

---

# Appendix 11.1

## Data Centre Application - Landscape Statement

---

THIS PAGE IS INTENTIONALLY BLANK

# Herbata Data Centre Campus

## Landscape Design Statement

**BSM**

Est.  
1968

**Brady Shipman  
Martin**

**Built.  
Environment.**

# Landscape Design **Built Environment**

Client:

Herbata Limited

Date:

26 April 2024

DOCUMENT CONTROL SHEET

6971\_RP-02\_Landscape Design Statement

Project No. 6971

Client: Herbata Limited

Project Name: Herbata Data Centre Campus

Report Name: Landscape Design Statement

Document No. RP-02

Issue No. 01

Date: 26/04/2024

This document has been issued and amended as follows:

Issue	Status	Date	Prepared	Checked
P01	For Planning	26 Apr 2024	BM	DB



## Table of Contents

1	Introduction .....	1
2	Site Context.....	1
2.1	Subject Site.....	3
2.2	Tree Protection .....	5
3	Pre-App Consultation.....	5
4	Landscape Proposals.....	7
4.1	Landscape Principals .....	7
4.2	Landscape Masterplan .....	7
4.3	Integrated Landscape Surface Water Management.....	9
4.4	Landscape Boundary Treatments .....	13
4.5	Internal Site Areas .....	16
4.6	Landscape Construction Phasing.....	16
4.7	Landscape Maintenance.....	18
5	Outline Landscape Specification.....	19
5.1	PROTECTION.....	19
5.2	EARTHWORKS / SOIL WORKS / CULTIVATION WORKS.....	19
5.3	PLANTING .....	19
5.4	GRASS SEEDING.....	22
5.5	AFTERCARE.....	24



# 1 Introduction

This Landscape Design Report is submitted as part of the planning application for the proposed development at Naas, Co. Kildare.

This report comprises a landscape design statement prepared to accompany the planning application to Kildare County Council.

This report should be read with the following landscape drawings and reports:

1.1 Drawing Title	Drawing Number	Size
Existing Tree Survey 01 of 04	BSM-ZZ-ZZ-DR-L-0101	A0
Existing Tree Survey 02 of 04	BSM-ZZ-ZZ-DR-L-0102	A0
Existing Tree Survey 03 of 04	BSM-ZZ-ZZ-DR-L-0103	A0
Existing Tree Survey 04 of 04	BSM-ZZ-ZZ-DR-L-0104	A0
Tree Removal, Retention & Protection Plan 01 of 04	BSM-ZZ-ZZ-DR-L-0211	A0
Tree Removal, Retention & Protection Plan 02 of 04	BSM-ZZ-ZZ-DR-L-0212	A0
Tree Removal, Retention & Protection Plan 03 of 04	BSM-ZZ-ZZ-DR-L-0213	A0
Tree Removal, Retention & Protection Plan 04 of 04	BSM-ZZ-ZZ-DR-L-0214	A0
Landscape Master Plan	BSM-ZZ-ZZ-DR-L-0301	A0
Landscape Boundary Treatments Plan	BSM-ZZ-ZZ-DR-L-0311	A0
Coordinated Services & Landscape Plan	BSM-ZZ-ZZ-DR-L-0312	A0
Landscape Sections 01 of 02	BSM-ZZ-ZZ-DR-L-0401	A1
Landscape Sections 02 of 02	BSM-ZZ-ZZ-DR-L-0402	A1
Landscape Elevations 01 of 02	BSM-ZZ-ZZ-DR-L-0405	A1
Landscape Elevations 02 of 02	BSM-ZZ-ZZ-DR-L-0406	A1
Landscape Details 01 of 02	BSM-ZZ-ZZ-DR-L-0450	A0
Landscape Details 02 of 02	BSM-ZZ-ZZ-DR-L-0451	A0

1.2 Report Title	Report Number	Size
Tree Survey and Arboricultural Impact Assessment Report	BSM-ZZ-ZZ-RP-L-0001	A4
Landscape Design Report (this document)	BSM-ZZ-ZZ-RP-L-0002	A4

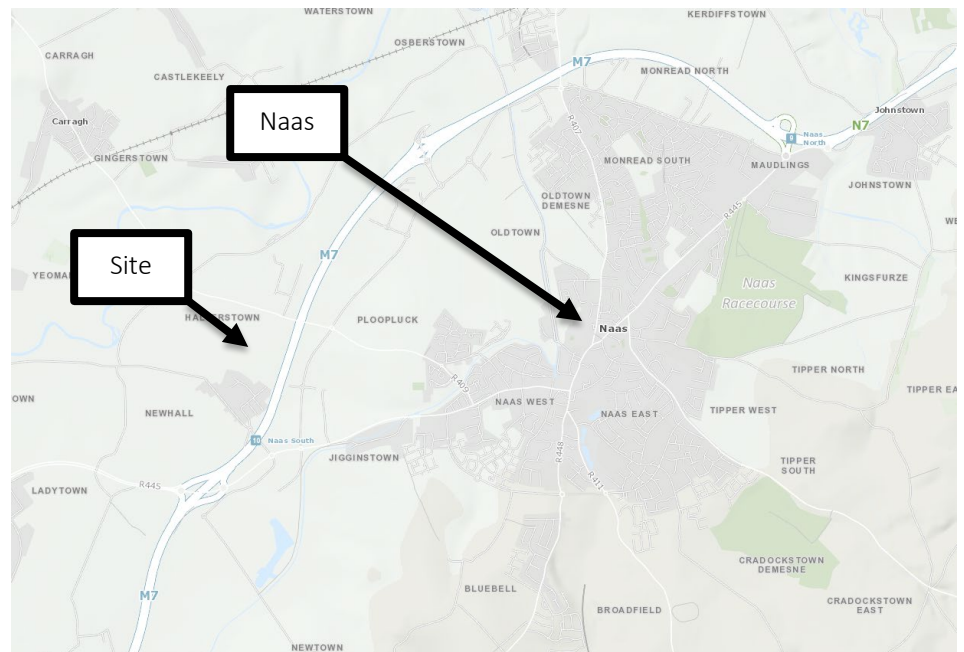
# 2 Site Context

The proposed development subject lands are approximately 37ha in extent and are located on the western side of the M7 motorway, positioned between Junctions 9a and 10. The site is bound to the north by the R409 road which provides a direct link to the centre of Naas, c.2.5km to the east.

The subject lands are located between the existing 'M7 Business Park' and 'Osberstown Business Park'. The Osberstown Wastewater Treatment Plant is located nearby to the north. The site is bounded to the east by the M7 motorway and to the west by agricultural lands. The 'Newhall Retail Park' is located to the south of the site, on the east side of the M7 motorway.

West of the M2, land uses transition to retail, residential and commercial around the Newhall Retail Park. To the west of the site sits the River Liffey, past Newhall Road to the Commons.

Refer to **Figure 1**.



*Figure 1 Site Location and context*



*Figure 2 Site Existing conditions*

The area is characterised by its flat landscape, containing a mixture of agricultural, commercial, and industrial development clusters, modern high capacity road infrastructure and a network of high voltage overhead powerline infrastructure. Developments are set within the landscape and sub-divided by layers of traditional treeline / hedgerows and more recent boundary typologies. R409 Road and Newhall Road to the north and west of the site respectively are more traditional rural roads

with narrow carriageways and roadside treelines and hedgerows providing visual containment along the roads.

## 2.1 Subject Site

The site for the proposed development is currently in agricultural use. The site falls at a generally even grade from north to south. It comprises several large fields, divided by man-made drainage ditches, most of which have associated hedges and trees. The site is bounded by semi-mature hedgerows and tree lines on the north, west and east, and a combined hedgerow and flowing Blue Bell stream to the south. For more detail on the existing features, please refer to BSM-ZZ-ZZ-RP-L-0001 Tree Survey and Arboricultural Impact Assessment Report.

The site is within the administrative area of Kildare County Council and the Kildare Development Plan 2023-2029 provides the statutory planning framework for its development.

The site is Zoned *P: Data Centre (C7)*, as a central part of the digital economy and to provide added economic benefit across the value chain (see Figure 3). It is one of two areas nominated for data centres within the Naas Local Area Plan (2021-2027).

To the north and south of the site is land zoned *H: Industry & Warehousing (C2.2)*. Further north is land zoned *U: Utilities / Services (N)* which encompasses the Osberstown Wastewater Treatment Plant.

Existing tree survey landscape plans have been prepared for the proposed development. For further details see drawings '*DR-L-0101-4 Existing Tree Survey 01-04 of 04*' submitted as part of this planning application.

To the north west, west and south west of the site sits agricultural land, with intermittent residential plots.

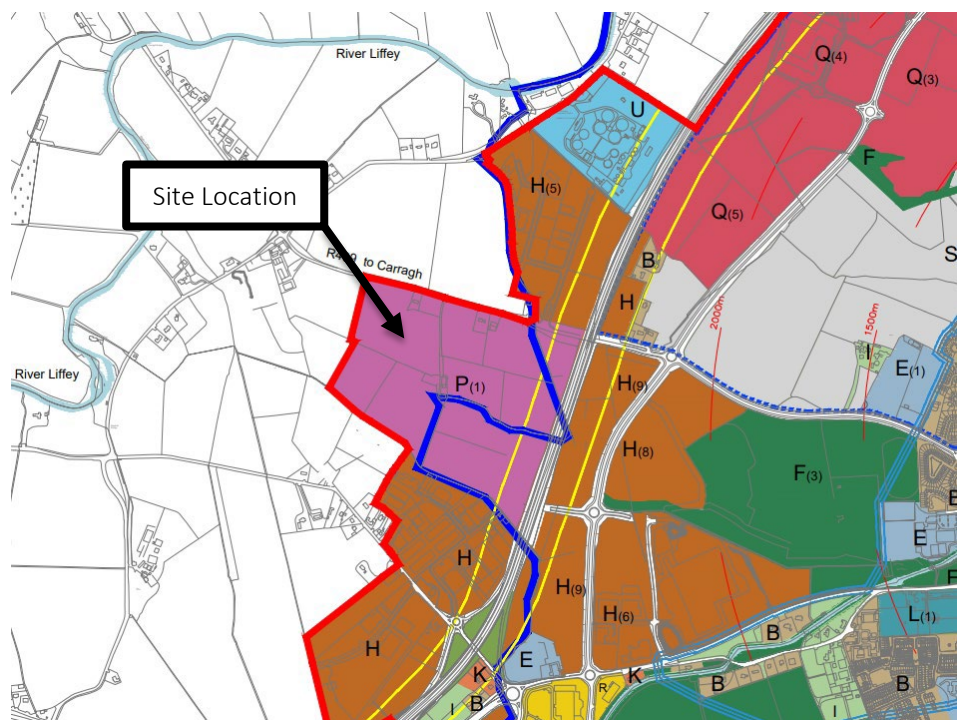




Figure 3 Land use zoning – extract from Naas Local Area Plan 2021-2027, Land Use Zoning Map Oct 2021 (Kildare County Council, Oct 2021)

The topography of the site is gradually sloping from north to south, and has no protrusions or natural vertical features of note from the surrounding context. This natural slope ensures much of the northern section of the site is dry, and towards the southern and eastern boundaries water is more abundant. This occurs in two types, either through ephemeral wet grasslands, where large areas of flat low lying ground are predominantly wetland habitat (more common along the eastern boundary), or along the southern boundary, where the approx. 4-5m wide Bluebell stream collects much of the surface water run off. In this section more low light and damp vegetation occurs, as well as water logged trees.

Within the site and along the boundaries, there are a number of existing hedgerows. These have been surveyed and assessed as part of the development. For more detail on these landscape elements, please refer to the Biodiversity chapter (5) in the EIAR.

Within the Naas Local Area Plan 2021 – 2027 Green Infrastructure Map (DWG 200/21/1135) as shown in Figure 4 there are nominated significant hedgerows in green lines. There is a section of significant hedgerow to the south of the site, to the north of the M7 Business park, running along the Bluebell stream and southwards towards Newbridge Rd which is being retained within the landscape proposal.

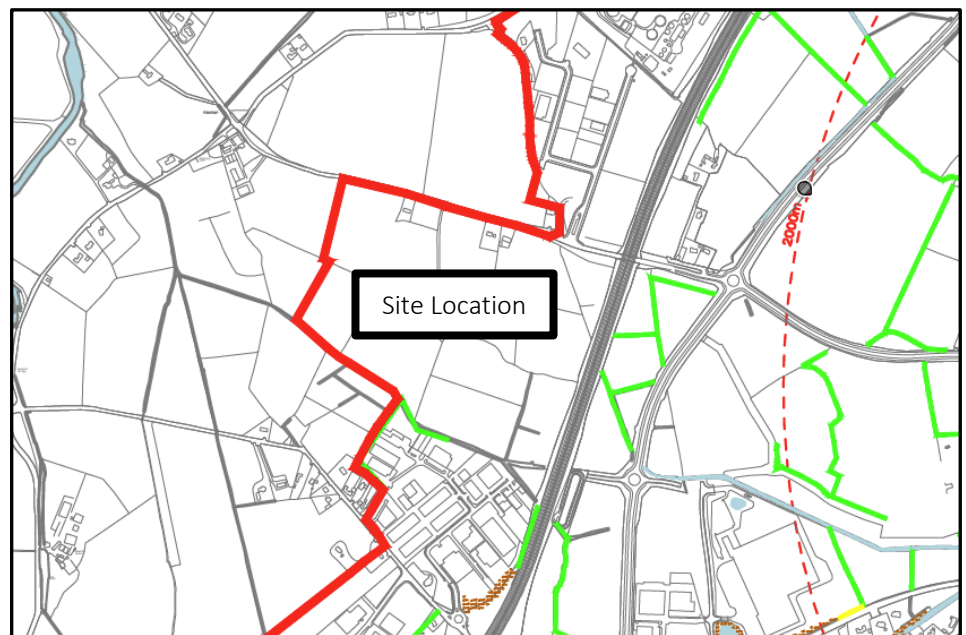



Figure 4 Naas Local Area Plan Green Infrastructure Map (Naas Local Area Plan 2021 – 2027, Kildare County Council, Oct 2021)

 Hedgerows

In the southeast corner of the site sits a Fulacht Fiadh. The exact location of this is further developed in the Cultural Heritage chapter in the EIAR. Currently this area is a mix of wet and dry grassland / pasture.

Within the centre of the site is an assorted number of farm buildings, some derelict/ overgrown, and others functional. Many of the open areas are managed farmland for grazing of livestock.

## 2.2 Tree Protection

All existing retained trees and hedgerows are proposed to have tree protective fencing to BS 5837:2012 erected. The layout of the site has been developed to ensure as much existing trees and hedgerows are maintained amongst proposed utilities, services, buildings, roads, fences and other required infrastructure.

Any services to be installed within the protected area to be carried out following a specialised construction methodology under the supervision of the Project Landscape Architect/Arborist. For further details see drawings ***'DR-L-0211-4 Tree Removal, Retention & Protection Plan 01-04 of 04'*** submitted as part of this planning application.

- Sturdy tree protection fencing will be erected along the lines shown on the accompanying Tree & Landscape Protection & Removal Plan Drawing to prevent construction activity and machinery encroaching into the root protection areas (RPAs) of the trees and hedges to be retained. The fencing will be erected as soon as the tree and hedge removal works have been completed and will not be removed or moved unless authorised by a qualified arborist;
- Where works/site machinery has to encroach the RPAs of the trees to be retained for reasons unforeseen and unavoidable; suitable ground protection will be put in place to prevent any significant soil compaction or root damage near the trees; this should take the form of suitable strength ground protection mats or cellular confinement system capable of supporting the appropriate weight. Any works will be carried out in accordance with Arboriculture Association *'Guidance Note 12 - the use of cellular confinement systems near trees'*;
- Any new underground services such as electricity cables, water pipes etc. will be routed away from the root protection areas of the trees to be retained; where this is not possible for reasons unforeseen, the services will be installed using specialist methodology (such as Airspade excavation or Mole drilling) that ensures minimal impact on any tree roots;
- All site offices, materials storage, staff parking etc. will be located outside of the RPAs of the trees; there is ample space on the site to accommodate these facilities outside the RPAs of the retained trees and hedges;
- The tree protection measures and specialist work methods will be overseen by a qualified arborist; the arborist should also make regular visits to the site during the construction process to ensure compliance and be available to provide advice and guidance where necessary; and
- The retained trees will be assessed by a qualified arborist following the completion of the construction works.

## 3 Pre-App Consultation

A number of pre-application meetings were held between representatives from Kildare County Council (KCC), the client and the design team. The meetings, as well as Local Area Plans and Development Plans, has informed the overall landscape development strategy for the Herbata lands.

During the course of design development, Herbata met with KCC Parks and Water Services department to discuss the current design, visual mitigation strategy, and landscape proposals.

The technical meeting for the overall drainage strategy was held on the 11/04/2023, online, with members of the design team and representatives from Kildare County Council. Items discussed included

- Proposed Sustainable Urban Drainage Strategy, including existing conditions and proposed integration of SuDs principals into the design, incorporating flooding and overall drainage scheme;
- Bio-retention integration including basins and ponds, bioswales, green retaining walls;
- Bio-diverse planting of SuDs features and drainage schemes;
- Carpark and Road network SuDs integration.

This meeting primarily discussed the proposed developments drainage strategy and noted the integration between drainage and landscape that will be a part of the design. For further information, please refer to the Planning Engineering Report, Appendix C, KCC Water Services Department Meeting Notes.

The meeting with KCC Parks department was held online, on the 22/05/2023, with members of the design team and a representative from the Kildare County Council Parks Dept. A number of items were discussed, including:

- Proposed planting typologies;
- Tree protection;
- Boundary treatments;
- Services and utilities (please refer to drawing BSM-ZZ-ZZ-DR-L-0312\_CoordinatedServices&LandscapePlan) and;
- Green walls and building vegetation

This meeting discussed the overall landscape masterplan proposal, including the perimeter landscape treatments of mounding with native woodland vegetation.

The green walls were noted as an item of potential opportunity for further screening in previous discussions with KCC, however, it was discussed in the meeting that vertical building green walls would prove unsustainable for the scale of the proposed development due to the availability of space, ventilation, fire access, exposure and potential high failure rates, and high consumption of water due to irrigation. The opportunity of an integrated green wall system as mentioned in 3.2 (p9) was discussed and noted to be a more sustainable solution to providing vertical vegetation and screening of heavy elements within the proposed development, alongside a robust, resilient and deliverable perimeter boundary treatment of structural screening woodland, scrub and hedgerows.

## 4 Landscape Proposals

### 4.1 Landscape Principals

The guiding principals of this landscape proposal include:

- **Visual screening and integration** of the proposed development into the landscape;
- **Retention, protection and enhancement** of the boundary hedgerows and tree lines to the eastern, southern and western boundaries;
- Increase and enhance **biodiversity** through pollinator friendly native planting, **wildflower meadows**, native wetlands, and habitat enhancement measures for flora and fauna;
- Creation of quality landscaped network and boundary settings for the development;
- Good quality, low maintenance hard and soft landscape measures throughout the site;
- **Integrated sustainable water management** to ensure a clean and diverse environment and reduce urban heat island effect;
- **Integration** of landscape treatments with proposed buildings, utilities and substation proposals.

Following the above landscape principals, a Landscape Masterplan has been prepared to accompany the development. The plan is accompanied by a series of supporting drawings outlined in the Introduction (refer section 1.1).

### 4.2 Landscape Masterplan

A landscape masterplan has been prepared for the proposed development (refer to Figure 5 for an extract from the Landscape Masterplan).



Figure 5 Overall Landscape Masterplan. Refer drawing BSM-ZZ-ZZ-DR-L-0301.

The landscape masterplan seeks to develop a high-quality data campus and native environment for the proposed new development. It places a high priority on biodiversity and sustainable water management at the proposed lands. In particular the majority of the perimeter boundary hedgerows and tree lines are retained, strengthened and bolstered, encompassing the campus in a native woodland perimeter.

Landscape mitigation measures include:

- **Protection** of existing trees and hedgerows during construction;
- **Retention** and incorporation of site features into the layout of the scheme;
- Natural and site specific **boundary treatments** including **mounding** and **native woodland planting**;
- **Integrated sustainable campus water management**;
- Protection of existing riparian water ways;
- Native low maintenance, **biodiverse wildflower planting** throughout the Campus environment
- Additional tree and other **diverse planting** for biodiversity.

The perimeter treatment of the site will be densely planted, mounded native woodland to provide visual mitigation to the development and further increase the



existing biodiversity of the local area and the site. The perimeter will further bolster the existing retained trees and vegetation along the boundaries.

Much of the western, eastern and southern perimeter hedgerows and tree lines will be retained and protected as part of the proposed development. Although much of the internal hedgerows will be removed (approx. 2.9 linear km), this loss will be mitigated and offset with a dense, wide belt, of over 5.4 hectares of perimeter planting of native woodland and structural screen planting being proposed surrounding the site from all available sides, with a mixture of 10-15% Semi-Mature. A selection of over 200 native tree species is proposed throughout the development, further offsetting the removal of hedgerows. This is in addition to the proposed native long and short meadow grassland of wildflowers, which will cover over 6 hectares, integrated aquatic and SuDs planting and seeding which will include over 3.8 hectares, and green roof proposals providing over 8,000m<sup>2</sup> of vegetation.

The landscape design has been prepared by a qualified landscape architect who will also supervise the implementation of all works relevant to the landscape design.

### 4.3 Integrated Landscape Surface Water Management

The proposed development has developed an integrated sustainable surface water management. This has been guided by the *Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas* National Guidance Document, *The SuDS Manual* by CIRIA and *The Kildare County Council Development Plans 2023 – 2029 Chapter 6: Infrastructure & Environmental Services*. As part of the project's aim, the Kildare Development Plan's Aim from Chapter 6 has been highlighted throughout the development process:

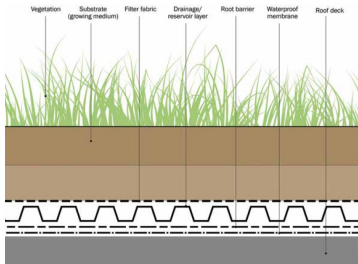

*To create an environment characterised by high quality infrastructure networks and environmental services that complement the overall settlement and economic strategy and ensures the health and wellbeing of those who live and work in the County, also securing the economic future of the County. P.203.*

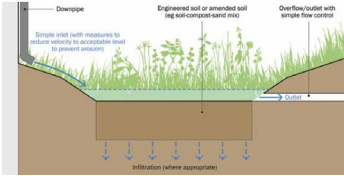

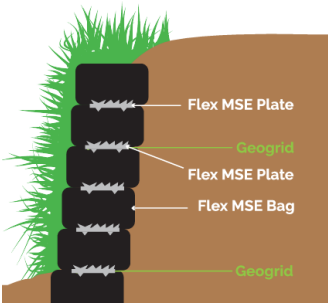

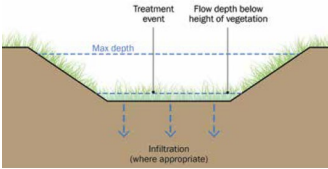

The sustainable management of water throughout the site is a critical element to the campus proposal and seeks to ensure there is no increased flood or pollution risk to the catchment, whilst ensuring the integration of SuDs principals throughout. This includes the protection of groundwater, increased water catchment areas, increased water infiltration, reduction in water conveyance throughout the site utilising porous pavement, green roofs, biofiltration, detention and attenuation basins, utilisation of appropriate green infrastructure that increases biodiversity, protection of existing riparian corridors and providing adequate infrastructure for management of all required water services throughout the campus. The guiding principals found in KCC Development Plan 6.6 Surface Water / Drainage highlights the key planning objectives that the development proposal has sought to align with throughout the integrated proposal of water management.

Below outlines the suite of surface water drainage elements incorporated into the proposed development that intake, filter, manage and discharge water sustainably across the development.

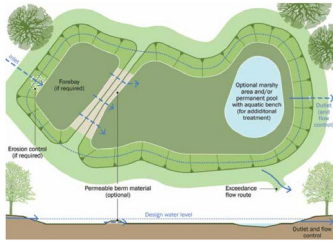


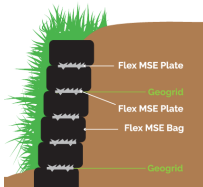




Figure 6 Proposed site wide water path diagram

No.	SuDS Feature	Diagram / Description	Reference Image
1	Green Roof	 <p>Rainwater is captured and collected on the Admin roofs of DC Buildings and filtered through a vegetation layer of organic materials, providing a greater water holding capacity whilst providing for biodiversity and greater building climate efficiency. (See IN O25, KCC Development Plan 6.6)</p>	

No.	SuDS Feature	Diagram / Description	Reference Image
2	Biofiltration	 <p>Rainwater run-off from building surfaces, roads, footpaths and other impermeable surfaces is captured in vegetation biofiltration beds which capture, filter, permeate water into the ground and outlet into a network of swales. Permeable pavement is also utilised to provide water infiltration across campus. (See IN O23, KCC Development Plan 6.6)</p>	
3	Ground level Green Walls	 <p>Low level retaining walls will be vegetated with native plants to provide further infiltration along the path of water movement. (See IN O24, KCC Development Plan 6.6)</p>	
4	Swales	 <p>A network of planted swales from DC units connected to local ponds channel water throughout the site and allow for further ground water infiltration in both low- and high-level flooding. (See IN O23, KCC Development Plan 6.6)</p>	



No.	SuDS Feature	Diagram / Description	Reference Image
5	Biofiltration Basins	 <p>Planted biofiltration basins will sit primarily on the northern end of the site and will provide further infiltration of site water in low and high rainfall events. (See IN 023, KCC Development Plan 6.6)</p>	
6	Wet Attenuation Ponds	<p>Planted attenuation ponds will be placed at designated locations towards the south of the site. They will perform a dual role of providing a water course and ability to capture runoff in the event of an emergency. (See IN 023, KCC Development Plan 6.6)</p>	
7	Discharge Headwalls and Outlets	 <p>Before water exits the site and enters the local catchment, local vegetated headwalls will be constructed to provide further opportunity for water infiltration and increase in biodiversity for the local ecology.</p>	 

Sustainable management of water across the project will also include the connection between existing water courses and internal campus water. Clear management, connection and integration between the two has been incorporated into the landscape proposal. A project wide buffer has been established from all riparian

corridors, with any required planting including native woodland and low-lying native grassland.

The surface water management across the site will be further managed by an integrated green wall system for all vertical elements. This system will be utilised to soften or replace all retaining wall elements and headwalls, ensuring an increased amount of planting and biodiversity for the local ecology and a more visually amenable campus for staff and visitors. For more detail, please refer to drawing BSM-ZZ-ZZ-DR-L-0451.

Native Wetland Wildflower planting comprising a mix of Devils Bit Scabious, Common Sorrel, Cowslip, Fleabane\*, Greater Trefoil\*, Hemp Agrimony, Lesser Knapweed, Marsh Cinquefoil, Marsh Marigold, Meadow Buttercup, Meadowsweet, Meadow Rue, Oxeye Daisy, Purple Loosestrife, Ragged Robin, Red Clover and Red Rattle will be planted in dry swales and biofiltration basins to provide a native wildflower appearance throughout the campus environment and enhance the biodiversity value of the water corridors.

Native wetland marginals and aquatics comprising of *Schoenplectus lacustris*, *Iris pseudacorus*, *Typha latifolia*, *Carex acuta* and other native species will be planted in the biofiltration basins and biofiltration planters beside hard surfaces to provide further wetland appearance, provide further water infiltration throughout the campus and further purify surface water before discharging it into the local catchment / ground.

## 4.4 Landscape Boundary Treatments

A key feature of the landscape masterplan is the perimeter boundary planting. This is a consistently planted boundary treatment that softens the edges of the built development, provides screening to neighbouring receptors, ensures increased protection of existing vegetation and increases biodiversity through additional planting of woodland, hedgerows, meadows and wetland planting.

To the northern boundary, a large extent of planting will be incorporated into the data campus, providing a softened edge and maintaining a lineal hedgerow feature along the R409 route. This planting will be integrated with additional earth mounding, road upgrades, site entrances and active travel. Mounding and planting of native evergreen and deciduous trees at key locations beside major infrastructure will play a further role in softening the campus edge. A consistent treatment of timber rail fencing will be provided to the northern boundary, with mounded hedge planting behind to provide a consistent boundary treatment and native screen to the R409.

Table 4-1 Native hedge mix, refer drawing BSM-ZZ-ZZ-DR-L-0450.

Native Hedge Mix			
Holly	Ilex aquifolium	Hawthorn	Crataegus monogyna
Hazel	Corylus avellana	Ivy	Hedera helix 'Hibernica'
Oak	Quercus robur	Dog Rose	Rosa canina
Blackthorn	Prunus spinosa		

The site entrance will be a key feature of the site. Integrated mounding, stonewalls, evergreen species and native planting will ensure the entrance into the site is settled and integrated with the context of the landscape, whilst also providing a sense of arrival for visitors to the campus.

Along the eastern boundary, the landscape masterplan proposes to retain all existing hedgerows, protect, and bolster them with approximately 30-40m wide native woodland and structural screen planting on raised 1:2-3 gradient/sloped mounds ranging in height from 3-10 meters parallel to the hedgerow.

The proposed mounding will help provide increased height and immediate screening between the M7 and the data campus environment. The mounding will take into account the retention of remaining retained trees and hedgerows and fit the earthworks accordingly.

The mounding will be planted with a mixture of native and adaptive large deciduous and evergreen trees. The proposed planting will generally be established in line with normal landscape planting techniques, i.e., 'whips' and 'feathered trees' which adapt readily to disturbed ground conditions. These will be planted at average 1m centres. A minimum of 10-15% of evergreen trees and shrubs will be mixed through the planting to minimise impact during winter months. Evergreen plants will be supplied as container grown stock.

Larger 'standard' and semi-mature trees (up to 5m tall) will be used closer to the building and footpaths to give a more immediate impact. Semi-mature Pine trees (3-4m tall) will be planted to the in groups along the mounds to augment visual screening of the built development.

Woodland screen planting trees and shrubs to be planted will be selected from the following list of species. As discussed with KCC Parks Department on the 22/05/2023, the proposal will provide a range of plant material sizes, spacing and species according to the different landscape typologies. This will include transplants, feathered whips, standard and advanced tree species (native deciduous and evergreen). Trees will be minimum 1.2m high, planted at 1.2m centres, feathered, individually staked and protected with rabbit proof guards. For further information, please refer to drawing BSM-ZZ-ZZ-DR-L-0450.

Table 4-2 Proposed woodland species. See drawing BSM-ZZ-ZZ-DR-L-0450.

<b>Tree Planting</b>			
Alder	<i>Alnus glutinosa</i>	Pine	<i>Pinus sylvestris</i>
Willow	<i>Salix spp.</i>	Birch	<i>Betula pubescens</i>
Downy Birch	<i>Betula pendula, B pubescens</i>	Blackthorn	<i>Prunus spinosa</i>
Hawthorn	<i>Crataegus monogyna</i>	Oak	<i>Quercus robur</i>
Wild cherry	<i>Prunus avium, P. padus</i>	Beech	<i>Fagus sylvatica</i>
<b>Understorey Planting</b>			
Hazel	<i>Corylus avellana</i>	Dogwoods	<i>Cornus sanguinea</i>
Wild Rose	<i>Rosa spp.</i>	Holly	<i>Ilex aquifolium</i>
Guelder rose	<i>Viburnum opulus</i>	Elder	<i>Sambucus nigra</i>
Ivy	<i>Hedera helix</i>	Rowan	<i>Sorbus aucuparia</i>

Beyond the proposed woodland planting, a security fence will run parallel, which will separate the screen woodland planting from the data centre buildings and infrastructure. Around the buildings, the landscape treatment will include short and

long meadow grassland, swales, green walls, biofiltration planting, detention basins and ponds.

Within the 220kv powerline wayleave, a native scrub planting (hawthorn, blackthorn, hazel, holly with maximum height of 3m) is proposed. A corridor of 4 metres will be left clear as meadow grassland for ESB maintenance access from within the site. See below table for specified species.

Table 4-3 Native scrub/ hedge mix. See drawing BSM-ZZ-ZZ-DR-L-0450

<b>Native Scrub Planting</b>			
Hazel	<i>Corylus avellana</i>	Honeysuckle	Lonicera periclymenum
Spindle / Peg Bush	<i>Euonymus europaeus</i>	Blackthorn	<i>Prunus spinosa</i>
Dogwood	<i>Cornus sanguinea</i>	Elder	<i>Sambucus nigra</i>
Dog Rose	<i>Rosa canina</i>	Guelder Rose	<i>Viburnum opulus</i>
Wild Rose	<i>Rosa rubiginosa</i>		

With these extensive areas of mounding and planting, the proposed development will be substantially screened from the M7.

Along the southern boundary, a large amount of native planting will strengthen the existing riparian corridor, buffering the ecology from the data campus. Native woodland and riparian vegetation is proposed 10-20m from the vicinity of the riparian corridor. This vegetation will provide native vegetation for protection and extension of the riparian ecology further into the site, and at the same time act as a protective barrier from any potential hazards. This planting will be separated by fencing running parallel, encasing the data campus, beyond which will sit predominantly biofiltration basins and native wildflower grasslands. The attenuation basins will connect into the Bluebell stream at three points along the southern boundary. These connections will be placed in locations to avoid impacts to existing vegetation, and green walls installed and vegetated to ensure minimal disturbance to the existing ecology.

The western boundary will maintain all existing hedgerows protecting the existing habitat and will provide further habitat improvement through the installation of native wildflower meadows, native trees and scrub planting. Due to the existing 110kv power lines entering the site and being rerouted, the southern end of the western boundary planting will be extended with low height scrub and shrubby planting to 3m in height. This will consist of Hazel, Hawthorne, Holly and Viburnum species strengthening the existing hedgerows for the existing flora and fauna running along the western boundary. Towards the northern end of the western boundary, the existing hedgerows will be maintained and strengthened with similar scrub and shrub species set behind. Mounding and woodland planting is proposed further to the northern most corner between the boundary and the ESB Substation. This planting will consist of native evergreen trees including Pine, Alder, Birch, Oak and more, further bolstering the western boundaries native habitat for local species and screening the data campus from surrounding receptors.

## 4.5 Internal Site Areas

Within the development site, the areas around the DC will be landscaped so as to enhance the overall appearance and presentation of the campus. Surface water drainage and management will be accommodated in permeable paving provided for surface car parking areas and a number of biofiltration basins planted with marginal species. Additional tree planting will be included throughout the facility within the open spaces, and it is proposed to establish wild flower meadow areas with 1-2m wide mown grass verges.

A services wayleave is incorporated into the landscape masterplan through the middle of the site from southeast to northwest and from the lower southwest of the site through to the ESB Substation. Native wildflower meadows and 3m high scrub planting is located in these areas to further provide vegetated screening and enhance the biodiversity.

### Tree Planting in Grassland

Areas between built elements will be seeded to establish managed wildflower meadows areas and will include copses of trees with selected species in order to enhance the amenity of the facility for staff and to improve the overall biodiversity value of the site. Trees sizes will include heavy standards and standards. Species proposed will include a selection of *Alnus glutinosa*, *Betula pendula*, *Prunus avium*, *Pinus sylvestris*, *Quercus robur*, and other native tree species.

### Wild Flower Meadow

Wild flower meadow areas are proposed to be located within internal landscaped areas and further incorporate the biofiltration basins and dry grass swales throughout the site. The objective is to further strengthen the southern site landscape character and biodiversity characteristics of this part of the site. The meadow will be established over existing subsoil. Typical species will include:

Birdsfoot Trefoil, Black Meddick, Burnet Saxifrage, Century, Wild Chamomile, Cowslip, Eyebright, Meadow Buttercup, Marjoram, Red Bartsia, Mallow, Forget-me-not, Hoary Plantain, Kidney Vetch, Lady's Bedstraw, Ox-eye Daisy, Red Clover, Ribwort Plantain, Rough Hawksbit, St Johnswort, Wild Carrot, Sorrel, Yarrow and Quaking Grass.

Typically these will be seeded at 5-10g seed/sqm and will be sourced from native species suppliers with traceable provenance.

### Security Fencing

The proposed security fencing surrounding the site and internally between buildings will be a black powder coated 2.4m high Palisade security fencing. For further detail, consult the Architectural boundary and fence details, drawing no. 22217-RKD-ZZ-ZZ-DR-A-1400.

## 4.6 Landscape Construction Phasing

As part of this application, a proposed construction phasing plan is included to highlight the construction timeline of the campus and its elements. For the landscape, there will be two main stages of completion of works (Refer Figure 12 Proposed Site Phasing Plan).

- Phase 1 – DC 1 & DC 2
  - During this phase, all perimeter planting in locations where no temporary access is required will be undertaken. This will predominately include the eastern, southern and western boundary, and majority of the northern boundary. All internal roads, Ponds, Utilities and Services, and accompanying landscape treatments will be completed during this phase.
- Phase 2 – DC 3 & DC 5
- Phase 3 – DC 4 & DC 6
  - At the end of this phase, the removal of all temporary construction access will ensure that all landscape mounding and planting not yet completed, can be completed.

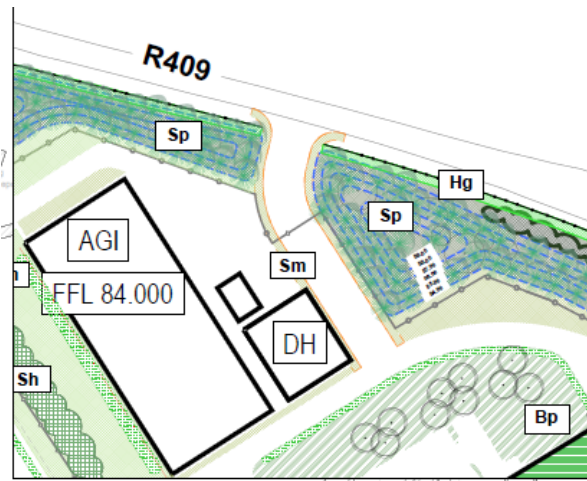


Figure 7 R409 Temporary Construction Access



Figure 8 Proposed Site Phasing Plan. Refer Architecture Drawings.

## 4.7 Landscape Maintenance

Please see Section 4, Outline Landscape Specification for further details.

Landscape works are to be undertaken by an ALCI approved landscape contractor and in accordance with BS 4428:1989 Code of Practice for general landscape operations. All planting works are to be carried out to BS8545:2014 (Trees from nursery to independence in the landscape). Good quality topsoil to BS3882:2015. All tree works are to be carried out to BS3998:2010 (Tree Work Recommendations). The proposed mixed woodlands planting will establish a closed canopy within five years.

Any failures in planting within the first year will be replaced by the appointed landscape contractor. All planting areas will be maintained weed free to help the establishment of the tree cover with the objective of providing full canopy cover of the planting areas within the first five years. The landscape will be implemented, managed and maintained for five years to ensure 100% coverage of the site. The planting is to be carried out within the first planting season (November-March) after construction work.



## 5 Outline Landscape Specification

### 5.1 PROTECTION

#### 5.1.1 Introduction

Landscape works shall have full regard to guidance, recommendations and requirements of:

- The final Landscape Design Report and associated Landscape Drawings;
- The Tree Survey and related Report and Drawings;
- The Planning Authority

#### 5.1.2 Trees and Hedgerows

Trees to be retained within the site, shall be fenced off in accordance with BS 5837: 2012, prior to commencement of the works. The fence will be removed at the end of the works.

### 5.2 EARTHWORKS / SOIL WORKS / CULTIVATION WORKS

#### 5.2.1 General

Works will also involve general site preparation and landscape reinstatement within landscape areas and open spaces.

#### 5.2.2 Weather and Soil Conditions

Normally all work involving soil shall be carried out only when soil is dry and in dry weather. Soil shall not be stripped or moved when frozen or waterlogged.

#### 5.2.3 Topsoil

Generally excavations, re-grading *etc.* shall only take once topsoil has been removed. Therefore topsoil shall be stripped initially and stored separately for re-use within gardens and open space.

#### 5.2.4 Grading

The full extent of landscape areas shall be re-graded in a series of initial operations followed by decompaction, secondary grading and final grading.

Grading and re-profiling of the landscape shall leave a free-flowing and draining surface, free of humps and hollows.

### 5.3 PLANTING

#### 5.3.1 Standards of Workmanship and Materials

All landscape works to be carried out to comply with BS 4428:1989 (General Landscape Operations) and all plants to conform to BS 3936 (Nursery Stock).



### **5.3.2 Unsuitable Weather**

Cultivation, planting and other works will be suspended in wet weather and when conditions are unsuitable.

### **5.3.3 Plants generally**

All new plants shall be well grown, sturdy and bushy according to type and free from all diseases and defects.

### **5.3.4 Materials**

All plant material shall be good quality nursery stock, free from fungal, bacterial or viral infection, Aphis, Red Spider or other insect pest, and physical damage. It shall comply with the requirements of the appropriate sections of BS 3936, Specification for Nursery Stock, where applicable.

All plants shall have been nursery grown in accordance with good practice and shall be supplied through the normal channels of the wholesale nursery trade. They shall have the habit of growth that is normal for the species.

### **5.3.5 Species**

All plants supplied shall be exactly true to name.

### **5.3.6 Specimen Trees, Larger Trees and Standard Trees**

Trees shall conform to appropriate standards for sizes as proposed. All trees shall have a well-balanced, branching head. Trees shall be well furnished with lateral and fibrous roots, and shall be lifted without severance of major roots. Roots shall be of the habit normal for the species and size.

### **5.3.7 Whips**

Whips shall have a well-defined, straight and upright leader and stout, straight stem and be well furnished with strong lateral branches of balanced, feathered habit. Plants shall have been twice transplanted and shall have an extensive fibrous root system. Roots shall be of the habit normal for the species.

### **5.3.8 Conifers**

Conifers shall be supplied root balled or container grown, with a good fibrous root system. Plants shall conform to specified height with well-developed, uniform branching systems.

### **5.3.9 Hedging, Shrubs and Climbers**

Hedge plants, climbers and shrubs shall be of the minimum size specified, with several stems originating from or near ground level and of reasonable bushiness, healthy, well grown, and with a good root system. Roots shall not be deformed or restricted.

#### 5.3.10 Damage

All plants are to be adequately and carefully packed and protected to survive transport, by whatever means, to the site, without damage in loading, transit or unloading.

#### 5.3.11 Planting Generally

All planting operations shall be carried out in accordance with BS 4428 and good horticultural practice. Particular attention must be paid to correct depth of planting ensuring the soil is firmed in around the roots.

#### 5.3.12 Herbicides

Unless unavoidable, no herbicides shall be used on the site. Where required, a natural-based herbicide as approved shall be used on the site.

#### 5.3.13 Tree Pits

Tree pits shall be excavated 150mm all round larger than the natural spread of the roots/rootball of the plant. The base of the pit shall be thoroughly forked to a depth of 300mm to allow roots to penetrate below the pits.

#### 5.3.14 Planting of Trees

All trees shall be planted according to the general directions on planting given above.

#### 5.3.15 Stakes

Stakes shall be turned and pointed at one end. Sizes shall be as follows:-

- For Specimen / larger trees: 2 x 2400mm long x 75mm dia.
- For Standard trees: 1800mm long x 50mm dia.
- For other trees/conifers generally: 1200mm long x 50mm dia.

Set stake(s) vertically in the pit, to the western side of the tree station. Drive stake(s) before planting to secure firmly and to leave between 600-900mm above ground. Drive stake(s) with a drive-all, wooden maul or cast iron headed mell, not with a sledge hammer.

#### 5.3.16 Tree Ties

Tree ties shall be of rubber, PVC or proprietary fabric laminate composition, and shall be strong and durable enough to hold the tree securely in all weather conditions for a period of three years. They shall be flexible enough to allow proper tightening of the tie. Ties shall be minimum 35mm wide for standard trees.

#### 5.3.17 Soil Conditions

Planting shall not be carried out while the ground is frozen or waterlogged.

#### 5.3.18 Watering

All root balled and pot grown plants shall be well-soaked before planting. All planting shall be watered after planting, to consolidate soil around the roots, unless ground is so wet as to make additional water unnecessary.

### **5.3.19 Planting Specimen, Larger and Standard Trees**

Excavate tree pits to 150mm all round larger than the natural spread of the roots of the plant. The base of the pit shall be broken up to a depth of 150mm and glazed sides roughened. Supply and drive the stake(s) as scheduled.

Trees shall be planted at the same depth as in the nursery, as indicated by the soil mark on the stem of the trees. They shall be centred in the planting pit and planted upright. The roots shall be spread to take up their normal disposition. Clean a neat circle 500 mm dia. of all grass.

### **5.3.20 Whip and Transplant Planting**

Excavate tree pits to 150mm all round larger than the natural spread of the roots of the plant.

Place tree in pocket at same depth as in the nursery, spreading out roots to their natural configuration. Backfill pocket carefully incorporating ameliorated soil mix from stockpile on site.

Firm soil around roots, and firm thoroughly on completion. Any surplus soil shall be spread evenly over the surrounding area.

### **5.3.21 Planting of Shrubs and Climbers**

All shrubs and climbers to be planted in excavated pits to give 100mm minimum growth space to accommodate root spread. Climbers to be fixed with adjustable ties to walls.

### **5.3.22 Planting of Hedges**

All hedge plants to be planted in an excavated pit or trench to give 100mm minimum growth space to accommodate root spread. Hedgerows to be established as double staggered row. Plants to be randomly dispersed within mixed species hedgerows.

### **5.3.23 Workmanship**

Whips Transplants: Leave ground free of superficial debris including all stones and debris over 35mm diameter and grass / weed within 500mm of plant.

Shrubs and Mixed Transplants/Shrubs: Leave surface reasonably even, free of all stones and debris over

35mm diameter, free of grass / weed free within 500mm of plant.

### **5.3.24 Replacements**

The planting will be inspected in spring and again in the September following planting. Any tree or shrub found to have died shall be replaced to the original specification.

## **5.4 GRASS SEEDING**

### **5.4.1 Grass Requirements**

DW01 Short Cut Floral Lawn: A closely knit, native grassland mix of even density, height.

DW03 Tall Wildflowers: A native Irish mix of larger wildflowers of thick density and bright colours.

EC05 Wetland Wild Flora: A vigorous, medium tall mixture made for moist soils.

#### **5.4.2 Seed Mixture: DW01 Short Cut Floral Lawn**

The general high-quality low-maintenance seed mixture shall be used for verges and areas of frequent maintenance access within the development area, or an equivalent product of similar performance.

#### **5.4.3 Seed Mixture: DW03 Tall Wildflowers**

The general high-quality low-maintenance seed mixture shall be used for large open spaces and detention basins within the development area, or an equivalent product of similar performance.

#### **5.4.4 Seed Mixture: EC05 Wetland Wild Flora**

EC05 is a vigorous, medium tall mixture which can compete with the often fertile wetland soils on which many wetlands are situated. It shall be used for open dry swales and detention ponds in the development area.

#### **5.4.5 Weather**

Work to soil shall be carried out in dry weather and when the soil can be reduced to a friable condition, avoiding smearing or panning, and rutting and compaction.

#### **5.4.6 Final Grading**

Where required, areas to be grassed will be graded during cultivation with a light blade grader to bring them to a uniform and even grade to tie into surrounding levels and to remove all minor hollows and ridges.

#### **5.4.7 Cultivation and Stone Burying**

Cultivate the surface using rotavators so as to break up the top 100mm of soil by two passes in transverse directions to provide a fine tilth up to 25mm suitable for grass seeding. All landscape areas shall be stone-buried to remove stones and debris over 35mm from the final seeding surface.

#### **5.4.8 Seeding**

Grass seed shall be sown at the rates appropriate to the seed mix (refer planting schedule for more information). Seeding shall only be carried out on areas where cultivation and preparatory work has been approved.

Seeding shall be carried out during suitable calm weather conditions using an efficient broadcast machine for large areas or by hand in small areas and confined spaces. The operation will be carried out in equal sowings in transverse directions. After sowing, the ground will be rolled with a light-weight roller.

#### 5.4.9 Quality

Grass sward shall be even and consistent in terms of height, density and growth of each sward type. Re-cultivate and reseed any areas that fail to germinate or are of poor quality.

#### 5.4.10 Defects / Making Good

All damaged / failed grass seeded areas to be reseeded in spring and late summer following seeding, in accordance with this specification.

### 5.5 AFTERCARE

#### 5.5.1 Period

All landscape works, including planting and seeded areas, shall be maintained for a minimum period of 5 years from practical completion.

#### 5.5.2 Performance Standards

##### 5.5.2.1 Plants / Planting Areas

All plants shall be alive, healthy, free of minor defects and free of weedkiller or cultivation damage.

Planting areas shall be free of weeds and debris.

##### 5.5.2.2 Amenity Grass

Amenity grassland describes all natural and semi-natural grassland used for amenity/recreation purposes.

Grassed areas shall be managed for the visual amenity and enjoyment of staff and visitors and encourage biological diversity.

##### 5.5.2.3 Maintenance Objectives

All grass areas on the site will be managed to follow the All-Ireland Pollinator Plan 2021-2025<sup>1</sup> which aims to that aims to help bees, other pollinating insects, our wider biodiversity and reduce resource consumption. All grass areas will be managed to enhance biodiversity as grassland meadows through the following measures:

- Reduction in the frequency of mowing to provide short and long height meadows;
- For short grass areas, this will entail:
- Delay cutting the grass until mid-April to allow the Dandelion flowers to bloom.
- Mowing the grass every six weeks to allow flowers like Clover to bloom;
- Removing all arisings from the grassland, after each cut reducing fertility and preventing nutrients building up.
- Non-use of pesticides (herbicides, fungicides, insecticides) and fertilisers in the grass meadow areas.

---

<sup>1</sup> <https://pollinators.ie/aipp-2021-2025/>

The mowing regime will allow common pollen-rich wildflowers such as Dandelions, Clovers, Knapweed, and Bird's-foot-trefoil naturally colonise and grow among longer grass, providing food for pollinators and other insects.

#### 5.5.2.4 Maintenance Actions

Grass areas will be broken down into different maintenance zones with varying actions.

**Zone A - Regular grass mowing with differential mowing height to edges; every 2 weeks.**

Location:

2m wide perimeter buffer edge to paths and planting areas will be maintained as ornamental amenity grass with two differential grass cutting heights with regular cutting.

Specification:

- No use of fertilisers and weedkillers;
- First lower cut to border to edge, boundary, or path, or open area within though meadow. Height 30-35mm, minimum width 1.07m (42") wide;
- Second slightly higher cut/border to higher meadow (as per photo below). Height 40/75mm, width 0.5m (21") wide;
- Allow for yearly decompaction in areas of high pedestrian footfall.



Figure 9 Differential grass maintenance



Zone B - Short flowering grass meadow; every 6 weeks.

Location:

Road verges (min. 2m from the back of road verge), building edges, adjoining pathways.

Specification:

- No use of fertilisers and weedkillers;
  - Cut grass meadows to 100mm height at six weeks intervals throughout the year, allowing more flowers to get a chance to grow and provide food source for pollinators amongst the grass, following outline mowing regime in Figure 13;
  - Collect and dispose of arisings off-site.
- Install signage to communicate intent/raise public awareness (artwork available from National Biodiversity Data Centre or custom graphics/signage).

[illegible]

Figure 4-1 - Typical grass cutting regime of short flowering grass meadow.



Figure 10 Signage

Zone C - Annual cut (Long flowering grass meadow); Once a year.

*Location:*

All remaining grassland area outside short flowering grass meadow areas and existing planting areas, providing both food and shelter for insects.

Specification:

- No use of fertilisers and weedkillers;

- Leave the area grow, with one cut per year;
- Cut once a year in September, 100mm high;
- Leaving arisings for 1 week to dry and drop seed head;
- Collect and dispose of arisings;
- Draw chain harrow over area detach grass and create opportunities for native flower seeds to germinate amongst grass;
- Over seed area with native Yellow rattle, Ox Eye Daisy, Knapweed, Vetches, annual cornflowers/poppies, etc. (@5g/sq.m). See Figure 15 below.



Figure 11 Long Flowering Grass Meadow Reference Image

### 5.5.3 New Tree Planting

Young trees need regular monitoring and attention in the first number of years to ensure establishment.

#### 5.5.3.1 Maintenance Objectives

Establish a stable and healthily growing tree with a well-shaped framework for future growth.

Guards will be used to protect the plant against rabbits, etc. The most important operation is to keep the soil around the base of the tree free from weeds or grass and to ensure secure and correct staking.

#### 5.5.3.2 Maintenance Actions

Protect foliage of all plants during applications of herbicides. No plant, foliage or stem, shall be directly sprayed, even in winter. Any plants affected by herbicide shall be replaced.

- Maintain a 1m diameter circle of plant-free soil around the base of each isolated tree by 75mm deep bark mulch and hoeing or the use of approved herbicide other than a residual. Avoid strimming around the base of standard trees to avoid damage to young bark.



- Allow for hoeing up of soil once every 4 weeks in the growing season (5 times per year). Allow for herbicide treatment once in the winter or spring and 3 additional treatments. Note: In some areas this operation may be replaced by the application of bark mulch as ground cover.
- Cut back any tall vegetation that is threatening to shade or smother the young tree (i.e. taller vegetation growing from outside the 1 m weed free area). Allow for cutting back regularly (3/4 times a year).
- If required, water the newly planted trees throughout the summer months (May to August) as required after any period of 4 weeks without significant rainfall (less than 5 mm). Apply sufficient water to thoroughly wet the top 150 mm of soil around the tree roots. This will normally require approximately 10 litres for a seedling or whip and 20 litres for a standard tree. Supply/transport of water will be the responsibility of the Landscape Contractor.
- Check stakes and ties for firmness and support and adjust as necessary. Allow for checking twice a year, preferably in late spring and late summer.
- Firm the soil around the roots to ensure that the plant is securely planted in the ground and upright. Allow for firming once in the spring after planting.
- Formative prune to remove any dead, diseased or damaged shoots and create a balanced form for future growth. Allow for pruning once in the season after planting.
- Where tree guards, stakes, ties, strimmer guards, rabbit guards and temporary fencing is no longer deemed necessary, the contractor shall allow for removing and discarding of these elements appropriately off site.

#### 5.5.3.3 Maintenance Objectives

Regularly clip hedges to maintain a uniform and tidy appearance (according to the type of hedge and situation) and a well-developed cover of vegetation over the whole of the hedge surface. Control any weed or grass growth at the base of the hedge so that it does not detract from the overall appearance or adversely compete with the hedge.

As wildlife often relies on the berries and nesting spots provided by the Hawthorn, it is recommended that they are pruned during the summer and autumn months, after the plant has flowered. Pruning during these seasons will encourage a fuller growth of flowers the following year, although this will also reduce the volume of berries the hedge is able to produce that winter. Avoid cutting the Hawthorn hedge before it is established, typically this is around 2 years after planting when the hedge has reached around c. 1.2 to 1.5m feet tall.

During the second year of planting, between February and March, is the recommended time for hard pruning Hawthorn hedges. Cut back growth by half during these months to encourage new growth. Remove dead, diseased or broken branches first to keep your hedge looking neat and stimulate new growth. Be careful to avoid cutting these branches flush with the trunk as this can make the trunk susceptible to decay. Removing any cross branches from inside your Hawthorn hedge will also help to prevent diseases as this improves circulation within the hedging. Pruning at this time of year while your hedge is dormant will also cause the

least disruption to the wildlife that rely on your Hawthorn, as it will not interfere with the nesting season or the volume of berries.

#### 5.5.3.4 Maintenance Actions

- Clip the top and sides of the hedge to maintain true and even levels and using suitable mechanical cutters to maintain the shape and height. Remove any cuttings lodged in the surface of the hedge and rake up and remove all arisings.
- Allow the operation to be carried out to suit the species and position of the hedge.
- Maintain weed free 750mm wide band at the base of the hedge (weeds at a maximum height of 100mm and a maximum ground cover of 10%) by mulch, regular hand removal, hoeing or by the use of approved herbicide. Allow for control once every 6 weeks in the main growing season (4 times per year).

#### 5.5.4 New Ornamental Shrub/Groundcover Planting

Ornamental planting areas shall be managed, where appropriate, to encourage biological diversity, to manage objectives of the individual planting and to provide for the safety and enjoyment of Users.

##### 5.5.4.1 Maintenance Objective

Maintain shrub growth to cover as much as possible of the border area and allowing the individual plants to achieve as nearly as possible their natural form. Maintain the borders free of visible grasses and shape and prune the shrubs to avoid obstructing pathways or blocking light to, or adhering to windows.

##### 5.5.4.2 Maintenance Operations

After planting, if appropriate and in season for the species involved, prune shrubs to remove dead or dying and diseased wood and suckers, to promote healthy growth and natural shape and to develop their desirable ornamental characteristics. At the same time remove intermediate plants that are restricting the natural and attractive development of their neighbours. Remove all arisings from site.

Lightly cultivate the surface soil, to a depth of approximately 50 mm, remove or bury all annual weed or natural litter and break any surface capping. Take special care to avoid unnecessary damage to the shrub plants and ensure that all the shrubs are firmly bedded in the soil. Leave the surface with a fine and even tilth with soil crumbs of less than 50 mm in diameter.

**Note:** This operation is only essential where the soil is compacted or as a means of incorporating mulch. Not required where the areas are mulched.

Maintain the soil surface substantially free of not planted grasses by hand removal Spot treatment at approximately four-weekly intervals throughout maintenance period.

**Note:** As an alternative the borders can be regularly hand-hoed at up to two-weekly intervals in the main growing season, to 6 times per year. This procedure is

recommended for the first year after planting when the plants may be more sensitive to contact herbicide damage and residual herbicides may not be used.

Apply slow release fertiliser to all planted areas in Autumn (NPK 0:20:30) at 25g/sq.mm to encourage strong root structure and winter hardiness.

Water as necessary to ensure the establishment and continued thriving of all planting. Water using a fine rose or sprinkler until full depth of topsoil is saturated.

### **5.5.5 Herbaceous Planting**

#### **5.5.5.1 Maintenance Objective**

Maintain a dense, grass free cover of healthy growth, clipped or pruned as necessary to give a neat and tidy finish and contained within the planted area.

#### **5.5.5.2 Maintenance Operations**

Maintain the soil surface substantially free of non-planted grasses by hand removal. Spot treatment at approximately four-weekly intervals throughout maintenance period.

Trim and tidy the plants once a year in the winter months, to remove dead vegetation or overgrowing branches. Remove all arisings from site. The amount of work will vary according to the species.

Apply slow-release fertiliser to all planted areas in Autumn (NPK 0:20:30) at 25g/sq. M to encourage strong root structure and winter hardiness.

Water as necessary to ensure the establishment. Water using a fine rose or sprinkler until full depth of topsoil is saturated.

At the end of the defect's liability period:

- Ensure that the soil is thoroughly moistened prior to re mulching, applying water where necessary.
- Remulch the whole surface of planting beds as specified at 75mm depth.

### **5.5.6 Programme**

The landscape shall be reviewed quarterly during the maintenance period and any defects made good immediately thereafter.

### **5.5.7 Weed killing (only if no viable alternative)**

Protect foliage of all plants during applications of herbicides. No plant, foliage or stem, shall be directly sprayed, even in winter. Any plants affected by herbicide shall be replaced.

### **5.5.8 Watering**

Water all planting as necessitated by dry weather. Apply water as a fine spray, to moisten full depth of root run.

Avoid washing or compaction of the soil surface.

#### 5.5.9 Tidiness and Clearance

All landscape areas shall be maintained free from debris, including free from all aftercare debris.

## Brady Shipman Martin

### DUBLIN

Mountpleasant Business Centre  
Ranelagh  
Dublin 6 D06 X7P8  
+353 1 208 1900

### CORK

Penrose Wharf Business Centre  
Penrose Wharf  
Cork T23 A8PT  
+353 21 242 5620

[mail@bradyshipmanmartin.com](mailto:mail@bradyshipmanmartin.com)  
[www.bradyshipmanmartin.com](http://www.bradyshipmanmartin.com)

