacts during construction and maximise biodiversity benefits are clearly set out in the accompanying documents. The aim of the applicant is to undertake the realignment and biodiversity management plan in the first year of construction to maximise biodiversity gain during the implementation of the permission. The objective is to provide a best practice example of such works that the Council can refer others to, where and if such works arise again.

In conclusion, for all of the foregoing arguments, reason and considerations, we respectfully request South Dublin County Council to accept the contents of the application, and to assess the subject development on its own individual merits and to grant planning permission for this development on the basis that by its nature and extent, the proposal would accord with the proper planning and sustainable development of this area including the preservation and improvement of amenities thereof.

We trust that everything is in order and look forward to a favourable decision in due course.

Yours faithfully,

Anthony Marston

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