LUCAN GREEN INFRASTRUCTURE



23178 Proposed Development at Lucan

on behalf of Nacul Develop-ments Ltd

July 2023

gannon + associates

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LANDSCAPE DESIGN IS NOT JUST ABOUT PLANTS AND AESTHETICS, BUT ALSO ABOUT CREATING SPACES THAT ENRICH THE HUMAN EXPERIENCE.

DAN KILEY



LOCAL CONTEXT

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LOCAL CONTEXT

1.1 INTRODUCTION

The purpose of this Green Infrastructure Report is to identify and assess the potential impacts on the Council's Green Infrastructure Strategy due to the development of residential building at Clonbrone, Esker Hill, Lucan, Co. Dublin. This Assessment has been prepared to support a response to a Request for Further Information issued by South Dublin County Council regarding the subject Application - Ref. No. SD22A/0390.

This report, alongside the associated maps, showing the development site in the context of the wider GI as shown on the Council's GI Plan for the County; indicate how the development proposals link to and enhance the wider GI Network of the County; describe the proposed GI protection, enhancement, and restoration proposals as part of the landscape plan.

This report and its associated figures should be read in conjunction with the plans and particulars that accompany and are enclosed as part of the RFI Response.





1.2 SITE ANALYSIS

A green corridor extends in the vicinity of the project, following a route parallel to Lucan Road (1) and extending to the west of Brookvale (2). Crossing through the Neighborhood Development Plan (NDP) area east of Brookvale, the corridor continues towards Esker Hill until reaching the prominent Cannonbrook House (3).

From there, its journey proceeds southward, traversing extensive wooded areas covering approximately 12 acres surrounding Moat Hill House (4). As it advances, the corridor harmoniously links with the public park situated between Moat Hill House and Vesey Park (5), enhancing the experience of those who traverse this lush green trail.

The conception of this green corridor, which passes through Esker Lawns, Clonbrone, Clonard, and Brookvale, was formulated and solidified on May 6th, 2023.

LANDSCAPE PROPOSAL

2.1 LANDSCAPE MASTERPLAN

The revised landscape plan represents a multifaceted enhancement that encompasses Sustainable Drainage System (SuDS) features, an augmented presence of greenery, and an elevated public open space. Significantly, this plan demonstrates a comprehensive commitment to safeguarding and revitalizing existing onsite Green Infrastructure (GI) assets.

Moreover, it meticulously integrates provisions that facilitate connectivity to both local and primary GI corridors, effectively forging a harmonious link with the broader ecological context. A pivotal inclusion is the intentional incorporation of elements that enable the site to function as a local steppingstone within the larger Green Infrastructure Network. This holistic approach underscores our steadfast dedication to a development that embodies environmental responsibility, enhanced aesthetics, and a symbiotic relationship with the surrounding ecosystem.



SOFT LANDSCAPE



Conife	Coniferous Woodland			
Code	Commom Name	Species Name	Specification	Quantity
	Scots Pine	Pinus sylvestris*^	b/r 1.0m - 1.2m tall	224
	European Larch	Larix decidua*^	b/r 1.0m - 1.2m tall	224

Code	Commom Name	Species Name	Specification	Quantity
	Alder	Alnus glutinosa	b/r 1.0m - 1.2m tall	23
	Hazel	Corylus avellana	b/r 1.0m - 1.2m tall	23
	Willow	Salix Babylonica*^	b/r 1.0m - 1.2m tall	23

Code	Species Name	Quantity
EC03	Bluebell, Burdock, Dog Violet, Cowslip, Devils Bit Scabious, Foxglove, Hedge Garlic Mustard, Lesser Knapweed, Meadowsweet, Ramson, Red Campion*, Ribwort Plantain, Sorrel, Upright Hedge Parsley, Wild Angelica, Wood Avens, Hemp Agrimony, Hoary Plantain, Primrose, Sweet Violet, Wood Sage	298.7 sq.m.

Wetland Wild Flora		
Code	Species Name	Quantity
EC05	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, Red Rattle, Ribwort Plantain, Selfheal, Sneezewort*, Tufted Vetch, Water Avens*, Wild Angelica, Wild Valerian, Yarrow, Yellow Flag Iris, Yellow Rattle, Red Rattle*	45.6 sq.m.

Rain Ga	arden - 14.7sq.m.			
Code	Commom Name	Species Name	Specification	Quantity
	Eulalia	Miscanthus sinensis	c/g 3L 30-40cm ht.	12
	Maedowsweet	Filipendula Ulmaria	c/g 3L 30-40cm ht.	12
	Adderworf	Persicaria bistorta 'superba'	c/g 2L 20-30cm ht.	12
	Yellow iris	Iris pseudacorus	c/g 2L 20-30cm ht.	12
	Reed grass	Calamagrostis brachytricha	c/g 2L 20-30cm ht.	12
	Yarrow	Achillea millefolium	c/g 2L 20-30cm ht.	12

Code	Commom Name	Species Name	Specification	Quantity
	Badan	Bergenia cordifolia	c/g 1L	84
	Japanese pachysandra	Pachysandra terminalis	c/g 1L	84
	Himalayan bistor	Bistorta affinis	c/g 1L	84
	Helleborus niger	Christmas rose	c/g 1L	84
	Lavander	Lavandula angustifolia	c/g 2L	84
	Cherry laurel	Prunus Otto Luyken	c/g 2L	84
	St. John's Wort	Hypericum x hidcoteense Hidcote	c/g 2L	84
	Oregon Grape	Mahonia x media 'Charity'	c/g 5L	84
	Chinese silver grass	Miscanthus sinensis	c/g 5L	84

Grass /	Grass Area			
Code	Species Name	Quantity		
	Cross Cooding Mix	118.9		
	Grass Seeding Mix	sq.m.		

Hawtho	orn Hedge - 235lin.m			
Code	Commom Name	Species Name	Specification	Quantity
	Common Hawthorn	Crataegus monogyna*^	b/r 1.0m - 1.2m tall	705

Shared Surface

HARD LANDSCAPE

Tarmacadam with colour chip (Or Similar Approved)

Footpath

Brushed concrete with trowel edge finisl (Or Similar Approved)

Front Garden/ Parking Bay Paving Permeable 200x100 mm paving (Or Similar Approved)

Back Garden Paving Charcoal 200x100 mm paving (Or Similar Approved)

Ballulysk Dusk Path

(Or Similar Approved)

BOUNDARY TREATMENT

Boundary Type 1 2m high Back Garden Fence Timber panel & Concrete post fence

Boundary Type 2 Existing wal to be retained

Boundary Type 3 2m high Feature Wall

Boundary Type 4 1.2m high metal railing (Or Similar Approved)

Boundary Type 5 600mm high stone faced block butt wall with capping & 1200mm high metal railing

FURNITURE

Existing millstone and a potential grinding stone to be retained and protected

Natural Playground (logs, rocks)

Bench s59.2 Supplier Omos.ie or similar approved

2.2 SECTIONS

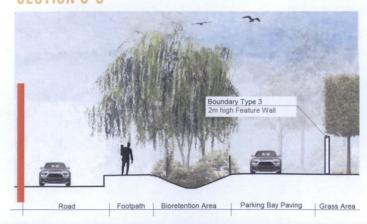
SECTION A-A



SECTION B-B



SECTION C-C





LANDSCAPE STRATEGY

3.1 DRAINAGE AND WATER SERVICES INFRASTRUCTURE

CAI 01

The Applicant is requested to provide the following clarification in relation to the proposed drainage and water services infrastructure:

(i) Submit a report showing site specific run-off rate and run-off volume calculations to clarify what water storage capacity is required to be attenuated to match the pre-developed greenfield run off rates on site.

The report shall include the following:

- a) The total area of site in km2 or ha:
- b) Seasonally Adjusted Annual Rate (SAAR) in mm;
- c) Attenuation coefficients of soil;
- d) Qbar calculations and results in m3 /s or l/s;
- e) Enlist the different type of areas (such as roofs, yard, grassed area, permeable pavement) and including their Impermeability Factor. SuDS such as the proposed swale or tree pits should not be included in the grassed area, as their attenuation volume is calculated separately;
- f) Provide calculation for the total impermeable area in km2 or ha.
- (ii) Submit a report clearly showing the required and the provided volume of storm water attenuation, namely how surface water up to and including the 1:100 (1%) year critical storm with climate change allowance (20%) will be attenuated on site.

Should there be a requirement to provide additional surface water attenuation, the above ground attenuation (such as SuDS) is preferred opposed to underground attenuation. In this case submit a report and drawings in plan and cross-sectional view with the inclusion of additional SuDS for the proposed development such as but not limited to the following:

- Permeable pavement (for example driveways and rear patios);
- Planter boxes with overflow connection to a public surface water sewer.
- Swales and rill channels.
- Grasscrete.
- Green roofs and water butts.
- Rain garden with overflow connection.
- Bio-retention rain gardens.
- Water butts are additional features for SuDS but they are not considered as main features.

(iii) Submit details of the rainwater storage capacity in m3 for all proposed SuDS. Prior to the providing the above outlined information, the Applicant is advised to liaise directly with the Drainage and Water Services Department of South Dublin County

RESPONSE:

(i) Please refer to the drainage drawings and reports provided by the consulting engineers for all SuDS interventions.

(ii) The revised landscape plan incorporates a strategic integration of various Sustainable Drainage Systems (SuDS) features, designed to efficiently manage stormwater within the proposed development. These carefully selected elements align with principles of sustainability, ecological enhancement, and effective stormwater management.

At the forefront of our SuDS strategy is the allocation of a bioretention area located at the entrance corner of the development. This area functions as a natural filtration system, enabling stormwater to naturally seep into the ground. This not only helps attenuate stormwater but also significantly enhances the ecological quality of the site. The bioretention area naturally purifies stormwater as it infiltrates the soil, promoting the overall health and vitality of the local ecosystem.

RESPONSE:

In addition to the bio-retention area, our proposal introduces a series of rain gardens strategically positioned along the driveway. These rain gardens are accompanied by thoughtfully placed tree pits, creating a harmonious blend of aesthetics and functionality. By effectively collecting and managing stormwater, these features contribute to reducing surface water runoff. Natural infiltration processes are facilitated as stormwater gradually soaks into the soil. This approach aligns with our commitment to sustainable stormwater management and enhances the overall environmental performance of the development.

Furthermore, we have incorporated permeable paving in both the front and back gardens. This choice of paving material significantly improves stormwater management by allowing water to permeate through the surface and into the ground. This permeability reduces the risk of excessive runoff and helps maintain a healthier balance between the development and the surrounding environment.

In conclusion, the integration of these SuDS features—bio-retention areas, rain gardens with tree pits, and permeable paving—reflects our comprehensive approach to managing stormwater within the proposed development. By combining functionality, aesthetics, and ecological responsibility, our goal is to effectively attenuate stormwater while making a positive contribution to the overall environmental well-being of the site.

(iii) Please refer to the drainage drawings and reports provided by the consulting engineers for all SuDS interventions.

SUDS STRATEGY PERMEABLE PAVING RAIN GARDEN **WET TOLERANT WOODLAND ENTRANCE** GANNON + ASSOCIATES LANDSCAPE ARCHITECTURE | 9

LANDSCAPE DESIGN | LUCAN

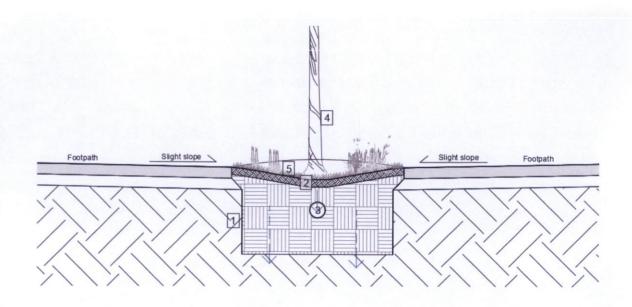
SUDS DETAILS

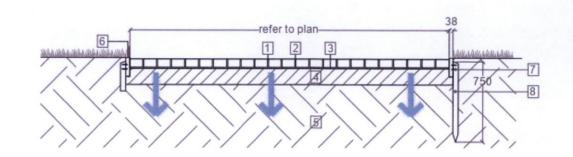
RAIN GARDEN

- 1. Permeable root barrier e.g. Terram Rootguard
- 2. Free-draining soil layer with from site 50-150mm max. as substrate for wildflower seed planting. Variable soil depths and low fertility are compatible with wildflower.
- 3. Perforated Drainage Pipe with outfall to storm system (diameter / specification to Engineer's detail); Wrapped with root barrier fabric; Pipe to be centred in the trench generally, but bent around tree positions.
- 4. Tree: rootball (nom. 450mm diameter); note tree raised locally to elevate the rootball above the trench level.
- 5. Tree Pit in accordance with current Arboricultural best practice wide, shallow topsoil area and free-draining subsoil similar to natural soil profile; Good quality topsoil sourced from site or imported and compliant with BS3882:2015'Multipurpose Topsoil' with slow release fertiliser incorporated into backfill; 200mm depth between tree pits for grass; 450mm for shrubs/hedging stock.

PERMEABLE PAVING DETAIL

- 1. Selected paving blocks
- 2. 6.3-2mm grit laying course material to BS EN13242:2002. Compaction: In accordance with BS
- 7533-3. Determine by trial the depth of loose bedding material needed to ensure specified bedding course thickness after final compaction of paving. Nominal thickness after compaction: 70mm
- 3. Polypropylene, Non-woven
- 4. 150mm Well compacted Sub-Base clean stone 4/20mm aggregate to BS EN13242:2002





3.2 IMPROVING PROPOSED DEVELOPMENT'S OPEN SPACE DESIGN

CAI 02

The proposed open space is poor in quality and would not be accepted at a development of this scale. In this regard the Applicant is requested to provide a complete set of revised drawings which demonstrate a more appropriate Public Open Space design having regard to the content of Section 12.6.10 of the South Dublin County Development Plan 2022-2028. Prior to providing a revised Public Open Space design, the Applicant is advised to liaise directly with the Parks and Public Realm Department of South Dublin County Council.

RESPONSE

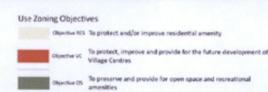
In accordance with Section 12.6.10 of the South Dublin County Development Plan 2022-2028, we recognise the significance of quality and design in public open spaces. This document outlines the minimum standards for public open spaces, as illustrated in the table below.

Considering that our development site, spanning an area of 3166.83 square meters, has been categorised as a New Residential Development

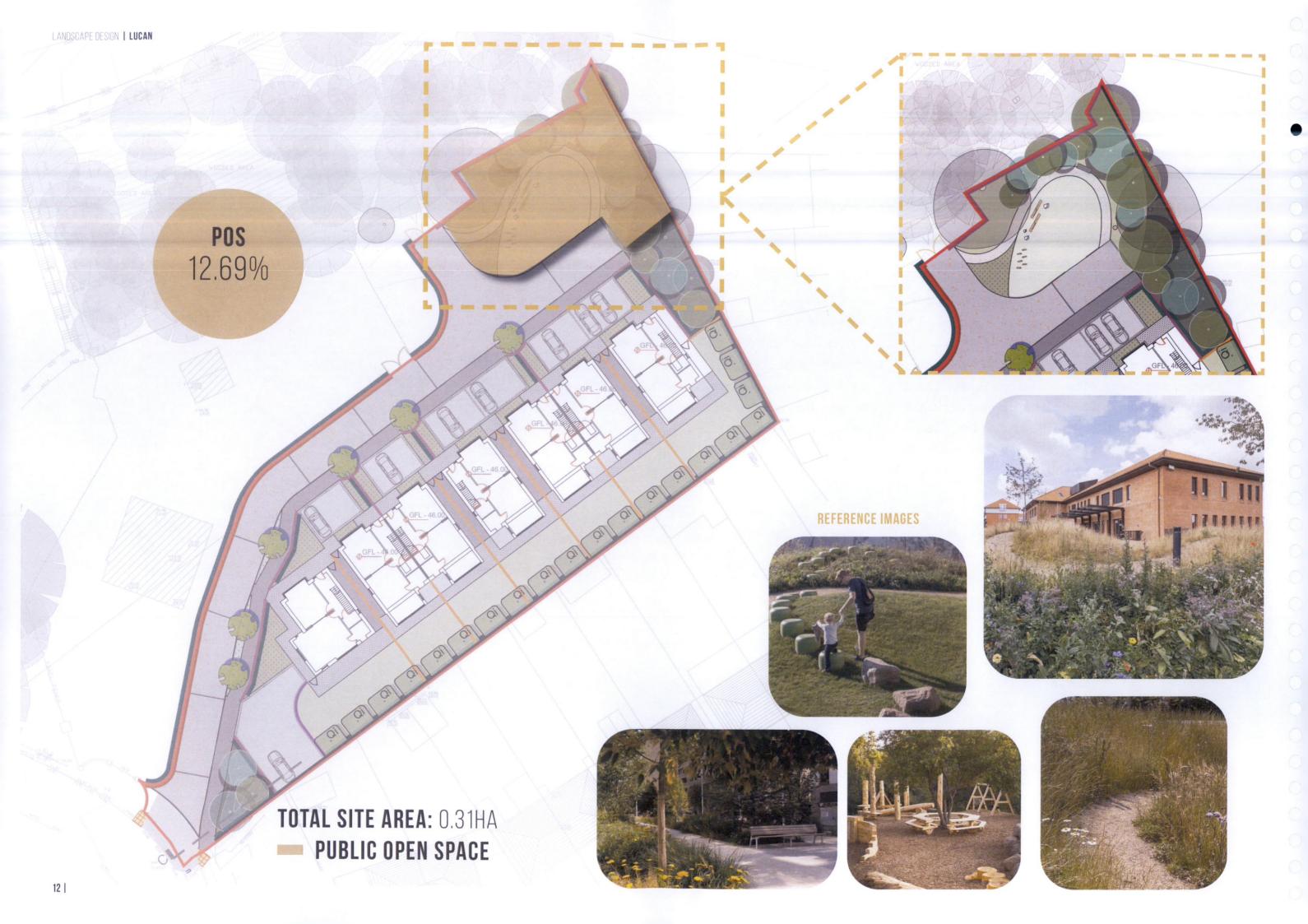
(RES) in alignment with the specified land use objectives, it is our responsibility to comply with the requirement of allocating 10% of the total site area as designated public open space. However, as part of the proposed landscape project and further to our discussions with Oisin Eagan in SDCC we are increase the provision of POS to 12.69% 402sq.m. This decision emphasises our dedication to creating an environment that prioritises community well-being, leisure, and aesthetic harmony.

Taking these factors into account, our revised landscape plan makes significant advancements in expanding the scope of public open space. This improvement is achieved by strategically relocating the hammer head 5 meters to the west. Through this design modification, the proposed landscape provides a larger area of soft landscaping compared to hard landscaping elements. This expansion is realised by establishing a spacious open grass area and incorporating pollinator-friendly plantings with a windflower meadow mix. As for the choice of hard landscaping materials, we have opted to use Ballylusk dust for the footpath.





and Use	Public Open Space Standards (minimum)
Overall Standard	2.4 Ha per 1,000 Population
New Residential Development on ands Zone RES-N	Minimum 15% of site area
lew Residential Development n Lands in Other Zones ncluding mixed use	Minimum 10% of site area
nstitutional Lands / 'Windfall' ites	Minimum 20% of site area



RESPONSE:

In addition to the aforementioned improvements, the revised landscape plan introduces an engaging and interactive aspect by incorporating natural playground elements. Specifically, these elements consist of two natural components: logs and rocks. This thoughtful addition aims to create a dynamic environment that encourages users to explore and interact with their surroundings. Adding to this experience, a seating element is strategically placed near the proposed Coniferous Woodland, promoting contemplation and a connection with the surrounding natural environment.

Based on the findings of the Archaeological and Geological Heritage Impact Assessment, the site is located within an area of significant archaeological importance and historical value. Notably, an on-site discovery of a millstone and a potential grinding stone highlights the historical significance of the location. Reflecting these findings, our updated landscape plan includes relocating them within our public open space and preserving these historically important artefacts.

Furthermore, considering the tree survey conducted, it has been noted that several trees on the site are in poor condition. However, it's important to highlight that dedicated efforts have identified two trees that can be conserved and rescued. The tree's influence

on the overall design of the public open space is of particular concern. To ensure the protection and health of this valuable tree, specific design adjustments have been implemented. For example, the footpath design has been modified to resemble a gentle wave, effectively avoiding any close proximity to the roots of the protected tree.









Figures: Historic garden relic on the site Source: Archaeological and Geological Heritage Impact Assessment - 2021

Figure: Map showing Recorded Monuments in Vicinity (Historic Map Viewer, National Monuments Service) Source: Archaeological and Geological Heritage Impact Assessment - 2021

3.3 PROPOSED STREET TREES AND PLANTING PLAN

CAL 03

The applicant has not provided any street trees that are up to South Dublin County Council's standards. Street Trees proposed are not classified as such if they are located in driveways. Miyawaki planting is also not considered to be street trees. The planting that has been proposed is unacceptable. The Miyawaki planting proposed differs greatly from what is widely understood to be Miyawaki planting. In this regard, the Applicant is requested to provide a more appropriate Planting Plan to include street trees and appropriate species of planting. Prior to providing a revised Planting Plan, the Applicant is advised to liaise directly with the Parks and Public Realm Department of South **Dublin County Council.**

RESPONSE

In response to these concerns, we have made significant adjustments to address the issues raised. The trees, which were initially located within driveways, have been repositioned to align with the road edge along the path. Additionally, the number of trees has been increased from 4 to 6, reflecting our commitment to enhancing the tree canopy within the development.

To further ensure the long-term health and vitality of the newly planted trees, a meticulous approach has been adopted. The trees are now integrated into rain gardens, a design choice that not only contributes to stormwater management but also nurtures optimal growing conditions for the trees. Moreover, a root barrier has been proposed to encircle the trees, safeguarding against any potential root-related issues.

Regarding tree species selection, it's worth highlighting that the Ginkgo biloba tree has been chosen due to its favourable root ball characteristics (r/b, 4x trpt 20-25cm gt.). This selection takes into account the tree's ability to thrive within the proposed rain garden environment while minimising potential disruptions to the surrounding infrastructure.

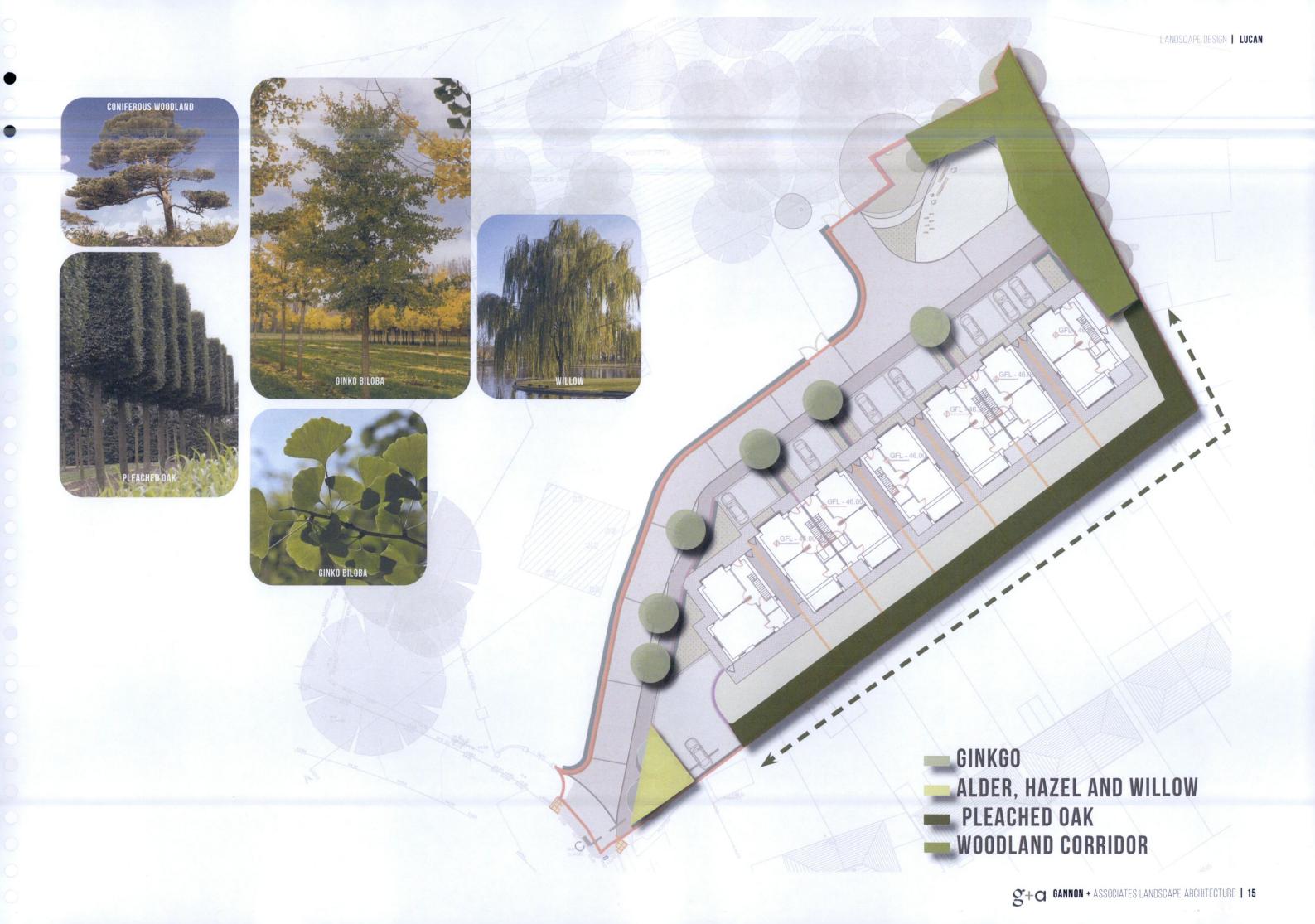
In an effort to increase the density of tree planting and amplify the ecological benefits, our revised landscape plan introduces a strategic addition: a screening row comprised of pleached Quercus ilex trees (r/b, 3x trpt 14-18cm at.). The

overarching intention behind this approach is to accomplish multiple objectives that collectively enrich the development's environment.

At the heart of this decision is the aspiration to establish a biodiversity route, fostering a thriving habitat for local flora and fauna. By introducing a continuous row of pleached Quercus ilex trees, we aim to create a green corridor that encourages the movement of various species and enhances the overall biodiversity within the area. This aligns with our commitment to ecologically sustainable practices and contributes to nurturing a balanced ecosystem.

Furthermore, this undertaking seeks to elevate the Green Space factor score, underscoring our dedication to improving the quality of the green infrastructure within the development. The enhanced tree density and thoughtful placement of the pleached trees are geared towards achieving a higher level of green coverage, which not only adds to the aesthetic appeal but also aligns with our sustainable landscaping objectives.

In addition to the ecological considerations, the screening row of pleached Quercus ilex trees is strategically positioned to provide an increased sense of privacy and seclusion for residents. This design feature aligns with the desire to offer a serene living environment that provides residents with a tranquil and harmonious living experience.



SPECIFICATIONS

TREE PLANTING

Tree planting throughout the scheme has been selected to blend the development in to its surrounding environs and create focal points within the development. The tree species selected will maximise food and nectar sources for birds and invertebrates. Trees will be planted as Standard and Heavy Standard to provide a reasonable degree of instant maturity to the development. All trees shall be planted between the months of Nov and March. The trees shall be purchased from a reputable nursery as rootball specimens and final order to be agreed by Landscape Architect; The trees shall be planted on delivery. If this is not possible due to weather conditions (wet or frosty), the plants must be healed

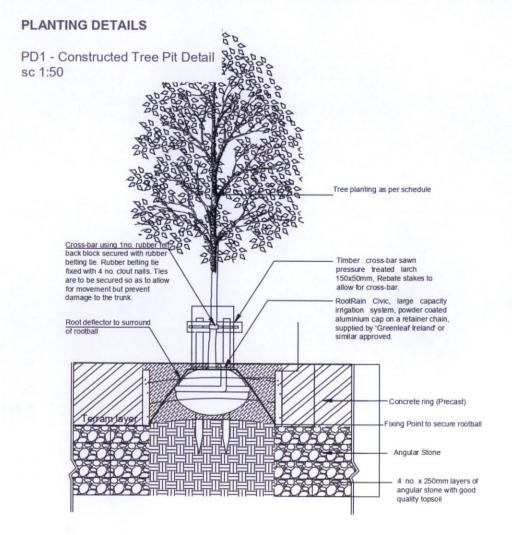
in. Maintenance Watering is essential during the first 2 growing seasons regardless of the weather conditions - 1000Lt / Tree/ Month.

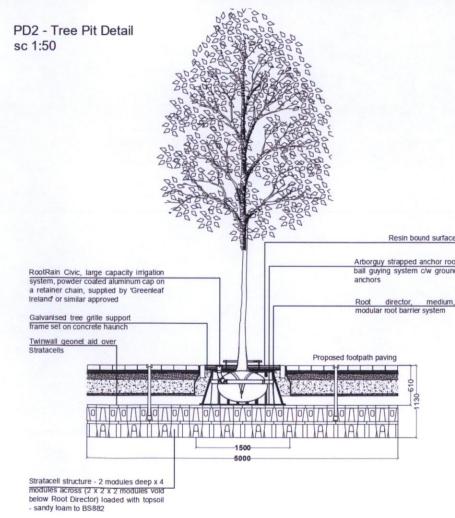
Methodology and Guidance notes:

The tree pit should have a diameter at least 100mm greater than that of the root system, with the depth not exceeding the rootball. Any glazed or smeared sides caused by digging shall be scarified with the use of a fork. The tree will be positioned in the centre of the planting pit at the correct depth, taking into account the root flare and finished level. Prior to backfilling the hessian twine/wire cage supporting the rootball shall be loosened or removed.

Backfilling shall be carried out in layers of 150mm, ensuring the tree is held upright. At each stage the fill will be carefully firmed in to eliminate air pockets under and around the root system.

The final layer of backfill will not be consolidated, but should be of a sufficient depth to allow for settlement and mulching. Formative pruning should be carried out if required, removing dead, damaged, crossing or diseased branches. Refer to Tree planting specification for tree anchoring system. All trees planting operation will be carried in accordance with BS8545:2014 Trees: from nursery to independence in the landscape recommendations.





3.4 PLANTING PLAN REVISION REQUIRED

CAI 04

(i) It is noted that the Applicant is proposing to remove virtually all of the existing Green Infrastructure that is currently on the site. This would result in the fragmentation of the Green Infrastructure Network and would be unacceptable to the Planning Authority. In this regard, the Applicant is requested to provide a Green Infra-structure Plan (to be coordinated with the revised Landscape Plan, Planting Plan, Drainage Plan and SuDS Plan) that includes objectives to protect or restore existing on-site GI assets, provides for connection to local or primary GI corridors or includes elements which allow the site to act as a local steppingstone.

RESPONSE

The strategic location of the site within the Liffey Valley Green Infrastructure Corridor emphasises the importance of seamlessly aligning our development with this broader ecological framework. To achieve this, our proposed measures fully adhere to the principles and objectives set by both local and regional Green Infrastructure initiatives.

Recognising the findings of the tree survey, we agree with your assessment that a significant portion of the existing trees have limited quality and value, and a short lifespan. Therefore, keeping them would

not be practical. Our revised landscape plan takes this into careful consideration and offers a solution by introducing screening trees along the southern boundary at the back of the gardens. Additionally, we are firmly committed to re-establishing a Coniferous Woodland along the eastern boundary, a commitment that greatly enhances the Green Infrastructure Network within the site.

In summary, the updated landscape plan presents a multifaceted enhancement that includes features of a Sustainable Drainage System (SuDS), an increased presence of greenery, and improved public open space. Importantly, this plan demonstrates a comprehensive commitment to safeguarding and revitalising the existing on-site Green Infrastructure (GI) assets. Furthermore, it meticulously incorporates provisions that promote connectivity to both local and primary GI corridors, effectively creating a harmonious link with the broader ecological context. A pivotal aspect is the deliberate inclusion of elements that enable the site to serve as a local stepping stone within the larger Green Infrastructure Network. This holistic approach underscores our unwavering dedication to a development that embodies environmental responsibility, enhanced aesthetics, and a mutually beneficial relationship with the surrounding ecosystem.

GI STRATEGY MAP

Key

County Boundary

- River/ Stream/ Canal

Core Area

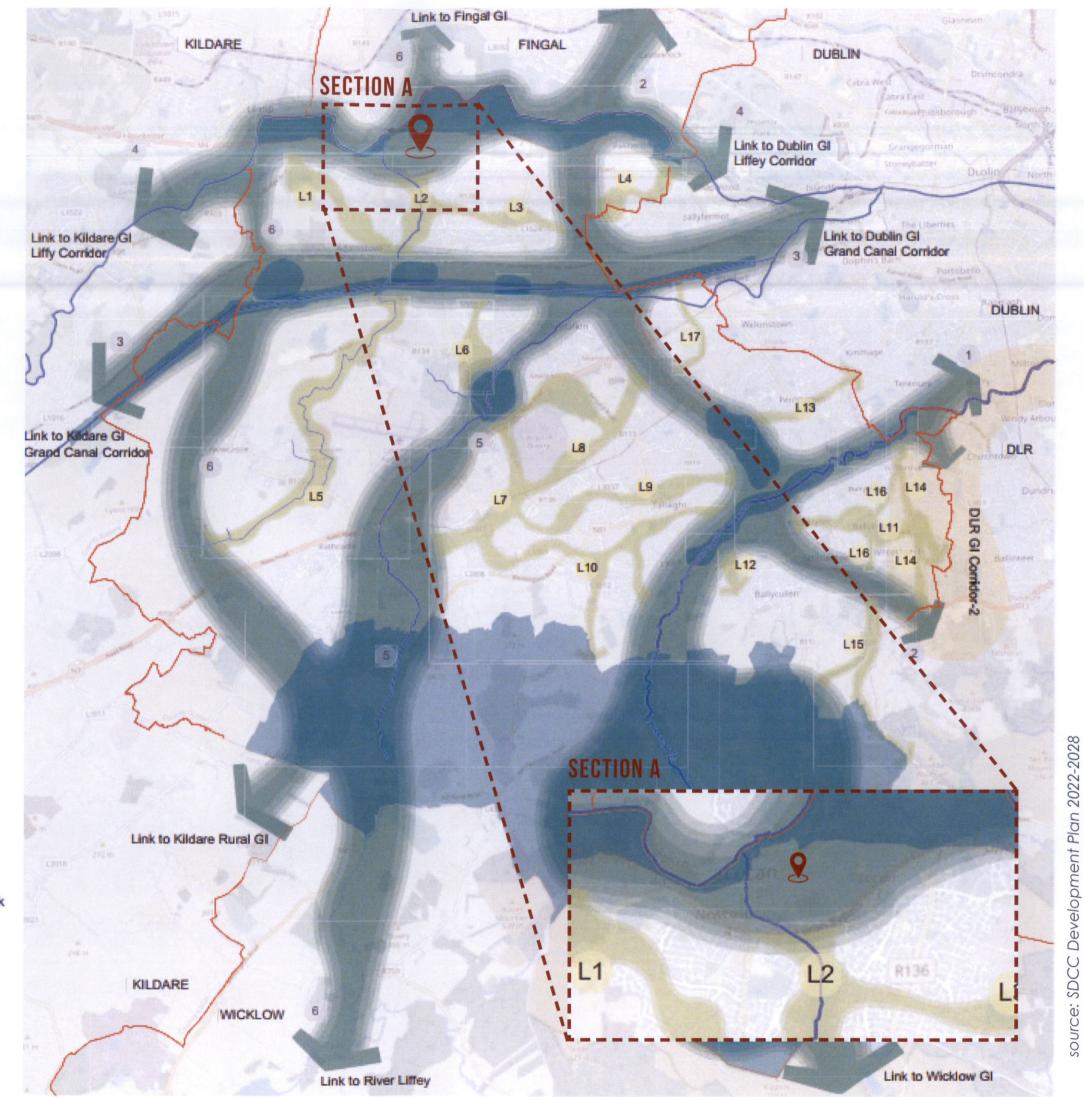
Primary GI Corridor
Secondary GI Link

Primary GI Corridor

- 1 Dodder River Corridor
- 2 M50 Corridor
- 3 Grand Canal Corridor
- 4 Liffey Valley Corridor
- 5 Camac River Corridor
- 6 Rural Fringe Corridor

Secondary GI Link

- L1 Adamstown Link
- L2 Griffeen-Grand Canal Link
- L3 Griffeen-M50 Link
- M50-Liffey Cross Link
- L5 Griffeen River Link
- L6 Grand Canal-Corkagh Link
- L7 Citywest-Saggart Link
- L8 Tallaght-Rural Link
- L9 Tallaght-Urban Link
- L10 Tallaght-Dublin Mountains Link
- L11 M50-DLR Crosslink
- L12 Ballycullen Stream-Dodder Link
- L13 River Poddle Link
- L14 Whitechurch Stream Link
- L15 Owendoher River/Glendoo Brook Link
- L16 Owendoher River Link
- L17 Ballymount-Grand Canal Link



EXISTING WOODLAND PROPOSED GREEN INFRASTRUCTURE STRATEGY PROPOSED GREEN CONNECTION CORRIDOR PROPOSED GREEN CONNECTION CORRIDOR ROAD TREES TO BE RETAINED PROPOSED TREES

3.5 IMPROVING GREEN SPACE FACTOR

CAI 04

(ii) It is considered that the proposed development fails the minimum requirements to pass the Green Space Factor. The Applicant is requested to provide a revised Green Space Factor worksheet which provides an accurate calculation of the greening factors on the subject site. Prior to providing a revised Green Infrastructure Plan and Green Space Factor Worksheet, the Applicant is advised to liaise directly with the Parks and Public Realm Department of South Dublin County Council.

RESPONSE

The updated calculations now yield a Green Space Factor score of 0.55, a result that we believe aligns with the expectations set forth by the South Dublin County Council. This score underscores our commitment to enhancing the quality and quantity of green spaces within the development, while also promoting sustainability and a vibrant living environment.

Green Space Factor Tool South Dublin County Council



User input indicated by Orange fields

Use	er Input
Zoning lookup	Minimum GI Score
Res	0.5

1. Enter Development Site Area m² HERE▶				
	3162.56 Proposed			
Surface Type (see tab for detailed descriptions)	Factor	Surface Area m²	Factor Values	
l. Short Lawn	0.3	631	189.3	
. Tall Lawn (wild, not mown)	0.5	0	0	
Permeable Paving	0.3	560	168	
/egetation	ENDING STREET	0		
a. Vegetation-Shrub below 3m	0.4	141	56.4	
lb. Vegetation-Shrub / Hedgerow above 3m	0.5	298.7	149.35	
c. Vegetation-Pollinator friendly perennial planting	0.5	151.4	75.7	
ld. Vegetation-Preserved hedgerow	1.2	34	40.8	
rees	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IN COLUMN TO THE PERSON NAMED IN COLUM	0	0	
a. New trees	0.6	650	390	
b. Preserved trees	1.2	539	646.8	
. SuDS intervention (rain garden, bioswale)	0.6	60.3	36.18	
reen Roof		0	0	
da. Green Roofs - Intensive green roof (substrate is 200-1200mm in depth)	0.7	0	0	
b. Green Roofs - Extensive green roof (substrate is 80-200mm in depth)	0.6	0	0	
0. Green wall 1. Retained Open Water	0.4 2	0	0	
12. New open water	1.5	0	0	
Total Equivalent Surface Area of Greening Factors		3,065.40		

Green Factor Numerator

Minumum Required GI score	Final GI score	Result	
0.5	0.55	Pass	

3.6 CONCLUDING REMARKS

In conclusion, this Clarification Additional Information report serves as a testament to our unwavering commitment to delivering a development that aligns seamlessly with the values and aspirations of the South Dublin County Council and the local community. Through a meticulous and responsive approach, we have addressed a range of critical aspects, ensuring that our proposed residential development at Clonbrone, Lucan, Dublin 20 is thoughtfully designed and thoroughly aligned with regulatory requirements.

The report's purpose has been to comprehensively address landscape considerations, respond to concerns, and refine plans in a manner that upholds the principles of quality, sustainability, and harmony. Therevisedlandscape planshowcases our dedication to enhancing public open spaces, incorporating Sustainable Drainage System (SuDS) features, and carefully preserving or restoring existing Green Infrastructure (GI) assets. The integration of street trees, the preservation of historical artefacts, and the strategic placement of elements like pleached trees and a Coniferous Woodland exemplify our commitment to holistic landscape planning that promotes ecological balance, community well-being, and visual appeal.

Our engagement with the Parks and Public Realm Department of South Dublin County Council reflects our transparency, willingness to collaborate, and adherence to local guidelines. Furthermore, our proactive approach in addressing concerns related to stormwater attenuation, public open space requirements, and historical artefacts underscores our dedication to comprehensive and responsible development.

In summary, this report stands as a testament to our commitment to excellence, sustainability, and community-centric design. Through our concerted efforts, we aim to contribute positively to the development's surroundings while fostering a living environment that harmonises with both the natural context and the needs of the residents. As we continue to refine and enhance our plans, we remain steadfast in our pursuit of a development that sets a benchmark for quality, aesthetics, and environmental consciousness in line with the South Dublin County Development Plan 2022-2028.

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