PROPOSED RESIDENTIAL DEVELOPMENT

at Ard an Gleannha, St. Josephs Road, Mallow, Co. Cork for Cork County Council

8th July 2024



LANDSCAPE DRAWINGS

- L101 Landscape Strategy
- L102 Existing Vegetation
- L103 Vegetation References
- L104 Green Infrastructure
- L105 Landscape Masterplan
- L106 Northwest Amenity
- L107 Northeast Amenity
- L108 Central Amenity
- L109 East Amenity
- L110 South Amenity
- L111 Archaeology Amenity
- L112 Section L1
- L113 Section L2

LANDSCAPE STRATEGY

The proposed scheme at Ard an Gleannha is designed to showcase Cork County Council's ambitions to provide quality amenity space that tackles pressing landscape issues including: biodiversity enhancement, stormwater mitigation, and improving residential well-being. This is being done through innovative and collaborative design, without incurring significant additional cost.

There are 5 no. designated open spaces, plus ancillary grass kickabout zones for use by adjacent houses. Additionally, the presence of subsurface archaeological features on site results in a massive complementary amenity space. The term community drives the design of the open spaces. They are for residents of all ages to engage in and interact, not just for kids to play in. Open space constitutes 15% of the developable site; generous considering this excludes the 6075 sq.m. archaeology zone. Important to each area is access and visibility. In many instances, adjacent houses have dual aspect for secondary supervision. At other locations, a row of houses will overlook an open space, and in such instances planting is kept low (<600mm) for clear supervision. Outlined below are the strategies for each open space:



- 1) NORTHWEST AMENTY (400 sq.m.) Framed by an urban woodland and bands of pollinator beds, this amenity has a well-defined 100 sq.m. level lawn. 3 no. seat benches and a seatwall make it a space for adults to mind children, a safe spot for teenagers to gather or individuals to turn away from the green and look out over the archaeology zone.
- 2) NORTHEAST AMENTY (375 sq.m.) This is also an area designed with a large level lawn (185 sq.m.), but in a more active format with a permanent junior sports goal. This is complemented by 2 no. picnic tables with full sun exposure, suitable for a family outing or a group of friends to watch others play. There is a large pollinator bed and a band of native trees to supplement the existing hedgerow with new Oak and Birch, which currently are not present on site.

- 3) CENTRAL AMENITY (1100 sq.m.) A linear space accommodating 3m change in gradient. It is an attractive series of spaces that incorporates biodiversity swales as part of the SuDS solution and habitat attraction. It is links the upper and lower ends of the estate, is overlooked by 6 houses. The terraced solution still provides 285 sq.m. of level lawn, while also being an inspiring spot to read a book.
- 4) EASTERN AMENITY (550 sq.m.) This space is an extension of the central plaza and is a safe location aimed at children. The plaza consists of bench seating and stylised planting and is comfortable for those not associated with the play area. The large play space is divided between a formal play area and a natural adventure zone. The modest amount of play equipment make it an unlikely spot for outsiders to visit, but well suited to the estate and immediate neighbourhood, with a high level of active and imaginative play.



5) SOUTHERN AMENITY (500 sq.m.) - This open space acts as a gateway to the development, sitting on elevated ground near the first junction. With a public orchard, it exudes the aim of unifying the community across all ages and interests. Residents are encouraged to pick the autumn fruit, facilitating social interaction on a different level than play. There is also a 180 sq.m. protected level lawn, flanked to the front by spring flowering Heather and to the back by summer wildflower for transitional pollinator benefits.

ARCHAEOLOGY AMENITY (6075 sq.m.) - Although not part of the developable space, it is a green open space that is anticipated to be taken in charge and can benefit the residents. In providing a 'maintained' appearance while prioritising biodiversity, it is proposed to create pockets of inviting mown green space. These will reflect the archaeological zones without having any impact on the subsurface features. It will also be a positive example of how the local authority can protect heritage and enhance awareness of it, while being beneficial as an amenity to play, walk a dog or experience nature.

PLANTING STRATEGY - 96% of the proposed trees are native, with the addition of a few Lime trees for large canopies in urban conditions. The species palette greatly diversifies the site, with the intention of positively influencing habitats beyond the site boundary. All shrubs follow plant lists published by the *All-Ireland Pollinator Plan* (AIPP). We do have large areas of lawn that will be regularly managed by the local authority and will follow internal policies like 'No Mow May' for targeted pollinator benefit. Areas where wildflower is identified will utilise soil salvaged from site, to ensure the existing seed bank is continued within the locality. This will be supplemented with native red/white Clover to quickly stabilise the soil and create fast pollinator benefits while the retained seed bank matures.

SUSTAINABLE URBAN DRAINAGE SYSTEMS (SuDS) - Many of the proposed stormwater solutions will be landscape-based, mimicking natural systems. There are swales, attenuation basins and infiltration trenches - 3 types of solutions to address different degrees of stormwater. This scheme will act as a strong example of the local authority ability to support and deliver natural SuDS systems. The intent is also to showcase how daily interaction with such systems can enhance residents lives and association with nature.

LANDSCAPE FINISHES - In the public realm, street furniture (benches, platforms, picnic tables) will utilise robust, low maintenance composite materials. Paths will be laid to brushed concrete and in select amenity settings will be treated with a low-cost exposed aggregate finish. Any steps will include tactile warning paving, nosings and galvanised handrails.

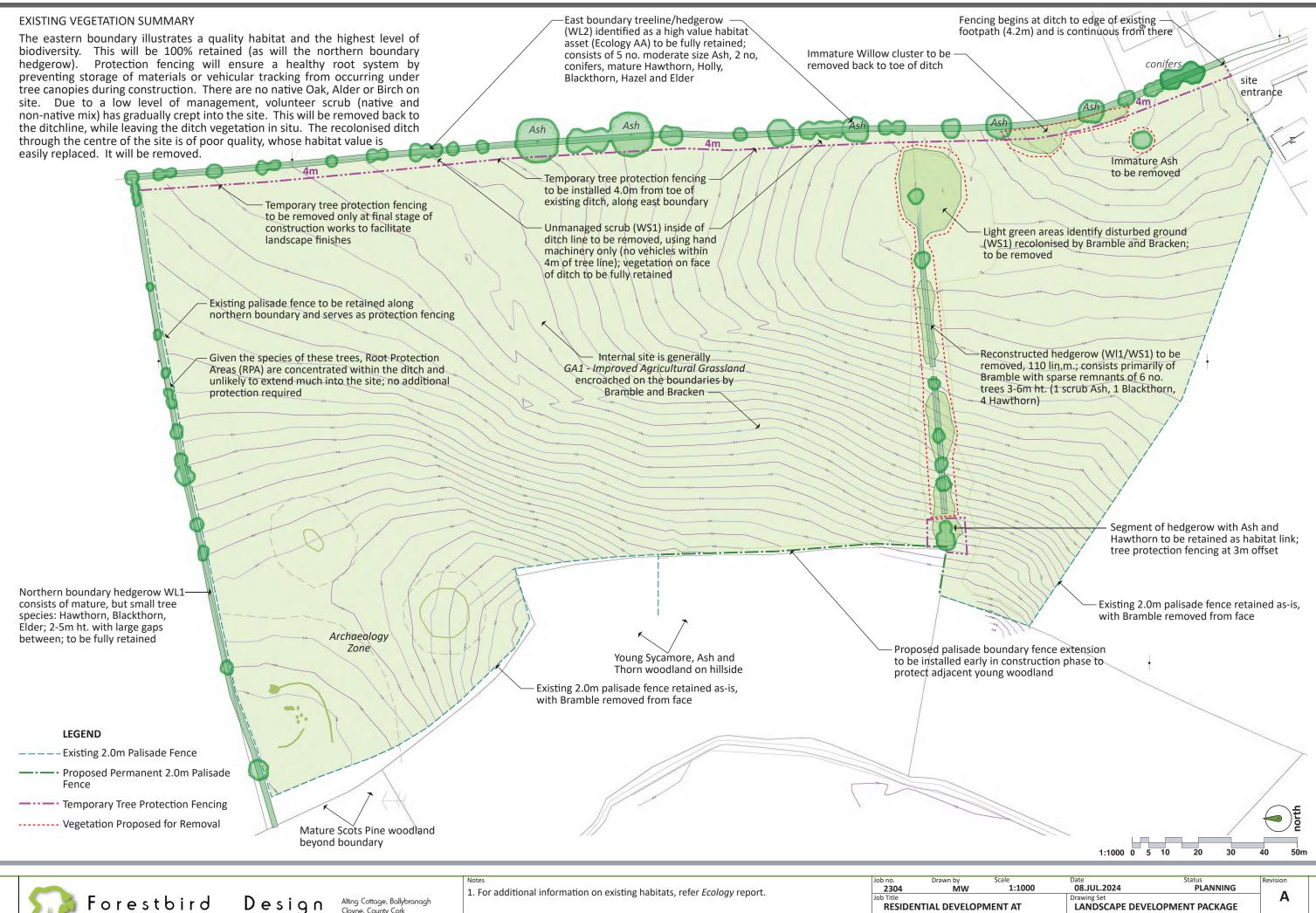
In the private realm, driveways will be paved with select coloured concrete unit pavers to differentiate private and public space. Individual units receive a paved rear terrace and all walls facing the public realm are capped and rendered.



Image of a driveway paved in select coloured concrete unit pavers with planting buffers and rendered boundary walls.



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RESIDENTIAL DEVELOPMENT AT ARD AN GLEANNHA, MALLOW, CO. CORK

LANDSCAPE DEVELOPMENT PACKAGE **Existing Vegetation**

Drawing No.



A cluster of young voluntary Willow has arisen on previously disturbed ground, expanding out from the eastern hedgerow. The cluster will be removed, while the Willow on the ditch will be retained.



Bramble has begun to overwhelm existing boundary fences. These will be removed at ground level and the fences kept clear of vegetation.



The hedgerow running through the centre of the site was reconstructed a number of years ago with spoil soil. A few mature thorn trees remain, but the bulk of the ditch is covered in Bramble, grass and Bracken. The hedgerow and scrub will be removed.

REMOVALS



A view of the eastern boundary treeline/hedgerow, looking north. All trees will be retained. Bramble, Nettles and residual scrub creeping into the site will be removed back to the toe of ditch and re-seeded with grass. The area adjacent to the hedgerow will become rear gardens in the proposed scheme. To ensure retained vegetation is not damaged and root zones are protected, temporary tree protection fencing will be installed 4m from the toe of the ditch during the course of construction. This will prevent storage of materials and vehicles compacting the soil within the protection zone. Fencing will be removed once machinery is offsite and final landscape works are being carried out.



Example of mature, quality groundcover vegetation and habitat on the boundary ditch that will be protected and retained.

Example of temporary tree protection fencing using 1.8m mesh panels. The mesh allows continual air flow, access to light, movement of insects, and movement of small fuana below the fence rail. Signage will alert construction crews as to the reasoning and seriousness of keeping fencing in place.



PROTECTIONS



Alting Cottage, Ballybranagh Cloyne, County Cork

1. For proposed retention and removals on plan view refer drawing L102. For additional habitat information refer Ecology screening reports.

2304 **RESIDENTIAL DEVELOPMENT AT**

08.JUL.2024

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LANDSCAPE DEVELOPMENT PACKAGE ARD AN GLEANNHA, MALLOW, CO. CORK

Vegetation References

GREEN INFRASTRUCTURE

The zoned lands at the east end of Mallow town are bounded by an existing residential development to the south, agricultural lands to the east and north and mixed woodland to the west. It is a greenfield site classified as *Improved Agricultural Grassland* GA-1, (Refer *Ecological Impact Assessment* Chapter 5). There is evidence of previous ground manipulation with a portion of the site exhibiting poor grassland qualities. Boundaries consist of mixed native hedgerows, with a large woodland beyond the western fenceline.

Chapter 14 (Green Infrastructure and Recreation) and Chapter 15 (Biodiversity and Environment) of the Cork County Development Plan 2022-28 contain objectives for incorporating green and blue infrastructure into new residential development. These have been cross-referenced with the Cork Co Co guidance document *Biodiversity and the Planning Process*. Pertinent objectives include:

Objective GI 14-1: Green and Blue Infrastructure

f) Achieve a net gain in green infrastructure through the protection and enhancement of existing assets and through the provision of new green infrastructure, as an integral part of the planning process.

Objective BE 15-8: Trees and Woodlands

- d) Ensure that development proposals do not compromise important trees and include an appropriate level of new tree planting.
- e) To protect mature trees/groups of mature trees and mature hedgerows that are not formally protected under Tree Preservation Orders.

The primary existing asset is the eastern hedgerow and this is protected in its entirety. A minor internal hedgerow is the only asset being removed. The existing grassland will also be removed, but the soil and seed bank will be retained for re-use on site, allowing the existing grassland fauna to re-emerge within managed wildflower zones. Existing fencing frames half of the site, serving as instant tree protection fencing during construction stage.

Proposed planting includes 254 no. new semi-mature and advanced trees. 244 trees are native (96%), with 10 acclimatised Lime trees for climate change adaptability and pollinator benefits identified in the *All-Ireland Pollinator Plan*. The result is a far greater diversity than what is currently offered on site. Combined with several thousand pollinator shrubs, the green infrastructure gain is a neutral in the short term and a net positive in the long term.

In reference to blue infrastructure, there are no existing field drains or areas of collected water. Surface stormwater sheets off the site towards the public road. Blue improvements include 3 designated SuDS areas to filter and attenuate some surface water, reducing impact on the public storm system.



Image of mature hedgerow along the eastern boundary, forming the primary asset. Bramble at the base of the sod/stone ditch will be trimmed back to the ditch face. All trees will be retained.

Objective BE 14-6: Public / Private Open Space Provision

b) Promote the provision of high quality, accessible and suitably proportioned areas of public open space and promote linking of new open spaces with existing spaces to form a green infrastructure network.

The scheme provides a mix of passive and active public amenity totaling more than 12% of the site area (Part 14.5.11). This percentage excludes the ancillary open space at the archaeological buffer zones. The 5 designated open spaces are intended to create a sense of community. The open spaces are deliberately sized to suit this development and not serve as a regional draw.

The internal amenity spaces are fully accessible, well overlooked and cater to a broad range of ages and activity interests. All amenity spaces are designed with buffers to the public roads for optimal child safety. The spaces are linked by trees and low level shrubs (typ. less than 0.8m high), as recommended by the *All-Ireland Pollinator Plan* (*AIPP*). The meadow experience at the archaeology area provides a managed natural opportunity for users to escape the urbanised environment. Accessible footpaths link the upper and lower houses.

When designing the physical and visual interaction between the site amenity and adjacent residences, consideration was also given to improving biodiversity links. A tree row links the north and south boundaries to provide a commuting route for fauna, while tree clusters serve as a habitat refuge.

The combination of these designed solutions provides a quality long-term framework to enhance the green infrastructure network.



Diagram highlighting the 5 primary amenity spaces (orange circles), well proportioned and evenly distributed, with the archaeology buffer zone open space to the northwest corner.

Objective BE 15-6: Biodiversity and New Development

- c) Requiring the incorporation of primarily native tree and other plant species, particularly pollinator friendly species in the landscaping of new developments.
- f) Ensuring that the implementation of appropriate mitigation (including habitat enhancement, new planting or other habitat creation initiatives) is incorporated into new development, where the implementation of such development would result in unavoidable impacts on biodiversity-supporting the principle of biodiversity net gain.

The urban woodland clusters and tree rows will be 100% native. Existing Ash, Hawthorn and Blackthorn will be enhanced with Oak, Hazel and Birch. A small percentage of non-native Lime trees are used in difficult urban situations where our native trees would not perform well and also to provide large tree canopies at the higher elevations.

Proposed attenuation swales and basins not only mitigate stormwater, but define and enhance open spaces by means of an additional habitat offering and improved biodiversity.

By increasing the numbers and diversity of native tree species on site, incorporating biodiversity swales and using flowering shrubs derived from the *AIPP* recommended plant lists, a responsible approach to the landscape is illustrated. The result is a measurable long-term biodiversity gain across the site.



Alting Cottage, Ballybranagh

Cloyne, County Cork

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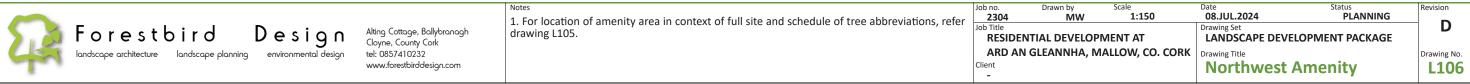


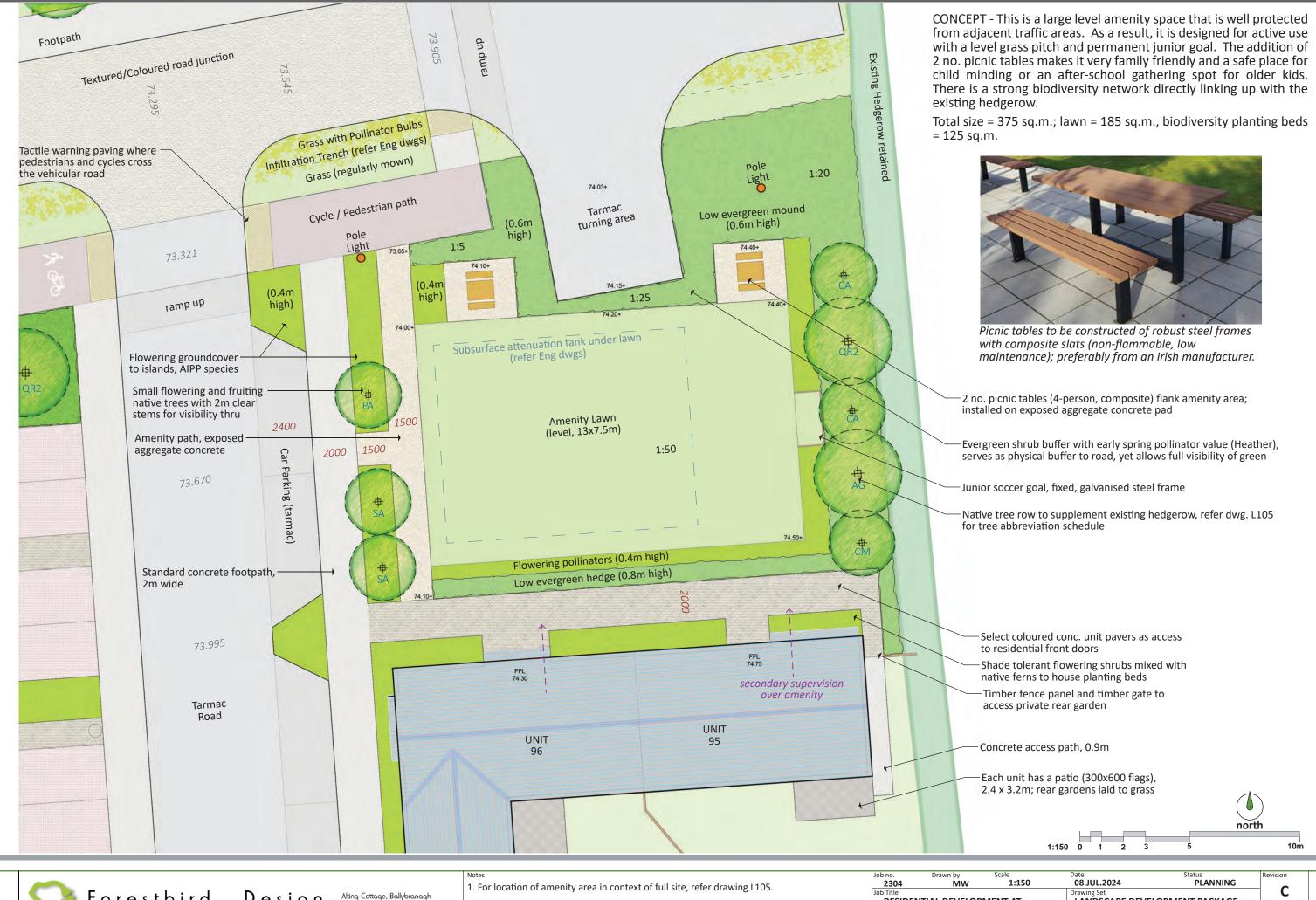
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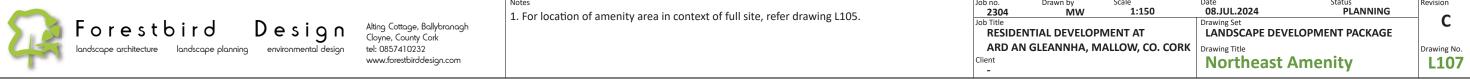
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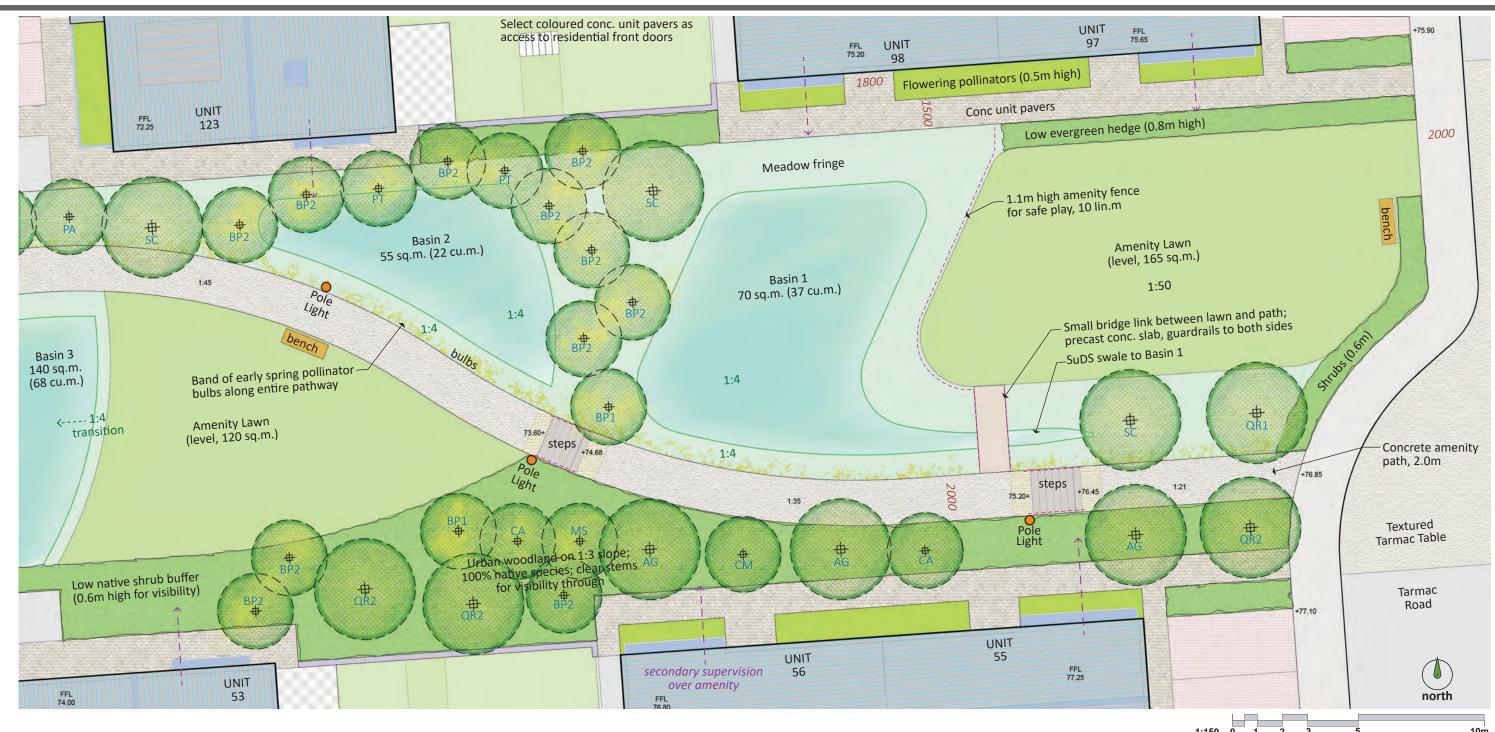












CENTRAL PUBLIC AMENITY CONCEPT - This is a large linear amenity space that connects the upper and lower residential areas. It accommodates a change in gradient of over 3m. This results in a series of spaces as one passes from top to bottom. A concrete path meanders through the site for access, incorporating 2 sets of DAC compliant steps. Amenity consists of 2 no. level lawns for informal active play, seating and 3 no. attenuation basins as visual features and for habitat enhancement. It has an excellent biodiversity network with wetland basins, wildflower meadows, a continuous band of pollinator bulbs, and 33 no. native trees.

Total size = 1100 sq.m.; lawns = 285 sq.m., attenuation basins = 265 sq.m., biodiversity planting beds = 350 sq.m.



Example of a swale prior to discharge at the attenuation basin. The SuDS swale will typically appear damp or dry.



Low Heather hedge (to 0.6m) as example of pollinator buffer.



Proposed 1.1m high weld mesh fencing typical to amenity spaces and select attenuation protection.



Alting Cottage, Ballybranagh

Cloyne, County Cork

1. For location of amenity area in context of full site, refer drawing L105.

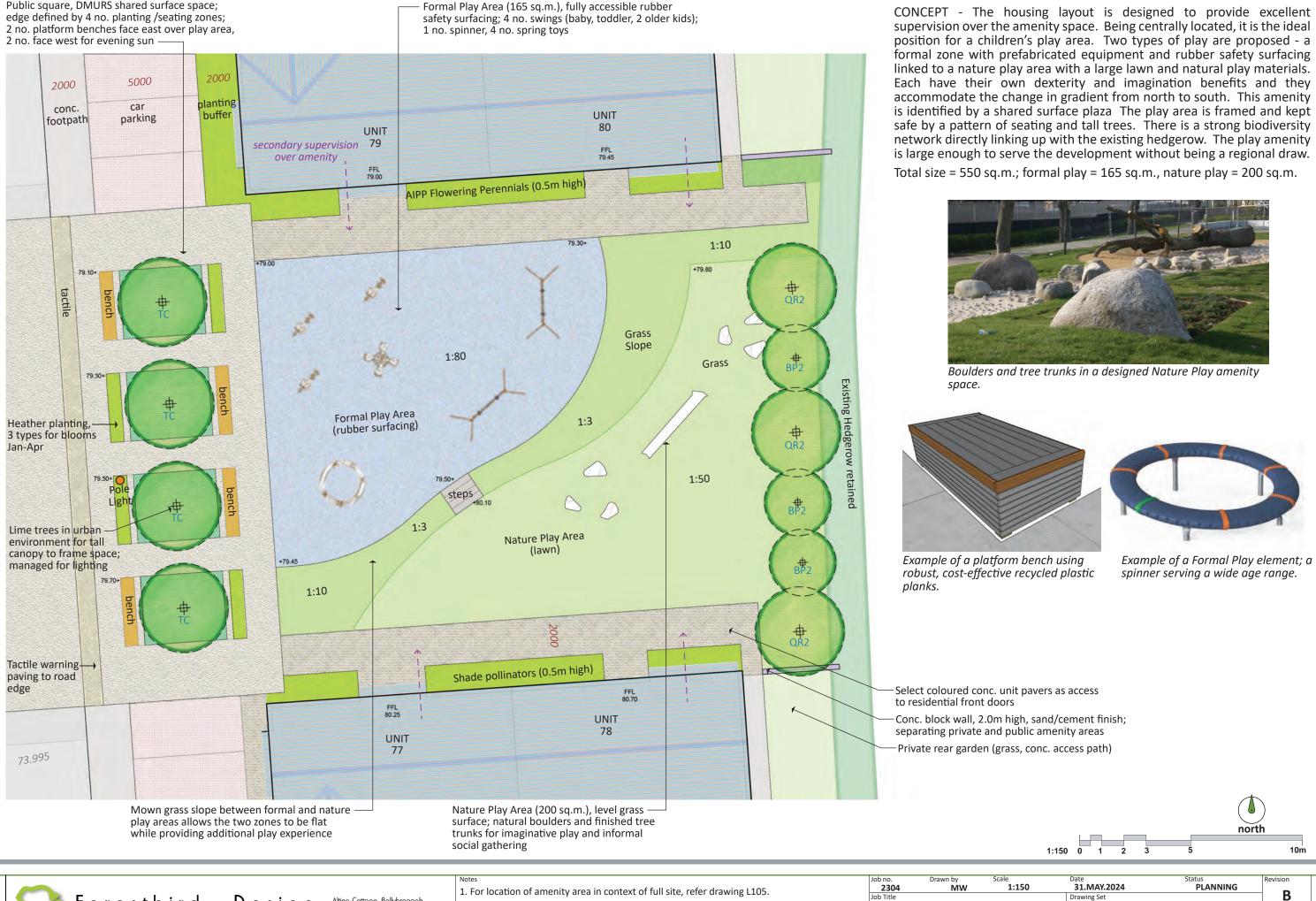
2. Attenuation basins illustrate a refined configuration, but volumes and locations match the engineered design shown on drawing WDG-CE-02.

1:150 2304 MW RESIDENTIAL DEVELOPMENT AT ARD AN GLEANNHA, MALLOW, CO. CORK

PLANNING 31.MAY.2024 Drawing Set

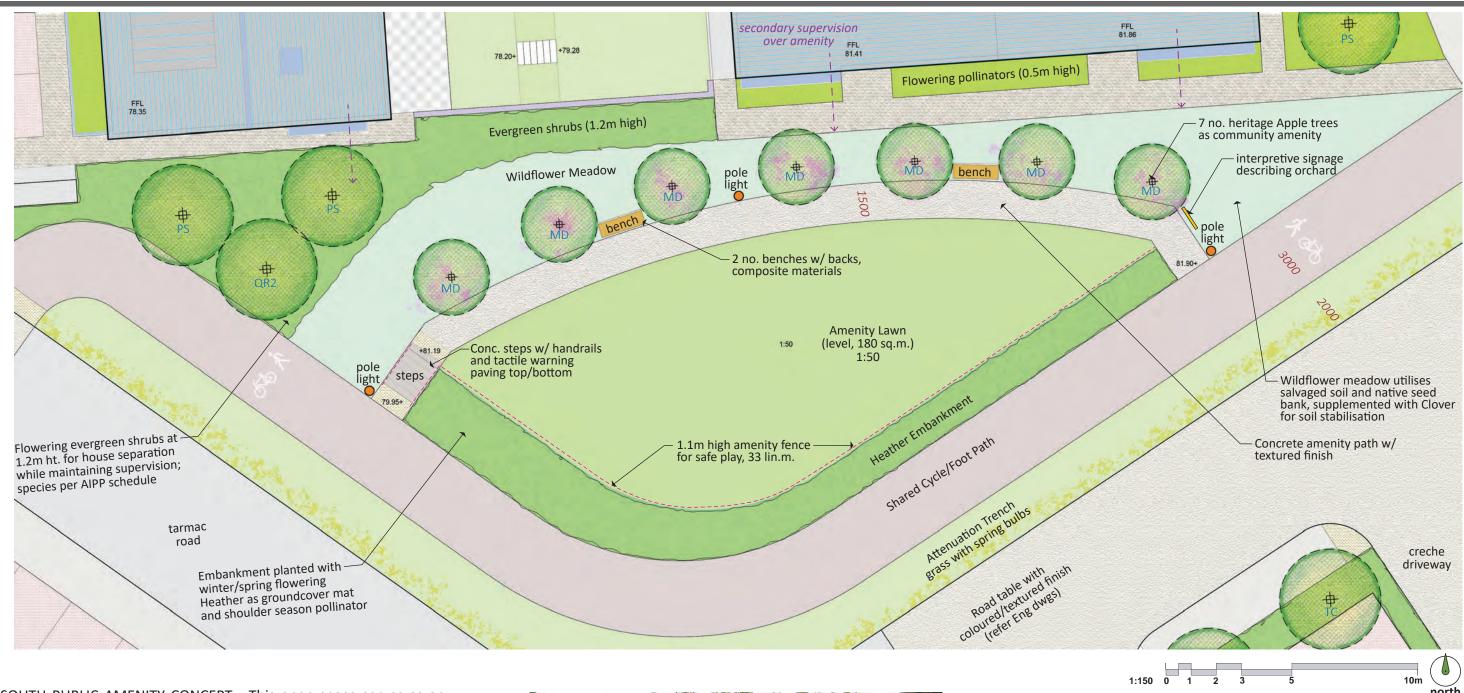
LANDSCAPE DEVELOPMENT PACKAGE Drawing Title **Central Amenity**

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Public square, DMURS shared surface space;

Drawing No.



SOUTH PUBLIC AMENITY CONCEPT - This open space serves as an entry node to the estate. With such high visibility, the aim is to provide a level of interest and underscore the sense of community. It is proposed to deliver a public orchard.

The orchard would include 7 no. apple trees of different Irish Heritage varieties. It is fully intended that the general public partake in picking apples in the autumn. Not only is this a source of food, but it fosters social interaction with a connection and stewardship of a public amenity. There is enjoyment and education for all ages.

The amenity would include informational signage, 2 no. south-facing benches and a large level amenity lawn. Site levels vary 1.5m from east to west. To mitigate this, the amenity path is wheelchair accessible from the east, but includes stepped access from the west.

Total size = 500 sq.m.; lawn = 180 sq.m., wildflower meadow = 150 sq.m., biodiversity planting beds = 170 sq.m.



Example of a public orchard in a grass and meadow setting, with clear stem trees for visibility through.



Example of Heather on an embankment. The Heather will form a low, dense carpet with a high biodiversity value and pollinator flowers Feb-Apr.



Design

Alting Cottage, Ballybranagh
Cloyne, County Cork
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For location of amenity area in context of full site, refer drawing L105.

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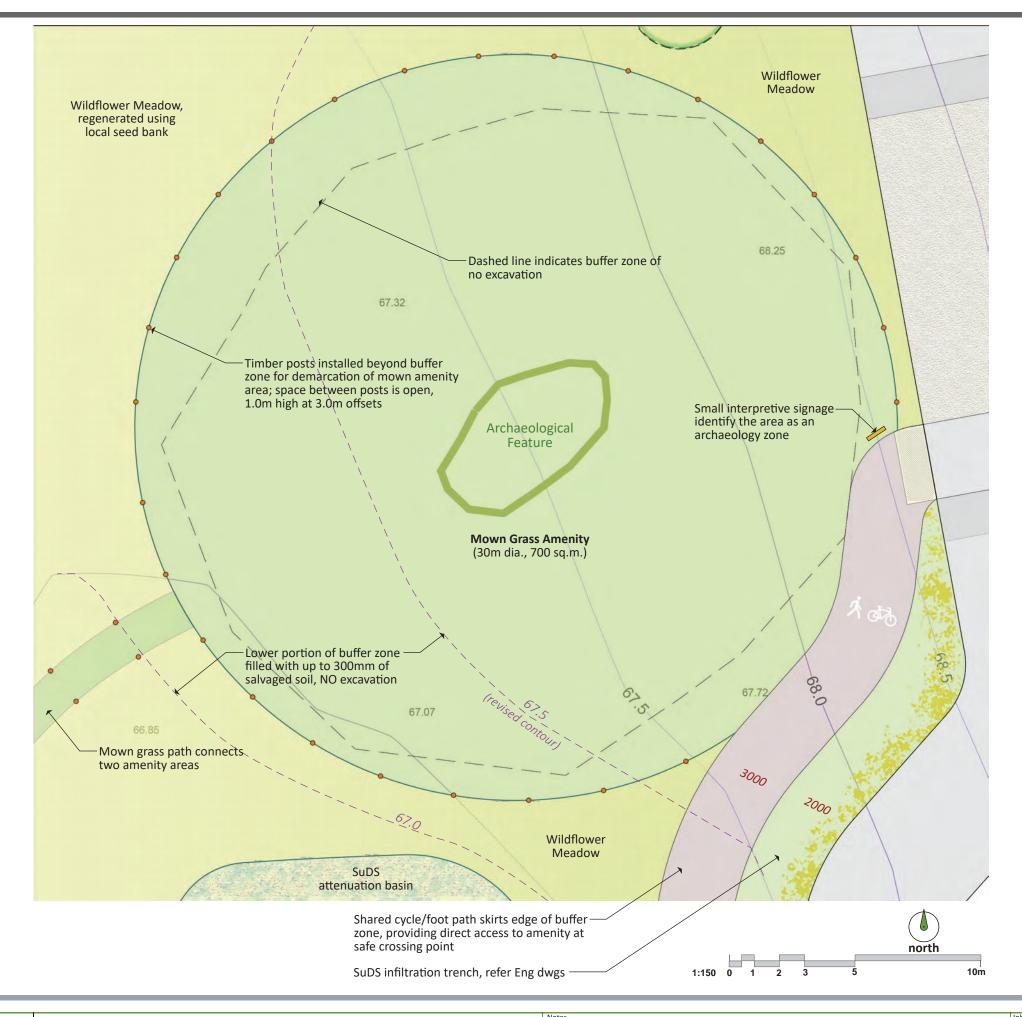
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South Amenity

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L110



CONCEPT - Subsurface archaeological features have been identified at the northwest corner of the site. To ensure their protection while making the area usable and attractive, it is intended to create pockets of mown grassland amenity that reflect the archaeology locations. This heightens awareness, allowing the unseen features to become part of residents daily lives.

Framing the amenity areas will be 1m tall timber posts. They are reminiscent of an agricultural past; aesthetically serving as visual land art and functionally serving to demarcate the mowing areas for maintenance personnel. There is no wire between the posts, allowing unobstructed access to the meadows for both fauna and humans. Up to 300mm of soil will be added to the lower end of amenity spaces, resulting in more level playing surfaces. The will be no excavations and the minor soil addition does not impact the archaeology. The zones are surrounded by naturalised wildflower meadows using the native seed bank (supplemented with clover). These will primarily appear as tall grassland meadows and be very high in biodiversity, being cut once annually.

Total size =6075 sq.m.; mown areas = 1200 sq.m.



Conceptual image of natural timber posts in a managed wildflower setting, framing a mown amenity path.



Example of a heritage feature regularly mown and in use as an amenity space within a housing estate (Douglas, Cork).

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Alting Cottage, Ballybranagh

Cloyne, County Cork

- 1. For location of amenity area in context of full site, refer drawing L105.
- 2. Treatment complies with guidelines identified in Archaeology report.

Job no. 2304 MW 1:150 Date
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RESIDENTIAL DEVELOPMENT AT
ARD AN GLEANNHA, MALLOW, CO. CORK

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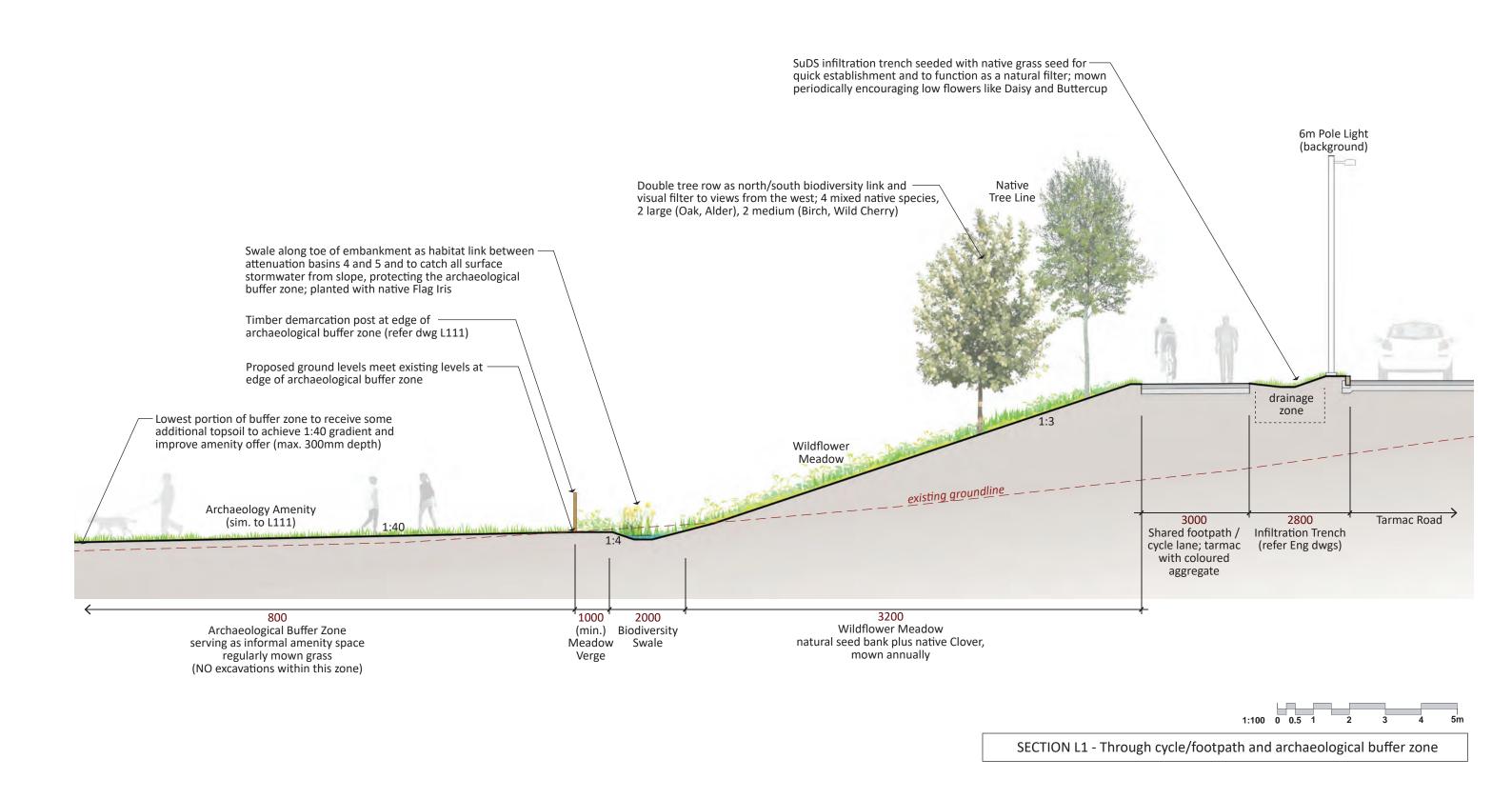
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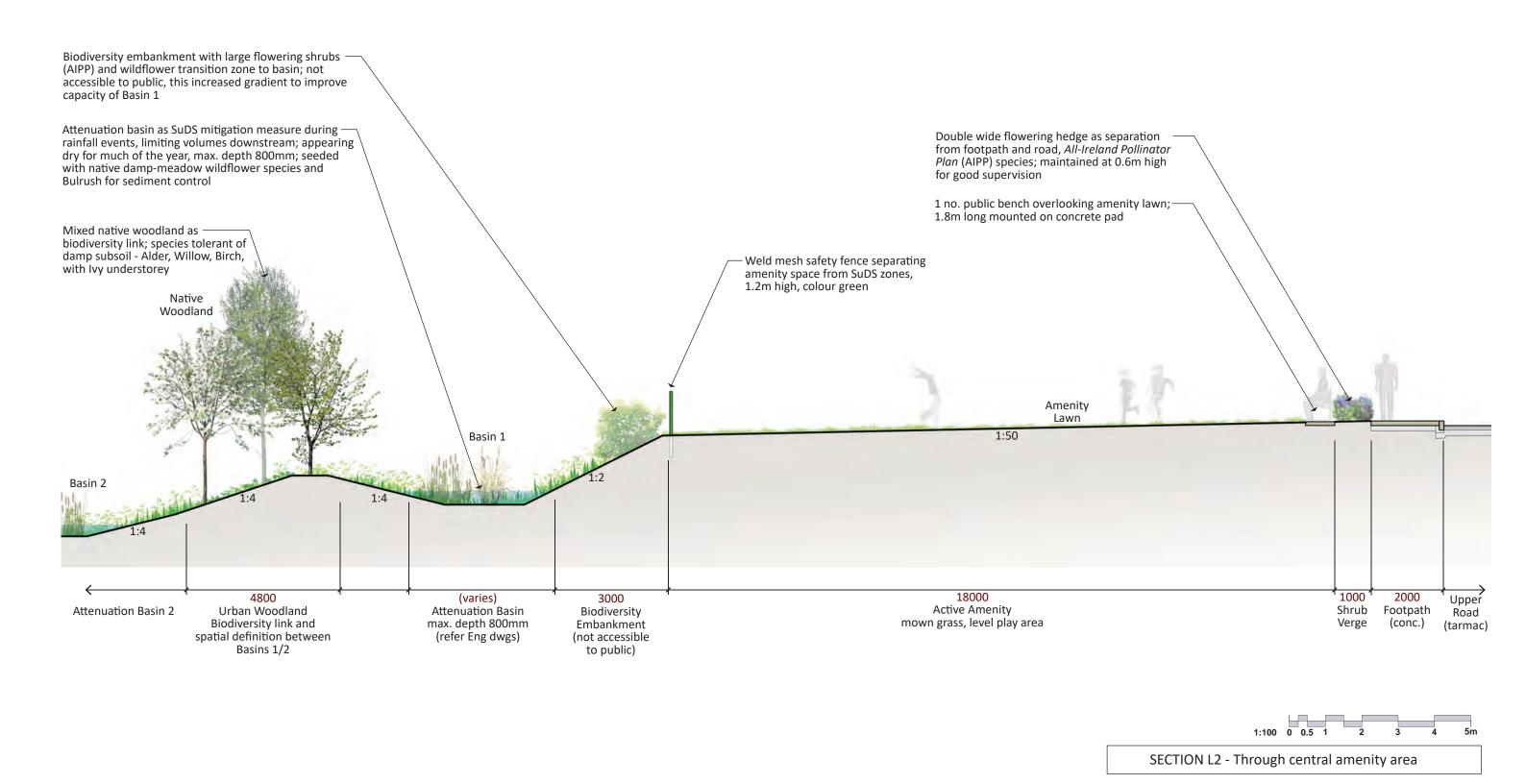
Archaeology Amenity

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Alting Cottage, Ballybranagh Cloyne, County Cork tel: 0857410232 www.forestbirddesign.com 1. For location of section on plan, refer *Landscape Masterplan* drawing L105. For layout details, refer *Central Amenity* drawing L108.

2. Stormwater finishes have been coordinated with Engineer.

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LANDSCAPE DEVELOPMENT PACKAGE

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