

REPORT: LANDSCAPE DESIGN REPORT

PROJECT: Clonkeen Residential Development (SHD)

DATE: July 2021

Landscape design report

Design development.

Introduction

The layout and design of the streetscape, provision of quality amenity areas, landscape mitigation and the protection and enhancement of the existing peripheral vegetation is central to the long-term successful establishment of this Strategic Housing Development (SHD) at Clonkeen Residential scheme.

Doyle + O'Troithigh are a landscape architectural firm with a collective experience over 30 years in all aspects of Landscape Architecture from design development to implementation. A central core principal of our design is the development of positive open spaces.

The design of positive open space

Working with Scott Tallon Walker Architects from inception, we have developed an integrated landscape strategy, which strives to seamlessly blend the public spaces between buildings and positively influence both the built form and the civic quality of the development. A balanced approach to the design of the public space, centred on the relationship between the buildings and their surrounding open space will allow for the development, and the management of a public realm to be used for a variety of possible neighbourhood based activities throughout the year in doing so, adding to the quality of life of the future end users. The design of public open space must be 'open minded', in that it does not try to define specific activities but can accommodate a range of them. Whether large or small, a successful open space is human in scale, and our proposal utilises this core concept throughout character areas.

Landscape design considerations include:

- Considering the topography and existing site features including existing trees and vegetation.
- Manipulating the external environment to enhance the outdoor experience for all residents.
- Working with the site settings, considering the influence of the elements and positioning amenity areas with whilst considering aspect and micro-climate to allow us add value to the landscape.
- Providing external areas which can be used year-round, adding value to the development and more importantly, acting in a positive way toward the creation of a community spirit and sense of ownership.
- Enhancing the biodiversity and ecological value of the site.
- Considering open space networks, connectivity and legibility (Making connections).
- Developing landmarks, focal points and vistas.
- Awareness and taking cognisance of available management post construction.

Landscape Design Approach

The development of positive open space will enhance a sense of ownership for the residents and users of the external areas and assist in the development of a community spirit which will greatly support and enhance upon future maintenance of the developed lands.

As discussed from inception, we have worked with STW Architects and Project Engineers, Cronin Sutton to ensure that a holistic approach to the landscape design has been developed. We have seamlessly co-ordinated surface water attenuation (SuDS), the public lighting strategy, access roads, parking and pathway infrastructure which has

been considered and altered as necessary to improve the amenity and welfare of the residents and wider community.

The core principle of our design is to provide positive permeability within the site and improve overall pedestrian and cyclist's movement. This core principal is coupled with the design objective to provide designed landscape amenity areas which offer comfort, passive supervision, ease of access and a safe amenity space for all end users.

The passive and active recreation open space areas must provide a high level of visual amenity while allowing for a connection between the development lands and the surrounding built environment and amenity lands, including Clonkeen Park to the north of the site.

Second to the core principal of design is the development of a palette of materials for both hard and soft landscape elements to both the amenity lands and the streetscape. To aid us during the process to select materials we have developed a simple check list of both hard and soft landscape materials as follows:

Hard works materials must;

- Allow for ease and comfortable movement for all users.
- Enhance the space and compliment with the building finishes.
- Work and look attractive in both wet and dry conditions.
- Have a long timeline appeal.

Soft works plant materials must;

- Be suitable for the Irish climate.
- Be non-invasive.
- Collectively provide visual interest all year round.
- Enhance biodiversity and habitat creation.
- Be disease resistant.
- Be cognisant of the local environment.
- Where possible, include a wide selection of pollinator plants in line with the 'All Ireland Pollinator Plan 2015-2020'.



Fig. A Stainless steel visitor bike stand

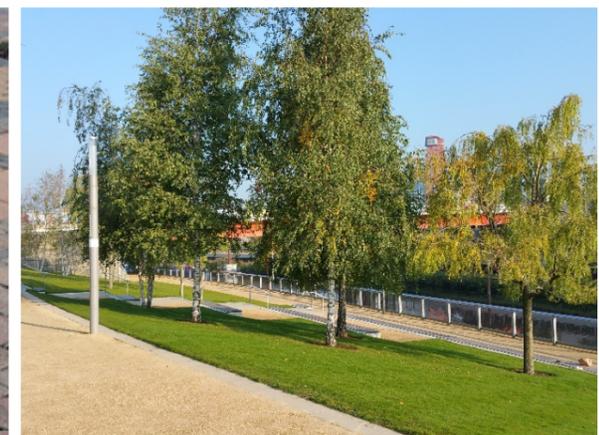


Fig B. Resin bonded gravel pathways



Fig C. Large scale chess board



Fig. D Concrete paving with textured finish



Fig E. Natural stone paving to feature paved areas



Fig. F Trees with year round interest



Fig G. Shrub planting with form, colour and texture

The existing trees and hedgerows pertaining to the site lands have been surveyed in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction' by the Project Arborist (Mr. John Morgan of Independent Tree Surveys). The completed survey and associated drawings form part of the planning application submission to An Bord Pleanála.

Aesthetics

The landscape, and in particular the softscape elements have been designed to ensure year-round interest. The use and mix of trees, shrubs and herbaceous plants have been considered in detail in order to be robust enough to establish, while still offering seasonal interest, movement and a focussed expression. Many of the herbaceous perennials have been under planted with bulb species to offer 'flurries' of colour from early to late spring. Leaf colour, bark colour and berries have all been considered for the scheme which allows for good contrast and again, seasonal variation as referenced in Fig H. below.

Both the public and communal amenity areas proposed including the streetscape will receive a landscape treatment of a high standard in terms of materials and specification; both for hard and soft landscape elements. Samples of some of the key hard and softscape elements have been illustrated. (Refer to Fig. A-G for reference)



Fig H: Seasonal colour and variation

Performance

The landscape design post construction will provide year-round visual interest, accessibility and usability providing the residents with the opportunity to develop a heightened experience of nature within the development. The completed landscape will be functional, comfortable and distinct to the development.

Whole Life Design

The landscape design to each site area (Public, communal and private open space) has been designed to cater for the needs and various age profiles of all residents. The open-minded nature of the design provided will not limit use of the open spaces because of age, gender or ability. It has been designed to develop clear and defined boundaries between the private, communal and public open space, boundaries which have been absorbed into the design to allow for a seamless visual landscape.

Durability

A long-term focus on improving health benefits with the introduction of formal and informal play has been considered from the outset; including the provision of a series of amenity green areas, a boules court, chess board,

outdoor gym equipment at 'station points' and an informal play area. Linking pedestrian connections both within and to the adjoining Clonkeen Park have been considered.



Fig I: Active and passive recreational areas.

Working with the site's topography to enhance the landscape proposed is considered key, and in particular with regard to establishing focal points such as the central open space area which can cater for active and passive recreation; developing meeting points, and assist in neighbourhood social interactions, thus developing neighbourly relations.

The open space has been designed to address envisaged desire lines across the site ensuring a cohesive design is adopted which will cater for all ages and abilities of end users and those within the wider community.

Attenuation through a Sustainable urban Drainage systems SuDs

As part of the design and development of the open space areas, the development of a sustainable urban drainage systems will be included, these measures will work collectively to reduce surface run off rates and improve overall quality. The measures will include;

- **Roadside bioretention swales;** refer to enclosed Landscape Plan's LP-01-PP to LP-05-PP inclusive for reference locations. Refer to drawing no. LD-05-PP for support details; reference Fig. J below.)
- **Roadside bioretention tree pits;** refer to enclosed Landscape Plan's LP-01-PP to LP-05-PP inclusive for reference. Refer to drawing no. LD-05-PP for support details; reference Fig. J below.)
- **Green roofs;** refer to supporting architectural plans as provided by STW Architects.

Working with the Project Engineers the listed SuDs measures (namely bio-retention swales and tree pits) have been developed to work within the site design and have been incorporated (where appropriate) into the landscape and streetscape design. Details for the bioretention tree pits have been prepared following detailed assessment with a reputable Arborist. These pits provide a favourable medium to sustain tree growth, while also providing surface water attenuation and filtration. The swales will be planted with a variety of appropriate species as listed in drawing LD-05-PP these will provide a visual interest to the swale and reduce maintenance through grass cutting. These measures work collectively to reduce the size requirement for the attenuation tank which is located within the central open space.

The basketball area is surrounded by seating areas and planting while being overlooked by the neighbouring apartment block to ensure passive supervision.

To the west of the Block A apartments a linear landscape route has been created to provide direct access to the communal courtyards and apartment amenity buildings. This link is peppered with seating areas creating social spaces for the residents, while providing an element of passive supervision to the school pitch. A pergola is included along the route to provide a vertical element among the tree planting and to help establish the entrance to the courtyard between block A3 and A4 and a focal point along the linear route.

Across the site clusters of bike parking is provided, a lighting plan has been prepared in conjunction with O'Connor Sutton Cronin to ensure that the lighting works with the landscape design and that lux levels are achieved without compromising site wide planting and street trees.

Preplanning.

As part of the planning process a series of preplanning meetings were undertaken with Dun Laoghaire Rathdown County Council and a S247 Tripartite meeting with Dun Laoghaire Rathdown County Council and An Bord Pleanala. was held on the 11th of March 2021 (ABP 309039-20). During this meeting a series of observations were made by Dun Laoghaire Rathdown County Council and An Bord Pleanala, the current site layout plan and landscape plans have been informed and developed in line with the comment made during the preplanning meetings.

The following items 1-3 detail our response to the primary landscape related comments and concerns of Dun Laoghaire Rathdown County Council and An Bord Pleanala.

Item 1

Further consideration / amendment or justification of the location of the areas of public open space (including walkway / running track along site boundaries) with specific regard to passive surveillance / overlooking of these spaces and address how the areas of public open space improve and support the overall character of the development.

In response to item 1 together with the Project Architects STW the site layout was revised to relocate the primary open space from the south eastern site area to a more central location, this open space has been merged with the former village green area to provided a central open space which provided passive and active recreation areas and opportunities for all residents. The open space is directly overlooked by Block B4 and indirectly overlooked from Block A, 2,3 and 4.



Illustration 2. CGI of central open space area.

The former walking / running track has been revised with the proposed landscape plan containing a series of walkways which link the amenity areas, the walking / running track which previously was located to the northern boundary has been removed with this area now given over to rear gardens which form a boundary with the existing dwelling to the north of the site lands. The pathway network to the eastern boundary has been amended to allow for a direct connection to Monaloe Park Road this is illustrated on LP-01-PP and LP-04-PP. See Appendix 1 Fig 3 for layout of relocated central open space following the S247 meeting with Dun Laoghaire Rathdown County Council and An Bord Pleanala and illustration Nr. 1 for CGI of revised central open space.

The manner in which the primary open space has been relocated to a more central location is illustrated in LP-02-PP this revised location provided an open space which is central to the development and creates a focal open space within the development from which all public open space areas can be accessed and utilities.

Item 2.

A report that addresses and provides a clear rationale for connectivity and permeability within and through the site.

In response to item 2 we have prepared a connectivity plan to illustrate connection to the surrounding amenities and through the site lands. As noted under item 1 The landscape plan has been revised to the eastern boundary to facilitate a potential connection to Monaloe Park Road. this is illustrated on LP-01-PP and LP-04-PP. See Appendix 1 for A3 images of both LP-01-PP and LP-04-PP



Fig O, Potential connection to Monaloe Road. See Appendix 1 for A3 illustration of LP-04-PP. See Appendix 1 Fig 4 for A3 drawing at A3 size.

Item 3

A landscape plan clearly delineating public, semi-private and private spaces and proposed boundary treatment. A report which addressed the concerns raised in the report of the planning authorities Parks and Landscape Services dated 21ST January 2021.

A response to item 3 has been subdivided in two;

Firstly, through the preparation of an open space provision plan, detailing the location and designation of open public, private and communal (semi private) open space areas across the site lands. See drawing OS-01-PP for details of all open space areas being proposed. The boundaries proposed between the site landscape and the surrounding lands are illustrated on the landscape plan LP-01-PP to the school site a paladin fence is proposed to the northern boundary the existing block wall forms the site boundary, to the eastern boundary the existing boundary will be retained and made good where necessary as is the case to the southern boundary. To the western boundary where the connection to the site is via a private area a 2200mm high block wall will be developed where the connection is to a semi private open space a paladin fence is proposed allowing for passive supervision through direct visual connection between the site lands and the adjoining school pitch.



Illustration 3. CGI of proposed development from school pitch.

Secondly in response to the reports raised by the planning authorities Parks and Landscape services we have revised the landscape to address the following concerns.

Item 3.1

A tree survey, impact assessment and protections plan prepared under BS 5837:2012 has been prepared by project Arborist John Morgan and submitted as part of the development application illustrating the impact that the condition of the existing trees on site the impact that the proposed development will have on the existing trees and the protective measures which will be undertaken to protect and retain trees during the construction stage. The landscape plan LP-01-PP and associated planting plans PP-01-05-PP illustrate the tree planting which will delivery across the site to develop a urban woodland and mitigate against the removal of existing trees.

The tree planting to the roof podium adjoining the pitch has been removed with the landscape design revised to provide ground level planting, social spaces, visual amenities and direct connections to the semi-private / communal courtyards between the A Blocks and the school pitch.

Item 3.2

To provide a greater number of street trees across the development, we have revised the carparking layout to ensure that parking runs are kept to a minimum of six after which an island of planting is provided.

To the road edge additional street trees have been added primarily in the following locations. To the north of the village green a planted verge has been proposed between the road and pathway, this verge will be planted with columnar trees to provide a strong vertical element between the roadway and the village green. To the western boundary the pathway location has been revised from the road edge to cater for tree planting to the roadside verge. To the left hand side of the entrance road street trees have been added to the back of the pathway. The banks of carparking have been broken up with islands of trees and shrub planted, the current layout allows for 5-6 spaces followed by an island of planting. Collectively an additional +60 street trees have been added to the site layout

The landscape and planting have been coordinated with the surface foul and lighting services to ensure the removal of clashes between street trees and services to maximise the number of proposed street trees across the site lands.

Item 3.3

The provision of play, a detailed plan PS-01-PP has been prepared to illustrate all play and stay areas across the site lands. These are areas which provide formal and informal for a range of age groups and areas which provide social / stay spaces. The plan provided illustrates the location of the play and stay areas and the age groups they facilitate. Play has been provided through the delivery of formal and informal play areas for age groups from toddlers to teenagers all areas are provided with adjoining stay spaces to allow for passive supervision.

See Appendix Fig 5 for A3 of PS-01-PP

Item 3.4

The landscape design has been revised and added to in line with the comments noted by the Parks and Landscape Services department under item 5 of the report issued on the 21st of January, in response to item 5 of the report we have developed the following

Item 3.4.1

A series of planting plans PP-01-PP – PP-05-PP to details all planting proposed across the site lands. As part of the design process for the site lands we have worked with the project ecologist to prepare a planting mix to strengthen the both the visual buffer with the adjoining dwellings and the improve upon the ecological and biodiversity value of the riparian corridor to the existing drainage ditch. Through the planting of a native hedgerow which includes a spine of Hawthorn, Holly and Blackthorn a dense planting buffer will be formed between the proposed development and the existing dwelling. To the development side of the native hedgerow, the riparian corridor will be planted with a rich mix of plant types and species to provide habitat for insects, bats and birds. The planting of the riparian corridor will include wildflowers such as Teasle and Mullion; and shrub planting such as Cotoneaster, Pyracantha, Guelder rose, Dogwood and Viburnum.

Scented plants for bats shall allow be considered including Nottingham catchfly (*Silene nutans*) Night-scented catchfly (*S. noctiflora*) Bladder campion (*S. vulgaris*) Night-scented stock (*Matthiola bicornis*) Sweet rocket

(*Hesperis matronalis*) Evening primrose (*Oenothera biennis*) Tobacco plant (*Nicotiana affinis*) Cherry pie (*Petasites hybridus*) Soapwort (*Saponaria officinalis*). With scented herbs including Chives *Allium* spp. Borage (*Borage officinalis*) Lemon balm (*Melissa officinalis*) Marjoram (*Origanum vulgare*) and Mint (*Mentha* spp). And climbing planting including European honeysuckle (*Lonicera caprifolium*) Italian honeysuckle (*L. etrusca superba*) Japanese honeysuckle (*L. japonica halliana*) Native honeysuckle (*L. periclymenum*) White jasmine (*Jasminum officinale*) Dogrose (*Rosa canina*) Sweetbriar (*R. rubiginosa*) and Field rose (*R. arvensis*)

Collectively this wide variety of planting will provide a rich habitat for insects and animals while providing a visually strong and secure green boundary between the proposed development the existing residential dwellings. See Section Proposed Planting Materials for details of all planting proposed across the site lands.

Item 3.4.2

The details of the site entrance are illustrated in photomontage Nr 7. prepared by Dune Visual together with the project landscape architects.



Illustration 3. Main site entrance detail arrangement.

Item 3.4.3

The overall site landscape plan LP-01-PP details all hard surfaces across the site lands with the landscape detail drawings LD-03-PP, LD-04-PP, LD-05-PP, LD-06-PP, LD-07-PP, LD-08-PP and LD-09-PP providing details of all hardsurfacing, swales and boundaries to the internal site areas.

Item 3.4.4

All street furniture will be finished in RAL 7004

Item 3.4.5

Landscape plan LP-01-PP details the buffer planting areas provided to all ground floor units.

Item 3.4.6

As part of the site landscape review the quantity and location of social (stay) spaces was revised, additional spaces have been provided across the site to deliver a series of stay spaces to facilitate social gatherings for all residents, see PS-01-PP for location of all social (stay) spaces.

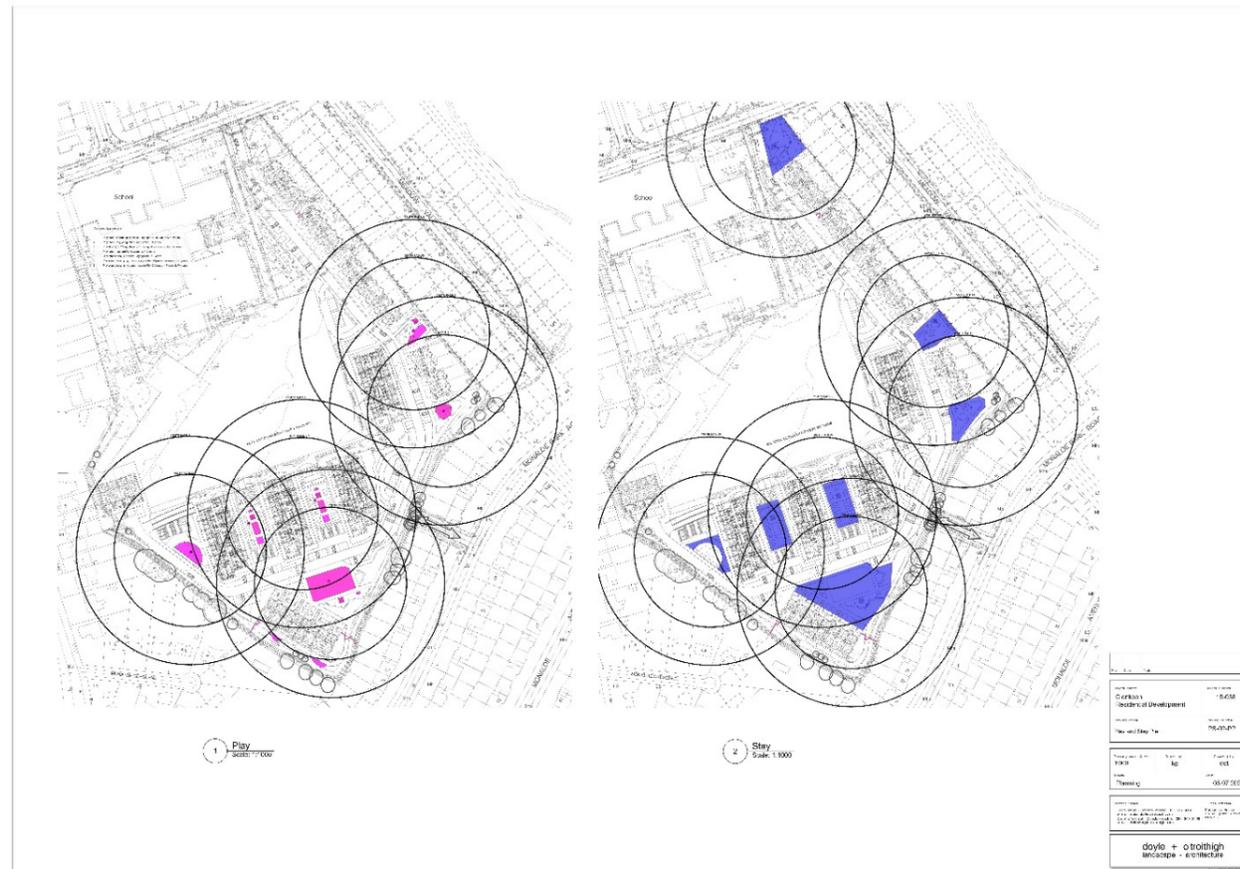


Fig. P. Play and Stay spaces located across the site area, See Appendix 1 Fig 5 for A3 drawing of PS-01-PP



Fig Q. Illustration of revised site plan to provide a central open space area. See Appendix 1 Fig 3. For A3 copy of drawing

The location of the open space has been revised to relocate the open space which was proposed in the south eastern corner to a more central role, in doing so developing a central open space / focal amenity area which has direct connections to all amenity areas across the site lands. Landscape drawings LP-03-PP illustrates the manner by which the site layout and landscape plan has been revised inline with comments from Dun Laoghaire Rathdown County Council and An Bord Pleanála to provide a more central open space area.

Item 3.5

In an effort to resolve the single entrance to the site, the landscape layout has been revised to facilitate the potential delivery of a pedestrian link to Monaloe Road, this has been illustrated on LP-01-PP, CP-01-PP See Appendix 1 Fig. 1 for A3 copy of the proposed connections plan, See Appendix 1 Fig. 2 for and A3 extract of the site landscape plan illustrating the location of the potential connections to Monaloe Park Road. To illustrate the central nature of the site and the potential pedestrian connections to the surrounding amenities, we have prepared a plan illustrating the surrounding amenities. While a radius of 1.0 and 0.5km radius have been included on the plan these are used to illustrate the proximity of the amenity, this has been added to with time and distance calculation for each amenity from the centre of the site as noted in the legend of the submitted plan. The surrounding amenities include Meadowvale Tennis Club, Clonkeen Park, Cabinteely Park, Foxrock GAA Club, Seapoint Rugby Club, Deansgrange Village and Cabinteely village. Refer to the extract of the 'Connections Plan' (CP-01-PP) for reference, Fig. R below.



Fig R, Connection Plan CP-01-PP illustrating the connections to the surrounding amenities



Fig. S. Bonded gravel pathway.

The revisions to the layout have been proposed to provide a formal landscape set among the building which provides areas for low impact active and passive recreation for all with permeability to the adjoining open spaces and wider site lands through connections to the looping pathways. See Fig S for reference image of selfbinding gravel surface to looping pathways.

To the western site boundary, a basketball area has been provided to develop play opportunity for older children, this hard stand area had been designed to also cater as the turning area for maintenance and emergency vehicles and would therefore not have a boundary with the internal roadway. This area has now been revised with the turning area separated from the basketball area and a landscape buffer proposed between the basketball area and the adjoining road to prevent direct access from the amenity area to the roadway. These revisions have been made in line with comments made by Dun Laoghaire Rathdown Traffic Department as part of the S247 meeting. See revised Landscape Plan LP-01-PP for details, See Appendix 1 Fig 2 for A3 copy of extract of the site landscape plan noting the location and arrangement of the revised basketball area.

Proposed Planting Species

The plant material for the proposed Clonkeen Residential development has been chosen on the basis of its long-term suitability and aesthetic appeal. We have categorised the site planting into the following key areas and types;

- **Feature Trees within public open space,**
- **Smaller trees more suited to limited space/constrained planting zones (including over podiums),**
- **Street trees (columnar/ fastigate in form),**
- **Woodland mix and understorey layer (with native element) to edge of drainage ditch / stream,**
- **Hedging,**
- **Ornamental large feature shrubs/small trees in privately maintained buffer areas,**
- **Ornamental shrub planting,**
- **Ornamental herbaceous planting,**
- **Bulb planting.**

The key planting elements for the site can be largely broken down into the below plant categories. With a select number of plant material referenced to support this categorisation below; however, planting is not limited to the species selected. For a more comprehensive review of plant material, a full and complete planting plan will be developed.

Feature trees within public open space

The trees in the formal open spaces have been selected to create a visually appealing mix of specimens. The trees here are largely a mix of deciduous and evergreen and are positioned as informal grouping; either in mix species groupings or as single species. Some of the species proposed include *Betula utilis 'Jacquemontii'*, *Pinus sylvestris*, *Betula pubescens*, *Fagus sylvatica*, *Liquidamber styracifula* and *Castanea sativa* as referenced below (Fig. T(1))



Fig T(1): From left to right; *Betula utilis* 'Jacquemontii', *Pinus sylvestris*, *Betula pubescens*



Fig T(3): From left to right; *Syringa vulgaris* and *Amelanchier lamarkii*,



Fig T(2): From left to right; *Fagus sylvatica*, *Liquidamber styraciflua* and *Castanea sativa*

These specimen trees are suitably placed within the scheme where they are grown in accordance with their shape and form and overall structure. The species are largely deciduous however some feature evergreen trees have been included to offer greater 'depth' to the scheme particularly during the winter months. It would be envisaged that over the course of a 10 year period post planting, the tree stand would vary in height between 10-14m tall and would develop further in accordance to their species and site conditions thereafter.

Smaller trees more suited to limited space/constrained planting zones (including over podiums)

Where space is more limited, smaller trees have been proposed which will offer visual appeal, year-round interest and 'companion' relationship with nearby tree and shrub planting. These trees are considered more 'delicate' in nature and offer wonderful flowering; however, they are sufficiently robust to ensure they are suited to site conditions and aspect. Some of the species proposed include *Syringa vulgaris*, *Amelanchier lamarkii*, *Hamamelis mollis* and *Cercis siliquastrum*.



Fig T(4): From left to right; *Hamamelis mollis* and *Cercis siliquastrum*.

The above tree species all noted above are deciduous and offer 'flower' from the period of late winter through to mid summer. These species would grow to some 2.5-4.0m in height over the course of some 10 years; and would not grow much taller thereafter.

Street trees (columnar/ fastigate in form)

Specific trees have been selected for the formal streetscapes within the scheme. These are all fastigate or upright in form with a narrow canopy in order to avoid interference with landscape elements such as lighting, vehicular infrastructure and the built environment. The species selected are considered 'tried and tested' in terms of streetscape design; however, they have also been selected for their seasonal interest. The street trees will be planted in constructed tree pits with a soil volume of 16 cubic mtrs.

Some of the species proposed include *Carpinus betulus* 'Frans Fontaine', *Quercus robur fastigiata* 'Koster', *Pyrus calleryana* 'Chanticleer' and *Fagus sylvatica* 'Dawyk's Gold'. Refer to fig T(5) and T(6) as referenced below.



Fig T(5): From left to right; *Carpinus betulus* 'Frans Fontaine', *Quercus robur fastigiata* 'Koster'



Fig T(6): From left to right; *Pyrus calleryana* 'Chanticleer' and *Fagus sylvatica* 'Dawyk's Gold'.

All the above species noted are deciduous in nature; and after a period of some 10 years post planting, these would grow to a height of 6-7.5m tall. The aforementioned period would be considered the most active growth period; and whilst they would grow taller after this period it would however be at a slower rate.

Woodland mix and understorey layer (with a native element)

To reinforce the existing boundary arrangement along the open stream to the south of the scheme, a planting palette with an emphasis has on native species has been considered. The woodland edge will aim to improve biodiversity and to connect to existing trees and understorey to benefit green infrastructure within the local setting. Some of the species proposed include *Corylus avellana*, *Crataegus monogyna*, *Euonymus europaeus*, *Ilex aquifolium*, *Prunus padus*, *Viburnum opulus*, *Malus sylvestrus* and *Betula pubescens*. Refer to fig T(7) and T(8) below.



Fig T(7): From left to right; *Corylus avellana*, *Crataegus monogyna* and *Euonymus europaeus*



Fig T(8) From left to right; *Prunus padus*, *Viburnum opulus* and *Betula pubescens*.

This is largely a deciduous mix; however, an evergreen element would come in the form of the introduction of Holly (*Ilex aquifolium*).

As part of these biodiversity areas, it is proposed that further herbaceous species are added such as Teasel (*Dipsacus fullonum*) and Mullein (*Verbascum thapsus*) to support and encourage feeding for a range of small birds.

Hedging

Hedging throughout the scheme will aim to define spaces which offer capacity for varying functions, create a backdrop to seating zones and edge pedestrian walkways. Every effort has been made to include hedgerows with a native element in order to improve the sites biodiversity; whilst a number of hedgerows offer visual appeal by utilising ornamental 'garden' species.

Some of the species proposed include *Carpinus betulus*, *Escallonia* 'Apple Blossom' and *Prunus rotundifolia*. Refer to Fig. T(9). The latter two species listed are evergreen in nature and offer a strong and formal hedge and would be maintained a height of 1.0-1.2m in height. The Hornbeam hedge (*Carpinus betulus*) is a deciduous hedge, however as the hedge creates continual juvenile foliage it tends to hold onto a large element of its leaves during winter which are brown in colour and offer good texture and seasonal interest.



Fig T(9) From left to right; *Carpinus betulus*, *Escallonia* 'Apple Blossom' and *Prunus rotundifolia*

The native hedgerow mixes proposed for the scheme include *Corylus avellana*, *Carpinus betulus*, *Crataegus monogyna*, *Euonymus europaeus*, *Ilex aquifolium* and *Prunus spinosa*. Refer to Fig. T(10) and T(11) below.



Fig T(10): From left to right; *Corylus avellana*, *Carpinus betulus* and *Crataegus monogyna*.



Fig T(11): From left to right; *Euonymus europaeus*, *Ilex aquifolium* and *Prunus spinosa*

This native hedgerow is largely deciduous in nature, apart from the Holly, and offers excellent seasonal interest in the form of changing bark colour, autumn leaf colour, berries of varying hues and flower. The hedgerow would be maintained at a height of some 1.2-1.75m depending on location. At boundary edges, the hedgerow could grow slightly taller and have a looser form; however where they define more formal spaces they can be retained at a lower height and retained more compact in form.

Ornamental large feature shrubs/small trees in private gardens

Where private planting is to be supplied within front garden / buffer zones, shrubs have been selected with regard to their suitable size in terms of restricted areas, visual appeal and ease of maintenance. Some of the species selected include *Sambucus racemosa* 'Black Lace', *Viburnum x bodnantense* and *Acer palmatum* as referenced below in Fig. T(12).



Fig T(12) From left to right; *Sambucus racemosa* 'Black Lace', *Viburnum x bodnantense* and *Acer palmatum*

The above shrubs all noted above are deciduous and offer 'flower' and strong bar colour from the period of late winter through to mid summer. These species would grow to some 1.5-2.5m in height over the course of some 10 years; and would not grow much taller thereafter.

Ornamental shrub planting

Ornamental shrub planting is proposed throughout the scheme both within public, private and semi-private spaces. The shrubs have been selected for their ability to create form to spaces as well as providing seasonal variation, movement, scent and colour throughout the scheme. It is envisaged that the shrubs will be a mix of evergreen and deciduous which will be complementary as part of companion planting arrangements. It is envisaged that shrub planting would not be taller than 900mm. An evergreen 'structure' will be present in all planting zones in order to allow the scheme to carry through the winter months. Some of the species selected include *Carex pendula*, *Helleborus orientalis*, *Buxus sempervirens*, *Rosa* 'White Carpet', *Hydrangea* 'Bobo' and *Sarcococca confusa* as referenced below in Fig. T(13) & T(14) below.



Fig T(13): From left to right; *Carex pendula*, *Helleborus orientalis* and *Buxus sempervirens*.



Fig T(14): From left to right; *Rosa 'White Carpet'*, *Hydrangea 'Bobo'* and *Sarcococca confusa*

Ornamental herbaceous planting

The herbaceous planting proposed for the scheme has been chosen for its robustness, ease of maintenance, movement' and visual appeal. These species shall be largely block planted in a single species and shall be edged with evergreen shrubs to ensure the planted structure is maintained throughout the winter period. Ornamental grasses have been included to create movement and appeal to a variety of the senses. Largely ornamental shrub planting is cut back each spring to allow for new growth; underplanting of ornamental bulb planting has been proposed in connection with herbaceous planting to offer added interest during the season; refer to Fig 9.0 below for reference.

Some of the species selected include *Anemone 'Honorine Jobert'*, *Calamagros 'Karl Foerster'*, *Sedum 'Autumn Joy'*, *Agapanthus sp.*, *Verbena x bonariensis* and *Miscanthus sinensis 'Gracillimus'* as referenced below in Fig. T(15) & T(16) below.



Fig. T(15) From left to right; *Anemone 'Honorine Jobert'*, *Calamagros 'Karl Foerster'* and *Sedum 'Autumn Joy'*



Fig. T(16): From left to right; *Agapanthus sp.*, *Verbena x bonariensis* and *Miscanthus sinensis 'Gracillimus'*

Planting to riparian corridor and site boundaries.

As part of the design process for the site lands, we have worked with project ecologist to prepare a planting mix to strengthen the visual buffer with the adjoining dwellings and the ecological and biodiversity of the riparian corridor to the existing drainage ditch. Through the planting of a native hedgerow which includes a spine of Hawthorn holly and blackthorn a dense planting buffer will be formed between the proposed development and the existing dwelling. To the development side of the native hedgerow the riparian corridor will be planting with a rich mix of plant types and species to provide habitat for insects and birds. The planting of the riparian corridor will include wildflowers such as Teasle, Mullion; and shrubs such as (but not limited to) Guelder rose, Dogwoods and Viburnum.

Scented plants for bats including Nottingham catchfly (*Silene nutans*) Night-scented catchfly (*S. noctiflora*) Bladder campion (*S. vulgaris*) Night-scented stock (*Matthiola bicornis*) Sweet rocket (*Hesperis matronalis*) Evening primrose (*Oenothera biennis*) Tobacco plant (*Nicotiana affinis*) Cherry pie (*Petasites hybridus*) Soapwort (*Saponaria officinalis*)

With scented herbs including Chives *Allium* spp. Borage (*Borage officinalis*) Lemon balm (*Melissa officinalis*) Marjoram (*Origanum vulgare*) and Mint (*Mentha* spp). And climbing planting including European honeysuckle (*Lonicera caprifolium*) Italian honeysuckle (*L. etrusca superba*) Japanese honeysuckle (*L. japonica halliana*) Native honeysuckle (*L. periclymenum*) White jasmine (*Jasminum officinale*) Dogrose (*Rosa canina*) Sweetbriar (*R. rubiginosa*) and Field rose (*R. arvensis*)

Collectively this wide mix of planting will provide a rich habitat for insects and animals while providing a visually strong and secure green boundary between the proposed development the existing residential dwellings.

Bulb planting

Bulb planting shall be proposed for across the scheme where the planting of bulbs will be in the form of naturalised bulb planting within grass zones or as companion planting to mixed herbaceous species.

Some of the species selected include *Tulipa 'Triumphator'* and *Allium hollandicum 'Purple Sensation'* as reference below in T(17) below.



Fig T(17): From left to right; *Tulipa 'Triumphator'*, *Allium hollandicum 'Purple Sensation'*

Summary

The points and concerns raised by Dun Laoghaire Rathdown County Council and An Bord Pleanála as part of the preplanning meetings in relation to the landscape design have been addressed and the landscape design as proposed has been altered to resolve the items of concern.

The proposed design for the landscape has been amended to increase street trees planting, create a series of linked open space areas which provide opportunities for passive and active recreation opportunities to all users, these open spaces are connected via direct pathways which are finished in a bonded gravel surface which is comfortable and accessible for all. The planting to the eastern and western boundary will be retained where appropriate and added to with suitable species to give a greater ecological value and increase biodiversity. Sustainable measures have been integrated into the landscape design.

The primary open space previously located in the south eastern area of the site lands has been relocated to a more central location with direct links to all open space areas. The walking / running track which ran to the rear of the B Blocks on the northern boundary has been removed with these units now proposed with rear gardens which connect directly to the existing boundary wall.

The open space between the A Block and the existing school pitch has been transformed to develop an amenity link to the communal courtyards while provided indirect supervision to the school pitch via a visual connections. . . A series of detailed site-specific planting plans have been prepared with the project Ecologist to ensure the delivery of species rich planting suitable to the site conditions.



Fig. W – Recreation opportunities within the landscape

Appendix 1.



- (A) Site Lands
- (B) Meadowdale Tennis Club (6Mins)
- (C) Clonkeen Park
- (D) Cabinteely Park (6mins-12mins)
- (E) Park Celtic FC
- (F) Foxrock Cabinteely GAA
Seapoint Rugby Club (12mins)
- (G) Deansgrange Village
- (H) St. Josephs Boys AFC
- (I) Cabinteely Village
- (J) Geraldine P Morans GAA Club

Existing Linear Park & Green Infrastructure

Average walking speed = 5KM per Hour
= 1KM 12mins

Rev.	Date	Notes

Project Name Clonkeen	Project Number 19-038
Drawing Name Connection to surrounding lands	Drawing Number CP-01-PP

Drawing Scale (1: A1) 1:5000	Drawn by kg	Checked by dot
Status Planning	Date 05.07.2021	

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1 Connection to surrounding lands
Scale: 1:5000

Appendix 1 Fig. 1 Connection Plan to surrounding site areas and amenities.



Appendix 1 Fig. 2. Extract from Site Landscape Plan to illustrate location of relocated primary open space areas.



3 Boundary school pitch - Previously lodged Landscape Plan
Scale: 1:500

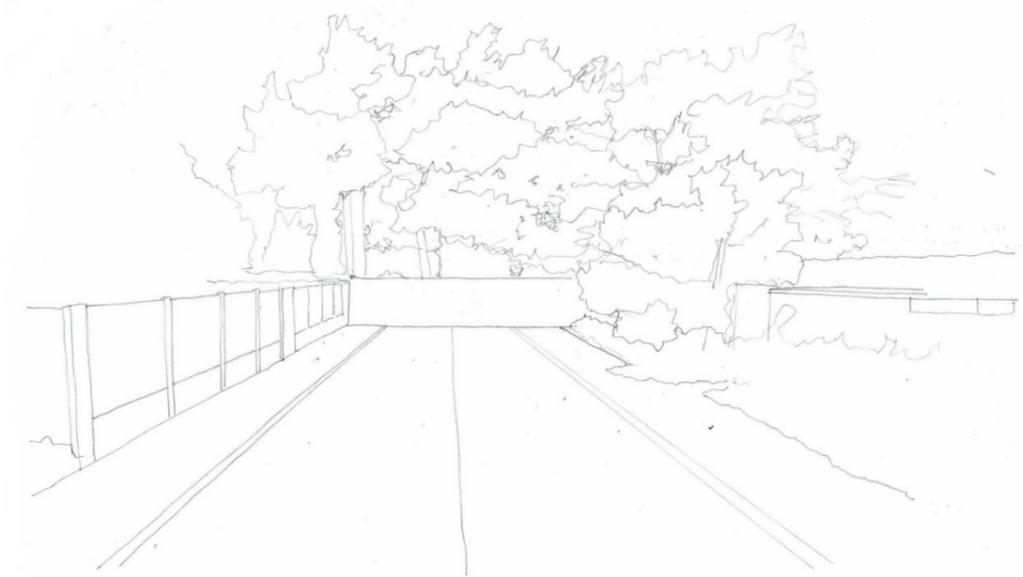


1 Boundary school pitch - Proposed Landscape Plan
Scale: 1:500

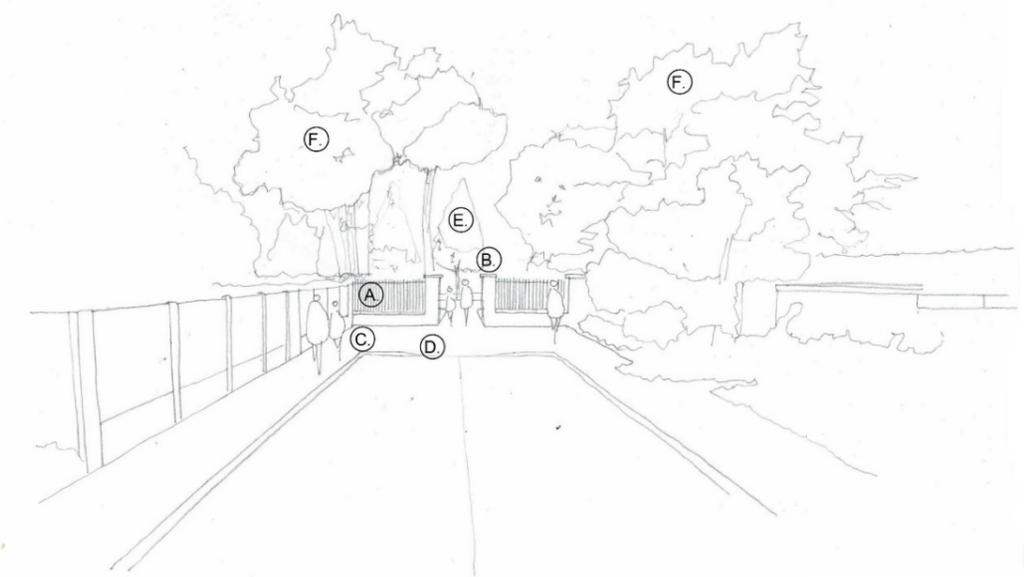


Rev.	Date	File
Project name: Clonkeen Residential Development		
Project number: 19-038		Drawing number: LP-02-PP
Drawing name: Landscape Plan		
Drawing scale (if A1): 1:500	Drawn by: kg	Checked by: dot
Date: Planning	Date: 05.07.2021	
Contact details: Doyle + O'Troigh Landscape Architecture 110A-112A, Dublin 11, Ireland Tel: +353 1 452 4155 Email: info@doyle-otroigh.com www.doyle-otroigh.com		
Office address: The Stone House 18-20 Upper Pembroke St Dublin 2, Ireland Tel: +353 1 452 4155 Email: doyle@doyle-otroigh.com		
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Appendix 1 Fig. 3, Illustration of relocation of Building Block and associated central open space following S247 meeting with Dun Laoghaire Rathdown County Council and An Bord Pleanála



Existing spur and deadend from Monaloe Park Road.

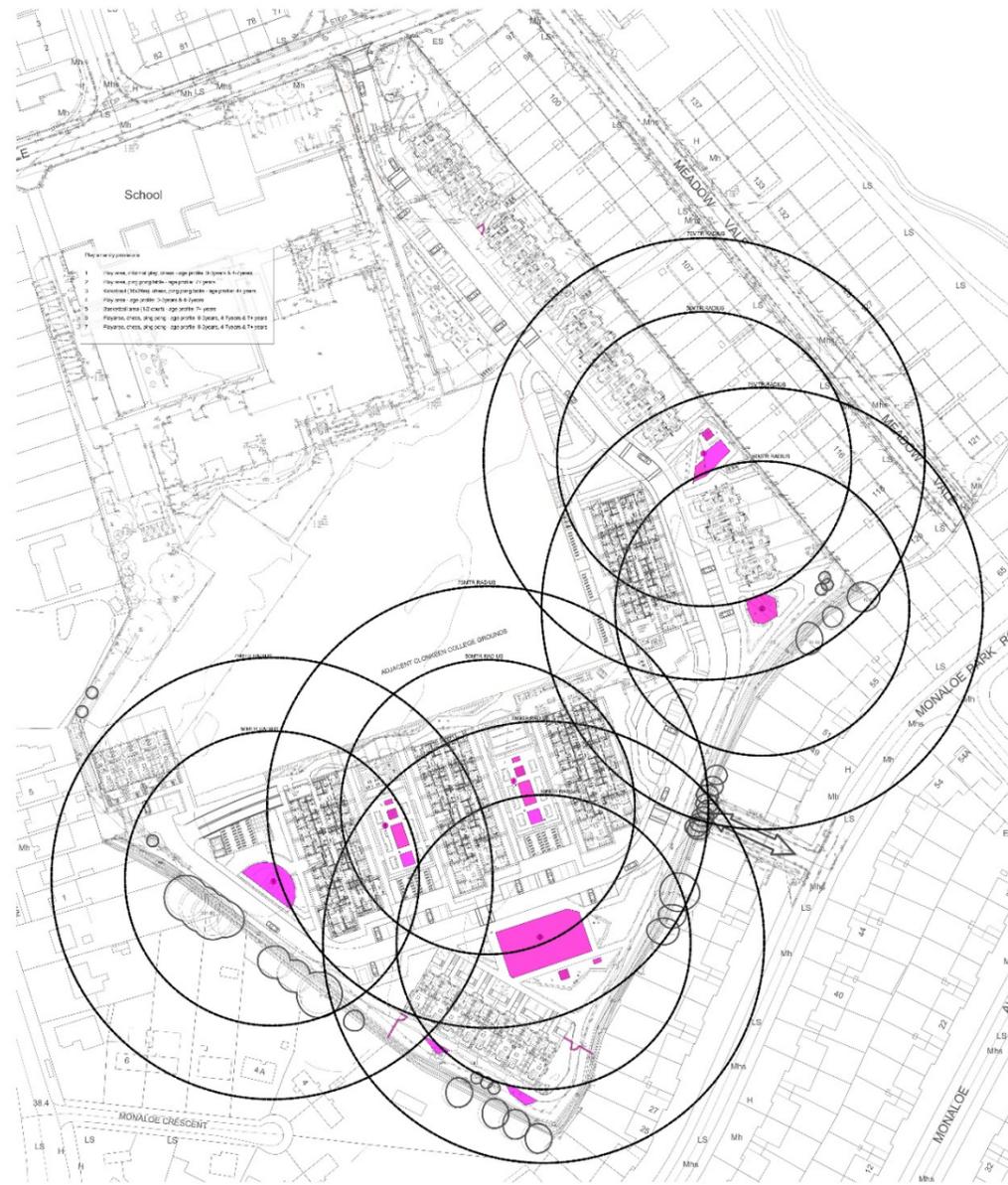


Potential Pedestrian and Bike connection from Monaloe Park Road to development.

- (A) Plinth wall and railing.
- (B) Pedestrian and Bike access to development.
- (C) Entrance apron.
- (D) Dropped kerb.
- (E) Tree Planting within the development.
- (F) Existing trees on site boundary retained.

Rev	Date	Issued
Project name: Clonkeen Residential Development		Project number: 19-038
Drawing name: Monaloe Park Road Potential Connection		Drawing number: SK-01-PP
Drawing scale: 1:100	Drawn by: nts	Checked by: dot
		Date: 05.07.2021
Contact details: doyle + o'troithigh landscape - architecture 20-21 Upper Leeson Street, Dublin 2, Ireland t: +353 1 452 2000 f: +353 1 452 2001 e: info@doyleo'troithigh.com w: www.doyleo'troithigh.com		Office address: doyle + o'troithigh landscape - architecture 20-21 Upper Leeson Street, Dublin 2, Ireland t: +353 1 452 2000 f: +353 1 452 2001 e: info@doyleo'troithigh.com w: www.doyleo'troithigh.com

Appendix 1 Fig. 4. Existing condition and Potential link from Monaloe Park Road for pedestrians and cyclists to site lands.



1 Play
Scale: 1:1000



2 Stay
Scale: 1:1000

Rev: Date: Issue	
Project name: Clonkeen Residential Development	Project number: 19-038
Drawing name: Play and Stay Plan	Drawing number: PS-02-PP
Drawing scale (if A1): 1:000	Drawn by: kg
Checked by: dot	Date: 05.07.2021
Contact details: 1006, Doyle + O'Roithigh, 1006, 1007, 1008 e-mail: info@doyleoeroithigh.com Doyle + O'Roithigh, 1006, 1007, 1008 e-mail: info@doyleoeroithigh.com	Office address: Harmonika House 1006, 1007, 1008 Dublin 7
doyle + o'roithigh landscape - architecture	

Appendix 1 Fig. 5. Location of proposed Play and Stay areas



