PROPOSED LARGE-SCALE RESIDENTIAL-LED MIXED-USE DEVELOPMENT ON MILLTOWN PARK AT SANDFORD ROAD

Biodiversity Enhancement Plan

Sandford Living Limited

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Table of contents

Table of Figures

Table of Tables

1 INTRODUCTION

1.1 Background

DNV was commissioned by Sandford Living Ltd., to prepare a Biodiversity Enhancement Plan (BEP) for a Large-scale Residential led Mixed-use Development (LRD) (the 'Proposed Development') at a ca. 4.26 hectare site at Milltown Park, Sandford Road, Dublin 6, D06 V9K7 (the 'Site').

1.2 Quality Assurance and Competence

All surveying and reporting have been carried out by qualified and experienced ecologists and environmental consultants.

This Report was authored by DNV Ecologists Ciara Barry Hannon (CBH), Liam Gaffney (LG), and William McCauley (WMC). The ecological surveys (bats, terrestrial flora and fauna) at the Site were coordinated by DNV Senior Ecologist Liam Gaffney (LG). DNV Ornithologist Brian McCloskey (BMcC) coordinated the bird surveys of the Site.

CBH is a Senior Ecologist with DNV and has a BSc. (Hons) in Wildlife Biology from Munster Technological University (formerly ITT). CBH has a wealth of experience in desktop research, literature review and reporting, as well as practical field and laboratory experience including experience in surveying habitats, plants, bats, birds, mammals, and invasive species. CBH is experienced in the preparation of Preliminary Ecological Appraisals (PEA), Ecological Impact Assessments (EcIA), and Stage I/Stage II Appropriate Assessment Reports, as-well as ornithology reports for renewable energy projects (wind and solar technology). Additionally, CBH has completed, and supported the preparations of several Biodiversity Chapters for Environmental Impact Assessment Reports (EIAR). CBH is also a Qualifying member of CIEEM.

WMC has a B.Sc. in Applied Freshwater and Marine Biology from Galway-Mayo Institute of Technology. WMC has four years of experience in ecological surveying and in this time, he has covered a wide range of ecological topics including ornithological surveying, bat surveying, badger surveying/exclusions, otter surveying, macroinvertebrate surveying and habitat surveying among others. WMC has also completed the field and report work of numerous planning surveys including Preliminary Ecological Appraisals (PEA), Appropriate Assessment (AA), Natura Impact Statements (NIS) and Ecological Clerk of Works (ECoW) surveys.

LG is a Senior Ecologist with 6 years of experience in ecological consultancy. With a B.Sc. in Zoology (Hons) and a M.Sc. (Hons) in Wildlife Conservation and Management from University College Dublin LG is experienced in desktop research, literature scoping-review, and report writing, as well as practical field experience (e.g., Bat surveys, habitat surveys, invasive species surveys, wintering bird surveys, large mammals, fresh water macro-invertebrates etc.). LG's MSc thesis was a literature scoping review on the ecosystem services provided by Irish bats. He has also completed best practice guidance courses on bat survey and mitigation techniques such as: 'Bat Ecology & Survey' and 'Bat Impacts and Mitigation' both held by the Chartered Institute of Ecology and Environmental Management (CIEEM). LG is experienced in compiling Biodiversity Chapters of EIARs, EcIAs, AA screening and Natura Impact Statements (NIS) reports, and in the overall assessment of potential impacts to ecological receptors from a range of developments. LG is also a Qualifying member of CIEEM with full membership application pending.

BMcC is an experienced Ornithologist with a BSc in Planning and Environmental management from the Technological University of Dublin (TUD) and over 12 years of bird survey experience, including three years of professional Ornithology work. BMcC is a longstanding and active member of Bird Watch Ireland and is also the author of several articles in UK birding publication Birdwatch Magazine. BMcC is highly experienced in all survey methodologies and with surveying all species groups of Irish birds and migrants, having provided a range of ornithology survey work for ecological consultancies, e.g., vantage points surveys of gulls, terns, raptors, waders and wildfowl; hinterland surveys of the above as well as riverine species; and breeding waders and country birds.

2 DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Site Location

The Proposed Development Site is located of Sandford Road and Milltown Road (R117), Milltown, Co Dublin (Figure 1). The Site is currently comprised of a mix of buildings and green space with an overall developable area of 4.26Ha. Works are also proposed on Milltown Road and Sandford Road to facilitate access to the Site including improvements to pedestrian facilities on an area of ca. 0.1Ha. Works associated with the Site's surface water drainage network will entail works through the junction of Milltown Road / Sandford Road and along a portion of Eglinton Road (R824) (approximately 200 metres from the Sandford Road / Eglinton Road junction), with these works incorporating an area of ca. 0.32 Ha.

The Proposed Development Site area, road works and drainage works areas will provide a total application site area of c. 4.74 hectares. The Site is accessed to the north via the R117 and is surrounded to the north, east and west by residential lands. The southern boundary of the Site backs on to lands owned by the Jesuit order and zoned as Z15.

2.2 Project Description

Sandford Living Limited intend to apply for permission for a Large-Scale Residential Development at a c. 4.26 hectare site at Milltown Park, Sandford Road, Dublin 6, D06 V9K7. Works are also proposed on Milltown Road and Sandford Road to facilitate access to the development including improvements to pedestrian facilities on an area of c. 0.16 hectares. The development's surface water drainage network shall discharge from the site via a proposed 300mm diameter pipe along Milltown Road through the junction of Milltown Road / Sandford Road prior to outfalling to the existing drainage network on Eglinton Road (approximately 200 metres from the Sandford Road / Eglinton Road junction), with these works incorporating an area of c. 0.32 hectares. The development site area, road works and drainage works areas will provide a total application site area of c. 4.74 hectares.

The development will principally consist of: the demolition of c. 4,847.5 sq m of existing structures on site including Milltown Park House (880 sq m), Milltown Park House Rear Extension (2,031 sq m), the Finlay Wing (622 sq m), the Archive (1,240 sq m) and the Link Building between Tabor House and Milltown Park House Rear Extension to the front of the Chapel (74.5 sq m); the refurbishment and reuse of Tabor House (1,575 sq m) and the Chapel (768 sq m) and the provision of a single storey glass entrance lobby to the front and side of the Chapel (52 sq m); and the provision of 562 No. residential units comprising 6 No. three-bed courtyard houses and 556 No. apartment units (70 No. studios, 176 No. one-bed units, 267 No. two-bed units and 43 No. three-bed units).

Block A1 will range in height from 5 No. storeys to 8 No. storeys and will comprise 81 No. apartment units; Block A2 will range in height from 6 No. storeys to 8 No. storeys and will comprise 139 No. apartment units; Block B will range in height from 3 No. to 7 No. storeys and will comprise 74 No. apartment units; Block C will range in height from 4 No. storeys to 7 No. storeys and will comprise 151 No. apartment units; Block D will range in height from 3 No. storeys to 5 No. storeys and will comprise 30 No. apartment units; Block E will be 2 No. storeys in height and will comprise 6 No. courtyard type houses; and Block F will range in height from 5 No. storeys to 7 No. storeys and will comprise 81 No. apartment units.

The development also includes the provision of: cultural/community space within Tabor House (4 No. storeys including lower ground floor level) and the Chapel (2 No. storeys including lower ground floor level and mezzanine level) (1,698 sq m) with associated outdoor space (248 sq m); a café/restaurant (179 sq m) and a creche (375 sq m) within Block F with associated outdoor creche play area; ancillary residents' amenities and facilities (324 sq m) within Blocks B & C; and a single storey bin store and substation adjacent to Block F (101 sq m).

The development also provides a new access from Milltown Road (which will be the principal vehicular entrance to the site) in addition to utilising and upgrading the existing access from Sandford Road as a secondary access principally for deliveries, emergencies and taxis; new pedestrian access points; pedestrian/bicycle connections through the site; 319 No. car parking spaces (288 No. at basement level and 31 No. at surface level); set down area for deliveries; bicycle parking; 22 No. motorcycle spaces; bin storage; boundary treatments; private balconies and terraces facing all directions; hard and soft landscaping including public open space and communal open space; green/blue roofs; PV panels; substations; lighting; plant; lift cores and overruns; and all other associated site works above and below ground.

The proposed development has a gross floor space of c.50,196 sq m above ground level over a partial basement (under part of Blocks A1 and A2 and under Blocks B and C) measuring c. 10,550 sq m, which includes parking spaces, bin storage, bike storage and plant.

See **FIGURE 2** for proposed site layout.

FIGURE 1. SITE LOCATION (QGIS, 2025)

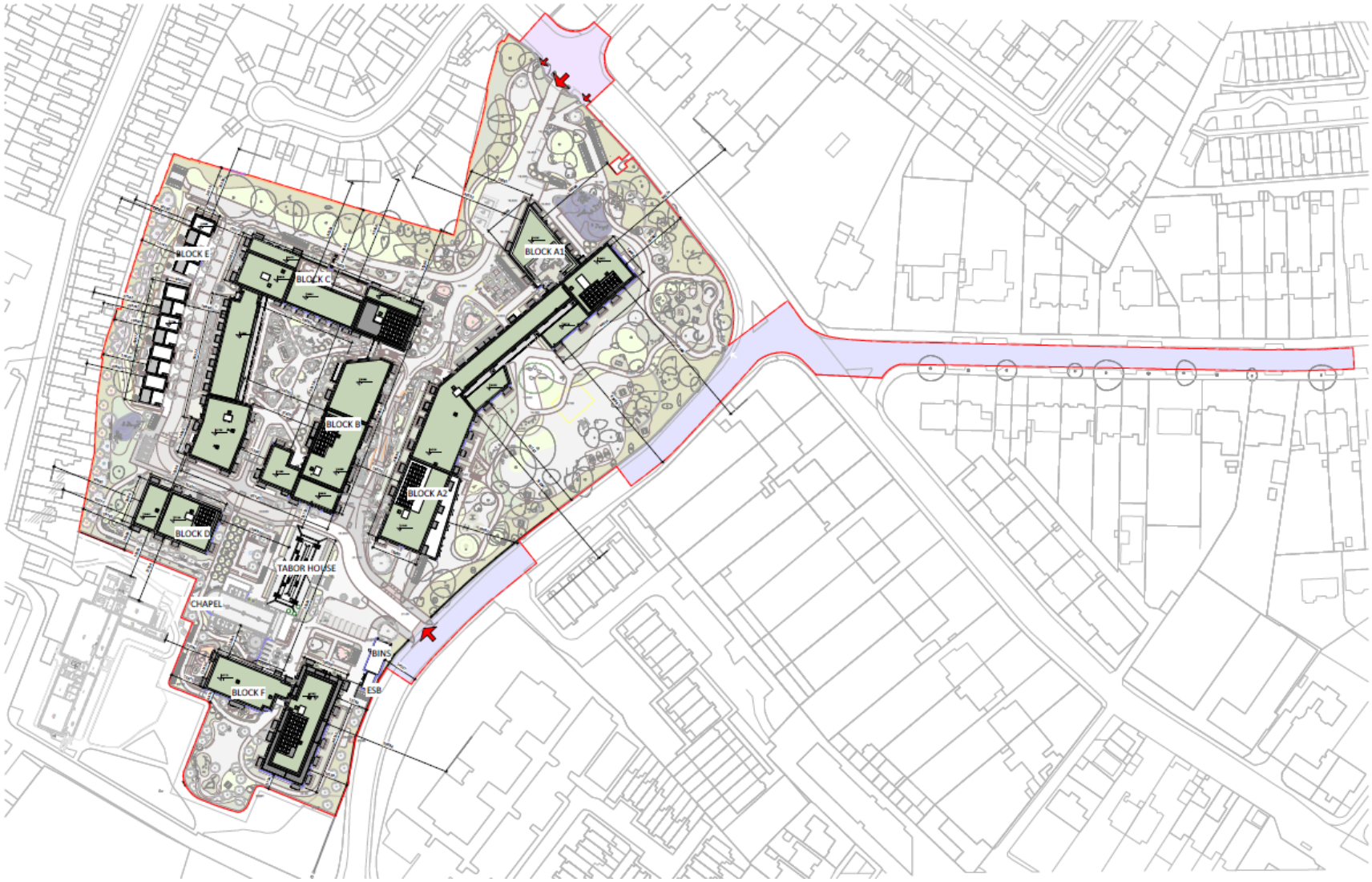

FIGURE 2. PROPOSED SITE LAYOUT (EXTRACTED FROM 19037C-OMP-OO-O8-DR-A-1109 - PROPOSED SITE PLAN – ROOF LEVEL, 2025).

3 Baseline Ecological Conditions

Multiple surveys have been conducted over several years (2022-2025) to determine the baseline ecological conditions at the Site. Table 1 shows the types of surveys carried out, the dates they were completed and who completed them. These results are referenced where relevant in this BEP.

TABLE 1: SCHEDULE OF ALL ECOLOGICAL SURVEYS CARRIED OUT AT THE PROPOSED DEVELOPMENT TO DETERMINE BASELINE CONDITIONS AT THE SITE.

Survey Type	Date
Multidisciplinary Ecological Walkover	25/04/2023 29/08/2024 24/09/2025
Habitat and Flora Surveys	03/03/2023 29/08/2024
Non-Volant Mammal Surveys	03/03/2023 29/08/2024 24/09/2025
Invasive Alien Plant Species (IAS) Surveys (Specialist IAS surveys completed by Invasive Plant Solutions in 2025)	03/03/2023 09/10/2025
Winter Bird Surveys	23/11/2022 23/01/2023 31/01/2023 28/02/2023 29/03/2023
Early/seasonal Bird Survey	03/03/2023
Breeding Bird Survey including building inspections for Swallow, Swift and House Martins. The survey on the 25th of June also included a dusk component specifically focused on detecting potential Swift nesting activity.	25/06/2024 25/07/2024 24/08/2024 ---------- 18/06/2025 22/07/2025 12/08/2025
Bat Building Emergence Surveys	17/07/2024 30/07/2024 29/08/2024 ---------- 30/06/2025

Survey Type	Date
	31/07/2025 27/08/2025
Bat potential tree (PRF-M) (Tree no. 267) Emergence Surveys	26/06/2025 29/07/2025 04/09/2025
Bat potential tree (PRF-M) (Tree no. 290) Emergence Surveys	26/06/2025 29/07/2025 04/09/2025
Daytime Bat Habitat Assessment Survey & Potential Bat Roost Assessment (PBRA) of trees to be felled	09/03/2023 10/03/2023 24/04/2024 29/08/2024 24/09/2025
Internal Bat Roost Assessment of Buildings	25/04/2023 08/05/2024 05/09/2024 19/06/2025
Dusk Bat Transect Surveys	24/06/2024 25/07/2024 30/08/2024 ---------- 11/06/2025 15/07/2025 21/08/2025
Bat Static detector deployment within attic of Tabor House	08/05/2024 – 20/05/2024 25/06/2024 – 02/07/2024 25/07/2024 – 30/07/2024 29/08/2024 – 08/09/2024 27/09/2024 – 04/10/2024 ---------- 19/06/2025 – 24/06/2025 11/07/2025 – 15/07/2025 27/08/2025 – 01/09/2025

Survey Type	Date
	24/09/2025 – 29/09/2025 15/10/2025 – 20/10/2025

All surveys have been undertaken having regard to best practice guidelines and guidance documentation published by relevant bodies including Transport Infrastructure Ireland (TII). A complete list of all surveys conducted, including their respective methodologies and results is detailed in Chapter 8, Biodiversity, of the EIAR Report which supports this planning application.

3.1 Habitats and Flora

The Site comprises a variety of habitats reflecting its historic parkland character within a predominantly urban setting. Key habitats include stone walls (BL1), which provide limited shelter and minor connectivity; buildings and artificial surfaces (BL3), where the Chapel and Tabor House offer potential bat roosting opportunities; and dry meadows and grassy verges (GS2), formerly improved amenity grassland, now supporting a tall, rank sward of grasses and forbs with succession to scrub (WS1) habitat occurring around the margins and in areas of previously disturbed ground in the centre of the Site. Two areas of mixed broadleaf/conifer woodland (WD2) in the northwest and northeast support mature trees and understorey vegetation, contributing to ecological connectivity and assigned Regional/County Importance given their urban context.

Additional habitats include scattered trees and parkland (WD5) in the northern section; hedgerows (WL1), which are few, species-poor, and in poor condition; and several treelines (WL2), including mature Beech and Yew, which function as wildlife corridors. Scrub (WS1) occurs along the western and north-western boundaries, dominated by Bramble and providing food and cover for birds and insects. Ornamental and non-native shrub habitats (WS3) and WS3/GS2 mosaics occur around buildings and are considered of Less than Local Importance.

The wider area surrounding the site is predominantly urban, comprising BL3 Built Land interspersed with amenity green spaces, treelines, and hedgerows. Adjacent lands include residential gardens, sports pitches, and landscaped areas typical of suburban Dublin. Connectivity to semi-natural habitats is limited, although the River Dodder lies approximately 500 m to the southeast, providing a riparian corridor of ecological value. Overall, the surrounding landscape is dominated by managed amenity grassland and ornamental planting, with occasional semi-natural features contributing modestly to local biodiversity within an otherwise heavily urbanised setting.

The value of each habitat identified within the Site is based on a combination of both field and desktop studies unless stated otherwise. Habitats within and around the Site boundary were recorded and are shown in Figure 3. The following sections provide a more detailed description of each habitat type present on Site, while Table 2 below shows a summary of the habitat types recorded at the Site.

Several invasive alien plant species (IAPSs) were recorded on Site, these include:

- Butterfly Bush
- Cherry Laurel (*Prunus laurocerasus*)
- Himalayan Honeysuckle (*Leycesteria formosa*)
- Snowberry (*Symphoricarpos albus*)
- Spanish Bluebell (*Hyacinthoides hispanica*)*
- Three-cornered Leek (*Allium triquetrum*)*
- Traveller's Joy (*Clematis vitalba*)
- Winter Heliotrope (*Petasites pyrenaicus*)

Of this list, only two species (those with an *) are high-impact species listed on the Third Schedule of European Communities (Birds and Natural Habitats) Regulations (S.I. 477 of 2011). The Medium impact invasive species recorded on Site include Butterfly Bush, Traveller's Joy, and Himalayan Honeysuckle.

In addition, Ragwort (*Jacobaea vulgaris*) which is not an invasive plant species but is considered a noxious weed under the Noxious Weeds Act, 1936 (and amended), was also recorded along the grassy verges contiguous to the carpark. The habitat map (Figure 3) shows the precise location of the invasive species where they occur across the Site. For the most part, invasive species were restricted to the perimeter of the Site and no invasive plant species were found to occur in the centre of the Site which is comprised of GS2 grassland habitat.

Invasive species were recorded on-site during ecological surveys conducted previously by JBA in 2019/20, and Invasive Plant Solutions. On foot of these observations, the client approved the immediate deployment of bio-security measures and the commencement of an active herbicide treatment regime, spanning April, May and June 2021. The purpose of these initial measures was to protect the plant stands from disturbance, through the erection of fencing and signage, and to mitigate the risk of seed dispersal and plant reproduction by the spot application of approved herbicide. Subsequent IAPS surveys have been conducted at the Site in December 2020, April and September 2021, April 2022, and March, April 2023, and finally October 2025 (with a 2026 survey pending) to determine the extent of IAPS on Site. The results of which have informed an update to the management plan, as necessary, by Invasive Plant Solutions (2025).

TABLE 2: HABITATS RECORDED DURING THE SITE VISIT

Survey Type	Date
Stone walls & other stonework	BL1
Buildings and artificial surfaces	BL3
Dry Meadows and Grassy Verges	GS2
Mixed broadleaved/conifer woodland	WD2
Scattered trees and parkland	WD5
Hedgerows	WL1
Treelines	WL2
Scrub	WS1
Ornamental/non-native shrub	WS3
Non-native shrub and Dry meadows mosaic	WS3/GS2

FIGURE 3. HABITAT AT THE PROPOSED SITE INCLUDING KEY FEATURES AND INVASIVE SPECIES FOUND ON SITE (SOURCE: QGIS/DNV)

3.2 Protected Fauna (Excluding Bats)

A review was undertaken for records held by the National Biodiversity Database Centre (NBDC) for terrestrial mammal species protected under the Wildlife Act, 1976 and Wildlife (Amendment) Act, 2000 within 10km grid square O13 of the proposed Site (NBDC, 2025). This review is a critical step in ecological assessment as it identifies species of conservation concern that may occur locally, informing the scope of field surveys and mitigation requirements.

The NBDC data review returned the following results:

- Eurasian Badger (*Meles meles).*
- Eurasian Red Squirrel (*Sciurus vulgaris).*
- Eurasian Pygmy Shrew (*Sorex minutus).*
- European Otter (*Lutra lutra).*
- European Rabbit (*Oryctolagus cuniculus).*
- Fallow Deer (*Dama dama).*
- Greater White-toothed Shrew (*Crocidura russula).*
- Pine Marten (*Martes martes).*
- West European Hedgehog (*Erinaceus europaeus).*

These records indicate the potential presence of both common and protected mammal species within the wider landscape. While the NBDC data does not confirm presence on the Site itself, it highlights the need for field verification and consideration of habitat suitability for these species during the assessment process.

The Site visits were conducted with particular attention given to the mammal species previously identified in the grid squares that encompass the Site.

Site visits were conducted with particular attention to habitats that could support these mammals, including woodland, scrub, hedgerows, and grassland areas. Surveys focused on identifying field signs such as tracks, droppings, feeding remains, burrows, and setts. The results of these searches are summarised in Table 3 and shown in Figure 6.

TABLE 3: MAMMAL SURVEY RESULTS FROM THE SITE VISITS

Species	Survey Record
Eurasian Badger (*Meles meles*)	There was no confirmed sign of Badger foraging, commuting (tracks), latrines, Setts, or any other form of habitation recorded during the surveys of the Site and its surrounds. Two abandoned mammal burrows were recorded within the eastern woodland at the Site (entrances filled with/covered in dense leaf litter). These may represent previous badger sett/fox dens, however they have been abandoned for some time (See Figure 4). Another burrow was recorded within the central grassland at the Site has since become completely overgrown and is no longer visible at the Site. This was likely to be a fox den based on appearance and regular presence of fox as recently as autumn 2025.
Eurasian Red Squirrel (*Sciurus vulgaris*)	There were no sign of Red Squirrel foraging remains, dreys, commuting (tracks), scat or any other form of habitation recorded during the surveys of the Site and its surrounds.

Species	Survey Record
Eurasian Pygmy Shrew (*Sorex minutus*)	There were no sightings of Pygmy Shrew recorded during the surveys of the Site and its surrounds.
European Otter (*Lutra lutra*)	There was no sign of Otter habitation recorded during the surveys of the Site and its surrounds.
European Rabbit (*Oryctolagus cuniculus*)	There was no sign of European Rabbit habitation recorded during the surveys of the Site and its surrounds.
Fallow Deer (*Dama dama*)	. There was no sign of Fallow Deer habitation recorded during the surveys of the Site and its surrounds.
Greater White-toothed Shrew (*Crocidura russula*)	There was no sign of Greater White-toothed Shrew recorded during the surveys of the Site and its surrounds.
Pine Marten (*Martes martes*)	The surveys recorded no Pine Marten-related habitation signs such as scats, tracks or any other form of habitation on Site or in the surrounding area.
West European Hedgehog (*Erinaceus europaeus*)	No field signs including scat or tracks of Hedgehog were recorded on Site or in the surrounding area during the surveys.

The mammals listed above are all categorised as of 'least concern' in Ireland in the latest Ireland Red List (Marnell et al., 2019). The Otter is an Annex II species protected under the European Habitats Directive. No evidence of the above-listed terrestrial mammals was recorded during the Site visit conducted by DNV in 2023, 2024, and 2025.

Habitat Suitability:

- Otter: The Site is unsuitable due to the absence of watercourses or aquatic habitats within or adjacent to the development footprint.
- Pine Marten and Red Squirrel: Both species are woodland specialists and highly sensitive to disturbance. While the Site contains areas of woodland, these are isolated within an urban matrix and unlikely to support viable populations, particularly given the dominance of Grey Squirrel (*Sciurus carolinensis*) in urban areas and this species recorded presence at the Site.
- Fallow Deer: Access is impossible given known distributions for these species and presence of boundary walls and surrounding residential development.

- Shrews: Both Greater White-toothed Shrew and Pygmy Shrew occur in a range of habitats. However, where the former is established, the latter is typically absent (NBDC, 2025). The Site's woodland and scrub habitats could support shrews, although none were recorded during surveys.
- Badger and Hedgehog: No setts or definitive signs were observed, but suitable habitat exists within woodland and scrub margins. NBDC records confirm these species occur in the wider landscape.

In terms of mammal activity; Mammal paths were noted throughout the Site during each of the site surveys carried out by DNV to date. Trails observed were primarily along linear features such as woodland edges, hedgerows, and scrub. Disused burrows and evidence of predation (bird remains recorded in 2023) suggest Red Fox (*Vulpes vulpes*) activity. Red Fox was confirmed during historical surveys on Site through visual sightings, paw prints, and burrows, and remains the most frequently recorded species, with repeated observations in 2025. Red Fox is a common, adaptable species afforded only basic protection under the Wildlife Act (1976 and amendments).

No evidence of badger setts or other protected mammals was detected. Mammal activity is consistent with an urban fringe environment, dominated by generalist species and providing foraging opportunities within scrub and woodland margins. No increase in invasive mammal presence was noted since previous surveys, with Grey Squirrel continuing to use the Site.

The absence of Annex IV or other strictly protected terrestrial mammals indicates that the proposed development is unlikely to result in significant direct impacts on these species. However, the Site does provide potential habitat for Badger, Hedgehog, and Pygmy Shrew.

Accounting for habitat suitability and species records, the Site is valued as Local Importance – Higher Value for terrestrial mammals, specifically Badger, Hedgehog, and Pygmy Shrew.

The Site does not contain any ponds or standing bodies of water and as such is not considered to be suitable for amphibians. Additionally, no amphibians, namely Common Frog (*Rana temporaria*) and Smooth Newt (*Lissotriton vulgaris*) were recorded within the Site during field surveys.

As such this Site is considered to be of Less than Local Importance, for amphibians.

FIGURE 4. MAMMAL BURROW PREVIOUSLY RECORDED IN THE CENTRAL GRASSLAND AT THE SITE IN 2023, AND NOW COMPLETELY OVERGROWN/UNDISCOVERABLE AT THE SITE.

FIGURE 5. THE TWO ABANDONED MAMMAL BURROWS RECORDED IN THE EASTERN WOODLAND AT THE SITE.

FIGURE 6. EVIDENCE OF MAMMAL ACTIVITY RECORDED AT THE SITE TO DATE

3.3 Bats

Trees, buildings, and any other manmade structures within the Site were assessed for their potential to house roosting bats. Five connected buildings are present on Site (Milltown Park House & Extensions are considered as one building in this assessment); three of which are proposed for demolition (Milltown Park House & Extensions, Finlay Wing and the Archive Building). The Chapel and Tabor House are to be retained in the proposed development design.

A daytime inspection of the Site was undertaken by DNV Senior Ecologist LG in 2024 and was reassessed again in 2025. The buildings were walked internally to inform the bat survey approach. A potential bat roost assessment (PBRA) consisting of detailed internal building inspections which can be undertaken any time of year, was carried out on the 8th of May 2024, again on the 5th of September 2024, and on the 24th of September 2025, with the buildings examined externally and internally for signs of bat roosting activity and/or access to the building envelopes. The surveyor also maintained a watching brief for any evidence of bat roosting activity within the buildings when visiting to deploy and collect static bat detectors in June 2025 and carry out the emergence surveys.

Potential bat roost assessment surveys conducted on Site identified that most trees on site have negligible/ low roosting potential, with the exception of 2 no. trees to be felled, which were assessed as having potential PRFs capable of supporting multiple bats and required further assessment.

Buildings ranged from negligible to moderate potential: the Chapel and Tabor House were classified as moderate owing to roof access points to the Chapel and an attic space in Tabor House, while Milltown Park House was considered low and all other structures negligible.

DNV bat surveys conducted during the 2024 and 2025 seasons detected a total of five bat species/ species group using the Site; Leisler's bat, Common Pipistrelle, and Soprano Pipistrelle were the most abundant and most frequently recorded species across the surveys in both 2024 & 2025, with the addition of several unidentified Myotis bat passes and a single Nathusius' Pipistrelle recorded during the emergence surveys (August 2025). No roosting

bats were identified within the proposed development Site during the external and internal tree and building inspections conducted by DNV, nor the subsequent emergence surveys conducted of each identified PRF. The static detector deployment within the attic of Tabor House over the course of 2024/2025 also confirmed no roosting activity. The Site does provide some roosting opportunities in the form of mature trees with suitable PRFs, and buildings with Moderate suitability for roosting.

Bat activity was generally low throughout the Site during the dusk transect surveys, despite suitable weather conditions. Leisler's bat was the most frequently recorded species on Site across both 2024 and 2025 seasons. With Common Pipistrelle and Soprano pipistrelle the other species recorded during these surveys. Overall bats were observed utilising the woodland edge and linear vegetative features on Site for foraging and commuting during the surveys. Leisler's bats in particular were observed also foraging and commuting high overhead. Being a larger bat species, Leisler's bats characteristically often forage and commute across open spaces and are not as reliant on linear landscape features for prey, protection from predators, shelter from the elements, as smaller bat species are. Numbers of individual bats present simultaneously were limited to a peak of 2-3 bats at one time based on the analysed bat data and the surveyors' observations during the surveys, with some social calls also detected indicating occasional interaction between multiple bats when present. Based on the survey results it can be surmised that the Site provides foraging and commuting habitat for small numbers of commonly recorded bat species and provides some limited roosting opportunities for same on Site. These bats likely use the Site as part of a wider foraging resource in the area, given the presence of institutional and school grounds and mature gardens located within the surrounding landscape of Ranelagh and Milltown to the south of the Site.

Overall, the site is considered of Local Importance – Higher Value for bats, primarily as a foraging and commuting resource. For a more detailed breakdown of bat surveys conducted on Site, including a breakdown of results, please refer to the accompanying Chapter 8, Biodiversity Chapter, of the EIAR.

3.4 Birds

3.4.1 Wintering Birds

Winter bird surveys undertaken in 2020/21 and 2022/23 recorded no wintering waterbirds using the Site (JBA, 2021; DNV, 2023). Only a single Curlew (*Numenius arquata*) was observed flying over the Site without landing, and occasional gulls (Herring Gull *(Larus argentatus*) and Common Gull (*Larus canus)*) were noted in flight, with no evidence of foraging or roosting.

The Site is not within known flight lines of sensitive wintering waterbird species, and no significant movement was observed during surveys. Subsequent assessments in 2024 and 2025 confirmed that the Site continues to provide negligible habitat for wintering birds due to the absence of waterbodies and the presence of rank, unmanaged grassland unsuitable for species such as Light-bellied Brent Geese (*Branta bernicla hrota*), which require short, intensively managed swards under 15cm for safe grazing (King, 2001; Enviroguide Consulting, 2022). GPS tracking further indicates Brent Geese show strong preferences for amenity grasslands maintained at short sward heights, avoiding unmanaged vegetation (Handby et al., 2022). Urban constraints, including visual barriers and fragmented green spaces, further reduce suitability.

Based on survey results and habitat characteristics, the Site is considered to be of Less than Local Importance for wintering waterbirds. Further details on winter bird surveys carried out on Site can be found in the Biodiversity Chapter of the EIAR.

3.4.2 Breeding Birds

The 2025 surveys recorded 22 species, including one red-listed species, Swift, and several amber-listed species such as Swallow, Herring Gull (*Larus argentatus*), and Goldcrest (*Regulus regulus*). Swift was observed feeding over the Site on all dates but showed no evidence of breeding. Confirmed breeding was recorded for Blue Tit (*Cyanistes caeruleus*), Coal Tit (*Periparus ater*), Goldcrest (*Regulus regulus*), Robin (*Erithacus rubecula*), Wren (*Troglodytes troglodytes*), and Herring Gull, with fledged young observed. Probable breeding was noted for Woodpigeon (*Columba palumbus*), Jackdaw (*Corvus monedula*), and Goldfinch (*Carduelis carduelis*), while other species such as Blackbird (*Turdus merula*), Blackcap (*Sylvia atricapilla*), Bullfinch (*Pyrrhula pyrrhula*), and Chiffchaff (*Phylloscopus collybita*) were considered possible breeders based on habitat suitability and seasonal presence. Non-breeding flyovers included Grey Wagtail (*Motacilla cinerea*) and Sparrowhawk (*Accipiter nisus*).

Overall, the Site supports a diverse assemblage of common garden and woodland birds, with occasional use by species of higher conservation concern for foraging.

TABLE 4: RESULTS OF BREEDING BIRD SURVEYS 2025

Species Common Name	Scientific Name	BoCCI Status	Dates Recorded	Breeding Activity
Blackbird	*Turdus merula*	Green	18th June 2025 22nd July 2025	Possible breeder. Species observed in breeding season in suitable nesting habitat
Blackcap	*Sylvia atricapilla*	Green	18th June 2025 22nd July 2025	Possible breeder. Species observed in breeding season in suitable nesting habitat
Blue Tit	*Cyanistes caeruleus*	Green	18th June 2025 22nd July 2025 12th Aug 2025	Confirmed. Recently fledged young.
Bullfinch	*Pyrrhula pyrrhula*	Green	18th June 2025 22nd July 2025	Possible breeder. Species observed in breeding season in suitable nesting habitat
Chaffinch	*Fringilla coelebs*	Green	22nd July 2025 12th Aug 2025	Possible breeder. Species observed in breeding season in suitable nesting habitat
Chiffchaff	*Phylloscopus collybita*	Green	22nd July 2025 12th Aug 2025	Possible breeder. Species observed in breeding season in suitable nesting habitat
Coal Tit	*Periparus ater*	Green	18th June 2025 12th Aug 2025	Confirmed. Recently fledged young.
Feral Pigeon	*Columba livia domestica*	Unclassified	18th June 2025 12th Aug 2025	Non-breeder. Flyovers.
Goldcrest	*Regulus regulus*	Amber	18th June 2025 22nd July 2025 12th Aug 2025	Confirmed. Recently fledged young.
Goldfinch	*Carduelis carduelis*	Green	22nd July 2025 12th Aug 2025	Probable breeding. Pair observed in suitable nesting habitat in breeding season

Species Common Name	Scientific Name	BoCCI Status	Dates Recorded	Breeding Activity
Grey Wagtail	*Motacilla cinerea*	Red	12th Aug 2025	Non-breeding. Flyover only.
Herring Gull	*Larus argentatus*	Amber	18th June 2025 22nd July 2025 12th Aug 2025	Confirmed. Recently fledged young on the roof.
Hooded Crow	*Corvus cornix*	Green	22nd July 2025 12th Aug 2025	Possible breeder. Species observed in breeding season in suitable nesting habitat
Jackdaw	*Corvus monedula*	Green	18th June 2025 12th Aug 2025	Probable breeding. Pair observed in suitable nesting habitat in breeding season
Long-tailed Tit	*Aegithalos caudatus*	Green	18th June 2025 12th Aug 2025	Possible breeder. Species observed in breeding season in suitable nesting habitat
Magpie	*Pica pica*	Green	18th June 2025 22nd July 2025 12th Aug 2025	Possible breeder. Species observed in breeding season in suitable nesting habitat
Robin	*Erithacus rubecula*	Green	18th June 2025 22nd July 2025 12th Aug 2025	Confirmed. Recently fledged young.
Sparrowhawk	*Accipiter nisus*	Green	18th June 2025 12th Aug 2025	Non-breeding. Flyovers only.
Swallow	*Hirundo rustica*	Amber	18th June 2025 12th Aug 2025	Non-breeding, flying, and feeding over the Site.
Swift	*Apus apus*	Red	18th June 2025 22nd July 2025 12th Aug 2025	Swifts were seen over the Site on all dates, however, these birds were in the feeding flock
Woodpigeon	*Columba palumbus*	Green	18th June 2025 22nd July 2025 12th Aug 2025	Probable breeding. Pair observed in suitable nesting habitat in breeding season

Species Common Name	Scientific Name	BoCCI Status	Dates Recorded	Breeding Activity
Wren	*Troglodytes troglodytes*	Green	18th June 2025 22nd July 2025 12th Aug 2025	Confirmed. Recently fledged young.

3.5 Other Fauna

Other fauna including fish, reptiles, and invertebrates that have the potential to utilise areas within the immediate area of the Proposed Development, or for which records exist in the wider area, were also considered during the ecological walkovers. However, it has been noted that there are no watercourses or standing bodies of water at the Proposed Development Site, therefore it is deemed that there is no habitat suitability for fish, amphibians, or invertebrates whose life cycle requires waterbodies to be present. However, the old stone wall may provide a potentially suitable habitat for Common Lizard. However, it is noted that the Site is an isolated greenspace within a highly managed urban built environment and is therefore unlikely to support a population of Common Lizard.

4 Biodiversity Enhancement/Protection Measures

4.1 Vegetated Habitats

4.1.1 Proposed Landscape Planting.

The landscape plan for the Proposed Development integrates a strong ecological and biodiversity enhancement strategy.

Key features include:

- Extensive native and wildlife-friendly planting, such as;
  - wildflower meadows,
  - SuDS features such as raingardens / biodiverse roofs, and;
  - layered woodland understory vegetation
- Existing high-value trees, including elm specimens, are retained where feasible
  - This is complemented by new native tree and;
  - New shrub planting to strengthen ecological networks.
- Wildlife Friendly Lighting and dark zones
- Transition zones and green corridor connectivity

All of which serve to maintain/ create green corridors and habitat connectivity.

The design incorporates biodiverse and blue roofs planted with Irish-origin wildflower mixes, providing foraging habitats for birds and bats while contributing to the SuDS strategy. Additional ecological enhancement design includes:

- 10 no. bird boxes,
- 10 no. bat boxes,
- 70 no. swift bricks,
- 2 no. insect hotels, and;
- 10 no. log piles

All of which will be strategically located to support nesting, roosting, and invertebrate diversity throughout the Site.

In addition, dark zones and buffer zones are maintained to protect bat movement, while pesticide-free management (detailed further below) ensures pollinator health. Communal spaces such as amenity terraces and edible gardens further enhance ecological value and resident engagement, setting a benchmark for sustainable urban design.

An extract of the proposed landscape plan (soft planting) is shown in Figure 7, below. For further information on the landscape plan / design and the ecological function of the proposed landscape plan, please refer to the Habitat Management Plan (DNV, 2025), provided under separate cover.

FIGURE 7. PROPOSED LANDSCAPE PLAN (EXTRACTED FROM LANDSCAPE DESIGN STATEMENT, CAMEO AND PARTNERS, 2025).

4.1.1.1 Wildflower Meadows

The Landscape Plan includes areas of wildflower meadow. A prominent section will be present in the north of the Site, referred to as a 'woodland glade' area in the Landscape Design Statement (Cameo + Partners Ltd., 2025a), and will run along the woodland section at this location. Smaller islands and linear strips of meadow are proposed throughout the Site, particularly in the east and north-east. Spread among areas of woodland understorey planting and amenity grassland, these areas will be managed using a low-intervention approach with a reduced mowing regime (1-2 cuts per year).

All wildflower seeds to be used in the installation of the wildflower meadow areas will be Irish Provenance Certified Seed, from a reputable source such as Design by Nature (Wildflowers.ie). To maximise the biodiversity value of the landscaping at the Site, consideration has been made to the All-Ireland Pollinator Plan planting code (NBDC, 2022).

The proposed wildflower meadows will serve to provide nectar and pollen for pollinators (bees, butterflies), seeds for birds, and habitat for invertebrates. They also improve soil health and contribute to carbon storage, and can offer cover for small mammals from predation, as well as foraging opportunities.

4.1.1.2 Sustainable Urban Drainage Strategy (SuDS) Features:

Biodiverse Roofs

Green roofs, including biodiverse and blue roofs, are proposed across multiple buildings within the Development as part of the integrated SuDS and landscape strategy. These roofs will be planted with native Irish-origin wildflower seed mixtures, ensuring seasonal nectar and pollen availability for pollinators such as bees and butterflies, while also providing foraging opportunities for birds and bats. By introducing vegetated roof habitats, the scheme enhances habitat connectivity, supports invertebrate diversity, and contributes to stormwater attenuation, urban cooling, and microclimate regulation. Green roofs also reduce surface water runoff and improve building energy efficiency, delivering both ecological and sustainability benefits.

For detailed management measures, including inspection, invasive species control, and reseeding protocols, please refer to the Habitat Management Plan (HMP) accompanying this report under separate cover.

Rain Gardens

Rain gardens are proposed as part of the sustainable urban drainage strategy (SuDS) to manage stormwater by filtering and slowing runoff, reducing flood risk and improving water quality. These features act as micro wetland-like habitats, supporting moisture-tolerant plants and creating valuable niches for amphibians, aquatic invertebrates, and pollinators. By intercepting and infiltrating surface water, rain gardens also contribute to groundwater recharge and help maintain soil health. Their structural diversity and seasonal flowering enhance site biodiversity while delivering climate resilience benefits.

4.1.1.3 Layer Woodland and Structured Planting Strategy

The proposed development incorporates a multi-layered approach to planting and habitat creation, designed to enhance biodiversity and ecological connectivity across the site. Layered woodland understory vegetation will provide structural diversity, offering shelter and foraging opportunities for birds, small mammals, and invertebrates while linking canopy and ground-level habitats. Green corridors will maintain continuous vegetated routes through the site, enabling wildlife movement and reducing fragmentation. Where feasible, existing high-value trees, including elm specimens, will be retained to provide nesting and roosting sites for birds and bats, microhabitats for invertebrates, and carbon storage benefits. This is complemented by new native tree planting, which will deliver food resources and shelter for local fauna, and new shrub planting, creating dense cover for nesting birds and small mammals, nectar sources for pollinators, and transitional habitats between grassland and woodland. Collectively, these measures will create a resilient, interconnected habitat network that supports multiple species groups and strengthens ecological function across the site. For detailed management measures, including pruning, invasive species control, and maintenance protocols, please refer to the Habitat Management Plan (HMP) accompanying this report under separate cover.

Native Planting Mix

In addition to the above, the Landscape Plan includes the reinstatement of trees and scrub lost due to Construction works. Whilst higher value trees will be retained, the majority of new trees planted as part of the Proposed Development will be native species and will comprise a mix of species already present on Site.

There are currently six elm trees on Site comprising 8 no. *Ulmus Procera* & 1 no. *Ulmus glabra*. Following pre-planning application consultations with Dublin City Council (in the previous SHD application) it was recommended to consider the importance of retaining elm trees extant on the Site where possible.

As such, tree protection of this species has been a key tenet of the proposed design. Tag #220 *Ulmus procera* & tree tag #214 *Ulmus glabra* present on Site are to be retained. It is proposed that the elms removed will be replaced with trees with better long-term prospects, as advised by CMK Arborists, due to the limited long-term potential of elm as a result of Dutch Elm Disease, which has had a significant impact on the native elm tree population.

The planting of native shrubs in the ground layer of the woodland habitat will provide cover and nesting opportunities for birds and small mammals. While the mixed planting of wildflowers, heritage lawn, fruit trees and green roofs will attract insects which act as food sources for the above species groups and also as pollinators.

For further information please refer to the *Landscape Plan and Design Statement* (Cameo + Partners Ltd., 2025).

4.1.2 Transition Zones, Edge Species, and Connectivity

The Proposed Landscape Plan incorporates transition zones; which comprise gradual shifts between habitats such as woodland, shrub layers, and wildflower meadows. These are essential for supporting edge species and maintaining ecological connectivity.

These ecotones provide structural complexity and diverse microhabitats, benefiting species that thrive in intermediate conditions, including pollinators, small mammals, and birds such as robins, wrens, and blackbirds. Edge habitats also support invertebrates that require both open and sheltered conditions, enhancing food availability for bats and birds.

By linking these transition zones with green corridors that run through the site, the scheme facilitates safe wildlife movement, reduces fragmentation, and strengthens ecological networks. This integrated approach ensures that species can forage, nest, and disperse across the landscape, contributing to overall biodiversity resilience.

4.2 Wildlife Friendly Lighting & Dark Zones

The Proposed Development incorporates a wildlife sensitive lighting strategy (Pritchard Themis, 2025), which was designed specifically with the most light sensitive species on Site in mind; bats. This strategy complements the green corridor network and transition zones mentioned in previous sections. Artificial lighting can significantly disrupt bat (and other nocturnal fauna) behaviour by deterring movement along commuting routes, reducing access to foraging areas, and increasing predation risk. Bats in particular rely on darkness for safe navigation and feeding, and excessive illumination can fragment habitats even where physical connectivity exists.

The risk from operational phase lighting impacts is mitigated for by creating designated dark zones and buffer zones along site margins and areas of high-value bat habitat. These zones (Figure 8) are maintained with minimal or no artificial lighting, while buffer areas use low-level, directional lighting (e.g., bollards) to reduce light spill. This approach is critical for maintaining bat commuting routes and foraging corridors, as excessive illumination can disrupt bat navigation and feeding behaviour. By preserving darkness in key areas, the scheme also benefits other nocturnal wildlife, supporting ecological connectivity and reducing fragmentation. The lighting design aligns with best-practice guidance for wildlife-friendly development, ensuring that essential habitat functions are retained within an urban context. Further information on the proposed lighting plan is provided in Chapter 8, Biodiversity, of the EIAR.

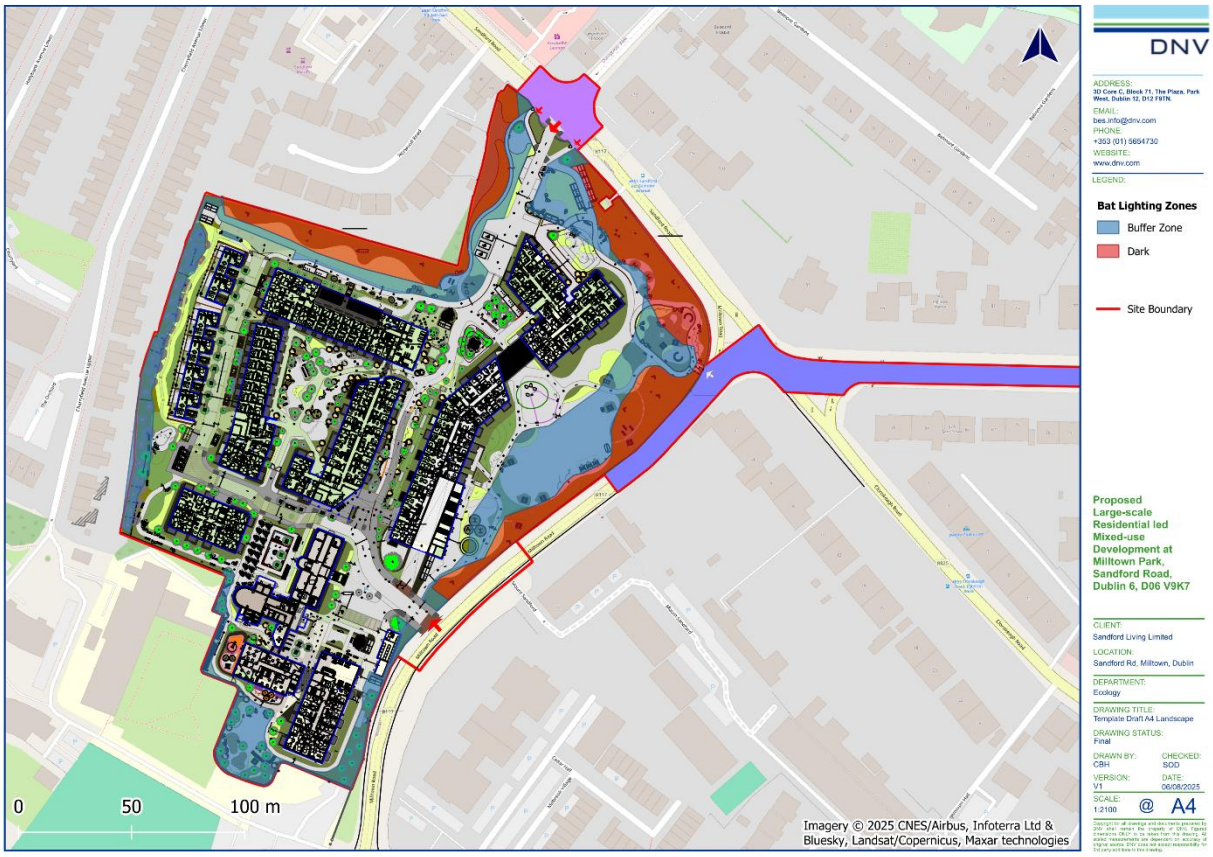

FIGURE 8. PROPOSED DARK / BUFFER ZONES

4.3 Habitat Management and Maintenance

A Landscape Management and Maintenance Plan (LMMP) has been prepared for the Site of the Proposed Development (Cameo + Partners Ltd.,2025), as well as a Habitat Management Plan (HMP) (DNV, 2025). The above documents should be consulted along with this BEP when managing the vegetation and habitats within the Site. A coordinated approach will provide the most positive results in terms of biodiversity enhancement and support within the Site of the Proposed Development for its operational lifetime.

As per the LMMP, maintenance of the landscape areas shall be undertaken by a competent Landscape Contractor, registered with the British Association of Landscape Industries (BALI). Maintenance visits shall be undertaken at minimum monthly intervals (i.e., 12 visits per year). Visits may need to be increased at certain times of the year to enable the operations set-out within the report to be properly executed. The plan covers the first 5 years of maintenance. After which, the plan should be reviewed, with fresh objectives and prescriptions for long-term maintenance, in consultation with any relevant stakeholders, including any emerging resident groups.

The HMP details the management approach to be taken on Site, to ensure correct maintenance and long-term success of the landscape / enhancement measures contained herein. Listed below are key management measures proposed in the HMP:

- Grassland and wildflower management
- Woodland and woodland understory management
- Invasive species management
- Tree / shrub retention and planning
- General vegetation removal
- Herbicide and pesticide use

- Management of SuDS features
- Management of man-made features (enhancement features), including:
  - Bird boxes
  - Swift brick scheme
  - Bat boxes
  - Insect hotels, and
  - Log piles

Please refer to the Habitat Management Plan (HMP) which is provided under separate cover, for further information on the above management measures.

The following sections detail the management approach for the human-made habitats on Site that will be undertaken during the Operational Phase of the Proposed Development.

4.4 Human-made Habitats for Fauna

4.4.1 Bird Box Scheme

A bird box scheme is proposed to be installed at the Site of the Proposed Development and will be implemented with the landscape plan so as to enhance the potential bird nesting habitat at the Site during the Operational Phase.

A total of 10 bird boxes are proposed to be installed on suitable trees around the Site, to provide nesting habitat for breeding birds that may be using the Site.

Bird box installation will be overseen by the appointed ecologist, within the proposed areas of dense planting at ground floor and podium level and on the semi-mature trees to be planted on Site, and details of same provided to the Parks Department of Dublin City Council. The boxes will be durable. The bird boxes will be firm and secure to their supports, and only placed on trees that are robust and large enough to support bird boxes.

There are various standard bird box options, and a mix of the following box types[1] will be installed:

- 'Hole type' bird boxes (28 mm hole)
  - For example, the Eco Small Bird Box, which can be found at the following link: https://www.nhbs.com/eco-small-bird-box
- Open fronted bird boxes for blackbirds
  - For example, the Blackbird FSC Nest Box, which can be found at the following link: https://www.nhbs.com/blackbird-fsc-nest-box
- Open fronted bird boxes for wrens and robins
  - For example, the Eco Robin (Open-Fronted) Nest Box, which can be found at the following link: https://www.nhbs.com/eco-robin-open-fronted-nest-box

Hole type bird boxes should be positioned 2-4m off the ground, with good-visibility, a clear flight line, and away from the prevailing wind direction.

The open-fronted boxes for Robins, Wrens and Blackbirds should be installed lower than 2m but amongst dense vegetation (e.g., hedges or areas of scrub that develop within the Site), or newly planted vegetation that will grow to become dense upon establishment, and somewhere cats and other predators will not easily see or access them.

Unless the sites are very sheltered, bird boxes should be fixed facing between north and south-east to avoid the hot sun and the wettest winds. Guidance from Bird Watch Ireland regarding bird box construction and installation can be found at the following link: https://birdwatchireland.ie/app/uploads/2019/09/Nestboxes-factsheet.pdf. Bird box placement will be directed by an ecologist and amended as appropriate, with the results submitted to the council's Parks department on completion.

[1] https://birdwatchireland.ie/irelands-birds-birdwatch-ireland/garden-birds/nestboxes/#:~:text=Many%20people%20put%20their%20nestboxes,cats%20to%20get%20near%20it.

Bird boxes will be cleaned out at the end of the bird breeding season by the development management company, from September onwards, to encourage birds to return to the nest boxes.

4.4.2 Swift Brick Scheme

In addition, and as part of this scheme, it is proposed to include 70 No. Swift bricks. The Swift bricks are installed side by side, in sets of 10 on each block, as Swifts are a social nesting species, on suitable buildings within the proposed development. These nest bricks will be installed at least 5 metres above the ground, in safe areas where they will not be disturbed. As the bricks tend not to overheat, they can be placed on any aspect, N, S, E, W. Care will be taken to ensure no obstacles or plate glass windows are located below the bricks.

Guidelines for the bird box scheme should also follow guidelines published by Swift Conservation Ireland, and those published by Birdwatch Ireland entitle “Saving Swifts” (2009/2010). The incorporation of Swift Bricks will help recover the declining swift population, which are now Red Listed in Ireland (Gilbert et al., 2021).

Swifts are a “clean” bird species which remove their own wastes from their nests periodically. As such, Swift bricks do not require any cleaning by the management company.

It is advised to install a **Swift calling system** per block where Swift bricks will be located to attract Swifts and encourage them to take up residence at a new site. A Swift calling system is a small speaker set-up that plays Swift calls during the summer. It should be located close to the brick entrances and has been seen to greatly increase the chances of Swifts using the Swift boxes/bricks. Solar powered options are possible.

An Ecologist will be instructed to set up the Swift calling system once the construction of the Proposed Development is complete. This can be with the help of active local Swift groups as required (e.g., Dublin Swift Conservation Group), who can help and advise as to the best set-up etc.

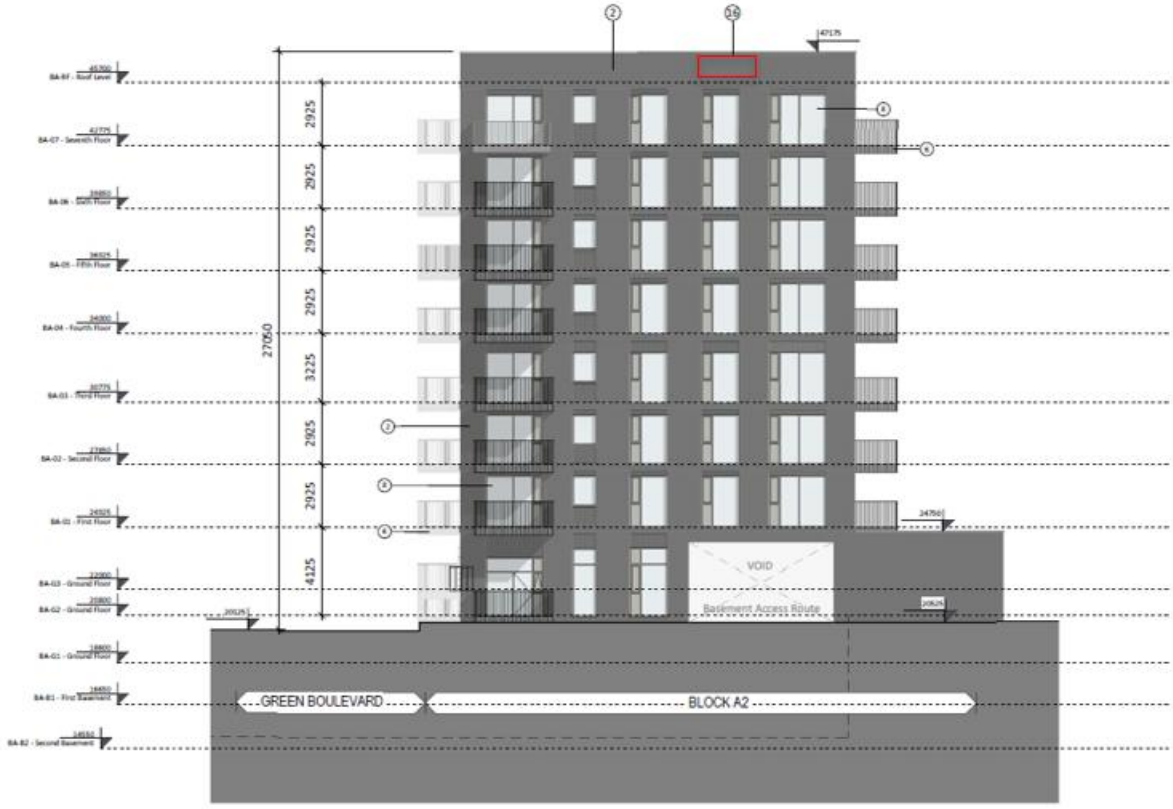

FIGURE 9: EXAMPLE OF SWIFT BRICKS (ITEM NO.16) INCORPORATED INTO THE SOUTH ELEVATION OF BLOCK A2.

4.4.3 Bat Boxes

It is proposed to place a total of 10 no. bat boxes on suitable retained trees within the Site. These bat boxes will be of the durable woodcrete variety and capable of supporting multiple crevice- dwelling bat species e.g., the Shwegler 2F bat box. These will provide an important roost habitat for bat species using the Site. As such, a suitably qualified ecologist will be required to select and oversee the placement of these bat boxes in suitable locations, paying consideration to factors such as aspect and height.

These bat boxes will work in tandem with the following, to ensure that the Proposed Development will not result in a significant adverse impact on bat species:

- The reinstatement of grassland habitat and wildflower meadows along edge habitat (e.g., woodland/scrub/hedgerow edges).
- The reinstatement of scrub and hedgerow habitat, with low intervention hedgerow management.
- The planting of multiple tree species within the Site.
- The bat-friendly lighting plan (including a dark corridor along Site margins with high-value habitat for bats); and
- The planting of green roofs on select buildings to provide additional foraging and commuting habitat.

4.4.4 Insect Hotels

The landscape plan includes the insertion of 2 no. insect hotels in select areas around the Site, during its Operational Phase. These will be located adjacent to the Sandford entrance and adjacent to the Tabor House. No herbicides or pesticides will be used in the vicinity of these insect hotels; to protect bees and pollinators from harm.

4.4.5 Log-piles for Invertebrates and Fauna

Piles of logs and other woody vegetation arising from the proposed tree felling will be left in suitable secluded wilder margins of the Site where they will remain undisturbed. These will provide habitat for Common Frog and small mammals such as Hedgehog and Pygmy Shrew. These areas of woody debris will also benefit local invertebrate species through the provision of shelter and food sources. Log piles will be left by management and remain undisturbed in discrete locations to allow colonisation by invertebrates and fungi as part of the biodiversity provision in the dense areas of woodland understorey planting. Figure 10 below shows how log piles can be constructed to maximise their biodiversity value.

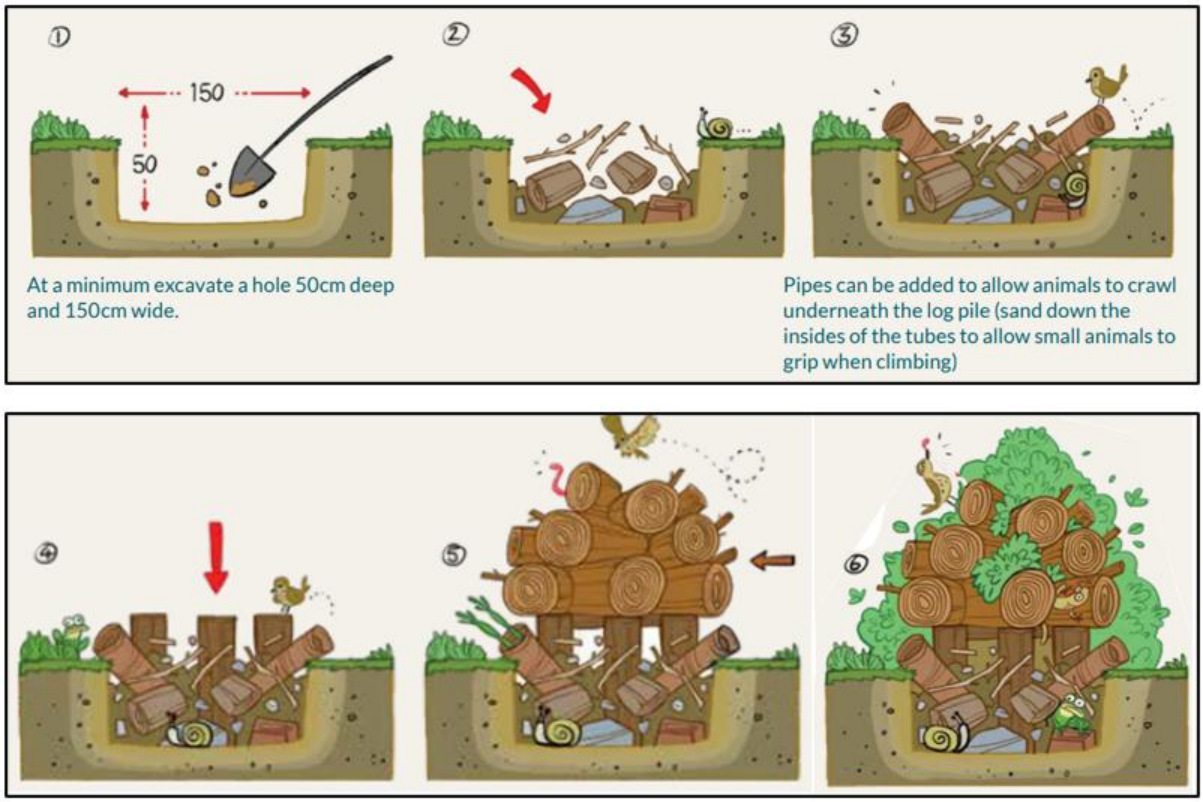

FIGURE 10. EXAMPLE DESIGN OF A WILDLIFE-FRIENDLY LOG PILE. EXTRACTED FROM GARDENING FOR BIODIVERSITY (JUANITA BROWNE, 2020).

4.4.6 Placement

Placement of the above enhancement features for birds, swift, bat, and insects, including the log piles, shall be carried out in co-ordination with a suitably qualified ecologist. DNV have preliminarily advised on potential suitable placement locations within the Proposed Development, as shown below (Figure 11) and in the Landscape Design Statement (Cameo & Partners, 2025). However, final placement will be decided on-site.

FIGURE 11. ENHNANCMENT FEATURE PRELIMINARY/ SUGGESTEDLOCATIONS (CAMEO AND PARTNERS, 2025)

5 Monitoring of Man-made Habitats

While the Habitat Management Plan focuses on the management of habitats and features, the biodiversity monitoring requirements for the proposed human-made habitats are summarised below.

5.1 Vegetation Management

The management of the areas of grassland, wildflower meadow and woodland understorey shrub planting at the Site will be assessed once annually during the growing season by an Ecologist, for a period of 5 years; to ensure that these areas are being managed in a way that maximises their biodiversity value, as laid out in this BEP. The Ecologist will be able to provide further guidance if required to the management company as to the management of these areas.

5.2 Bat Box Scheme

Bat activity at the Site and the use of bat boxes will be assessed by a licensed bat ecologist during the summer following their placement. The bat boxes will be registered as a bat box scheme with Bat Conservation Ireland. This should be undertaken for a minimum of 2 years.

These bat boxes will not require cleaning as they are self-cleaning by design. Bat boxes will be left undisturbed and any disturbance, if required, must be carried out under licence by a bat specialist.

5.3 Bird Boxes

Bird boxes will be checked annually between September and February, outside of nesting season, for damage and for the presence of old nests which will be removed. This will also allow for the condition of the boxes to be checked and maintained.

5.4 Swift Surveys

The Swift Bricks will be monitored annually during the summer by an ecologist to assess whether they are being used by Swifts. Surveys will be carried out once a year for 3 years post installation with the results shared with BirdWatch Ireland and the Dublin City Council Parks, Biodiversity and Landscape Services Division to aid in the collection of data on Dublin's Swift populations.

The ecologist will also check that the Swift calling system is operational each year and advise if repairs are needed.

5.5 Invertebrate habitat

New logs can be added to the wood piles as the older one's decay over a period of years. Decaying wood can support a range of fungi and microhabitats and will be maintained as part of the log pile habitat.

6 SCHEDULE OF ENHANCEMENT MEASURES AND OPERATIONAL MONITORING

TABLE 5. SCHEDULE OF OPERATIONAL MANAGEMENT AND MONITORING MEASURES TO BE IMPLEMENTED AT THE SITE

Habitat/Species	Operational Phase Management/Enhancement			Operational Phase Monitoring		
	Task	**Frequency**	**Responsibility**	**Task**	**Frequency**	**Responsibility**
Proposed wildflower meadow, amenity grass, Woodland understorey planting. **(includes management of transition zones, green corridors and dark zones by proxy)**	Where possible and deemed appropriate, five cuts and lifts per year of amenity grass areas, under dry conditions to avoid soil compaction. Collect cuttings and compost off Site. Where possible, grass will not be mown until the 15th of April to allow dandelions to flower. Areas along margins forming a less managed verge may be appropriate.	Where possible, cut on a six-weekly rotation. Second cut at the end of May, third cut in mid-late July to maximise growth of Clovers and other wildflowers, fourth cut at the end of August and the fifth cut after mid-October.	Management Company	These habitats will be monitored to: • Monitor the establishment of the newly planted vegetation. • Ensure the implementation of appropriate management regimes. • Advise on the management regime and/or any changes to the management needed based on the condition of the habitats. • Monitor and record the success of the enhancement measures.	Once annually for 5 years	Ecologist
	Areas of wildflower meadow will be cut 1-2 times annually. Collect cuttings and compost off Site.	Cut once in early spring and once in September.	Management Company			
	Periodic inspection for and if necessary, clean-up of litter.	To be undertaken as part of routine litter management.	Management Company			
	Removal of undesirable non-native or invasive shrub or herb species should these be recorded.	Annually or as required	Management Company			
	Signage to be erected to ensure management adhere to the pollinator and wildlife-friendly management regime.	Once	Developer			

Habitat/Species	Operational Phase Management/Enhancement			Operational Phase Monitoring		
	Task	**Frequency**	**Responsibility**	**Task**	**Frequency**	**Responsibility**
	Herbicides will not be used within these habitats, except in exceptional circumstances where spot control of invasive flora is required.	n/a	Management Company			
Bats	Erection of a bat box scheme in the form of 10 2F Schwegler bat boxes which will be erected at appropriate locations under instruction from a qualified ecologist.	Once, once development complete.	Developer & Bat Specialist	Inspection of bat boxes.	Within one year of erection of bat box scheme	Bat Specialist
				Register bat box scheme with Bat Conservation Ireland. This should be undertaken for a minimum of 2 years.	Two years	Bat Specialist
				Monitoring of bat activity and any bat mitigation measures. All mitigation measures will be checked to determine that they were successful.	A full summer bat survey will be carried out post-works.	Bat Specialist
	Execution of lighting plan with dark zones per Pritchard Themis (2025).	Once, once development complete	Developer and Bat Specialist	Initial inspection by bat ecologist, light levels could also be assessed to ensure dark zones are maintained, all lighting fixtures to be maintained and replaced with like for like (not increasing luminosity)	Once post development, with ongoing maintenance. Dark buffers also maintained via ongoing vegetated habitat maintenance	Bat specialist and lighting specialist
Birds	A minimum of 10 bird boxes will be installed within the dense shrub planting and on trees on the Site, under advice from a qualified Ecologist. The boxes will be durable. The bird box will be firm and	Once, once development complete.	Developer & Ecologist	Inspection of bird boxes for damage.	Annually between September-February (outside	Management Company

Habitat/Species	Operational Phase Management/Enhancement			Operational Phase Monitoring		
	Task	**Frequency**	**Responsibility**	**Task**	**Frequency**	**Responsibility**
	secure to its support, and only placed on trees that are robust and large enough to support bird boxes.				breeding bird season)	
	Removal of old nests from bird boxes.	Annually between September-February (outside breeding bird season)	Management Company	n/a	n/a	n/a
	Incorporation of 70 Swift Bricks along proposed buildings. Installation of Swift calling system with guidance from an Ecologist.	Once, once development complete.	Developer & Ecologist	The Swift Bricks will be monitored annually during the summer by an ecologist to assess whether they are being used by Swifts. Surveys will be carried out once a year for 3 years post-installation. The ecologist will also check that the Swift calling system is operational each year and advise if repairs are needed.	Annually for 3 years	Ecologist
Invertebrates	The provision of 2x insect hotels in areas of dense planting. Installation of insect hotels with guidance from an Ecologist.	Once, once development complete.	Developer and Ecologist	n/a	n/a	n/a
	Small discrete log piles will be created using the wood from the felled trees on Site. A suitable location is within the woodland understorey along the north and eastern site boundaries.	Once during landscaping phase and then as required.	Management Company	New logs will be added as the older logs decay.	Several years, or as required	Management Company

7 Conclusion

This BEP describes the various ways in which biodiversity has been considered in the design of the Proposed Development. The enhancement measures and management approach detailed within this Report and the accompanying Habitat Management Plan will contribute to the support of biodiversity at the Site during its operational lifetime. The management approaches detailed in this Report will be adhered to as will the various recommendations and commitments relating to post-construction monitoring of vegetation management regime, bats, birds and pollinator habitat. Should any of the proposed mitigation and/or monitoring measures recommended in this report fail to be adhered to, the Local Authority shall be informed, and appropriate remedial actions will be agreed. Furthermore, it is recommended that the appointed management company keep a log of all actions undertaken in the event of an audit being undertaken to ensure works are undertaken as described within the report.

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