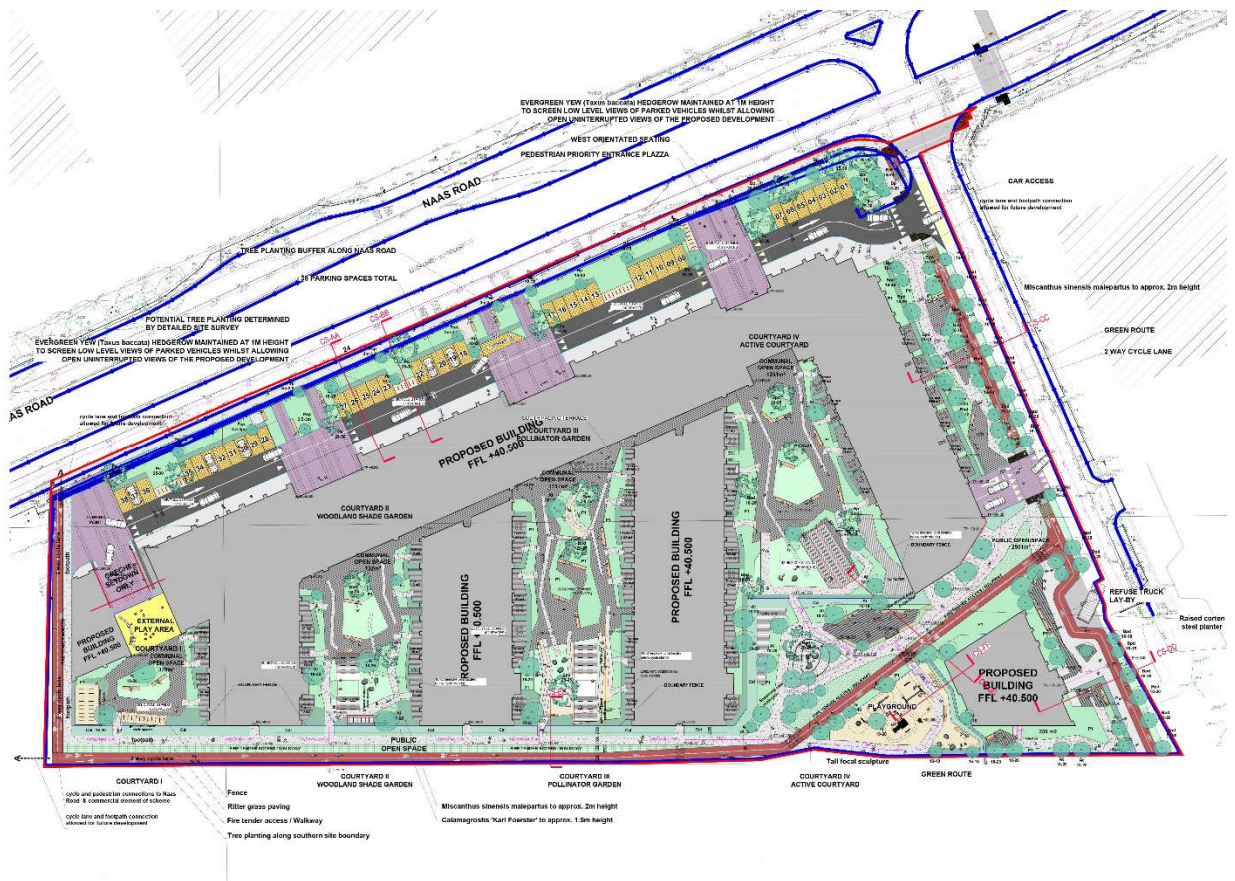


Landscape Design Rationale

Concorde Site

at

Naas Road



For

Development 8

25<sup>th</sup> April 2019

## 1.0 Introduction

We have been retained by the applicant to submit a landscape design rationale and comprehensive and detailed landscape proposals for the Concorde Site, Naas Road, Dublin 12.

Stephen Diamond Associates is a progressive design orientated landscape architecture consultancy based in Dublin. The practice has full Membership of the Landscape Institute (CMLI), the professional organisation for chartered landscape architects in the UK and is a Registered Member of the Irish Landscape Institute (ILI), the professional organisation representing landscape architects in Ireland.

Stephen Diamond Associates visited the site in late September 2018 to review the site landscape, boundary treatments, microclimate/orientation and the site's relationship to adjacent streetscape, land use, access roads and surrounding context.

The drawings associated with this report which describe and illustrate the landscape architecture proposals are as follows.

• 18-489-PD-01	Landscape Plan & Planting Plan	NTS at A1
• 18-489-PD-02	Landscape Plan – detail 01	Scale: 1:200 at A1
• 18-489-PD-03	Landscape Plan – detail 02	Scale: 1:200 at A1
• 18-489-PD-04	Construction Section AA, BB & FF	Scale: 1:50 at A1
• 18-489-PD-05	Construction Section CC, DD, EE	Scale: 1:50 at A1
• 18-489-PD-06	Construction Section Details	As indicated at A1
• 18-489-PD-07	Green Infrastructure Strategy	NTS at A1
• 18-489-PD-08	Communal/public open space areas	NTS at A3
• 18-489-PD-09	Pre App/Full Planning Submission Comparison	NTS at A1/A3

General hard and soft landscape works typically comprising paving, street furniture, fencing, play equipment and non-seasonal soft landscape to include topsoiling, shrub planting and roll out turf grass lawn shall be completed as part of the general building and site infrastructure construction works. Seasonal root-balled and bare root tree and transplant planting will be completed within the first suitable planting season after completion of construction works. The tender information for the works shall include for a minimum 12-month maintenance period and defects liability period.

## 2.0 Landscape Architecture Proposals:

Landscape design proposals have been developed on a number of levels to address the integration of proposed architecture, vehicular access, pedestrian circulation, infrastructure, Local area planning, and context.

The spatial arrangement of the landscape proposals relates directly to and is informed by the architectural proposals to create a unified whole and settle the proposed development into the site context. Movement patterns, orientation, context, prospect and microclimate have been considered in the design and detail of the scheme.

Our proposals seek to integrate nature and landscape back into the site setting.

Landscape proposals for the site are intended to address and contribute towards:

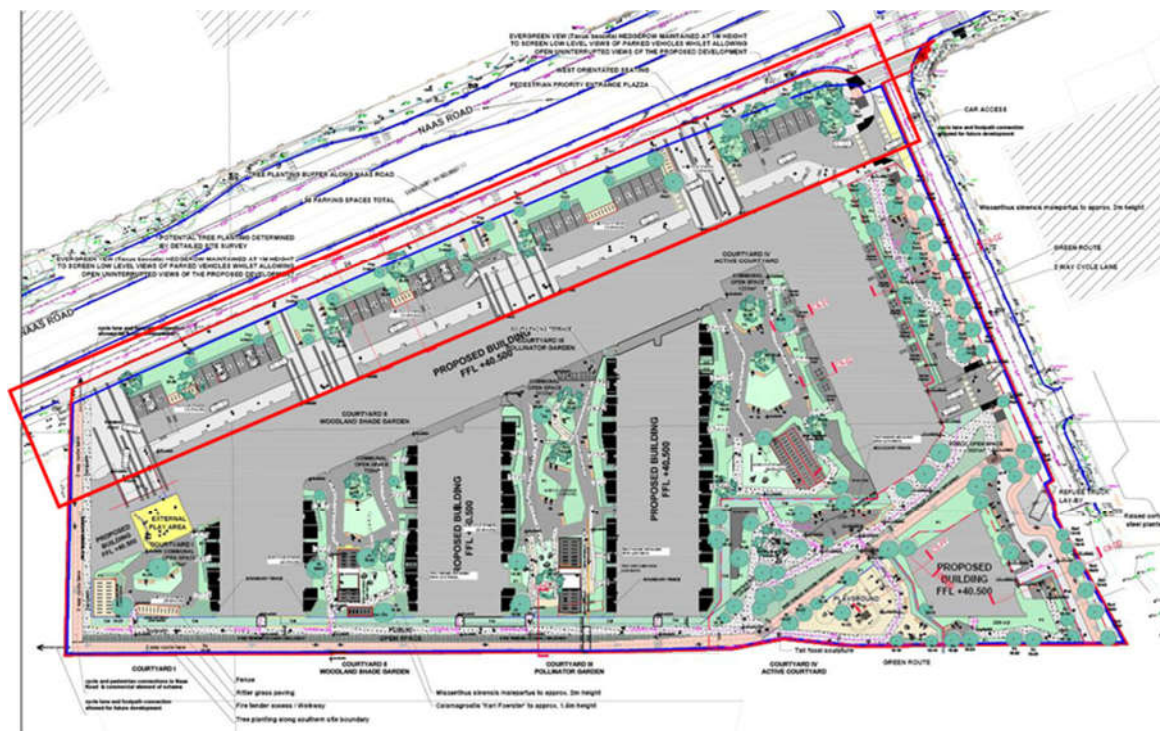
- Local Area Planning;
- A unique sense of place;
- A site-specific design proposal generated from existing landscape elements and context;



2.1.1 Interface between the proposed development and the Nass Road:



**Above:** In the previous layout, the site frontage contained earthen berms, ground cover and trees to screen views of the proposed development from Naas Road. A single shared surface plaza and southwest orientated seating were proposed.



In the current layout, shown above, the earthen berms have been removed and the quantity of trees reduced to a select number of strategically placed specimens underplanted by a low ground



**Above:** In the current layout cycling and pedestrian connections were provided from the western end of the proposed footpath and cycle route at the south of the site back to the Nass road at the western end of the site. On the northeastern corner the cycling connection was revised by the engineers to meet LAP/green route. **ref drawing 18-489-PD-01**

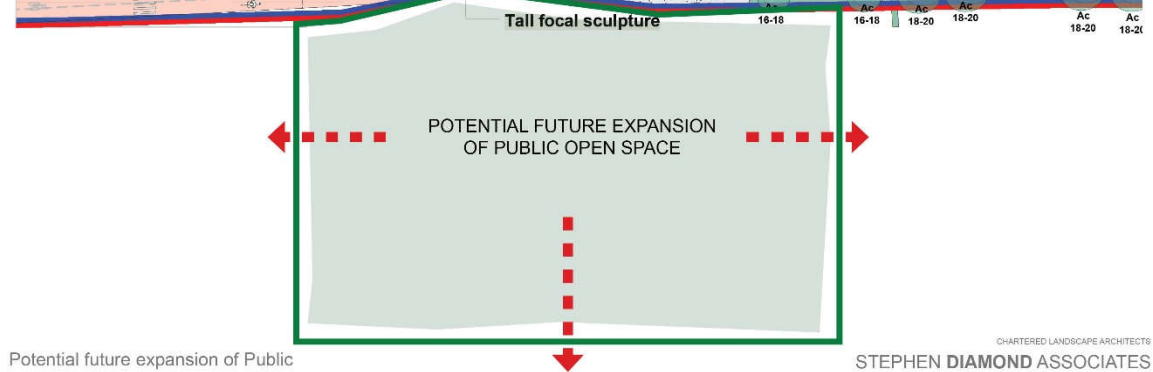
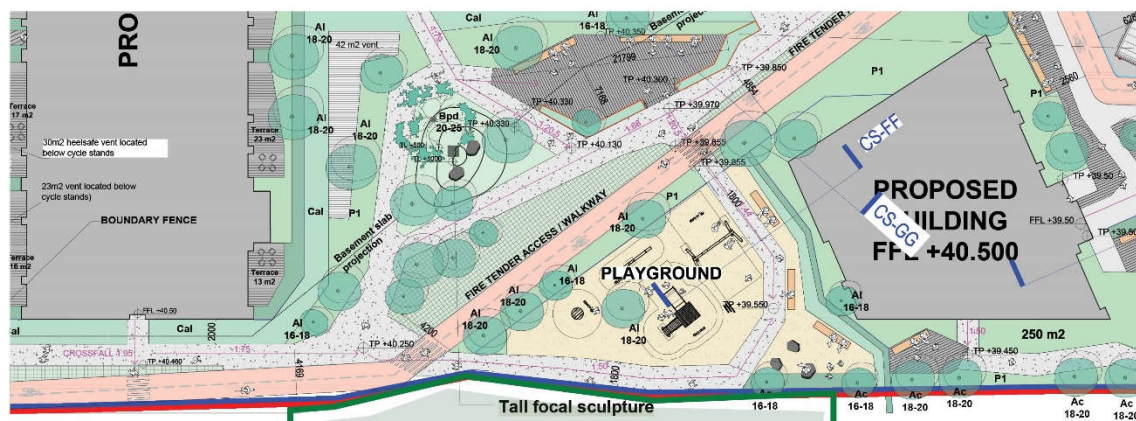
**2.1.3 Public Open Space Green Route and Playground:**

The focal Public Open Space has been developed as a well proportioned rectangular plan form of open aspect to the south and south west drawing high levels of direct sunlight into the heart of the space. South, west and east orientated seating areas and gathering spaces follow the sun arc from morning throughout the day to sunset. Passive surveillance of the open space areas by Block F to the east, Block E to the north/north east and Block D to the west will considerably reduce the potential for anti-social behavior, with further visual policing and surveillance generated by activity along the Green Route cycleway and footpaths.

A combined Green Route cycleway and footpath subdivide the Public Open Space into two distinct but interconnected zones. The first 'active zone' to the south comprises a playground overlooked by south and west orientated parental/guardian seating areas. To the north a second 'passive zone' introduces a large south orientated gathering space defined by nectar and pollen rich perennial planting beds punctuated by informal native trees. Seating overlooks activity along the Green Route and playground beyond. A footpath provides direct connection to the Active Courtyard no. IV located between blocks D and E immediately to the north.

By way of long term planning the strategic positioning of public open space along the site's southern boundary facilitates potential expansion as part of future development to the south as illustrated below.

CONCORDE SITE



### 3.0 Public Open Space

DCC Development Plan 2016-2022 sets out the requirements for the provision of meaningful public open space required in development proposals on all zoned lands. Section 16.3.4 'Public Open Space' outlines a requirement for 10% of the site area specifically for all residential schemes: 'Public open space is open space which makes a contribution to the public domain and is accessible to the public for the purposes of active and passive recreation, including relaxation and children's play.'

Public open space also provides for visual breaks between and within residential areas and facilitates biodiversity and the maintenance of wildlife habitats.

- Site Area: 18800sqm (1.88ha)
- Public Open Space required: 1,880sqm (10% of the site area)
- Public Open Space provided: 2,901sqm

#### 3.1 Communal Amenity Space

Communal open space for use by the residents of the scheme is provided within the South facing courtyards in between the rear 'finger' blocks.

- Communal Amenity Space required: 2,928sqm
- Communal Amenity Space provided: 3,702sqm

Details on further additional Communal Amenity Space provided within the building footprint is set out in the architect's report.

### 4.0 Cycle Parking Provision

The Mobility report advises 516 covered cycle parking spaces total are to be provided of which 258 no. have been accommodated across the communal courtyards as follows:

- Courtyard 1 (west) 72 covered cycle parking spaces;
- Courtyard 2, 48 covered cycle parking spaces;
- Courtyard 3, 52 covered cycle parking spaces;
- Courtyard 4 (east), 86 covered cycle parking spaces;

The remaining 258 no. covered cycle parking spaces are provided within the basement car park.

A further 56 no. uncovered visitor cycle parking spaces have been provided adjacent to the main entrance and between car parking bays extending along the site frontage to Naas Road.

Separate gated access has been provided to each of the four main courtyards via the 'Green Route' public open space, which extends along the full length of the southern site boundary. Cycle parking spaces have been concentrated within the southern sector of the courtyard for ease of access and to reduce disturbance to residents.

Sheffield type steel cycle stands have been provided in accordance with DCC recommendations. Aligned in straight uniform rows the benefits of this type of stand include:

- Liked by users. Easy to use and no lifting required. Supports the bicycle well and provides opportunities to lock back and front wheels as well as the frame
- Parks two bicycles to one stand & accessible from both ends

- Non-damaging to bicycles if plastic coated or similar.

## 5.0 Basement Ventilation Strategy

Due to geometry of the basement the strategy is for an assisted natural ventilation system.

This system requires 2.5% of the 7508 m<sup>2</sup> basement floor area to be provided as free area for basement ventilation to a total of 187.7m<sup>2</sup>.

In order to reduce the visual impact presented by ventilation grills on residential amenity we are proposing to locate the majority of vents below the covered cycle shelters. A galvanised mild steel elephant grill is proposed to facilitate full pedestrian access across the vent openings to cycle stands. This pedestrian accessible grill system will reduce the ventilation free area to 70% of the grating open size to a total ventilation requirement of 268m<sup>2</sup> (x 70% = 187.7m<sup>2</sup> free air flow)

The full basement ventilation requirement has been met across four communal open space courtyards, with an additional 42m<sup>2</sup> vent set within a large planter at the northern extent of the public open space.

Basement vents have been distributed/separated as much as possible within the courtyards to aid airflow.

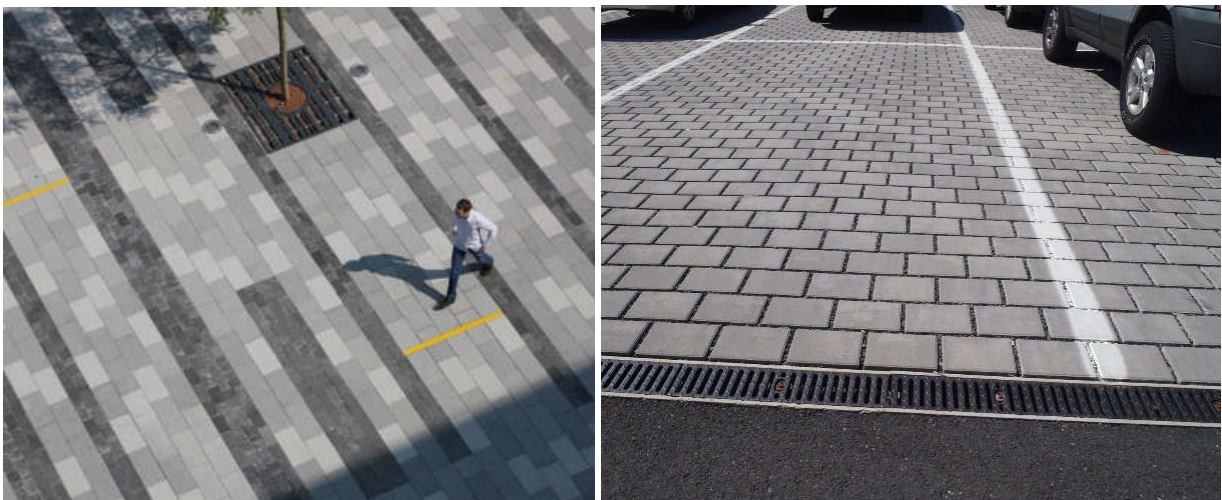
Ornamental shrub planting and trees have been strategically placed to further conceal the ventilation grills from view and filter air emanating from the basement.

## 6.0 Paving:

Paving materials within the development have been specified with the intent of providing high-quality surface materials which will survive well over the long-term and require little maintenance.

All paving materials have been specified as level, with no changes in level across paving which might cause a slip, trip or fall, and are suitable for access by all abilities.

A modular light-grey and contrasting dark-grey modular paving design is proposed to define the pedestrian priority shared surfaces located along the Naas Road frontage.

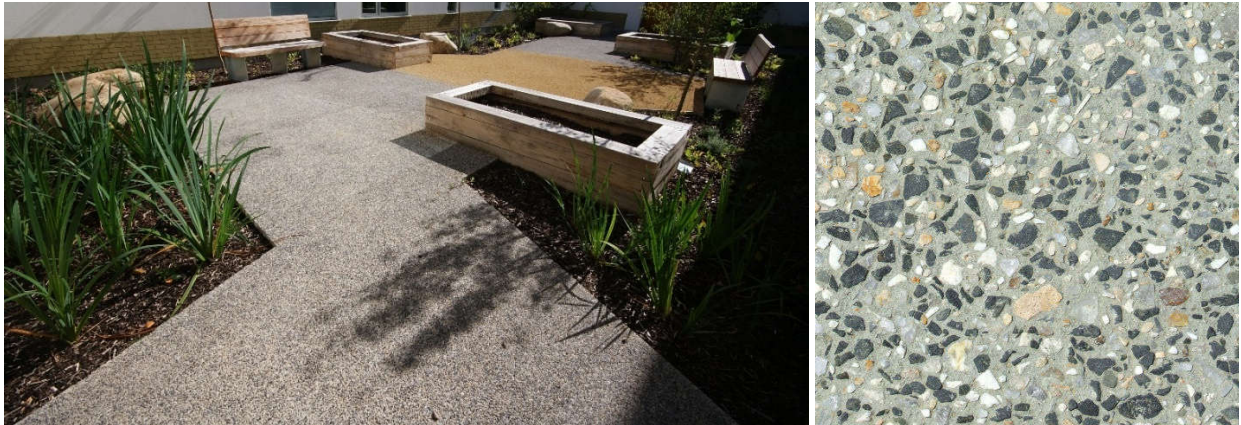


**Above left:** shared surface defined by light-grey and contrasting dark-grey modular paving.



**Above right:** open jointed permeable paving to car parking bays.

The contrasting light-grey and dark-grey modular paving serve as a traffic calming device that in effect highlights the entrance plaza shared surface concept of pedestrian priority crossing from cycle parking/seating areas to building entrances. This principle has been extended through to the underground parking access area to signal pedestrian priority, reduce the prominence of the vehicle and present a pedestrian priority environment, whilst retaining full vehicular access to the allocated parking spaces.



**Above:** In situ exposed aggregate concrete paving.

Exposed aggregate concrete used as a secondary high quality finish to complement the natural stone paving in open communal spaces as well as in public open space areas.

- Aggregate exposed through use of vegetable based surface retarder and curing agent;
- Concrete laid on sub-base to engineers design detail & specification;
- Saw-cut expansion joints to be provided at 3m centres and not less than one quarter the depth of the slab.

In situ exposed aggregate concrete provides a high quality finish, precluding the need for a secondary retaining edge detail along its perimeter. The exposed aggregate reveals tiny pebbles that make up the concrete mix, and endows the paving system with a natural slip resistance. Concrete is a material that can be easily sourced in Ireland, which reduces travel distances to the site.

An open jointed permeable paving system has been specified across all car parking spaces on the site frontage (Naas Road). Site access roads are finished in a durable bitmac surface cambered to drain to the permeable parking spaces.

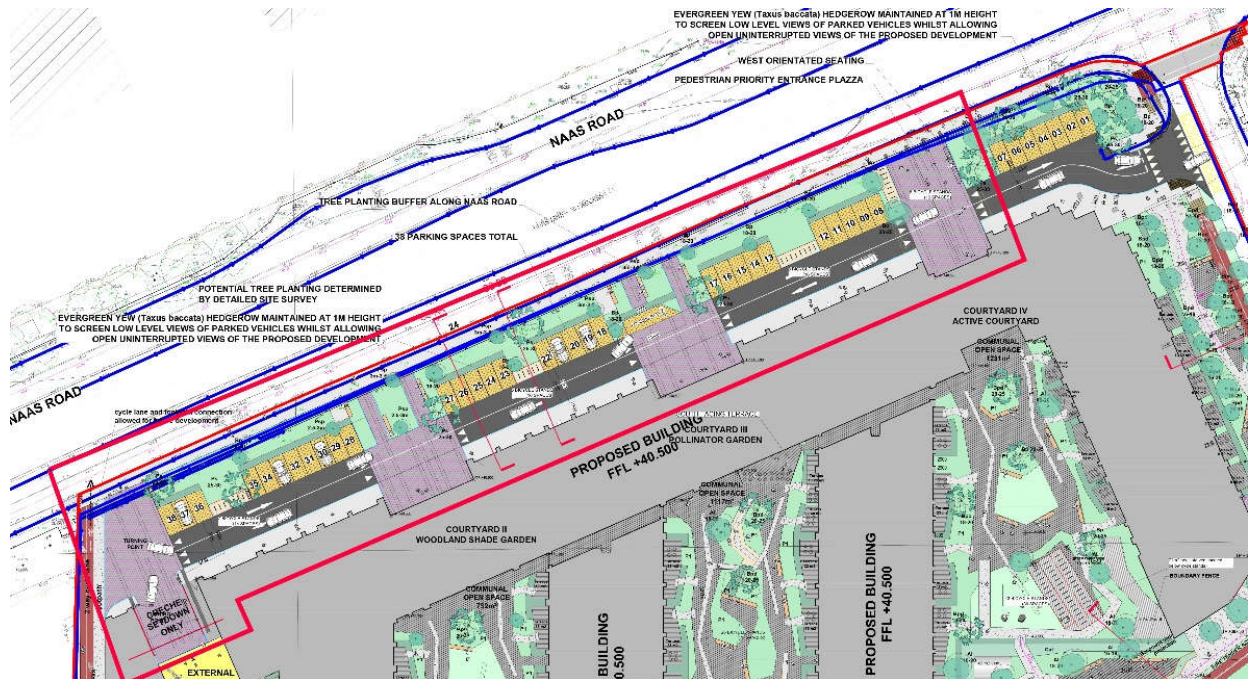
Compacted gravel paving is proposed to the playground area located on the southern boundary. Loose pavings are easily topped-up and require low ongoing maintenance costs. In addition to that they visually integrate well in both urban and rural settings.

The bicycle parking spaces located into ground i.e. Courtyard 1 and along the site frontage are paved with resin bound gravel which has a long lifespan (around 15-20 years). It is also a fully permeable SUDS compliant system and offers an environmentally sound alternative to traditional paving products.

## 7.0 Site frontage:

The site frontage extends along Naas Road (northern boundary). It houses the main pedestrian and vehicular access to the development which is defined by 4 shared surface areas as the principal

focus. Provision has been made for 38 car parking spaces (10 number allocated to Go Car), 56 bicycle parking spaces and 4 seating areas placed among trees and ground cover vegetation to enhance biodiversity and landscape visual amenity. The trees were meticulously positioned to prevent their roots from damaging the existing services pipes and cables and to provide open views of the development. Isolated clear stemmed Scots pine (*Pinus sylvestris*) and narrow columnar birch trees (2-3m spread) are proposed to soften the site context and introduce a human scale along Naas Road whilst retaining an open aspect as required by the Local Authority Planners/An Bord Pleanála. A low-ground cover vegetation and hedgerow of native *Taxus baccata* (yew) maintained at 1m height, will screen parked vehicles and allow clear visibility of the proposed architectural elevation from Naas Road.

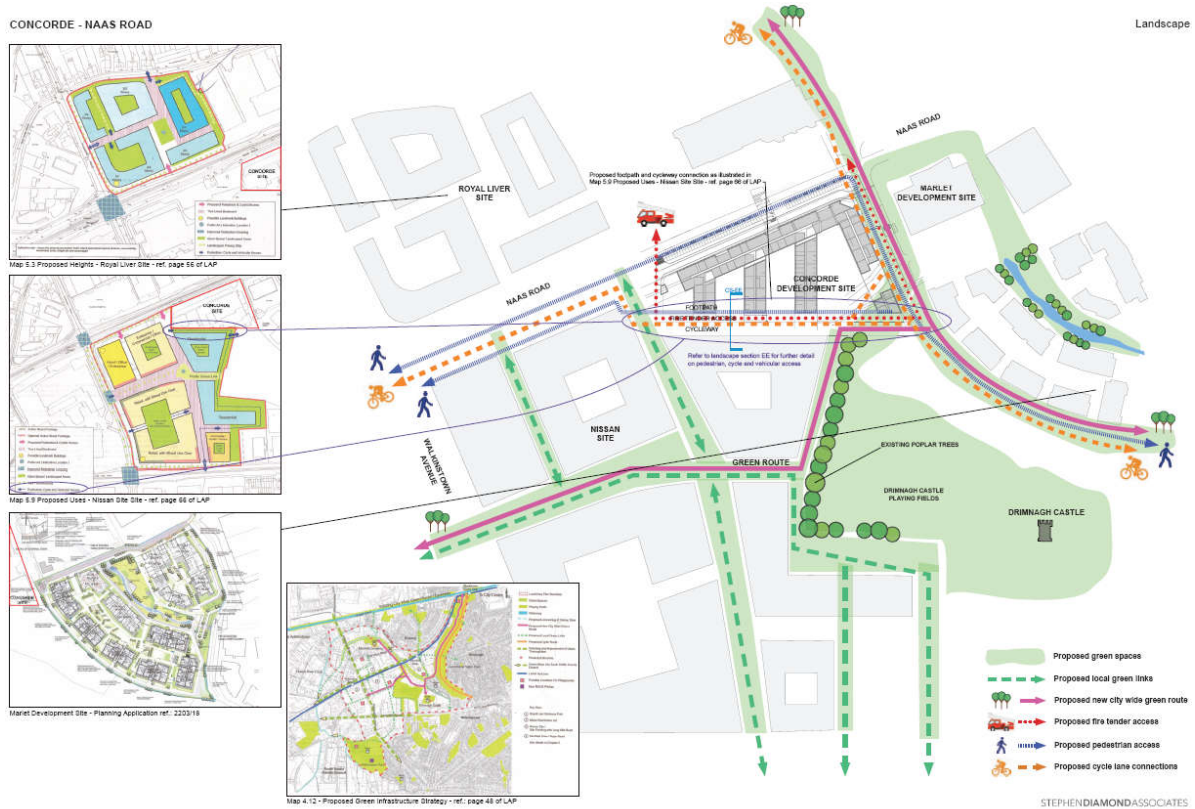


**Above:** Site frontage to Nass road. Landscaped and seating areas, shared surfaces, site access road and parking spaces highlighted by red line. (ref drawing 18-489-PD-01, 02 and 03)

An open jointed permeable paving system has been specified across all car parking spaces. Site access roads are finished in a durable bitmac surface cambered to drain to the permeable parking spaces. A cycle lane connection to Naas road is also provided on the western boundary.

## 8.0 Green route:

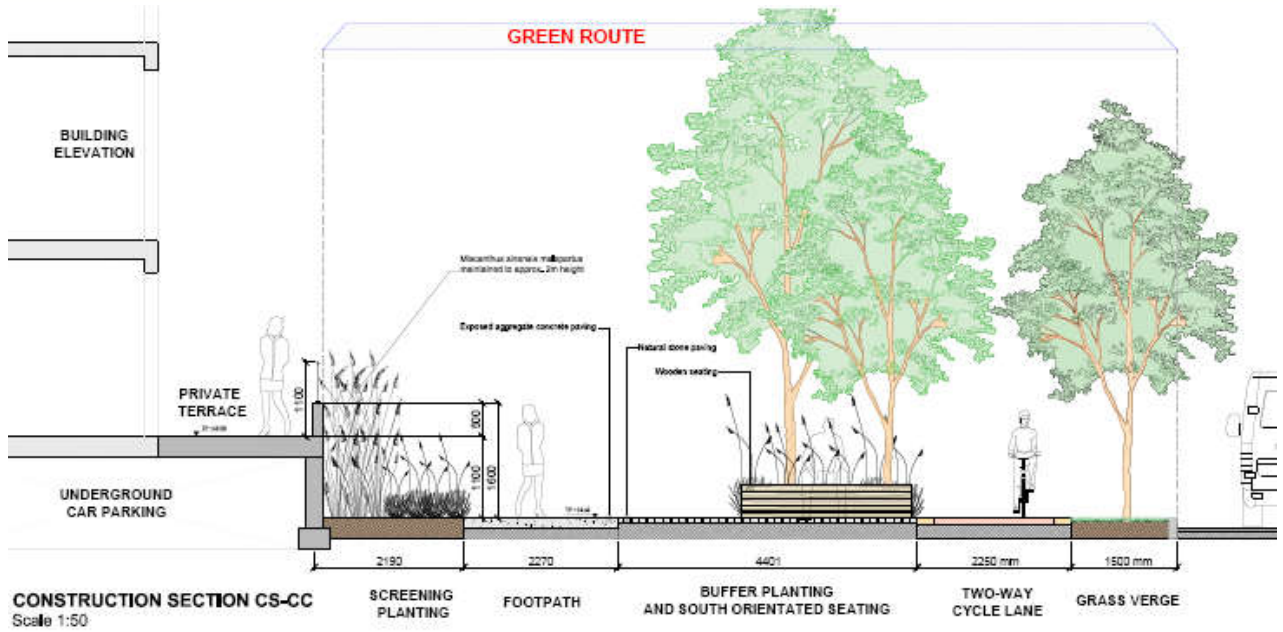
Guidelines set out in Naas Road LAP (Local Area Plan) ref below, detail a proposed new city wide green route which extends along the eastern boundary and south eastern sector of the Concorde site. (ref drawing 18-489-PD-07 Green Infrastructure Strategy).



The green route is comprised of a public open space with a two-way cycle lane, a contemplative foothpath, seating and landscaped areas, like a boulevard. In the big picture, it connects the Grand Canal to Drimnagh Castle and Walkinston Avenue (ref page 48 of LAP).

The Green Route specifically addresses the Concorde site, commencing on the north eastern site corner, following along the eastern and partially southern boundary. Custom wooden benches are embedded in five distinct seating areas and a playground, surrounded by semi-mature native trees and shrubs which soften the area in all its extension.

At the underground car parking access a shared surface paving visually alerts drivers, cyclists and pedestrians. Also, a grass verge between the cycle lane and the carriageway protects cyclists from the traffic.



**Above:** Section C-C shows the Green Route and its relationship to the eastern site boundary.



**Above left:** Green route proposal. Footpath, cycle lane & grass verge to protect cyclists and pedestrians.

**Above right:** Shared surface defined by modular paving.

**9.0 Communal open spaces:**

Four communal open spaces are proposed between blocks. South and west orientated embedded wooden benches are placed to offer a comfortable, pleasant and private gathering area to the residents, acting as a green finger, bringing the outside nature into the courtyards. Planters and feature trees are strategically positioned to give sense of scale and screening without blocking the sunlight. It also counts with sheltered bicycle parking spaces and exposed aggregate concrete pathways around the grass lawn areas. Around the private terraces, a ground cover vegetation is proposed to avoid people walking close to the apartments.

Landscape design proposals follow a zonal approach, structured by various microclimates experienced across the site.

Those zones receiving maximum levels of direct sunlight, have been designed to offer a series of interconnected gardens, seating areas and terraces providing valuable outdoor amenity space. These areas follow the sun arc in an east to west direction across the courtyard space to provide residents and visitors a variety of places to gather and chat from morning through to late evening.

Conceived as a place of escape or refuge from the noise and pollution of the adjoining roads, we envisage the courtyard gardens as a sanctuary to the hectic nature of city life. These courtyards have been designed to provide a series of distinctive social spaces configured to encourage interaction between neighbours and generate an enhanced sense of community.

Such communal gathering spaces are becoming increasingly important to our psychological health and wellbeing due to the hectic nature of our lives, increasingly urbanised nature of our environment and increasing sense of isolation experienced by many. They specifically play an important role in apartment developments providing an opportunity for people from different floors to meet.

Paving layouts have been developed to direct and orientate movement through the courtyard spaces in a logical and efficient manner. Linear strips of high quality exposed aggregate concrete paving direct movement from one courtyard garden space to the next to place emphasis on and interconnect the various open space areas. These strips overlap, cut through and frame larger mats of granite paving.

Paving materials have been selected for their natural characteristics and warmth.

Circulation pivots around central grass lawns and planters. We see the introduction of grass lawns in combination with flowering ornamental plants as fundamental landscape elements, recalling the familiar domestic character of a family garden. A 'Safagrass' rubber grass mat reinforcement system will allow heavy use across this lawn all year even after periods of high rainfall.

All courtyard level apartments have been provided with private terraces well in excess of the required minimum standards set out in Dublin City Council development plan & DOE guidelines of 4 m<sup>2</sup> for a studio unit, one bedroom unit at 5 m<sup>2</sup>, 2-bedroom unit 7 m<sup>2</sup> and 3-bedroom unit 9 m<sup>2</sup>. In some instances 23m<sup>2</sup> has been provided at more than double minimum requirements, allowing for sustainable family living. Refer to drawings 18-489-PD-01, 02 and 03 on which all private terrace m<sup>2</sup> areas are shown. Access paths have been provided from courtyard level apartments through perimeter buffer planting to encourage courtyard level residents gain direct access to the communal courtyard gardens from their private terraces. Rather than having to navigate internal corridors and access doors, it is hoped this modest intervention will bring the courtyards to life and encourage increased interaction between residents especially amongst children. Furthermore the interconnected courtyards will provide an increased sense of adventure for children in particular.

#### **10.0 Fire tender access:**

A fire tender access is proposed along the southern boundary. It encompasses the two-way cycle lane, footpath and the grass verge in between, which will be reinforced with an open plastic grid grass reinforcement and protection paving system. This fully porous and permeable system will contribute towards flood prevention by allowing rain water to percolate naturally into the ground.

The sum of those areas (footpath, cycle lane & reinforcement grass verge) will provide a 5.70m width access which respects the minimum width of hardstanding (ref Building regulations part B page 126).

## 11.0 Playground:

The playground area is located on the western elevation of block F. Large sculptural pieces of Richter Spielgerate wooden play equipment such as a swing, a stainless steel slide and a seesaw have been located to encourage everyone using the playground to play and highlight the importance of bringing children to play outside.

The area is surrounded by semi-mature native trees and on its eastern boundary a 2m height hedgerow is proposed to screen the private terraces of block F. South and southwest orientated embedded wooden benches are strategically positioned to allow parents' overlooking their kids and take the most of the sunlight. Although that area is designed for kids' use, it also works as a parental gathering space.



**Above left:** Stainless steel slide by Richter Spielgerate (ref E2.13510).

**Above right:** Wooden seesaw by Richter Spielgerate (ref .6.11000).



**Above left:** Jumping disc by Richter Spielgerate (ref 6.06000).

**Above right:** Swing by Richter Spielgerate (ref L6.14000).

## 12.0 Site boundary treatments:

An open and welcoming aspect will be presented along the entire northern site frontage onto Naas

Road (no fencing is proposed along this boundary). An informal arrangement of semi-mature native trees and low ground cover will help to settle the development into the existing site context and bring a more naturalistic appearance to the site frontage along Naas Road.

A 1.80 m height solid steel bar railing painted mid-grey is set within and softened by mass plantings of ornamental grasses to secure and visually integrate the four communal courtyards along their southern boundary as illustrated in the below perspective view.. At approx. 2mts height a *Miscanthus sinensis* 'Malepartus' buffer separates the public realm from these communal and private spaces. Further ornamental planting will separate private terraces from the communal open spaces giving residents an increased sense of privacy.



**Above:** 1.80m height fencing softened by an ornamental grass planting of *Calamagrostis* 'Karl Forester' in the foreground and *Miscanthus sinensis* 'Malepartus' (background. **(For boundary treatment ref drawings 18-489-PD-01 and 18-489-PD-05 CS-EE)**

### 13.0 Trees:

It is the intention to provide a feeling of maturity and permanence as soon as possible by planting a diverse selection of standard trees. A mix of native deciduous and evergreen trees has been specified to provide year-round visual interest, habitat and screening. The detailed specification of trees is inspired by the species of tree currently found in the surrounding landscape, and suitability of the tree to the location.

Tree planting layout proposals are informed by site context and land use to screen views of the proposed development, and to settle the development into the existing site context.

It is proposed to plant a varied selection of native and naturalised trees comprising Pine (*Pinus sylvestris*), Downey Birch (*Betula pubescens*), Silver Birch (*Betula pendula*), Field Maple (*Acer campestre*), Snowy Mespilus/Juneberry (*Amelanchier lamarckii*), Bird cherry (*Prunus padus*) and Blackthorn (*Prunus spinosa*) ranging in size from 16-18cmg standards through to 25-30cmg feature trees specimens. These trees have been strategically arranged along the site's north, south and east boundaries to soften and frame views of the proposed development from the eastern and western approach to the site along Naas Road.

Native species such as *Pinus sylvestris*, *Betula pubescens*, *Betula pendula*, *Prunus padus* and *Prunus spinosa* will be planted interspersed with ornamental planting shrubs and hedgerow (ref 18-489-PD01 drawing).

Along the northern boundary *Betula pubescens*, Pine (*Pinus sylvestris*) and *Prunus spinosa* (Blackthorn), will be planted to filter views of parked cars. Ground cover plants/shrubs will work as a visual amenity and also separate the car parking from the public footpath.

Regarding the Entrance Plaza and ground level car parking access in particular, a 03 No. 20-25 cmg *Betula pubescens* and 3 No. 25-30 cmg Pine (*Pinus sylvestris*), will be planted on a P1 Mix (Shrubs and perennials) base. This will give a strong character to the entrance as well as helping to capture and infiltrate storm water runoff.



Oak (*Quercus robur*)



Downey Birch (*Betula pubescens*)



Bird Cherry (*Prunus padus*)





Following the completion of the one year's defects liability period for the main works contract, responsibility for the day to day maintenance of all areas in the site curtilage will be passed to a landscape management company.

The management company will engage a landscape sub-contractor. It will be the management company's responsibility to monitor and review the works of the sub-contractor to ensure the management objectives as outlined below are attained.

### **15.3 Management Objectives:**

The objectives of the management company will be as follows;

- To maintain all areas in a neat, tidy and substantially weed free condition,
- To ensure that all seeded areas are maintained in a condition that contributes to the visual amenity of the development,
- To establish and maintain tree and shrub planting to provide an overall landscape framework for the development.

### **15.4 Performance Criteria:**

Performance criteria are indicators for assessing the quality and success of the particular plant mixtures used for a purpose i.e. structure/ screen planting, specimen planting, tree planting etc.

Such indicators will be based upon aspects such as;

- Health and condition of planting
- Plant growth
- Achievement of desired effect

The achievement of the performance criteria and the monitoring of the landscape contract will be under the direction and supervision of the developer's landscape architect. As previously stated the management company will monitor longer-term performance criteria.