

# Landscape Design Statement Monaghan Civic Offices

the **paul hogarth** company



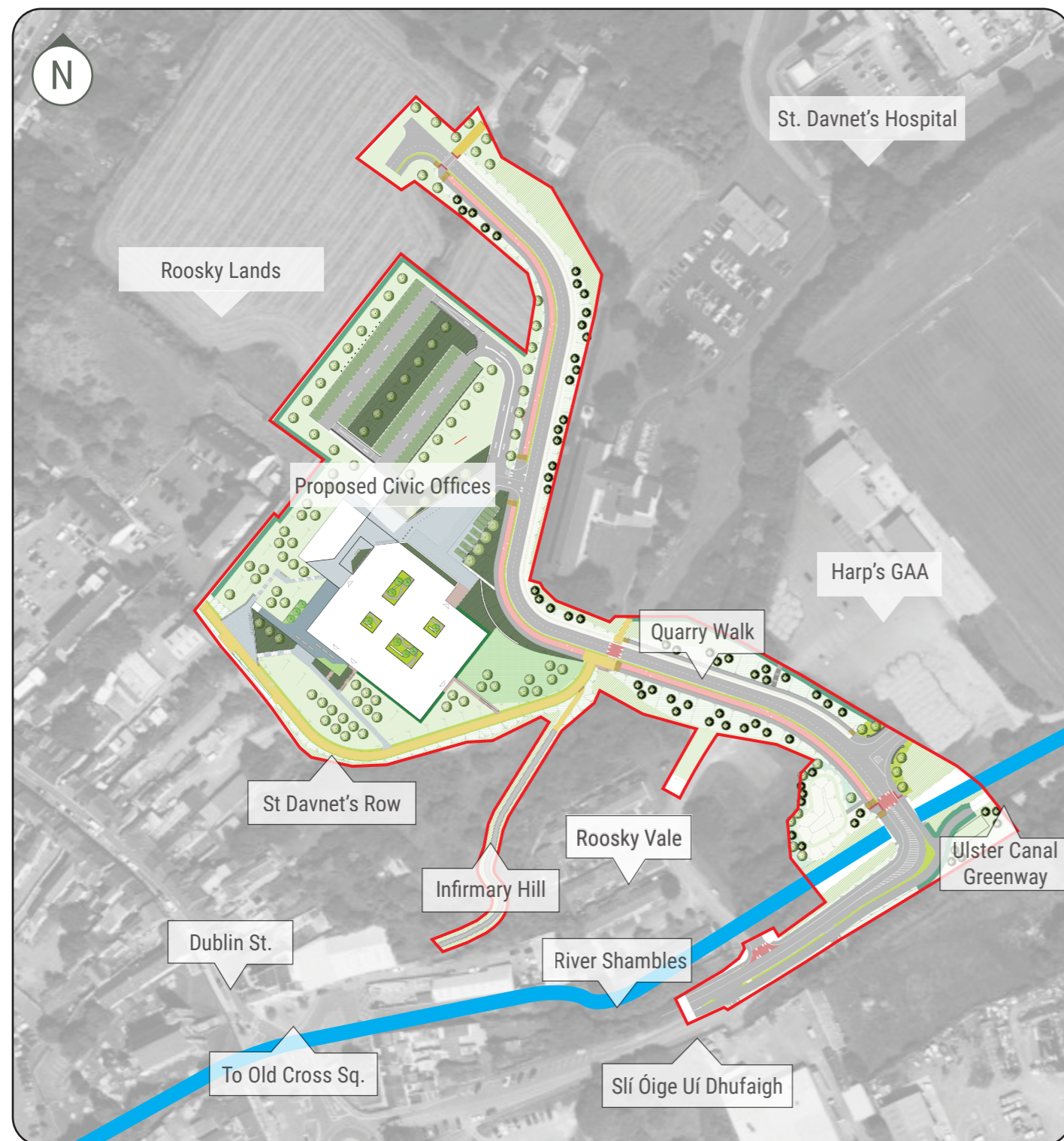
September 2023



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Fig1. Plan Showing Proposals with aerial map and redline boundary-3.9Ha



Redline Boundary - Proposals

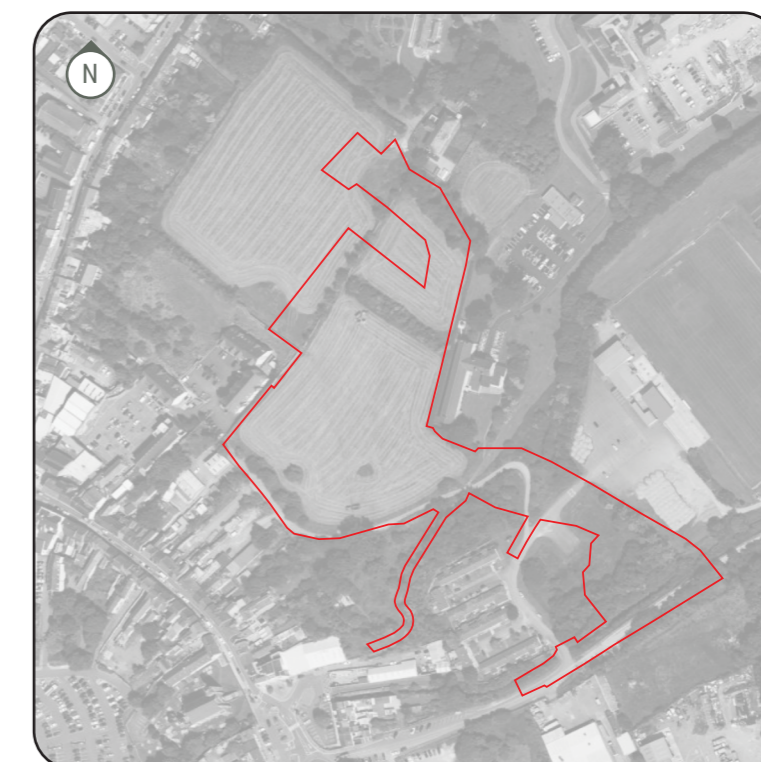
## 1. Landscape Design Opportunities

This document explains the approach to the landscape design in relation to the Civic Offices proposed within the south facing land to the North of Dublin Street, Monaghan Town.

The landscape proposals are designed to align with the principles outlined in the Roosky Lands Masterplan and future development of Dublin Street North Regeneration Plan, in that they will provide seamless links to future and existing developments by creating a high-quality external environment that is defined by legible stimulating spaces, utilising a range of hard and soft materials, reflective of the immediate environment, its heritage and the architectural proposals.

By developing an environment that is meaningful, accessible to all and adaptable for the community to benefit from events is central to ensuring the continuing enrichment of the Civic Space, associated directly with the Civic Offices.

Fig1.1 Plan Showing aerial map & redline boundary



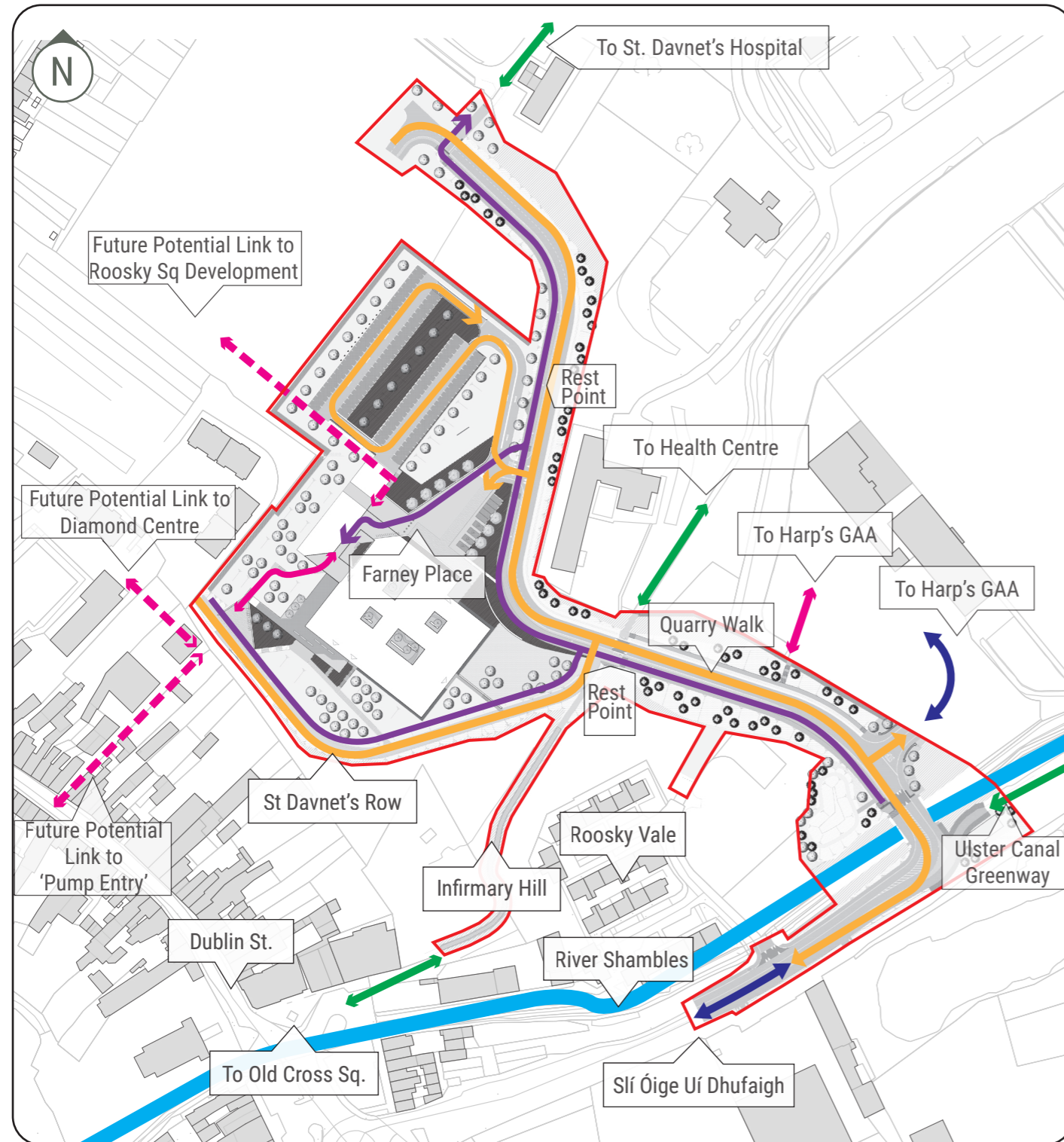
Redline Boundary - Existing Conditions

The aim is an external environment that is:

- Practical and distinctive
- Sensitive to the sites location, gradients, views and heritage
- Considerate of high quality soft and hard materials which are appropriate to long term maintenance and sustainability
- Rich in terms of its biodiversity
- Adaptable to activation and flexibility
- Low in terms of embodied carbon



Fig2. Plan showing existing and future links



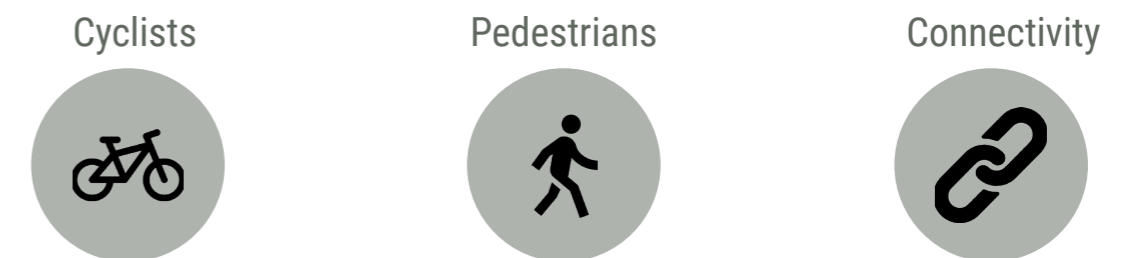
- Existing Links Improved - Vehicle
- Existing Links Improved - Pedestrian & Cycle
- Proposed Links - Vehicle
- Proposed Links - Pedestrian
- Proposed Links - Pedestrian & Cycle
- Future Links - Pedestrian & Cycle

## 2. Connectivity and Wider Landscape Opportunities

The site is located to the North of Dublin Street, Monaghan Town at the mid-point of the rising ground, on a South facing slope, with views of the Town's rooftops and glimpses of agricultural countryside beyond. The location is currently improved grassland with tractor access via St Davnet's Row. A narrow footpath, Infirmmary Hill, connects the site from Old Cross Square to St Davnet's Hospital to the North. To the South of St Davnet's Row the site abuts the backs of Dublin Street properties, with groups of storage buildings and yards arranged along narrow passageways.

Key features of the existing site demonstrate the role landscape can provide in wider connectivity and flexibility of use. These opportunities have influenced the layout of the scheme and dynamic earth modelling has been implemented to improve links and accessibility, encouraging users to approach the building on foot or cycle. Given the challenging topography, resting points (RP) with seating and cycle stands have been located along the main approach at Quarry Walk and wheelchair and buggy access have been provided to public approaches to the building ensuring level access. Farney Place provides direct accessible parking alongside opportunities to stage events within a generous shared space directly associated with the Civic Offices.

### Key Connecting Concepts & Approaches





### Cycling Opportunities

Integral to the design and layout of the scheme is the identification of potential wider movement networks and opportunities. Adjacent links to the Ulster Canal Greenway and Infirmary Hill will benefit those cycling to the Civic Offices from beyond the urban fringes of Monaghan Town. By promoting physical activity and extending peoples commuting opportunities the Civic Offices align with the MCDP objectives associated with Table 1.2 County Monaghan Strategies, Walking and Cycling Strategies. Future pedestrian and cycling links to the Diamond Centre will enable greater connectivity to the Town Centre with footpath widening and lighting upgrades to Infirmary Hill also contributing to safer shared pedestrian and cycling access from Old Cross Square. Cycling storage is proposed to be provided within the service block for staff and visitor cycle stands are provided at St Davnet's Row and adjacent to the primary pedestrian access to the building.



Indicative Image: Dedicated Pedestrian, Cycle and Vehicle Route



### Pedestrians

By being connected to the existing Ulster Canal Greenway the infrastructure is built in to meet MCDP 5.9 Cycling and Walking Strategies and Transport and Infrastructure Objective TISO 1 to achieve more sustainable movement patterns. When approaching the Civic Offices from Slí Óige Uí Dhufaigh and the Ulster Canal Greenway along Quarry Walk the building is elevated and becomes clearly visible to visitors, ensuring enhanced legibility at the approach. Views to St Macartan's Cathedral from the proposed podium terrace provide further links to cultural heritage, allowing these visual cues to respond to the sites connectivity, responding to its location. Visual links along the alleyways from Dublin Street up to the Civic Offices will tie into the urban fabric. Future connections from Dublin Street to the proposed lift tower will direct the eye from the 'Pump Entry' to the accessible approach from St Davnet's Row.



Indicative Image: Dedicated Pedestrian and Cycle Route



### Future Proofing Linkages

In responding to the Roosky Lands Masterplan Strategy and Dublin Street North Regeneration Plan the objective is to provide a context sensitive proposal, which responds to the gradients of the site while being sensitive to its neighbours. The building has been designed to nestle into the hillside as a series of platforms giving rise to a variety of spaces and uses. The proposals have been developed to ensure they are future proofed with links to adjacent future developments via St Davnet's Row and North toward the future Roosky Square. The location of the Civic Offices is central in forging new and improved cycle, pedestrian and vehicular access to the existing urban fabric. The Civic Offices proximity to Monaghan Town creates a sustainable town centre encouraging access by foot and cycling.

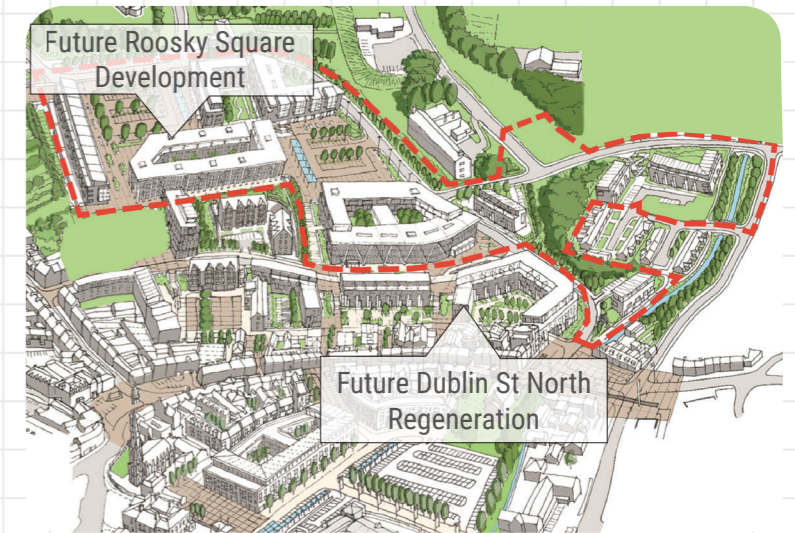


Illustration: Roosky Lands Masterplan Strategy

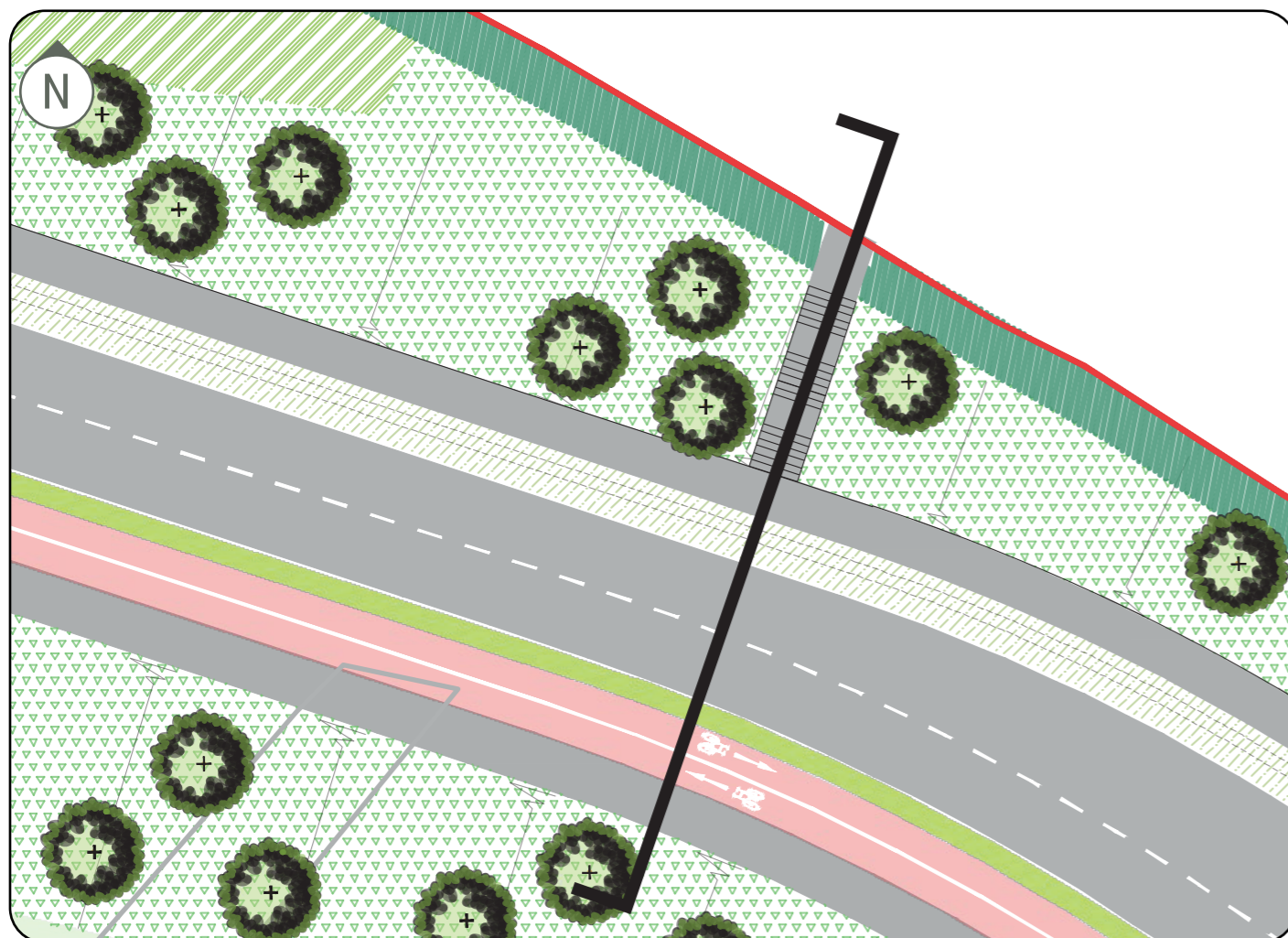


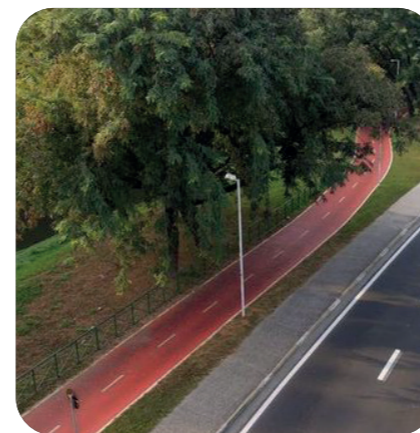
Fig4. Plan Showing Proposed Pedestrian Steps Linking to Harp's GAA



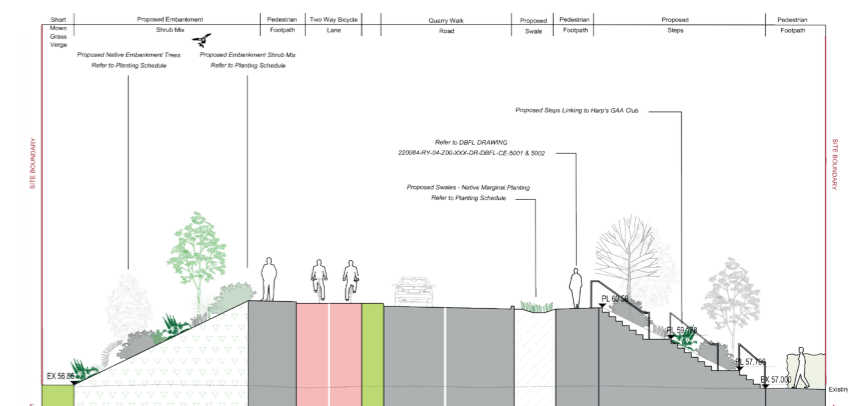
Indicative Image: Cycle & Pedestrian Links



Indicative Image: Steps with/ handrails



Indicative Image: Dedicated Cycle Route



Section F-f: Refer to '702 - Landscape Sections 02 of 03'

## 2.1 Connectivity and Wider Landscape Opportunities - Example Area

The MCDP aims to encourage healthy alternatives to vehicle focused travel. The Civic Offices approach routes offer shared and segregated cycle lanes with verges to the road. Pedestrian and cycle infrastructure at crossing points are designed to assist the partially sighted.

Links have been reinforced and upgraded leading to St Davnet's Hospital and Roosky Health Centre, further reinforcing the Monaghan Walking and Cycling Strategy: 2021 and tying into the Monaghan Town Development Plan land use links. Two resting points are located along Quarry Walk providing a seat with backrest and two cycle stands at each location.

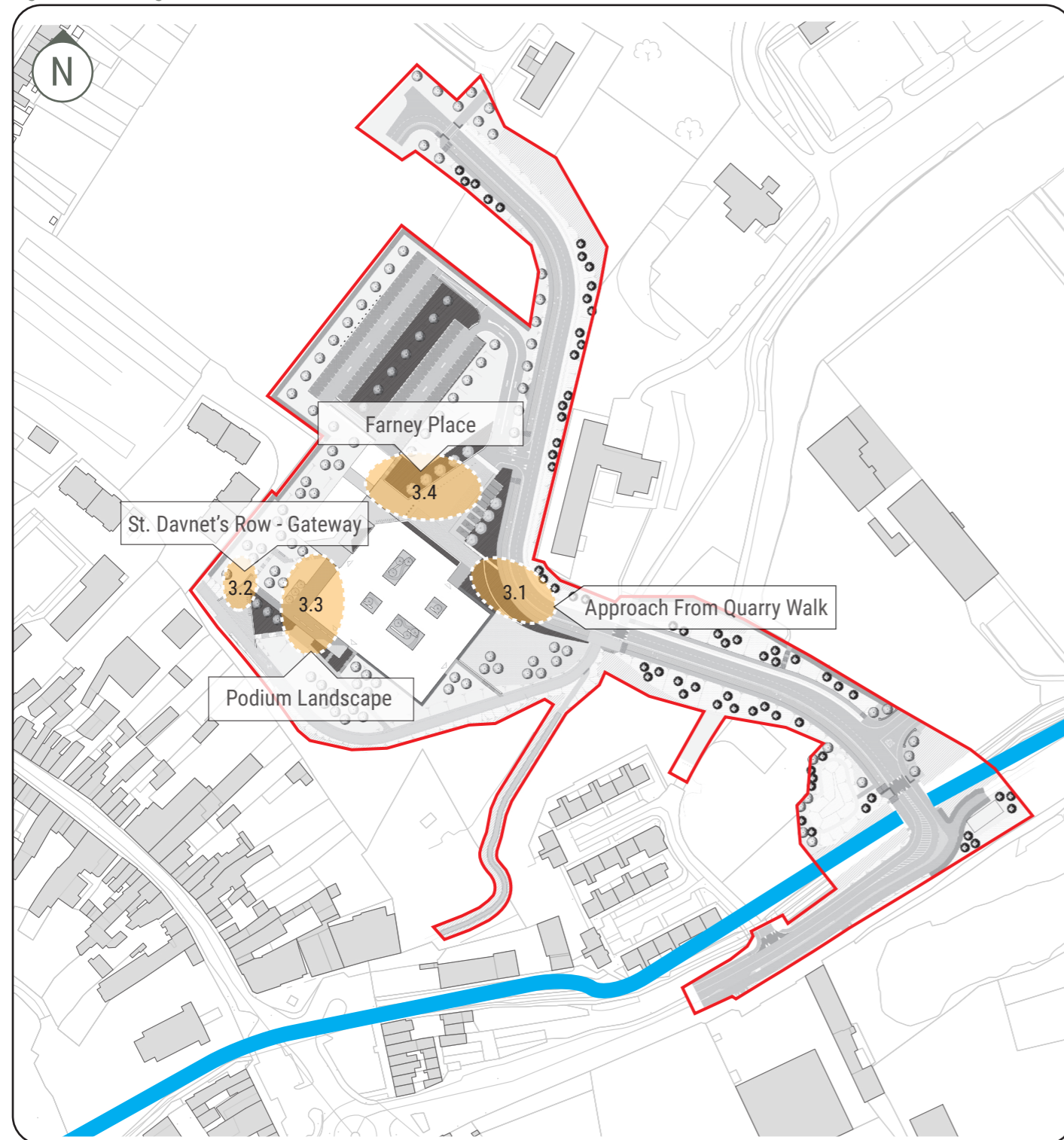
Proposals also include the provision of a direct pedestrian link to the Harp's GAA Lands, zoned as Recreation Amenity, via a proposed stepped access.

Enclosed secure cycle parking is provided within the Civic Offices service building for staff with visitor cycle parking located below the undercroft for direct access to the primary entrance with further cycle parking at St Davnet's Row approach.

The proximity of the Civic Offices, close to The Diamond, Old Cross Square and Dublin Street feeds into the Monaghan 10 minute town strategy, aiming to provide compact facilities within easy reach of walking, cycling and public transport. Cycling links from Quarry Walk route and Roosky Vale are further strengthened by the proximity and direct access to the Ulster Canal Greenway.



Fig5. Plan Showing Character Areas



 Landscape Character Areas

### 3 Landscape Design Character Areas

#### Response to Context

The objective is to provide a context sensitive proposal, which responds to the gradients of the site while being sensitive to its neighbours. The building has been designed to nestle into the hillside as a series of platforms terracing into the gradient to reduce the building's mass. By doing so this provides a series of spaces to take advantage of views and install resting points.

The buildings closest neighbours are the apartments to the West which are cut significantly into the hillside. These apartments currently have an existing evergreen Laurel hedge which will be reinforced along the West boundary of the site by a native mixed hedgerow of deciduous and evergreen species. A further mix of evergreen and deciduous Trees are grouped to provide a naturalistic appearance with further screening.

Although the current use of the site is agricultural, there is a limestone wall and rendered wall dividing the site to the North, this structure links to the recent natural heritage of the site. By referencing the stone materials the proposed retaining walls will benefit by introducing this same built narrative.

#### Landscape Design Proposals

Through sensitive and considered treatments, a series of interlinked public spaces will contribute positively to Monaghan's strong sense of place. The overarching strategic concepts for the site that have influenced the design of the external environment include:

- The transition in character from the north to the south across the site being markedly distinct. To the south of the site St Davnet's Row indicates the divide between the urban back-lands of Dublin Street and the agricultural / rural character to the north.
- The site is flanked on the west by residential apartments and to the east by a stand of mixed deciduous and evergreen woodland, providing screening to the adjacent residential development at Roosky Vale and Monaghan Harps GAA Club
- The Ulster Canal Greenway sits to the southeast of the site providing a safely lit dedicated pedestrian / cycle way adjacent to the site.

The following Character Areas reflect the requirements of the Roosky Lands Masterplan and the response to the above context. These areas are designed to provide users with a sense of arrival, activation or passive spaces:

- 3.1 Approach from Quarry Walk
- 3.2 St. Davnet's Row - Gateway
- 3.3 Podium Landscape
- 3.4 Farney Place

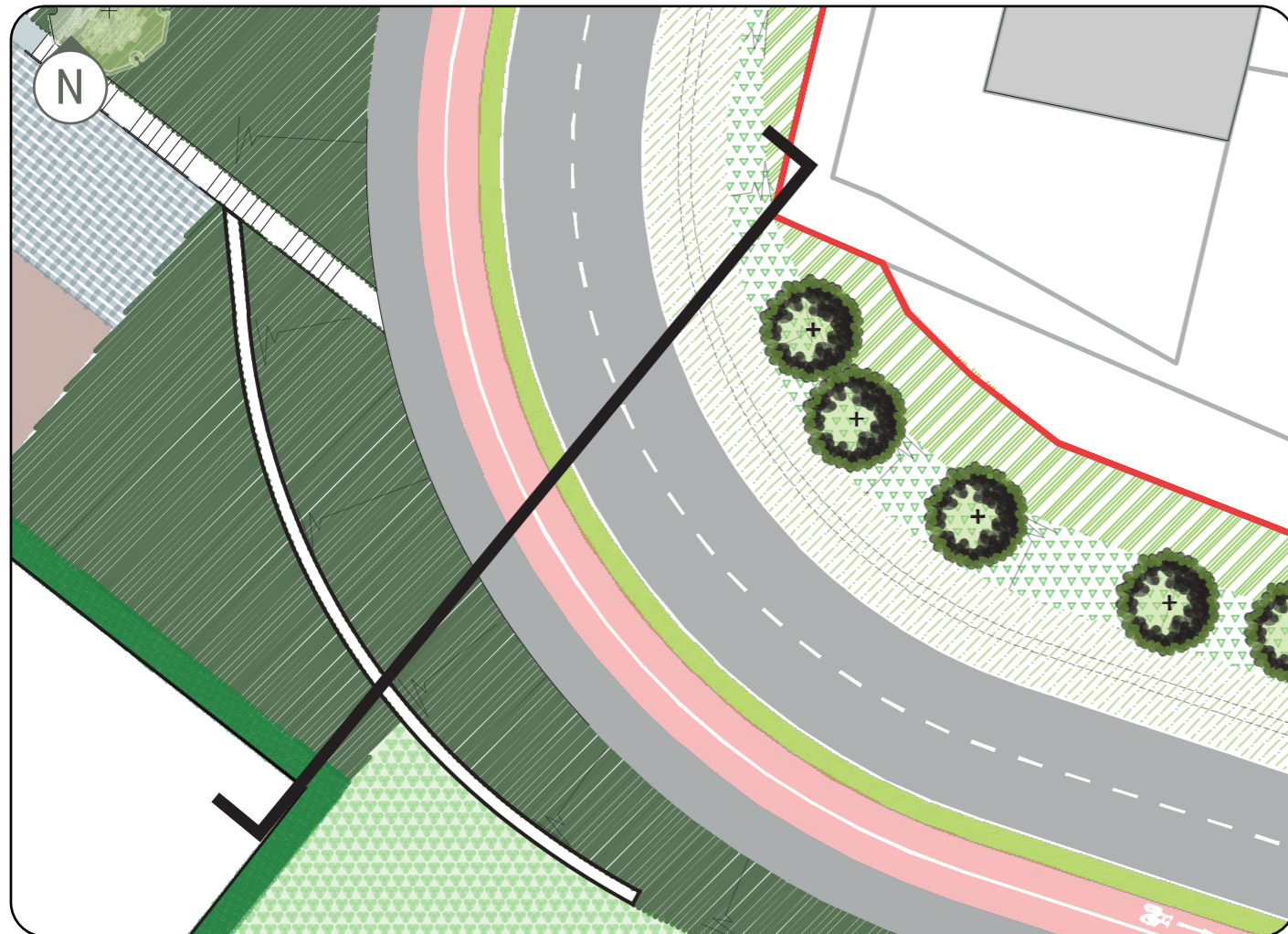


Fig6. Plan Showing Approach From Quarry Walk



Indicative Image: Illuminated Handrail to Steps



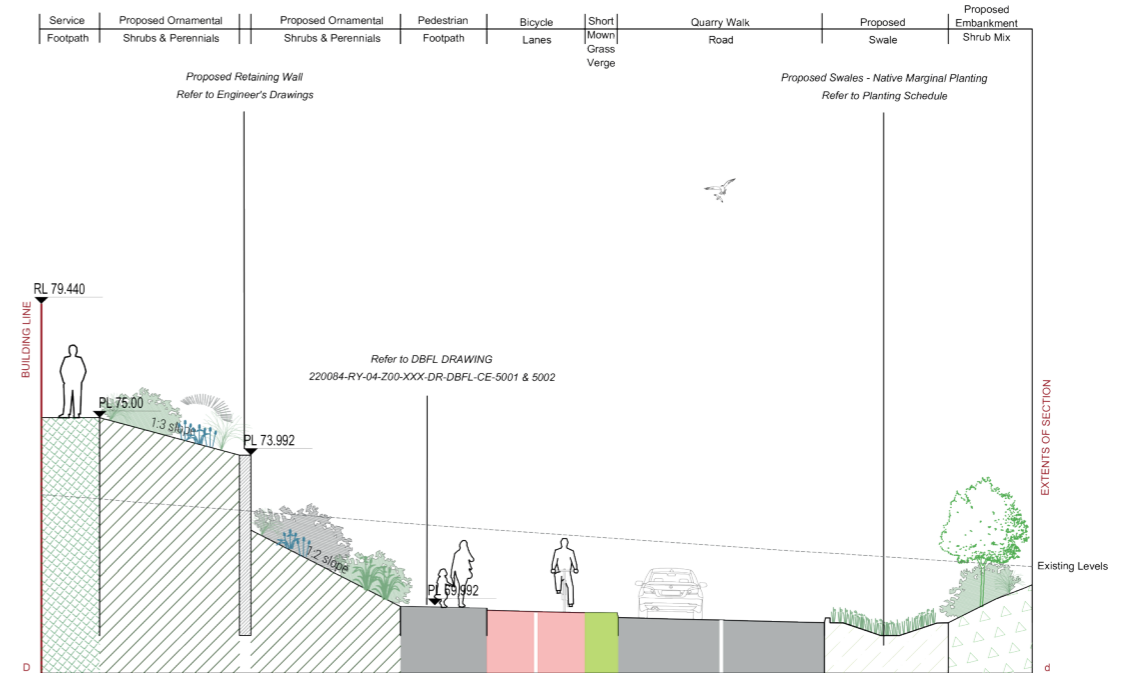
Indicative Image: Retaining Wall

### 3.1 Approach From Quarry Walk

At the confluence of Quarry Walk, St Davnet's Row, Infirmary Hill and the link to St Davnet's Hospital there is a traffic calming raised table and pedestrian / cyclist resting point. This junction marks the primary approach from the east of the Civic Offices.

The design enables the visitor to have a clear view of the building while ascending Quarry Walk. Planting on the Civic Offices side of the approach is formal in species choice and structure to complement the character of the building. The formal steps leading from Quarry Walk to the Civic Offices also lead the eye up the embankment toward the building, this stepped pedestrian route will be accented during the darker hours with low level lighting from illuminated handrails. Beyond this structured character the planting becomes informal with increased verticality, by way of native tree planting and meadow to the West.

Planting to the North of the road comprises species and characteristics with informal native shrubs and trees replicating the self-seeded nature of the existing woodland groups and hedgerows.



Section D-d: Refer to '701 - Landscape Sections 01 of 03'



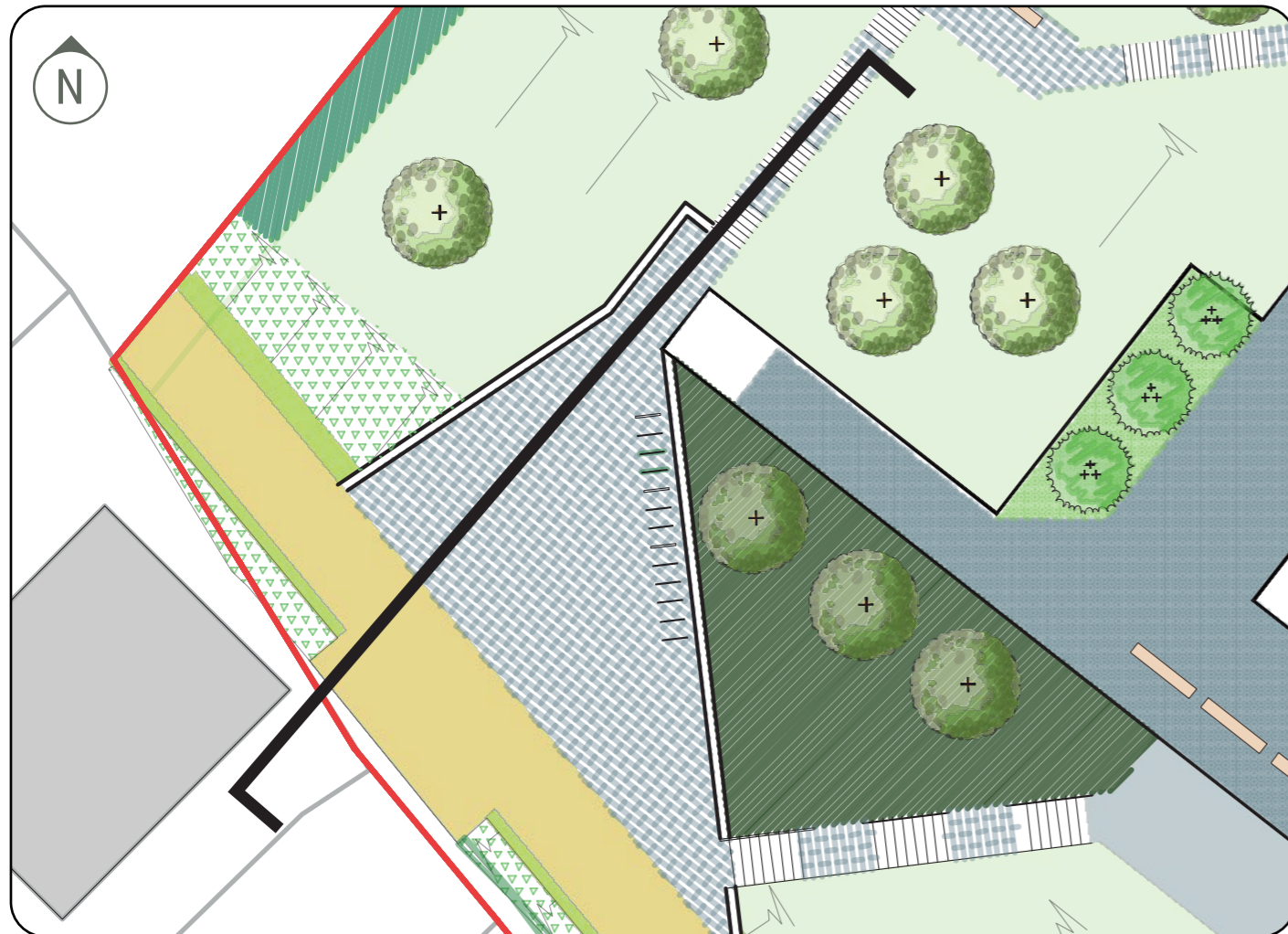
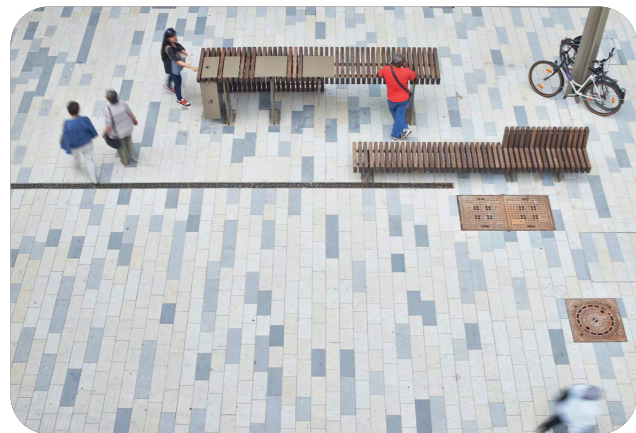
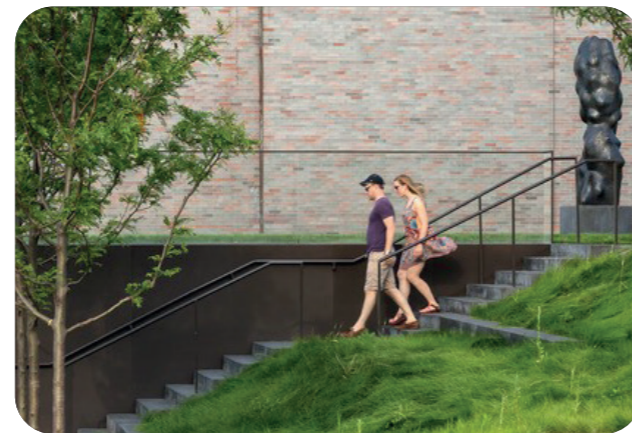


Fig7. Plan Showing St. Davnet's Row Gateway



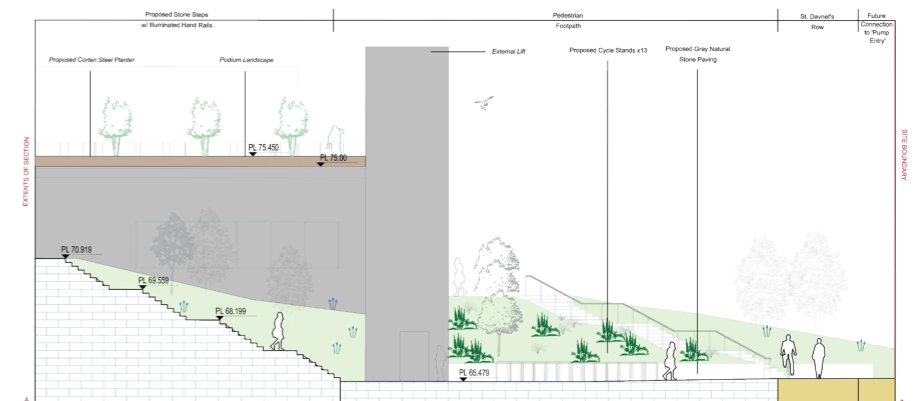
Indicative Image: Materials



Indicative Image: Steps



Indicative Image: Materials



Section A-a: Refer to '701 - Landscape Sections 01 of 03'

### 3.2 St. Davnet's Row - Gateway Space

By increasing permeability to St Davnet's Row via future proposals from Dublin Street and The Diamond Centre the South approach to the Civic Offices will integrate with the town core. Vehicular access to St Davnet's Row is limited to emergency vehicles and service vehicles only, this further enhances pedestrian safety and hierarchy along the approach from the South. Improvements to Infirmary Hill further strengthen existing links to Old Cross Square by widening the footpath and resurfacing.

Although the approach from the South to the Civic Office is the closest pedestrian connection to the Town it also faces challenging topography. Earthworks have been designed to reduce the severity of the gradient to a maximum 5%. The proposals provide further access via external lift, steps and level access from the South approach to ensure all abilities are catered for.



Fig8. Plan Showing Podium Landscape

### 3.3 Podium Landscape

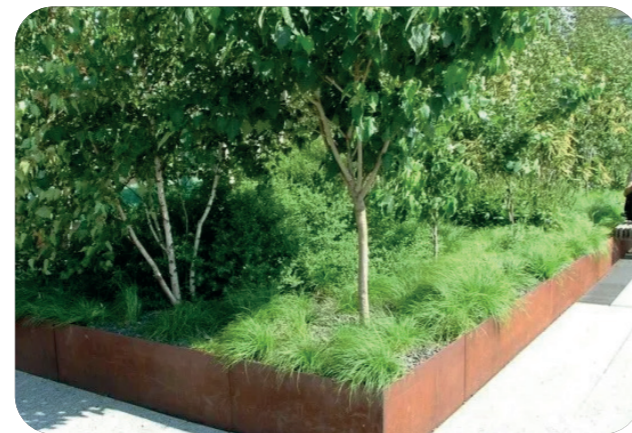
To the South of the primary entrance the level access continues passing the steps and further still toward the external lift to St Davnet's Row. The paving appears consistent with the primary entrance, below which the drainage board attenuates water on the podium above the building below.

A series of flush Aco style channels will be integrated into the surface finish to seamlessly direct water away to the sustainable urban drainage system (SUDs) below, attenuating water to slow down the flow.

The podium landscape commands an elevated position with views of the immediate rooftops of Monaghan Town and distant drumlins beyond. Looking East from the podium terrace will be views across to St Macartan's Cathedral in the middle distance. Soft landscape is incorporated with the use of raised planting beds with evergreen planting and seasonal pollinators to soften views and provide increased interest from the internal spaces. Inclusion of multi-stem specimen *Crataegus* adds further verticality to the planting.



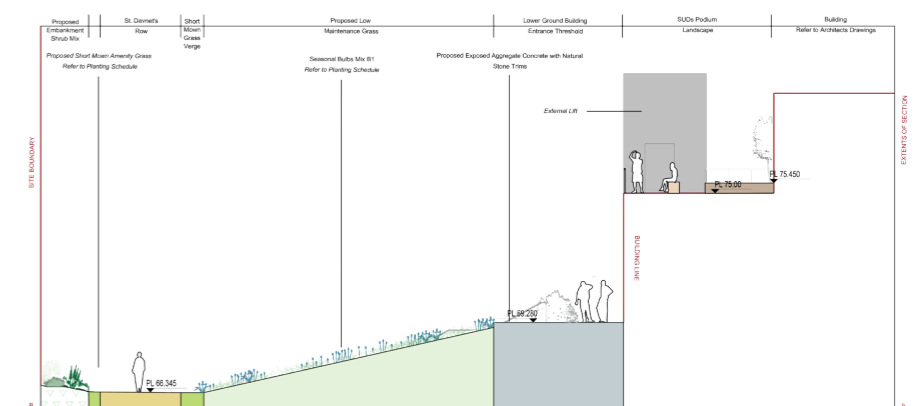
Indicative Image: Podium Planting



Indicative Image: Small Trees Within Raised Planters



Indicative Image: Seating & Raised Planters



Section B-b : Refer to '701 - Landscape Sections 01 of 03'

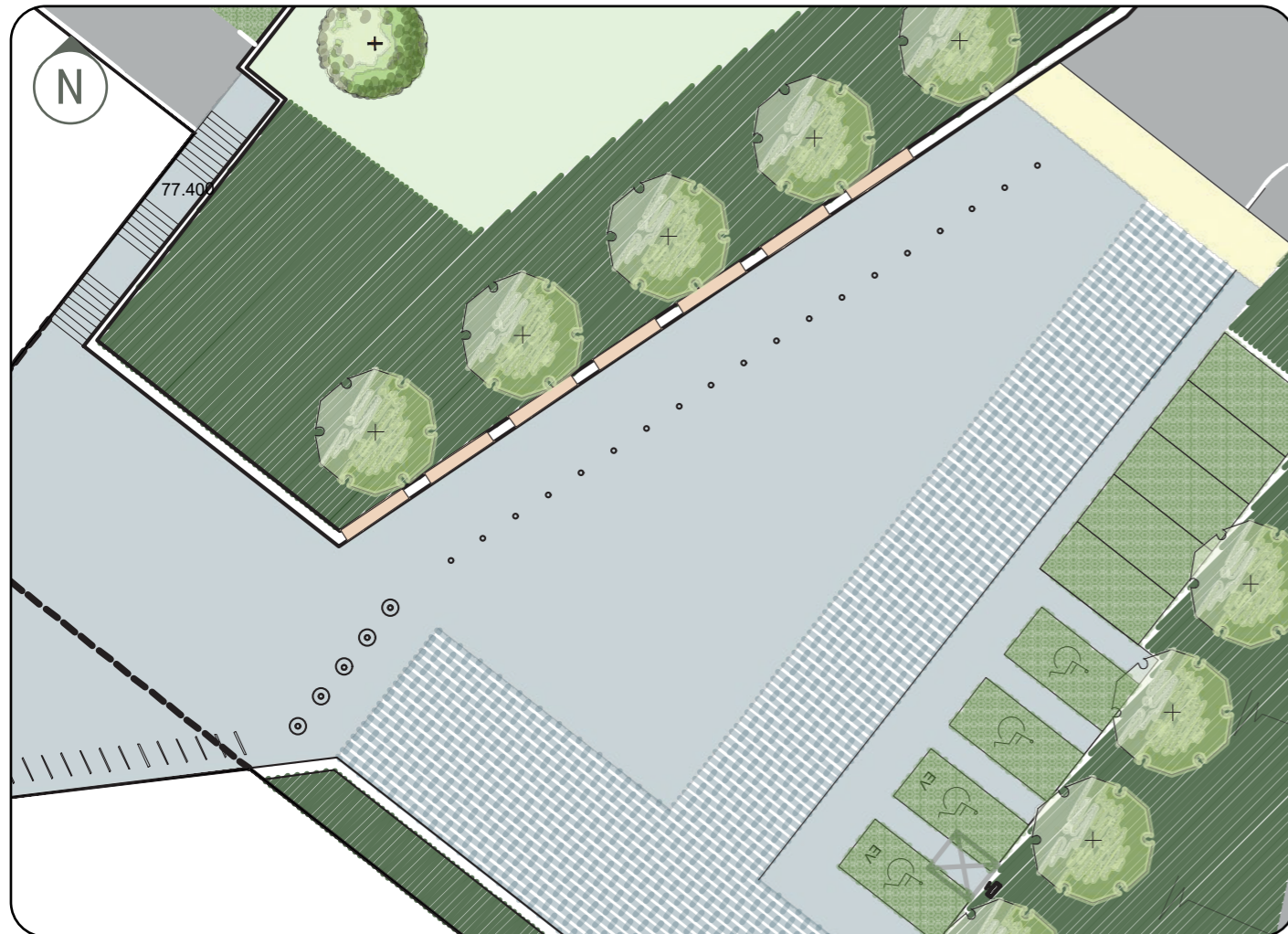


Fig9. Plan Showing Farney Place

### 3.4 Farney Place

This civic plaza arrival space is located directly off Quarry Walk at the North elevation of the building. A consistent and high quality palette of hard materials and street furniture will define the civic character. The space is designed to be flexible to allow for community events while enabling emergency and service vehicle access. Disabled parking is provided to allow direct accessibility to the building entrance.

**Street furniture** - A formal stone wall with integrated seating adjacent to a tree lined avenue provide defined edges to the space. The design, form and location of street furniture such as seating, signage and bollards are integral to the quality and experience of the public realm. Careful sighting and provision will minimise street clutter and obstructions to pedestrian movement. Bollards have been placed to provide a generous pedestrian approach from Quarry Walk and also act to deter informal parking. Lockable removable bollards are located to enable service vehicles to access utilities.

**Surface materials** - The predominant bound surface is a high quality exposed aggregate concrete with robust quality natural stone trims, edges and paving. The parking bays enable accessibility with bound surface adjacent to permeable finishes. The surface finishes direct visitors towards the primary entrance by change of material and colour to assist the partially sighted. The existing wall within the site will guide the hard materials palate to favour local stone and aggregates.

**Lighting** - Street lighting and accent lighting to the building and landscape will further identify the characteristics of the space. It is important that lighting should first ensure a safe environment but also with the potential to enhance and enliven spaces, highlight buildings, contribute to a distinct sense of place and enhance the night time environment. The Lighting has been designed to minimise light pollution and impacts on wildlife such as bats and insect populations.

**Building curtilage** - Raised planters will provide a buffer to the building threshold enabling additional privacy to those working within. Sustainable Urban Drainage will be integrated into the design to attenuate water and decrease the burden of flow on the drainage infrastructure.



Indicative Image: Integrated Wall Seating



Indicative Image: Flexible Space



Indicative Image: Exposed concrete



Indicative Image: Limestone paving



Indicative Image: Limestone edges



### 3.5 Hard Landscape - Materials

Paving within the public realm and threshold of the building provides a distinct purpose. It primarily has to be robust, high quality and easy to maintain. The surface finishes also have to complement the building and tie the scheme together. Choice of hard materials, texture, colour, slip resistance, pattern and provenance are all taken into consideration. Ensuring that impacts on climate and carbon emissions are built into the decision making process ensures a coherent and sustainable scheme.

There are few existing hard materials to define the character of the site aside from a rendered wall and a partially clad local fieldstone wall dividing the site. The local stone has a variation of colour, in predominantly warm tones of grey. In keeping with the stone cladding and aluminium of the building envelope the paving is chosen to complement this colour palate. The exposed aggregate concrete surface to Farney Place requires a robust finish to enable access for service and utility vehicles alongside also being attractive to hold events in this flexible space. Texture is achieved by exposing the aggregate at the surface. Natural stone trims and edges will complement the large format decorative concrete. Natural stone paving will also assist with directing visitors to the primary entrance at the approaches from Quarry Walk.

#### Car Parking & Vehicle Routes

Hard materials are chosen within the parking bays to assist with the drainage strategy. By specifying paving with permeable openings the rain water is absorbed slowly and stored to prevent direct flows to outlets and local river networks. Circulation space where vehicles are more frequently moving will be treated with a bound surface, with drainage directed to the permeable areas.

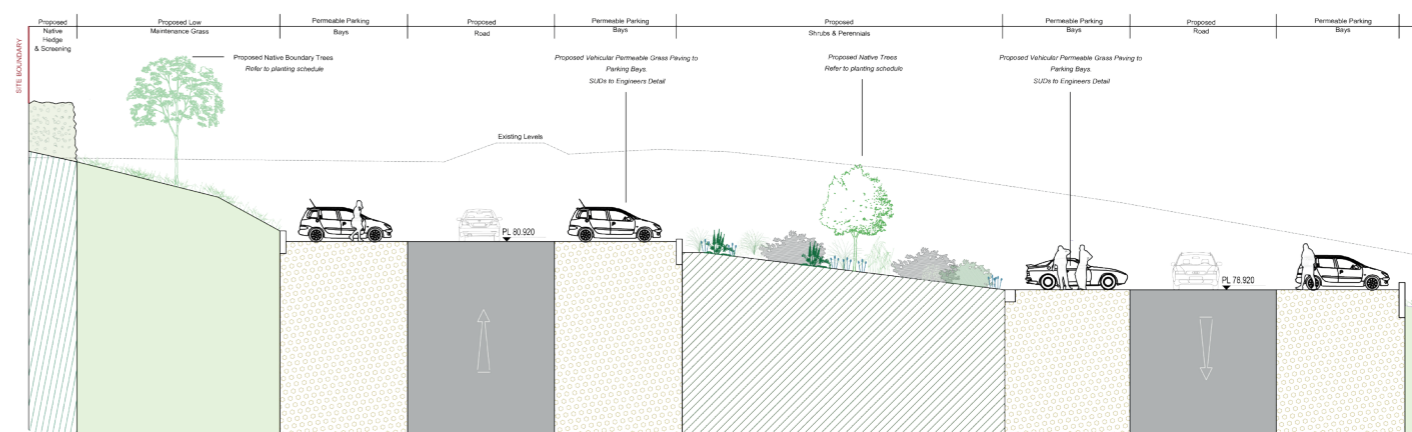
The Quarry Walk approach road is an asphalt surface with clear distinction delineating roadway from cycleway and footpath. Colour surface finish to the dedicated cycleway assists with the partially sighted. Pedestrian crossing points are fitted with tactile paving to further assist those with recognising transitions from footpath to roadway, with raised tables to emphasise pedestrian/cyclist priority. Road kerbs are designed to carry water toward the swales with openings for rainwater.



Indicative Image



Indicative Image



Section E-e : Refer to '702 - Landscape Sections 02 of 03'



### 3.6 Hard Landscape - Proposed Street Furniture

#### Seating

Seating opportunities have been considered to respond to the character areas, with accessibility and functionality being the primary consideration. Each character space has distinct functionality with active space at Farney Place providing integral seating along the boundary wall, enabling rest at pick up point, while also providing permanent seating to view community events. Seating is located to provide resting points associated with the gradients along Quarry Walk and half way up the stepped access from St Davnet's Row to Farney Place. The Podium landscape offers staff and visitors seating at an elevated south facing position, with views over the proposed trees across the rooftops, further connecting the civic offices with its urban fringe context. Seating will be provided primarily with backrest and armrests, with some seating designed to accommodate wheelchair accessibility.

#### Lighting

The lighting's primary function is to ensure a safe environment that responds to its location. Lighting has the potential to enhance and enliven spaces, illuminate primary access point, guide pedestrians and vehicle users toward their focus and provide accents to produce warm and calm spaces. In all instances consideration has been given to minimising the number of lights by utilising current technology with low energy consumption.

#### Other Street furniture

Careful provision and sighting of all street furniture is designed to minimise street clutter, improve legibility and manoeuvrability between spaces. The suite of street furniture is being selected to identify with the character and forms of the architecture. Bollards, cycle stands, litter bins, signage, handrails and raised planters will be complementary to each element to form the suite of furniture.



Indicative Image



Indicative Image



Indicative Image



Indicative Image



Fig10. Plan Showing Major Landscape Character Areas



 Native Species Rich Soft Landscape

 Civic Formal Soft Landscape



4.2 - Civic Formal Soft Landscape



4.3 - Native Species Rich Landscape

## 4. Soft Landscape Character Areas

- 4.2 Civic Formal Soft Landscape
- 4.3 Native Species Rich Soft Landscape
- 4.4 SUDs - Swales & Attenuation
- 4.5 Grasses - Amenity & Naturalised

Given the context of the site on the urban fringe of the Town centre, planting is very important to the scheme. It will be used to identify the character areas and also reflect on its views and connections to the rural landscape. Planting will comprise native and non-native species that are tolerant to the conditions with notable biodiversity benefits. Aesthetically planting will emphasize the character areas, provide sensory seasonal interest and provide high visual amenity to the environment.

The planting design varies across the site with each area providing primarily native trees (at various stock sizes) both deciduous and evergreen. Shrub planting is varied depending on location with native species designed to strengthen wildlife corridors including where replacement planting is being proposed due to loss of existing planting where development necessitates removal.

Plant material has been specified with consideration given to achieving high quality, well maintained appearance, vital to the overall experience of the public realm.



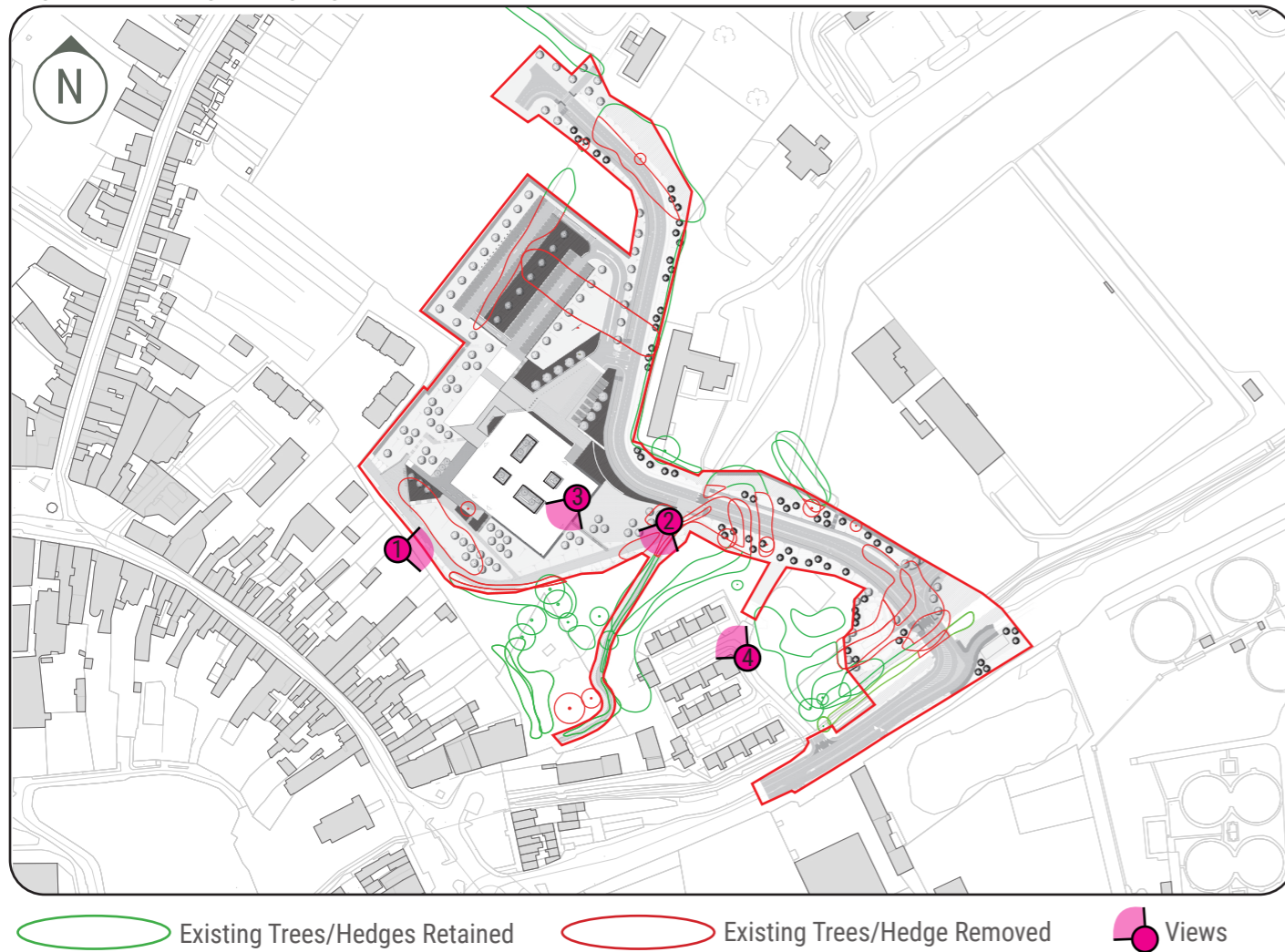
4.4 - SUDs - Swales & Attenuation



4.5 - Grasses - Amenity & Naturalised



Fig11. Plan Showing Existing Vegetation to be Removed



## 4.1 Existing Soft Landscape - Retained, Removed & Proposed

MCC instructed a qualified Arboriculturist to produce a Tree Survey for the Roosky Lands. The Survey identified individual trees, tree groups and hedgerows. These were then ranked in order of amenity value, identification of diseased, dead or dying specimens and recommendations for tree surgery or monitoring. It is noted in the tree survey report that the oldest trees are mature Ash and Beech growing on lands associated with the demolished infirmary. On inspection many of the Ash trees are suffering with Ash dieback (*Hymenoscyphus fraxineus*), some of which have been marked for felling within and outside the redline boundary. It is noted that most of the remaining younger Ash will succumb to this disease within the next 10 years or so. The commercial Sitka spruce plantation along the Ulster Canal Greenway are also showing signs of excessive deaths, with recommendations for felling due to their limited life expectancy. Refer to the Arboricultural Report for detailed information.

Trees that are proposed to be retained will be subject to protection in accordance with BS 5837, where root protection areas are applied by use of fixed protective fencing during construction. To facilitate the construction of footpaths, cycle routes, roads and infrastructure there will be some removal of existing Trees and hedgerows which has been kept to the minimum. In order to create accessible routes there will be ground modelling and engineered embankments to ensure that gradients are aligned with MCC Area Engineers requirements. Embankments will be planted with native species.

The landscape proposals provide for replacement planting to offset the removal of trees and hedgerows. The proposed Boundary Hedgerows are a native mix of four species planted in triple staggered rows with 5% planted as Standard Trees 8-10cm girth 2m height to create a variation of maturity to assist with accelerating replacement with the aim of knitting these into the existing wildlife corridors. There are an additional 176 mainly native individual Trees being proposed across the site the majority of which are Heavy Standards 12-14cm girth up to 3m height. Refer to Landscape Layout drawings 100, 101 and 102 for planting species and schedules.



View 01: Existing Vegetation at St Davnet's Row



View 02: Existing vegetation at Infirmary Hill and Davnet's Row



View 03: Existing self seeded vegetation looking south



View 04: Existing screen planting to Roosky Vale



Fig12. Plan Showing Civic Formal Soft Landscape Areas



 Civic Formal Soft Landscape

## 4.2 Soft Landscape - Civic Formal

Shrub planting adjacent to the building entrance approaches from Quarry Walk and St Davnet's Row will be a combination of none-native ornamental evergreens and perennial species. Tree species are primarily Native with none-native chosen to Farney Place to strengthen the edges of the space and to frame views toward the civic offices. Clear views of the building at the approach from Quarry Walk will be maintained to further assist with directing the visitor to their destination. On entering Farney Place the planting provides a sense of arrival and enclosure with colourful species and architectural forms enlivening the space. A seasonal colour palate will enhance the visual aesthetic providing a dynamic impact on arrival. The formal ornamental species have been chosen to prolong the pollinator season increasing the attraction to wildlife.



*Nepeta subsessilis*



*Libertia grandiflora*



*Ophiopogon japonica*



*Verbena bonariensis*



*Miscanthus sinensis* 'red chief'

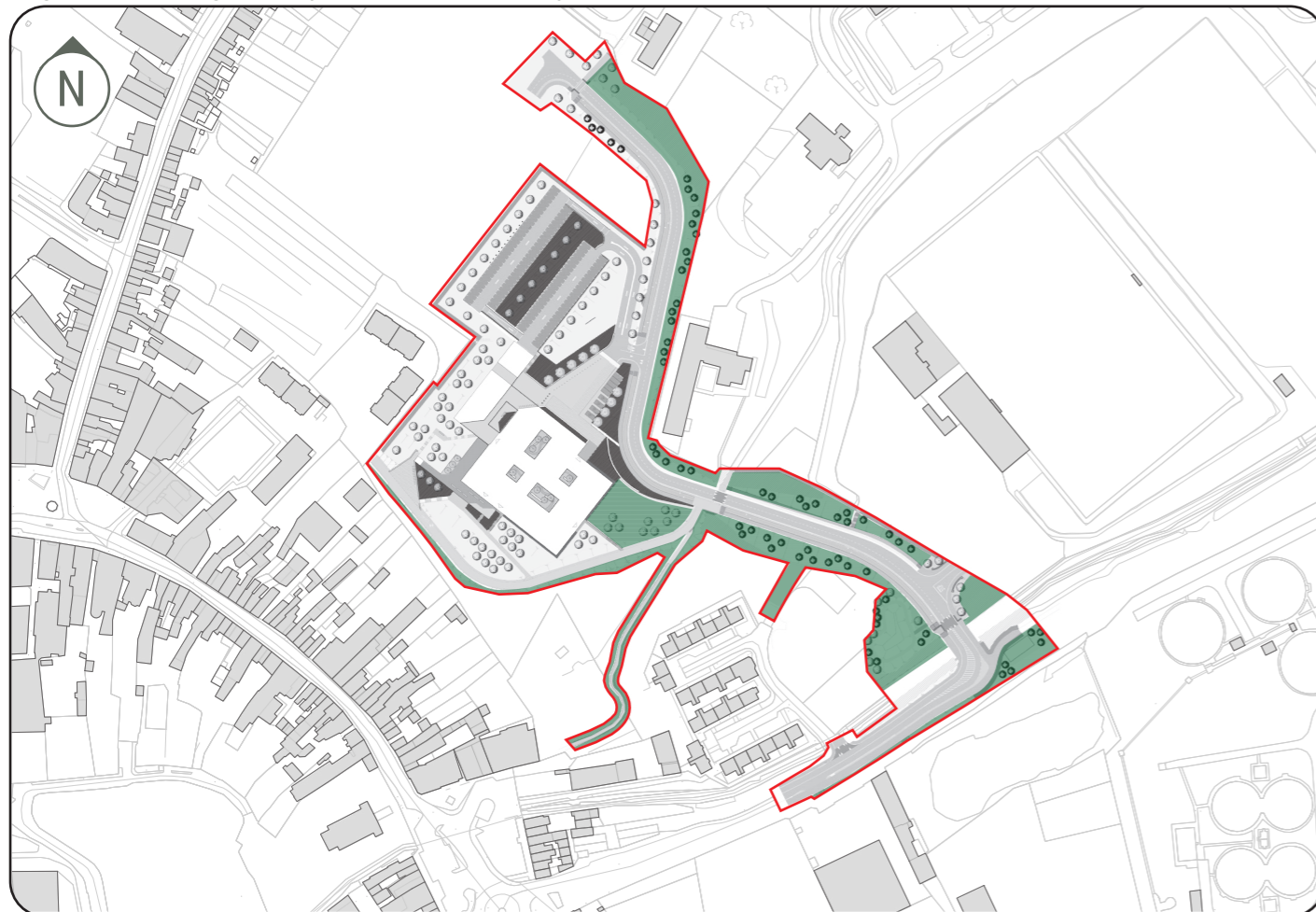


*Persicaria v*





Fig13. Plan Showing Native Species Rich Soft Landscape



 Native Species Rich Soft Landscape



Viburnum opulus



Sambucus nigra



Prunus spinosa



Viburnum opulus

### 4.3 Soft Landscape - Native Species Rich

Native planting has been chosen to enhance biodiversity increase habitats and fulfil specific roles; providing landscape structure through screening to neighbouring properties, strengthening boundaries and replacing existing planting. Where existing hedgerows are being replaced or proposed a four species native hedge mix of varying ages is being proposed, to accelerate the natural appearance and ensure taller faster growing species act as nurse planting for the slower growing species.

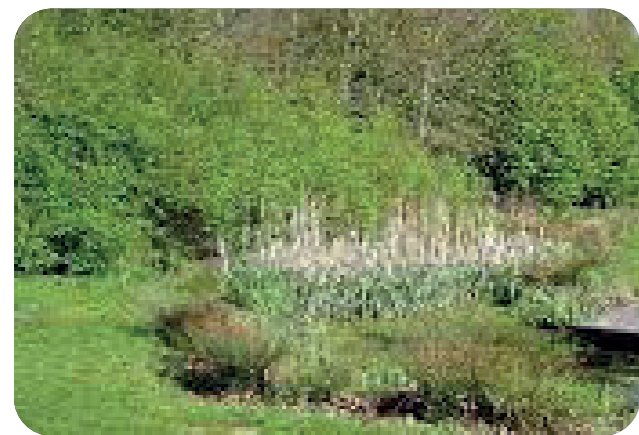
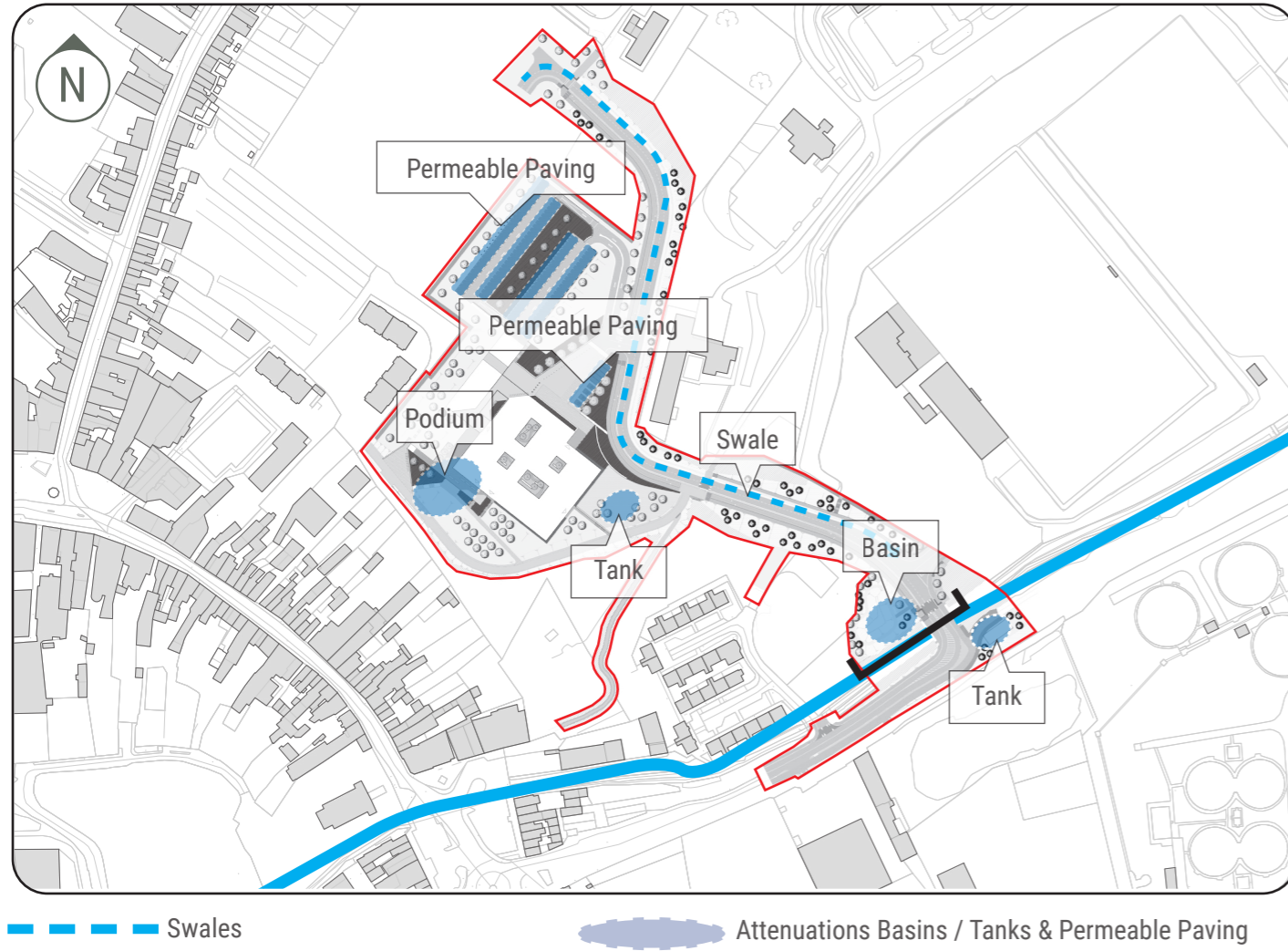
Aesthetically, planting will be used to create a strong sense of character, generate seasonal diversity, provide sensory qualities to external and internal courtyards and provide a high visual amenity to the environment.

Whilst the design of native planting will vary within each area, generally it would comprise native tree planting (at various stock sizes), deciduous and evergreen shrubs planting, areas of perennial and bulb planting and areas of managed grassland. Grass mixes have been specified as appropriate to each location with particular consideration given to achieving frequently maintained grass verges associated with the proximity to footpaths and cyclepaths adjacent to the Civic Offices, to the less frequently mown species rich grasslands associated with the more rural nature of the wider landscape. An area of meadow grassland has been included to enrich the habitat and encourage greater varieties of native species which have been lost to modern agricultural practices.

Native shrub planting will naturalise to a dense belt of vegetation along the road embankments to encourage native wildlife to recolonise wildlife corridors while producing a rich tapestry of seasonal interest along the roadsides.



Fig14. Plan Showing Soft Suds - Swales & Attenuation



Indicative Image: Attenuation Basin



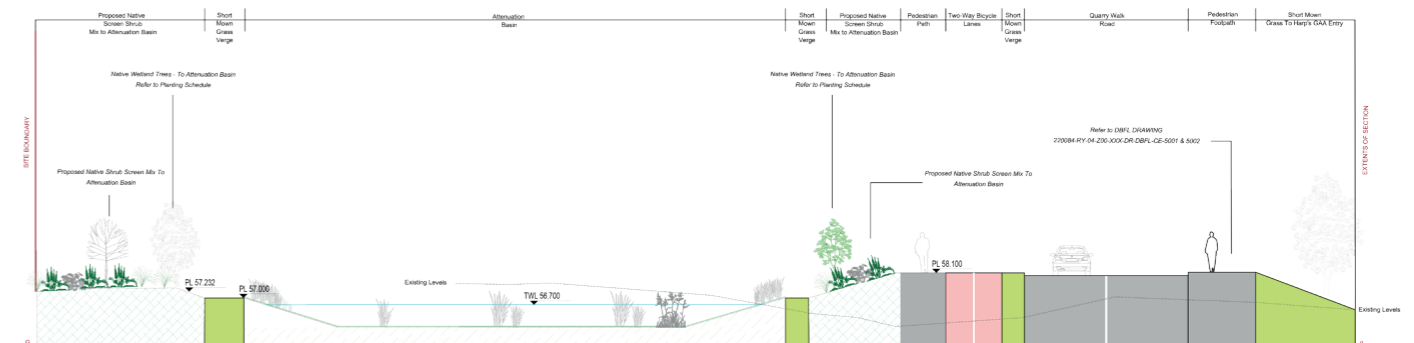
Indicative Image: Swales

## 4.4 Soft Landscape - SUDs - Swales & Attenuation

The drainage design follows a Sustainable Urban Drainage system (SUDs) (refer to engineer's drainage reports) where water management emulates natural water processes, as an alternative to directing surface water directly into piped networks discharged into rivers. The SUDs design is integral to the landscape strategy captured in the permeable car parking spaces, the podium landscape and below ground attenuation tanks associated directly to the Civic Offices which feeds into the approach road of Quarry Walk with a combination of below ground and above ground SUDs solutions to attenuate the sites water while increasing native habitats and biodiversity.

The attenuation basin is an engineered element designed to retain and slow rainwater run off into the adjacent drainage network. As an engineered basin maintenance must be carried out to ensure the system is functioning to the calculated capacity.

A maintenance path is provided with a level mown grass path which traverses the circumference of the basin. The basin is fed by the swale running adjacent to Quarry Walk Road. Run off will be captured and mainly absorbed by the marginal planting along the swales with heavier rain events being diverted from the swales into the Basin and attenuated to a level designed to be held and gradually released. A secondary below ground attenuation tank adjacent to the Ulster Canal Greenway is also designed to capture water before being slowly released. Given that climate change is tending to produce prolonged wetter winters and unusually heavy often short bursts of rain onto dry ground in the summer, the sustainable urban drainage system is designed to absorb the ebb and flow of water events. The planting is designed to be resilient to immersion and cope with dryer spells with a marginal species mix capable of laying dormant until submerged. Native ground cover and shrub screen planting around the attenuation basin creates increased habitat with native Tree planting providing screening to the future adjacent development site.



Section G-g : Refer to '703 - Landscape Sections 03 of 03'



## 4.5 Soft Landscape Grasses - Amenity & Naturalised

There are three distinct species mix of grasses designed to perform different functions. Grassland has a vital role to play in habitat creation, not only increasing insect and pollinator habitats but also by improving soil health and sequestration of carbon. The design intention is to increase habitat diversity, the grassland mixes have been divided into the 3 following categories.

### Amenity Grassland to Roadside Verges & Car Park SUDs

Amenity grassland is generally associated with frequently mown and managed parklands. Typically amenity grassland is mown between 20-30 cuts in a growing season, and managed with fertilizer and pesticides, to create a monoculture grassland. The specific species mix proposed is slow growing and robust, reducing the mowing regime significantly to reduce carbon emissions and costs. This grass mix is limited to roadside verges. Aesthetically the mown verges will contrast with the less frequently mown species rich grass mixes proposed, providing a managed appearance on the approaches to the civic offices.

### Low Maintenance Grass Mix

This grass mix is specified with white clover, to elevate this less frequently mown amenity grass to benefit pollinators and improve soil health. Grass cutting should be limited to when the clover is not in flower. Grass height should not exceed 150mm and cut to 50mm approx. 10 cuts annually. This approach prevents clovers from being out competed by grass species. Fertiliser and pesticide would not be used and all grass clippings would be removed and composted. Clover is also beneficial in fixing nitrogen into the soil. Aesthetically the longer grass will contrast with the frequently mown verges to provide a naturalised appearance.

### Native Species Rich Meadow Grass

The species rich meadow will be cut once a year in late autumn to maintain a diversity of grasses and wildflowers. Similar to the low maintenance grass mix, fertiliser and pesticide would not be used and all grass clippings would be removed and composted. During the growing seasons there would be opportunity to encourage cut short mown pathways through the Meadow to promote engagement with nature and the benefits of biodiversity. The species mix proposed has a long season of pollinator abundance to prolong habitat diversity and assist the prevalence of birds and mammals.

### Bulb Mix

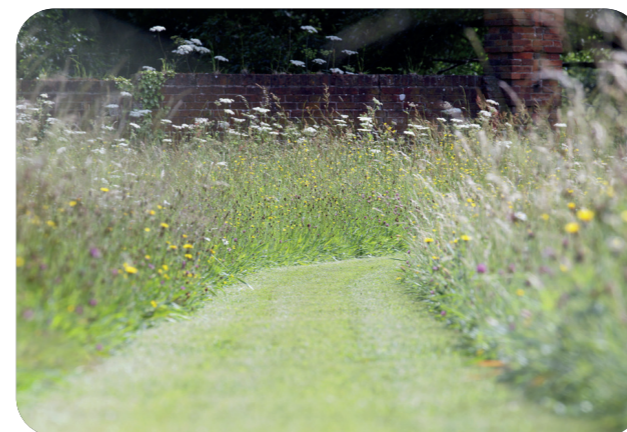
Seasonal interest is further enhanced by the addition of native perennial bulb planting, within bulb drifts located alongside the approaches to the civic offices (refer to layout and schedule B1). Bulbs are also beneficial to soil health and assist with preventing soil erosion. Native bulbs not only benefit early pollinators but also announce the beginning of Spring.



Short Mown Verges Adjacent to Low Maintenance Grass



Indicative image showing variation in mowing regimes



Native Species Rich Meadow Grass with informal cut pathways



Bulb Mix - Refer to landscape layout 101 for locations

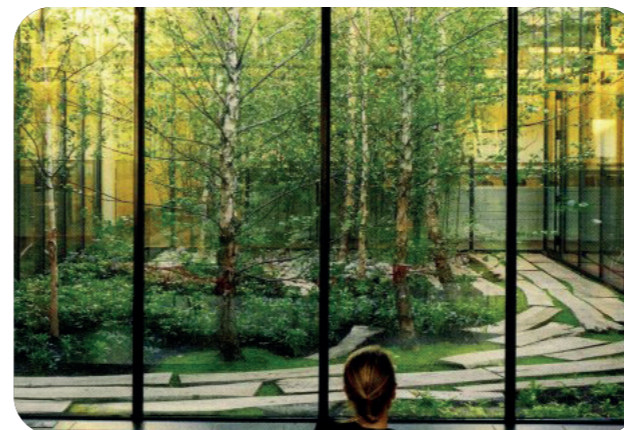


Fig15. Plan Showing Location and Size of Proposed Tress



● Trees- Heavy Standard   
 ● Trees-Standard   
 ● Trees-Semi Mature   
 ● Trees-Multi Stem

## 4.6 Soft Landscape - Examples of Proposed Trees



Courtyard Landscape Atmospheric Image



Courtyard Landscape Internal configuration



Courtyards - *Crataegus persmiliis* 'Prunifolia'



Courtyards & Podium - *Betula pubescens*



*Acer campestre*



*Alnus glutinosa*



*Sorbus aria Lutescens*



*Carpinus betulus*



*Liquidamber styraciflua*



*Prunus padus* 'Waterii'



*Salix Alba*



*Salix Caprea*



*Pinus sylvestris*



*Quercus robur*



4.7 Tree Heights - Standard Trees - Planted at approx. 1.5m to 2m height

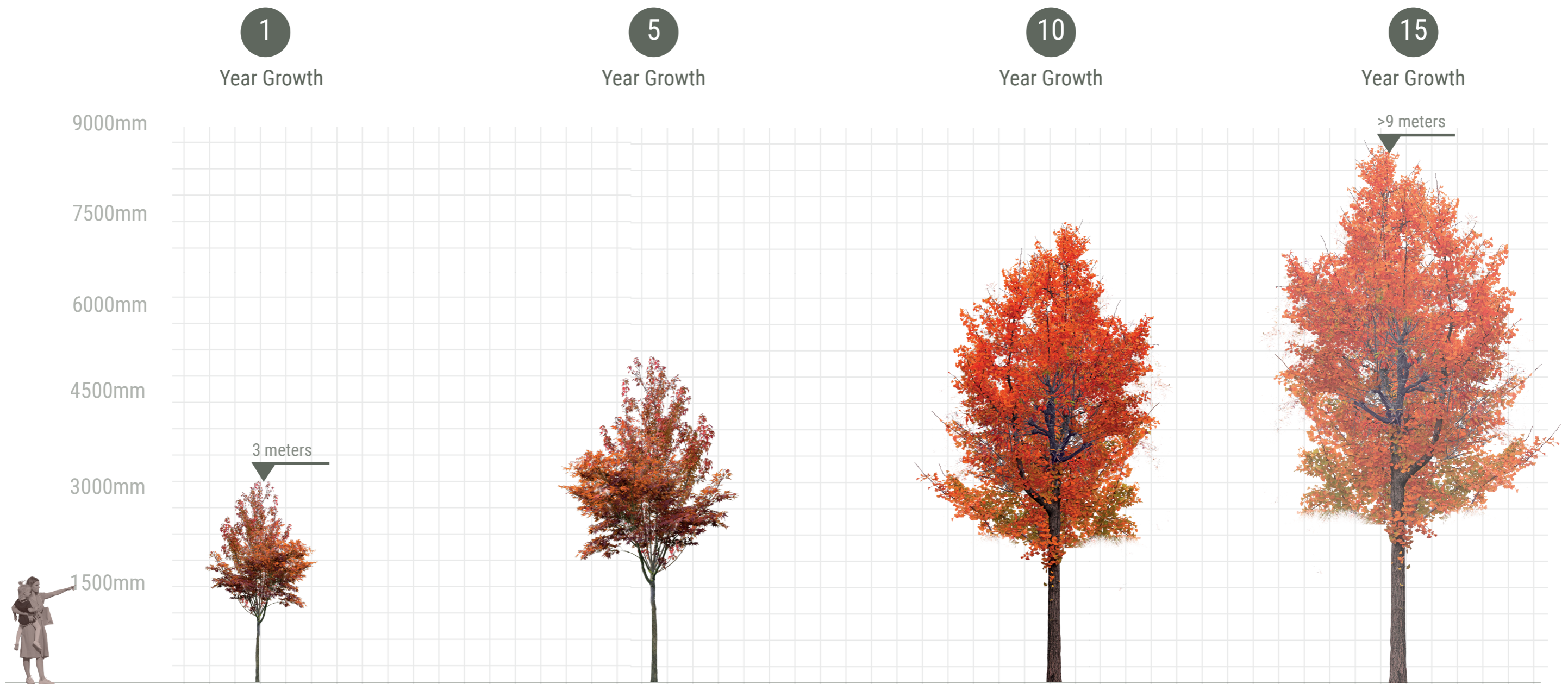
(Refer to Planting Schedule)





### 4.8 Tree Heights - Heavy Standard Trees - Planted at approx. 3m height

(Refer to Planting Schedule)





### 4.9 Tree Heights - Semi-Mature Trees - Planted at approx. 4m to 4.5m height

(Refer to Planting Schedule)





4.10 Tree Heights - Hedges - Planted as whips 60-90cm with 5% standards 1.2m height

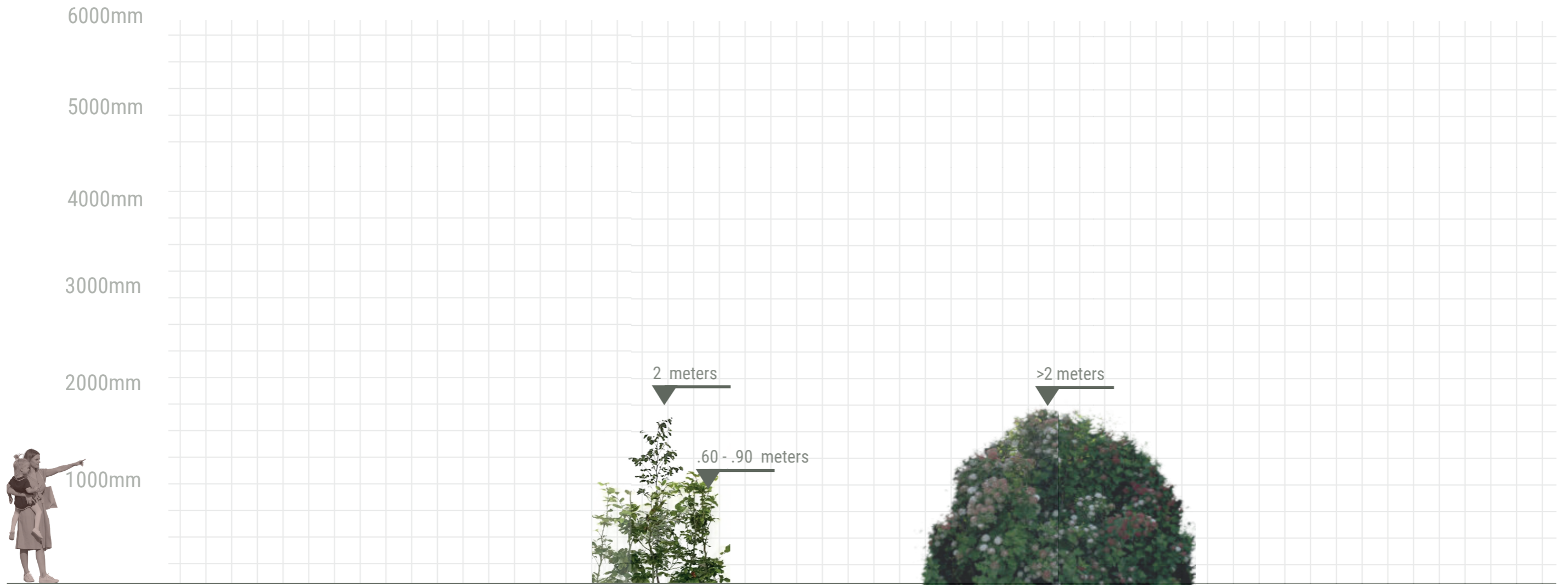
(Refer to Planting Schedule)

1

Year Growth

15

Year Growth







4.11 Soft Landscape - Examples of Proposed Species Rich Meadow



*Knautia arvensis* - Field scabious



*Prunella vulgaris* - Self-heal



*Rhinanthus minor* - Yellow Rattle



*Silen flos-cuculi* - Red campion



*Tripleurospermum inodorum* - Scentless mayweed



*Plantago lanceolata* - Ribwort plantain



*Festuca rubra* - Slender creeping red fescue



*Papaver rhoeas* - Common poppy



4.12 Soft Landscape - Examples of Proposed Shrubs, Ornamental Grasses & Perennials



Liriope muscari



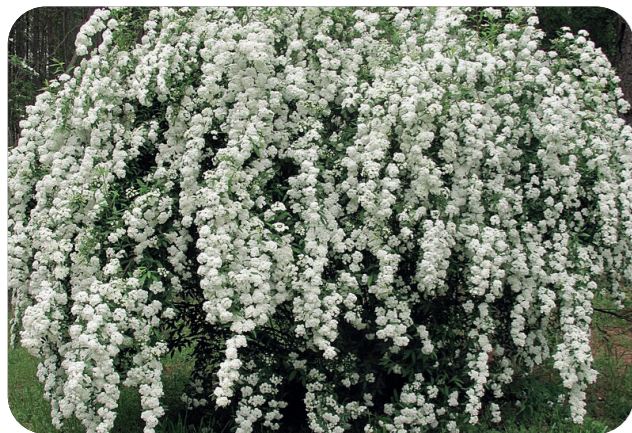
Miscanthus sinensis - Morning Light



Hebe albicans



Nepeta subsessilis



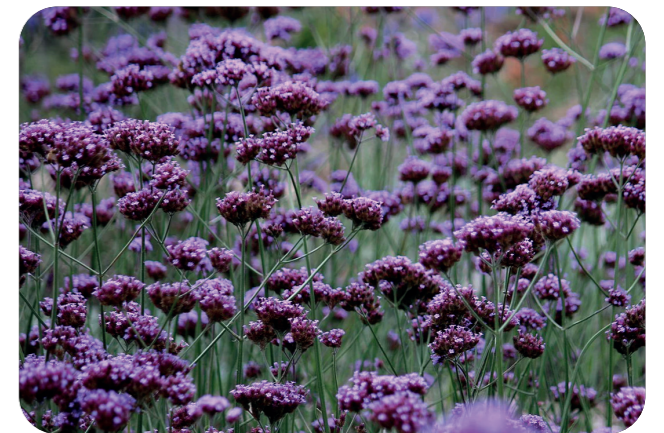
Spiraea vanhouttei



Persicaria vacciniifolia



Skimmia japonica - Kew White



Verbena bonariensis



4.13 Soft Landscape - Examples of Proposed Native Marginal Planting & Shrubs to Swales and Attenuation Basin



Salix caprea - Goat Willow



Quercus robur - Common Oak



Betula pubescens - Downy Birch



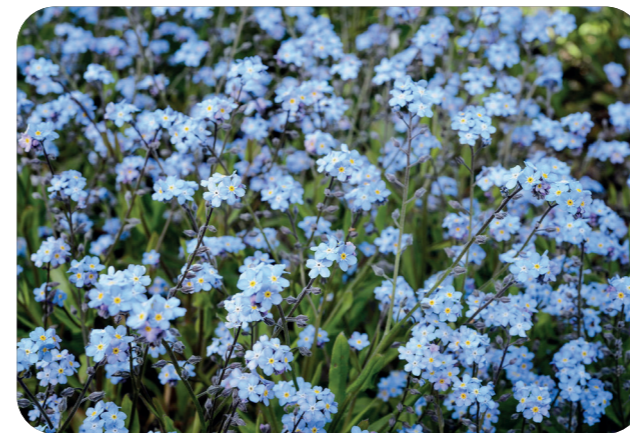
Rosa spinosissima



Ulex europeus - Gorse



Flag Iris



Myotis scorpioides



Caltha palustris - Marsh marigold