

7.1 Overview

Create Design Ltd have been commissioned by Woolwich Road Limited (a partnership between Welling United FC and Lita Homes Ltd) to prepare a landscape design proposal for the site to accompany the planning stage design for the redevelopment of the site.

This section should be read in conjunction with other planning application documents. The Design & Access Statement, Energy and Sustainability and Ecology reports are of particular relevance. The landscape design has emerged through a collaborative design process with the wider consultant team to ensure it can be delivered holistically.

The redevelopment includes the provision of new a new football stadium football HQ and training facilities, new club facilities including café and ticketing, a small amount of additional commercial space at ground floor level and a scheme of apartments above. The proposal is for a complex use of site and so careful landscape design is required to give space and utility to each of the user groups.

The site is located on the existing club site, plus land currently occupied by a part office and part residential building. The site is on the edge of Welling town centre and the club part of the land is located on the edge of Danson Park. The redevelopment of the site partially within the parkland setting and on the edge of the town centre is important and has been reflected in the landscape strategy, The brief for a sustainable low carbon solution that maximises ecology and biodiversity has also greatly influenced design direction.

There are often challenging locations and constraints across the site for planting, including terrace locations exposed to full sun, vehicle traffic at ground level and shady locations between buildings. The proposals therefore have been prepared cognisant of these constraints. Materials and plant selection have been made to ensure the proposals are robust and will survive and thrive in the long term.

We have developed a design that we believe is robust, following the right plant right place principle, attractive and sustainable and most importantly practical. Planting plans have been supported with details to ensure that the right amount of root space and watering is available for plants and a hard and soft landscape management plan can be delivered to allow the site to be maintained to a high standard long term.

The proposal covers the area highlighted in red as illustrated in the application documents. This area is comprised of the existing football club site and an adjacent site located on the corner junction of Park View Road and Roseacre Road.

The site borders Danson Park to the south and Bexley Cricket club to the east,

The site forms a transition located at the eastern end of Welling High Street and also to the north side of Danson Park.

It includes the club site which includes the pitch, stands and club facilities and to the north an area of derelict site hard standing where a building used to stand.

In the proposed scheme there is a need to provide a 3G artificial pitch to promote greater use of the site and to comply with FA rules. However, there are opportunities around the perimeter of the site and on roofs and terraces and external walls to provide high quality soft landscape that link with the park.

The experience of walking past the site on Park View Road is currently very negative as the site is enclosed by a poor-quality hoarding and there is little aspect / connection to any quality building or landscape. There is substantial opportunity to positively change this experience and to create a vibrant landscape serving all user groups.



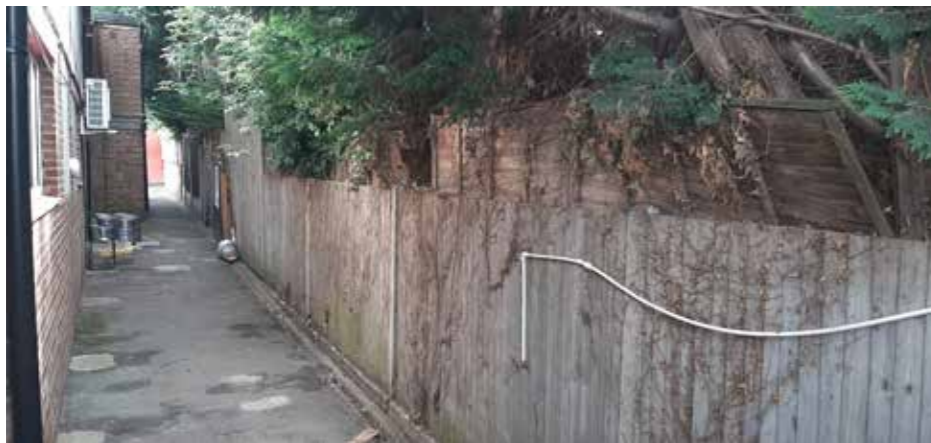
Extract of the site and surroundings from Google maps



7.2 The site today



A. SOUTH BOUNDARY TO CLUB FROM DANSON PARK



B. WEST BOUNDARY ALLEY TO ROSEACRE ROAD PRIVATE GARDENS

Key

- ① GMB BUILDING (to be demolished)
- ② SPECTATOR & VEHICULAR ENTRANCE
- ③ GMB CAR PARK
- ④ WELLING UNITED CAR PARK
- ⑤ WELLING UNITED STAND (to be demolished)
- ⑥ ERITH & BELVEDERE STAND
- ⑦ ERITH & BELVEDERE HALL
- ⑧ NORTH TERRACE AREA
- ⑨ SOUTH TERRACE AREA
- ⑩ BEXLEYHEATH CRICKET CLUB
- ⑪ PRACTICE NETS
- ⑫ PRIVATE RESIDENTIAL GARDENS



7.2 The site today

Park View Road

The public realm for the proposed scheme is relatively limited in terms of overall scope and area. This is primarily defined by the pavement treatment along Park View Road and Roseacre Road.

At present both pavements are narrow and of relatively poor appearance.

With the potential to attract larger football or event attendances, a key consideration with regard to the public realm design is crowd safety and management particularly on Park View Road. Furthermore, the addition of a residential building adds further spatial demands relating to access (people, refuse, cycles), loading/ unloading, drop off, and maintenance of the bus stop operation.

Therefore the design of the hard-scape is key to the buildings operation, public safety as well as character, appearance, and general maintenance.

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PARK VIEW ROAD LOOKING EAST



PARK VIEW ROAD LOOKING WEST

7.2 The site today

Roseacre Road

Although Roseacre Road is predominantly a residential street, the quality of the pavement is similar to Park View Road. i.e., It's narrow, and made up of broken tarmac.

We are increasing the usable depth of pavement by virtue of the proposed building line setting back from the kerb edge and generally creating more pedestrian space which also benefits the Club's entrance.

A car park for the employees of the GMB and residential tenants of that building will be effectively replaced by the proposed enclosed car park for blue badge holder residents and an ambulance space for match days.

New paving will be laid in this area along with two additional blue badge parking bays with electric charging points.



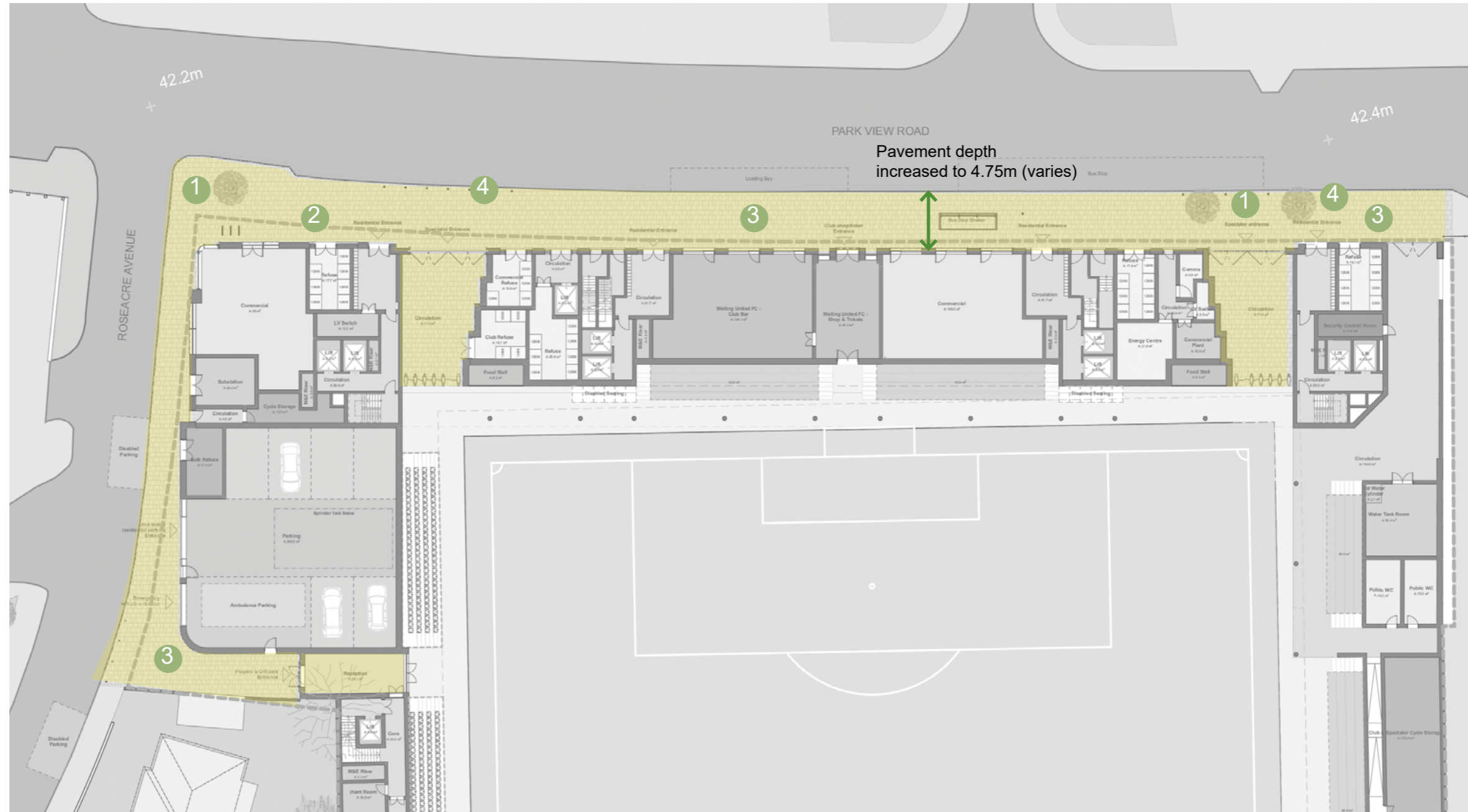
ROSEACRE ROAD LOOKING SOUTH AT THE JUNCTION OF PARK VIEW ROAD



ROSEACRE ROAD LOOKING NORTH TO THE JUNCTION OF PARK VIEW ROAD

7.3 Proposed public realm

Overview



Key

- 1 NEW TREE LOCATIONS
- 2 SHEFFIELD STANDS FOR CYCLES
- 3 NEW PAVING
- 4 BOLLARDS



Street paving

We are proposing a concrete block paving system natural granite aggregate for the external perimeter of the building.

The example opposite has a rough granite surface appearance which has excellent wearing and slip resistance properties. We would combine the available sizes (600 x 300 & 300 x 200mm) to create the patternation shown on the plan.

The drawing on the previous page shows the extent of new paving represented by the yellow fill.



BLOCK PAVING - TOBERMORE BRAEMAR



Bollards

We have conducted meetings with the CTSA and DOCO to discuss security and identify which types of risk / threat the football ground could be subjected to.

The main areas of concern are the spectator entrances where large groups of people can congregate or spill out onto the pavement. These areas represents a significant risk and opportunity for vehicular ram raiding.

Our current plans indicate bollards opposite the two spectator gates to protect spectators from vehicle attack.

The bollard type, spacing, and specification will be subject to a Vehicle Dynamic Assessment. The study will examine the whole building perimeter and suggest a strategy(s) to reduce the risk of an accident or attack of this nature and others occurring.

The design of the bollard will be determined by factoring vehicle types, speed, and subterranean conditions. This may exclude certain types due to the location and proximity of utilities etc.

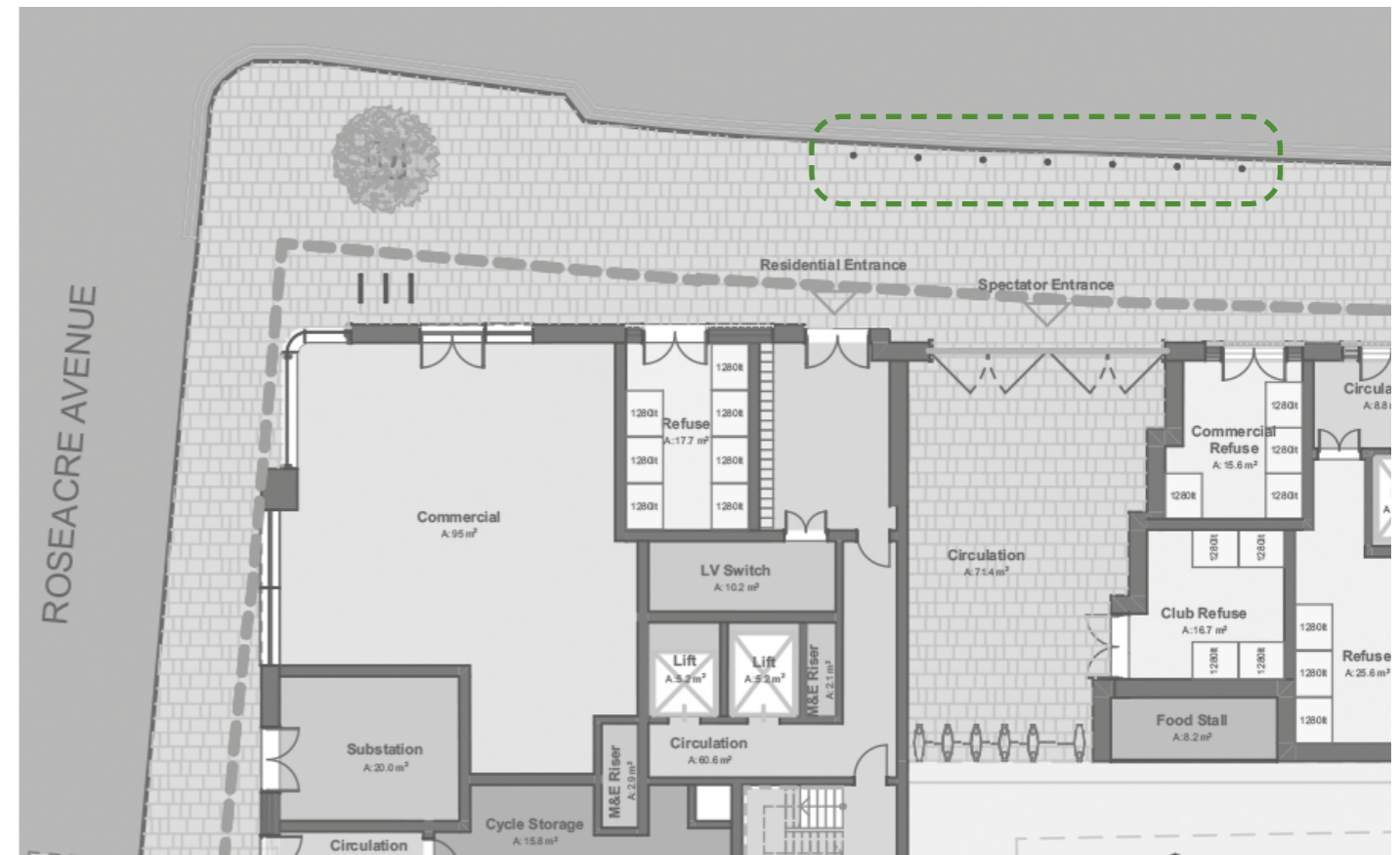
We will undertake the Vehicle Dynamic Assessment once the planning application is determined.



TEXTURED SURFACE FINISH. COLOUR : ALTO SILVER



INDICATIVE BOLLARD LOCATION



INDICATIVE PAVING PATTERN

7.3 Proposed public realm

Venue paving

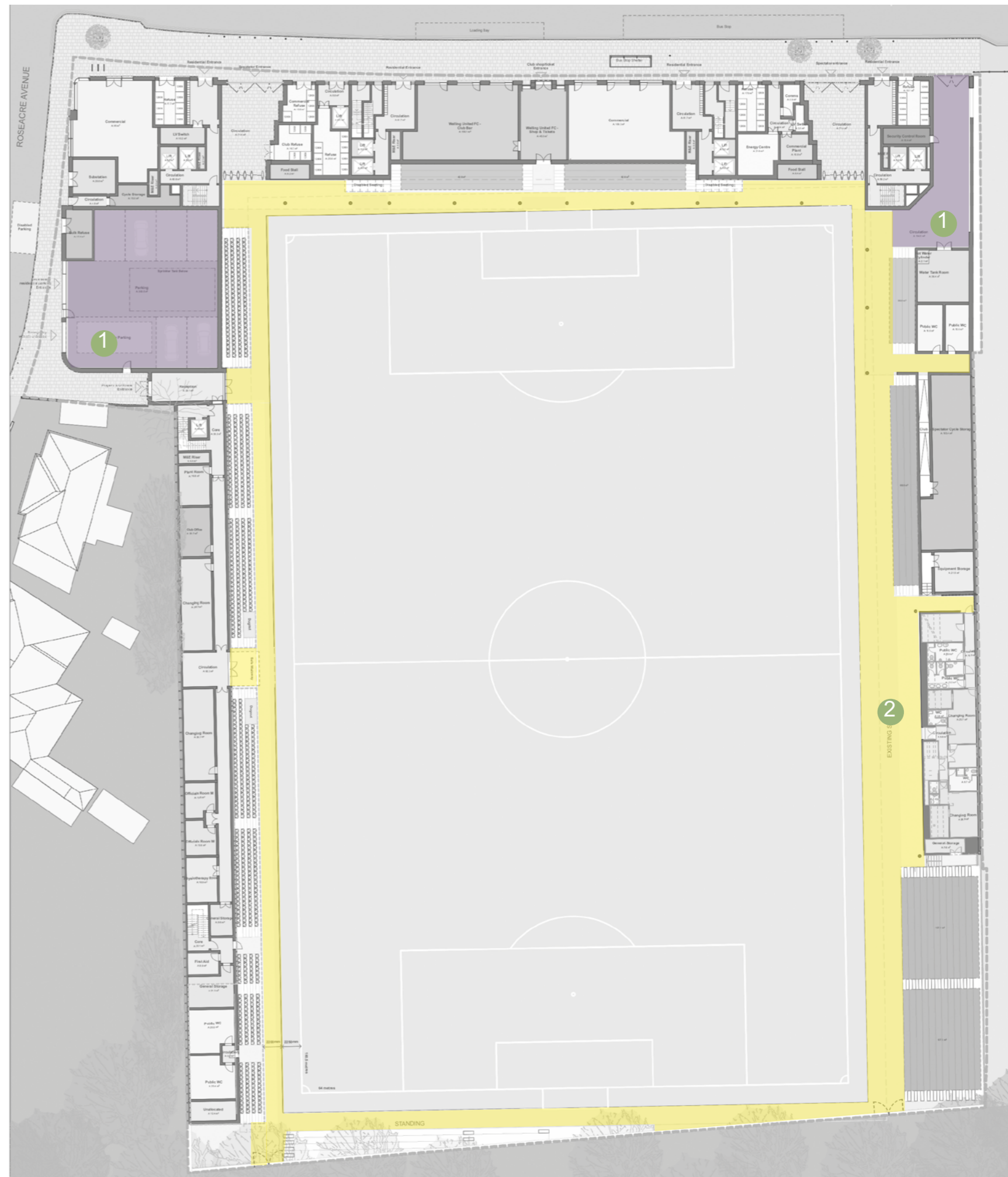
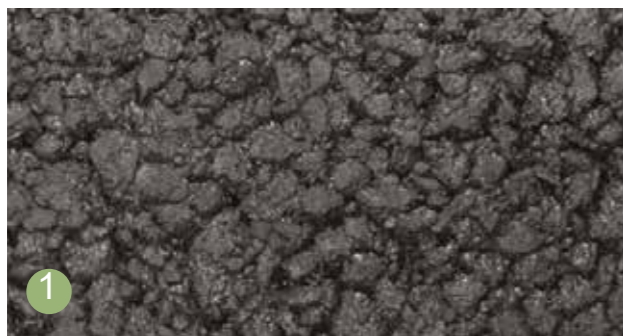
Ground Level Roads and Paths Surface

Product:- Tarmac Asphalt Ulticolour
www.tarmac.com

Specification / Features:- Hard wearing Asphalt product to take 40 tonne lorries turning and parking.

Location:- Site roadways, paths and parking areas

Colour: - Roadways and parking - Dark Grey, Paths- Light Buff



7.4 Landscape strategy

Landscape ideas & opportunities



THERE IS SCOPE FOR A LARGE NUMBER OF SMALL INTERVENTIONS ACROSS THE SITE THAT THREAD PLANTING AND WILDLIFE THROUGHOUT

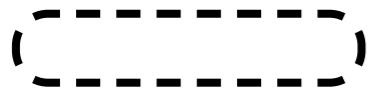
TRANSFORM ROOFS TO GREEN ROOFS



WILDLIFE CORRIDOR



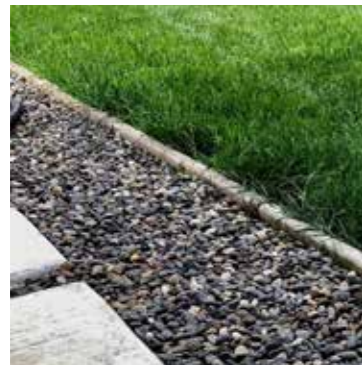
PLANTED AREA



HEDGE / LIVING WALL



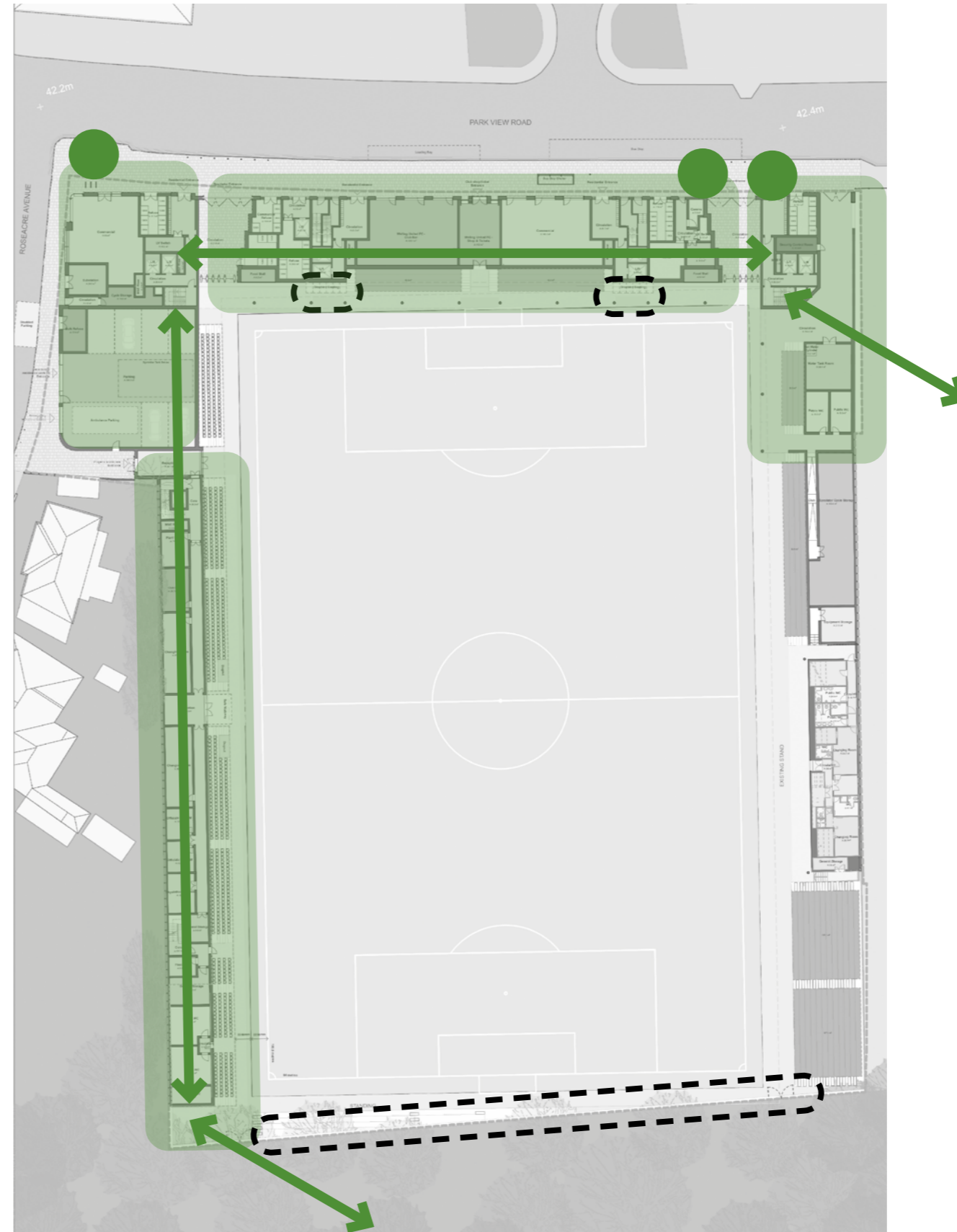
TREES



SHINGLE MARGIN; TRANSFORM TO GARDEN



STREET EDGES; TRANSFORM TO PLANTING



IDEAS



FORMAL TOPIARY



WILDLIFE PLANTING IN RAISED BEDS



SEATING OPPORTUNITIES





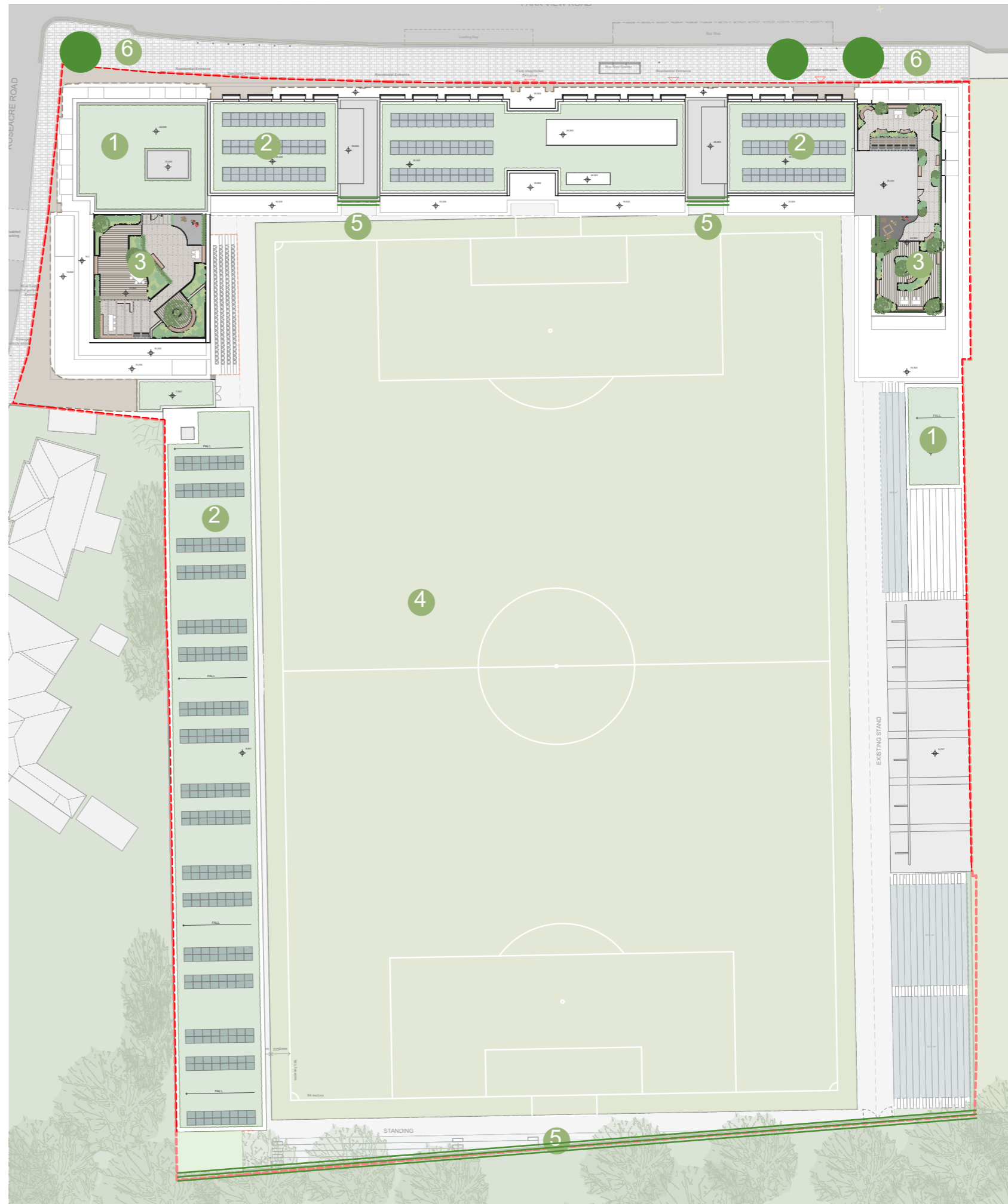
GREEN WALL

7.4 Landscape strategy

Key areas

Key

- ① EXTENSIVE GREEN ROOF
- ② EXTENSIVE GREEN ROOF & PV PANELS
- ③ ROOF TERRACE
- ④ 3G FOOTBALL PITCH
- ⑤ GREEN WALL 
- ⑥ NEW TREES 



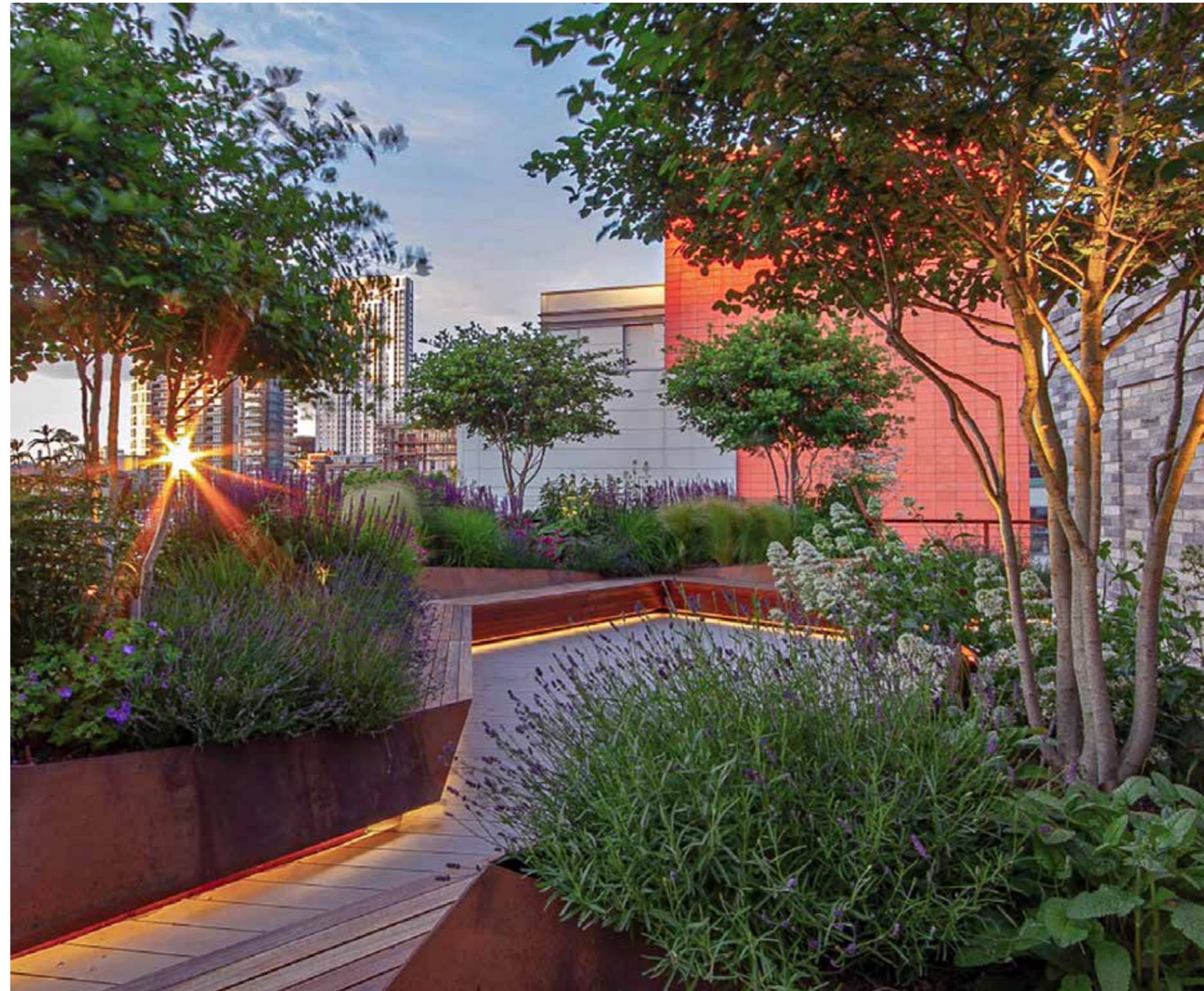
7.4 Landscape strategy

Style

The proposed building design celebrates the fusion of football club and housing.

This proposed landscape design style celebrates the unique location of local centre and historic parkland with a naturalistic form of planting and hard landscaping.

Enveloping the development is a planted glove using every surface possible as a location for planting and wildlife.



7.4 Landscape strategy

Woodland style planting

There are number of woodland style roof terrace illustrated to the right, these are all examples of London based roof terraces and illustrate the kind of lush containerized planting that can be achieved.



7.4 Landscape strategy

Seating & activity areas

The terrace gardens are divided by substantial planting into discreet activity areas. These areas will each serve family groups allowing many families to use the terraces at the same time. There is open space for play and games and tables for dining / working or playing games.



7.4 Landscape strategy

Roof Terraces - covered areas

Each terrace includes an outdoor kitchen and covered area. The outdoor kitchen allows people to wash and prepare food and / or access water. The covering affords greatly increased seasonal use and use in inclement weather.

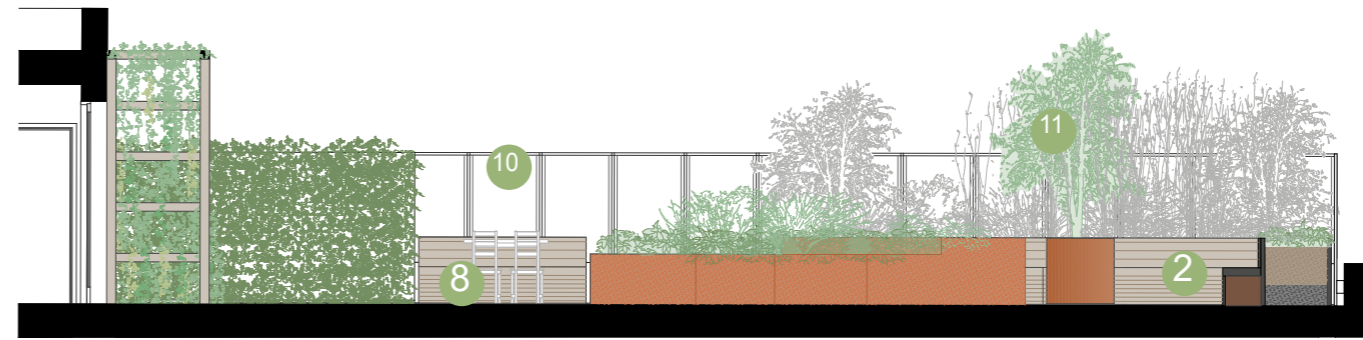


7.5 Terrace levels

East wing roof terrace

This terrace garden provides a family friendly area with space for play, cover in case of rain, screens to prevent wind and a number of subdivided areas to allow many families to use the space at the same time.

There is a small outdoor kitchen area for washing and food preparation, giving families the chance to take snacks and meals on the terrace too.

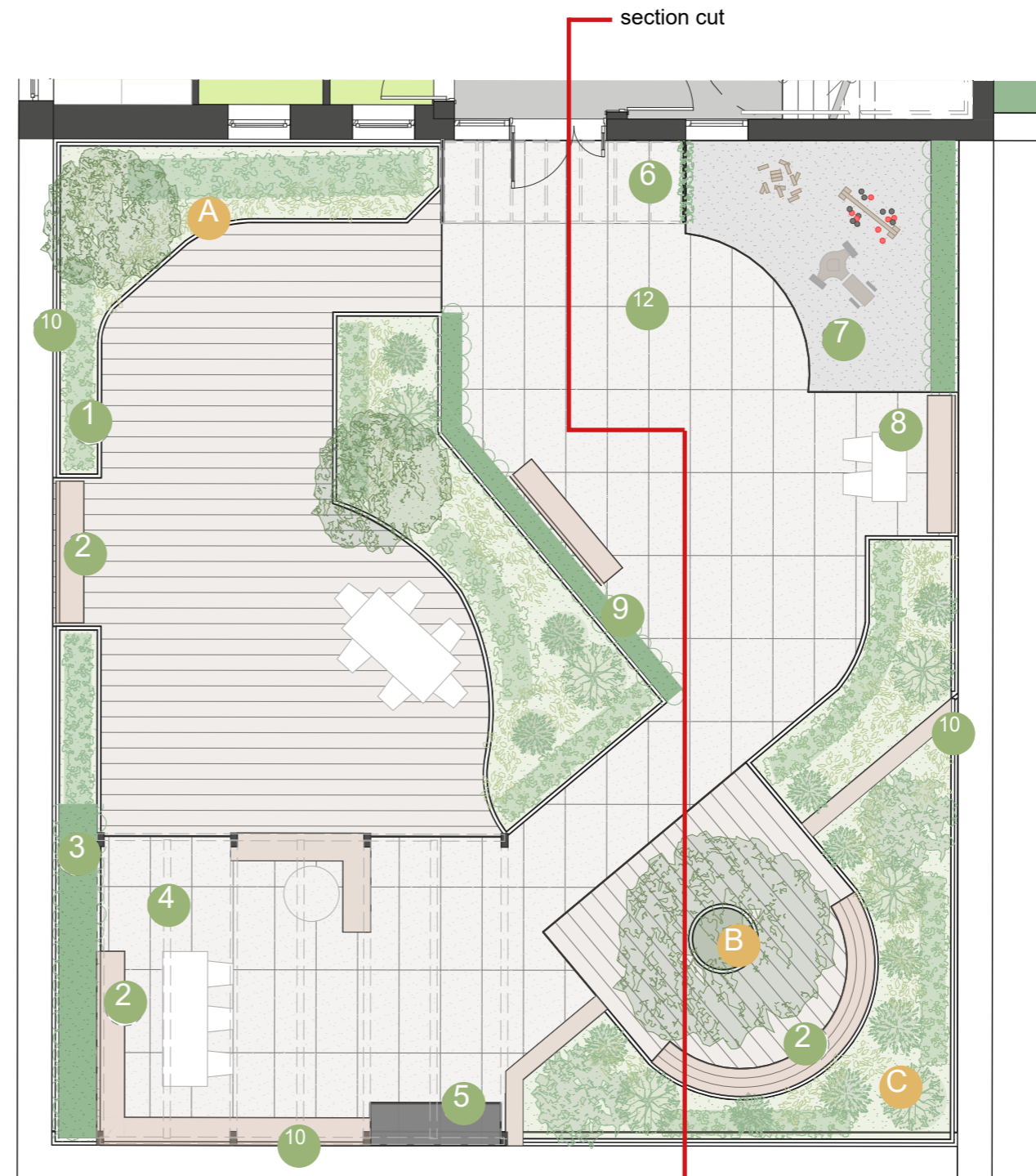


WEST WING ROOF SECTION

Key

- A** Raised beds with a combination of Feature Tree Type A and shrub types A-F
- B** Feature Tree Type B
- C** Herbaceous border planting

- 1** Planted raised beds
- 2** Seating area
- 3** Green wall perimeter
- 4** Covered amenity area providing space to be outside in inclement weather
- 5** This area also includes a small kitchen with a sink
- 6** Canopy with climbers over entrance to the roof garden
- 7** Toddlers soft play area
- 8** Seating and tables near play area
- 9** Ivy wall 1800mm high surrounding central garden. They provide structure and will be substantially evergreen for year round spatial separation
- 10** 1800mm high glass parapet for wind and safety protection
- 11** Feature tree with enclosed seating area
- 12** Paving stones on pedestals



WEST WING ROOF PLAN



7.5 Terrace levels

East wing roof terrace



WEST WING TERRACE AXONOMETRIC

7.5 Terrace levels

West wing roof terrace

This terrace garden also provides a family friendly area with space for play throughout the garden. There is an outdoor kitchen area with cover in case of rain, screens to prevent wind.

The northern part of this terrace close to the kitchen area is arranged for sitting with tables for dining and activities. The middle area includes raised planting troughs and seating and the southern area is arranged as more divided and private seating and play areas for families and any other use.

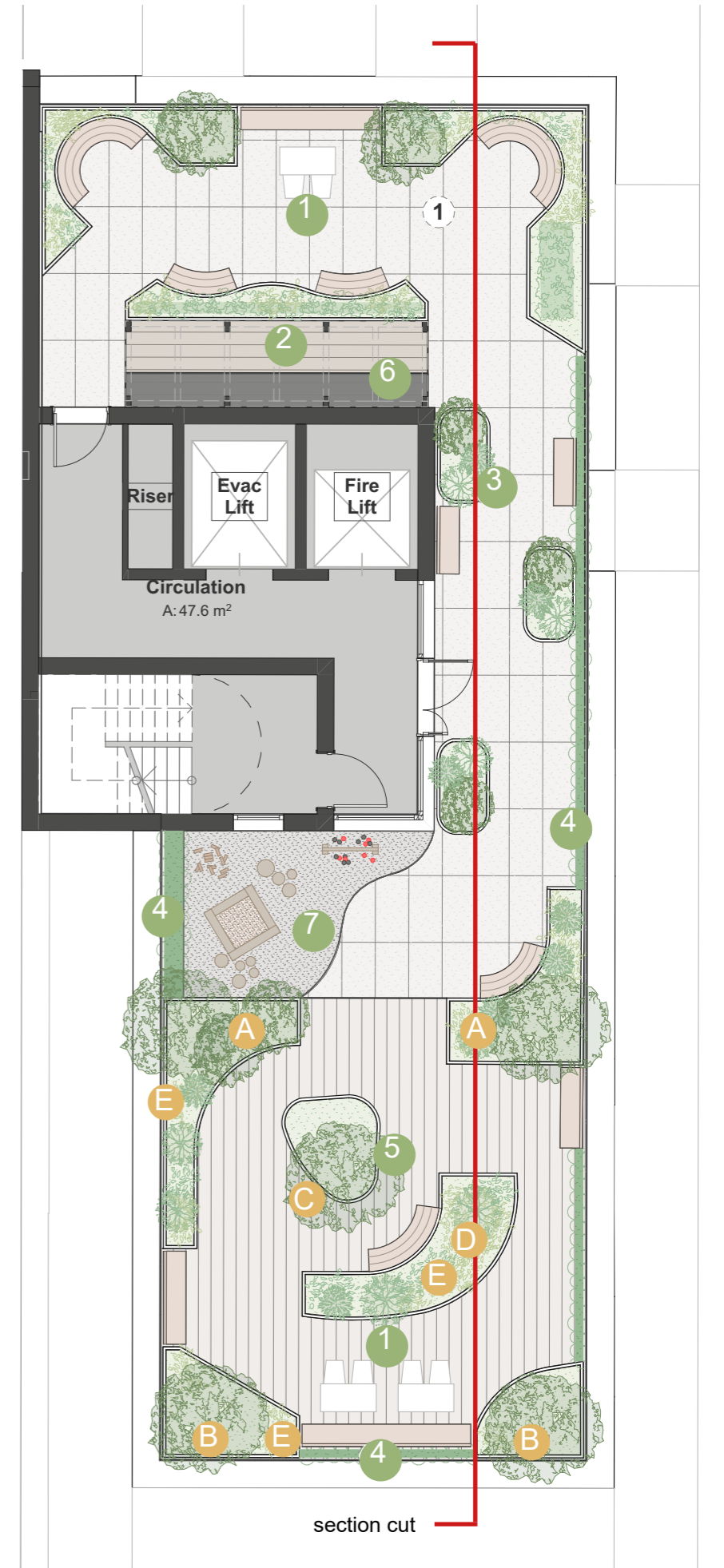


EAST WING ROOF SECTION

Key

- ① Activity area with seating and tables
- ② Canopy with climbers over entrance to the roof garden
- ③ Sensory garden area with seating and tables near play area
- ④ 1800mm high glass parapet for wind and safety protection
- ⑤ Woodland style area with hidden seating and activity spaces
- ⑥ Kitchen preparation area with sink
- ⑦ Paving stones on pedestals

- Ⓐ Feature tree & shrubs. Tree/ Shrub A
Tree type and shrubs B-F
- Ⓑ Feature Tree Type A
- Ⓒ Feature Tree Type B
- Ⓓ Feature Tree Type C
- Ⓔ Herbaceous border planting



EAST WING ROOF PLAN SKETCH

7.5 Terrace levels

West wing roof terrace



EAST WING TERRACE AXONOMETRIC

7.5 Terrace Levels

Planters

Perimeter Long Trough– For supporting small shrubs.

Product:- Adezz Andes Rectangular CA 22 Corten Steel Planter
100% recyclable material

Specification:- Planters are 2000mm long 500mm wide and 600mm high. Filled with potting soil horticultural grit at the base. 2 holes drilled for irrigation 15mm from base at either end. Planters to be positioned end to end around terraces with 50mm gaps and gaps to the walls

Colour:- Natural Corten Steel



7.5 Terrace levels

Green roofs & decking

1 Green Roof – Type 1 Green roof over blue roof

Product:- BauderBlue Stormcell biodiverse green roof or similar.
100-150mm overall depth, works with solar array, is walkable, and does not need regular irrigation.

Specification:- Green roof incorporating the addition of blue roof water retention properties. Great for promoting biodiversity.

Location:- west stand roof, main residential block roofs where PV are located

2 Green Roof – Type 2 Extensive Type Roof

Product:- Permagard / Bauder or similar
100-200mm overall depth, works with solar array, is walkable and does not need irrigation.

Specification:- Provides storm water mitigation, hosts grasses-herbs and moss. Great for promoting biodiversity.

Location:- all other roofs labeled as green roofs

3 Sustainable Terrace Decking – Low Carbon Product

Product:- Millboard Weathered Oak Vintage – MDW200V www.millboard.co.uk

Specification:- Hard wearing natural appearance, Fire Rating A2 100% timber free and composite decking. ISO 14064-1 Verified Low Carbon Footprint Product

Location:- east and west roof terraces

4 Terrace decking on pedestals

Product:- Tobermore Mayfair flags www.tobermore.co.uk

Description: Durable non slip granite like surface. Made from natural aggregates and recyclable.

Colour: Sandstone

Location:- east and west roof terraces



7.5 Terrace levels

Entrance planters

Feature Planter– For supporting small trees and perennials

Product:- Adezz Andes Rectangular CAP 6.1 Corten Steel Planter

100% recyclable material

Specification:- Planters are 800mm long 800mm wide and 800mm high. Filled with potting soil horticultural grit at the base. 2 holes drilled for irrigation 15mm from base at either end. Planters to be positioned end to end around terraces with 50mm gaps and gaps to the walls

Colour:- Natural Corten Steel



Feature Planter Plants

Product:- Illex Crenata – Cloud Pruned Tree – Planted 1.5m high

Planter finished with grey slate pieces.



7.5 Terrace levels

Landscape equipment



Terrace Benches & Tables
Product:- Adezz www.adezz.com Storr Corten
Specification:- Various Sizes
Colour:- Corten and Oak



Landscape Hockers
Product:- Adezz www.adezz.com Hockers
Specification:- Various Sizes
Colour:- Corten and Oak



Moveable and Stackable Tables & Seating - for terrace areas
Product:- TBC
Specification:- Various Sizes
Colour:- Corten and Oak

7.6 Planting palette

Trees



Tree Type A

Portuguese Laurel – *Prunus Lusitanica*
Angustifolia

Planted with as 250-300m full standard (clear stem 180cm) pot grown about 100Lt.

Ultimate height 4-8m and 4-8 spread

To be maintained as an oval dome 3mx3m by annual clipping in the late autumn



Tree Type B –

Japanese Dogwood– *Cornus Kousa* Schmetterling
- Multi-stem

Planted with as 2-2.5 m specimen, pot grown about 50-75lt.

Ultimate height 3-5m and 3-4 spread

To be maintained with a multi domed canopy by annual clipping in the late autumn to restrict the canopy to a maximum of 3m spread.



Tree Type C –

Small Bamboo– *Fargesia Rufa*

Planted with as 1.5-2.m specimen, pot grown about 10-20lt.

Ultimate height 22.5m m and 1-2 spread

To be maintained with an annual prune. The plants will be restricted in a dedicated planting pot so that its roots do not spread to other areas.

7.6 Planting palette

Shrubs



Tree / Shrub Type A
Photinia Red Robin Fraseri – Shrub Tree

Planted with as 2m high pot grown about 75-100Lt.

Ultimate height 3-4m spread 2m approximately
To be maintained as a vertical shaped shrub about 2-5m high and 1.5m spread. Trim in the spring



Shrub Type B
Camellia Japonica in Pink and Red form– Shrub

Planted with as 1m high pot grown

Ultimate height 2-3m spread 1.5-2m approximately
To be maintained as a roughly roundish shaped shrub. Slow growing so it does not need a lot of pruning light prune in the spring to maintain shape.



Shrub Type C
Virginia Sweetspire

Planted with as 500mm high pot grown

Ultimate height 2m spread 1m approximately
To be maintained as a roughly shaped shrub. Slow growing and is great for insect habitat and is tolerant of shade and sun..



Tree / Shrub Type D
Viburnum Tinus– Shrub Tree

Planted with as 5-700mm high pot grown about 10lt

Ultimate height to be controlled by pruning.
To be maintained as a rounded shaped shrub about 1.5m high and 1.5m spread maximum.
Prune in the spring



Shrub Type E
Hebe Blue Gem

Planted with as 300mm high pot grown plan in approx. 3-4lt pot

Ultimate height 1.2m spread 1.2m approximately
To be maintained as a roughly roundish shaped shrub. Slow growing so it does not need a lot of pruning light prune in the spring to maintain shape.



Shrub Type F
Indigofera Heterantha

Planted with as 500mm high pot grown

Ultimate height 2m spread 2m approximately
To be maintained as a roughly shaped shrub. Slow growing and is great for insect habitat with summer flowers, prune in spring.

7.6 Planting palette

Typical herbaceous border border planting, including below and around feature trees



Asarum europaeum



Asplenium scolopendrium



Echinacea purpurea



Geranium macrorrhizum



Hakonechloa macra



Heuchera micrantha 'Purple palace'



Iris chrysographes 'Black Knight'



Lavandula angustifolia 'Hidcote'



Lavender angustifolia 'Rosea'



Osmanthus x burkwoodii



Pachysandra terminalis 'Green Carpet'



Pennisetum setaceum



Phlox subulata 'Emerald Cushion Blue'



Polystichum setiferum



Rosmarinus 'Tuscan Blue'

7.6 Planting palette

East wing sensory garden

It is proposed to include a sensory garden area in the middle of block D roof terrace. These gardens are great for nature and enjoyable for all age groups.

SIGHT



SPECIES

Echinacea Purpurea and White Swan, Heuchera Black Pearl, Geranium Rozanne (not illustrated)

TOUCH



Eryngium Big Blue, Stachys Byzantina,

HEAR



Miscanthus Sinensis
Condensatus Cosmopolitan
Stainless Steel Bird Feeder
Water bath from Opossum Design

SMELL



Rosemary,
Rosa Princess Ann,
Lavender
Munstead English

TASTE



Fennel (Grown as a perennial),
Globe artichoke

7.6 Planting palette

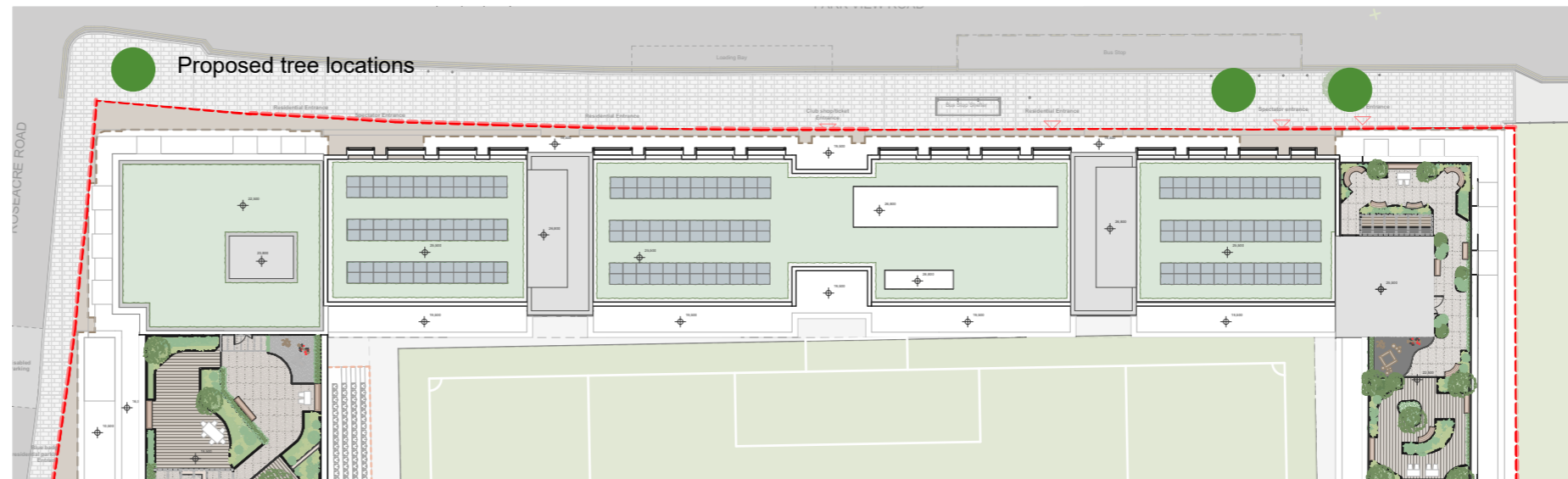
New street trees

Trees on Park View Road

Product:- Pyrus Calleryana Chanticleer Planted as a heavy 150KG pot grown specimen

Specification:- Compact tree with a vertical growing habit, upto 5-8m high.

Planted in structural tree pit – refer to specification. With 30m3 column



Tree Pit Base

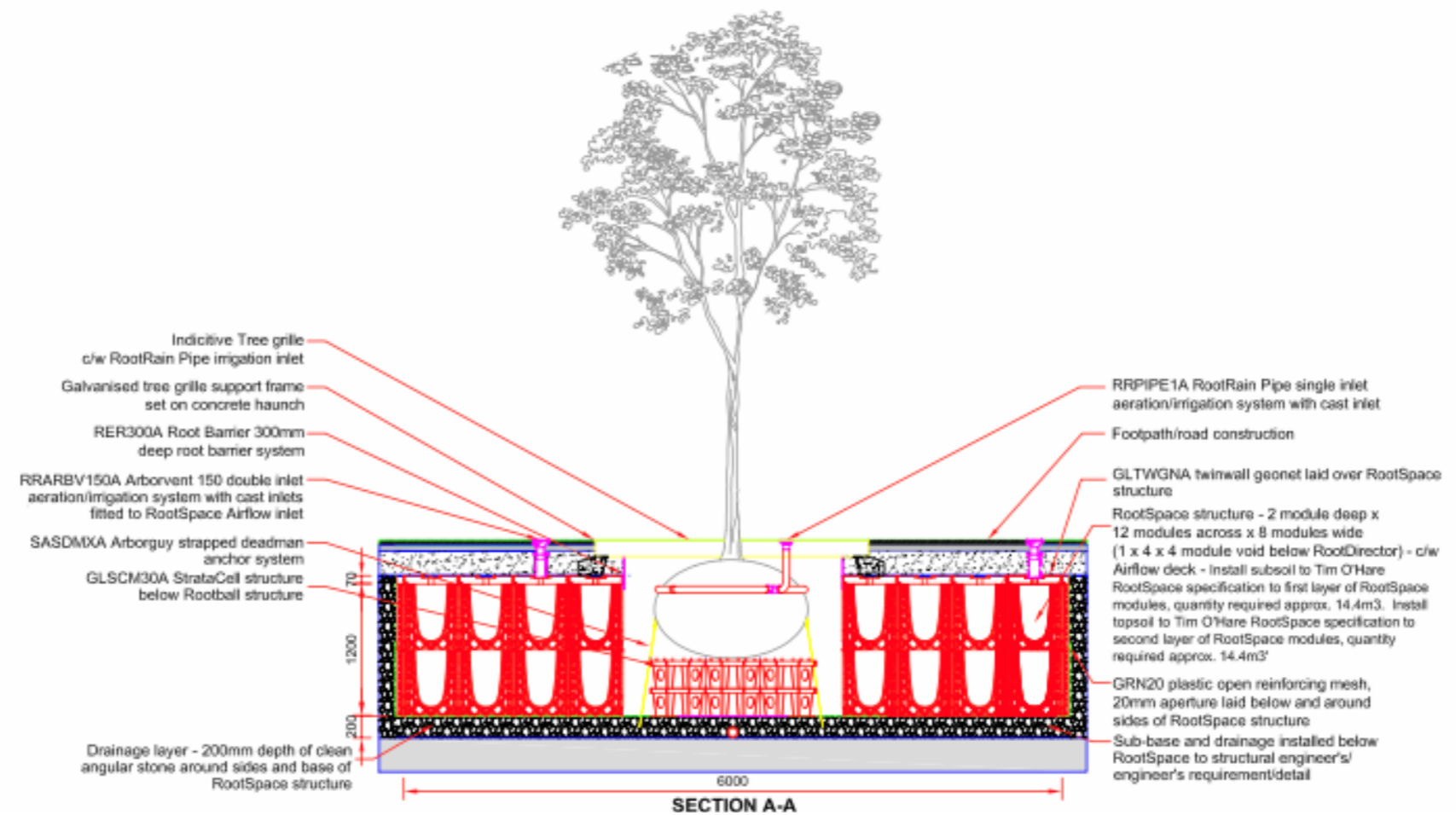
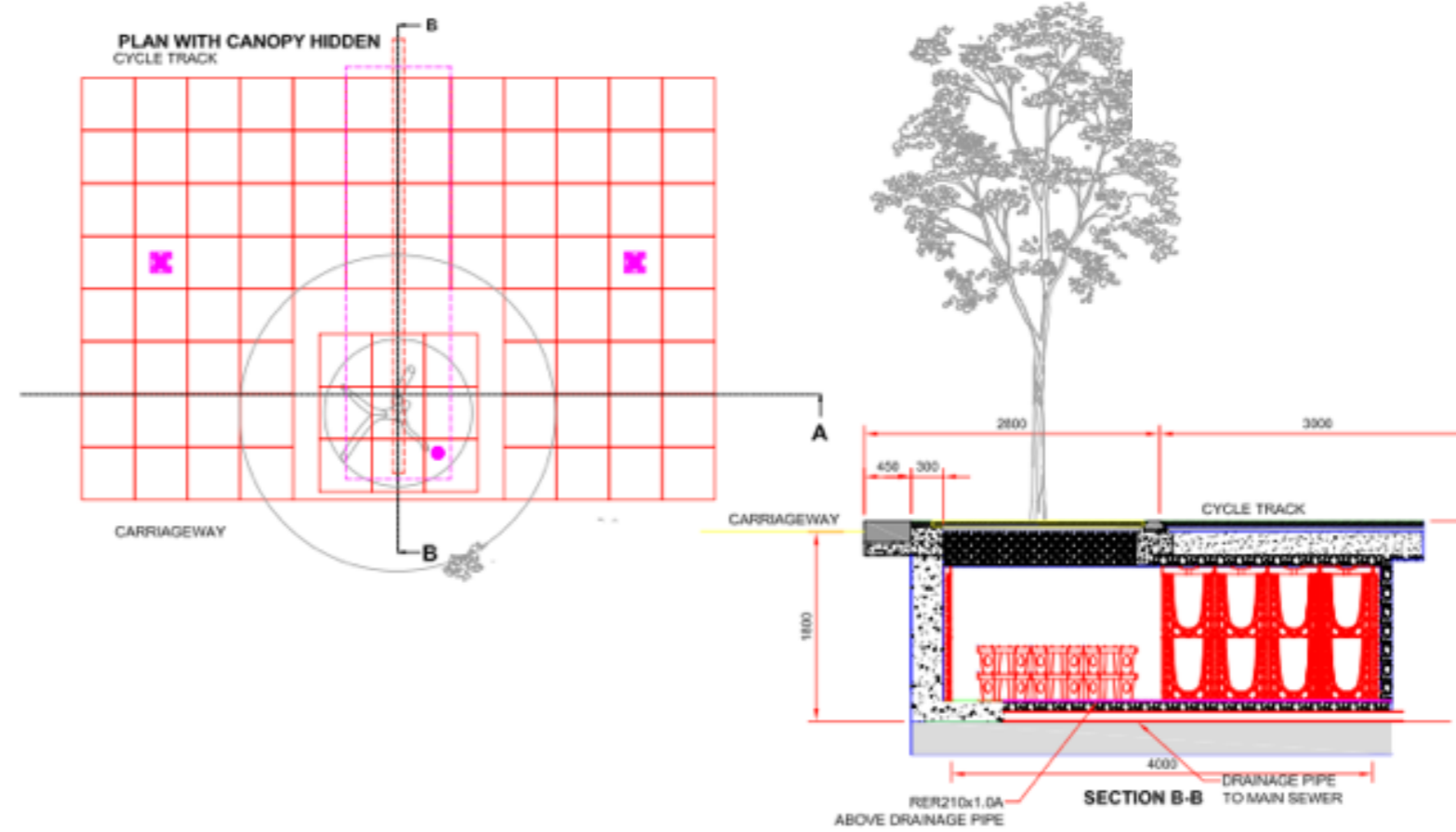
Product:- Stainless Steel Metal tree grillage. Green Tech Dentdale Grille www.green-tech.co.uk

7.6 Planting palette

New street trees

Structural Tree Pits

Product:- Structure Tree Pit by Green Blue www.greenblue.com



7.6 Planting palette

Green Walls

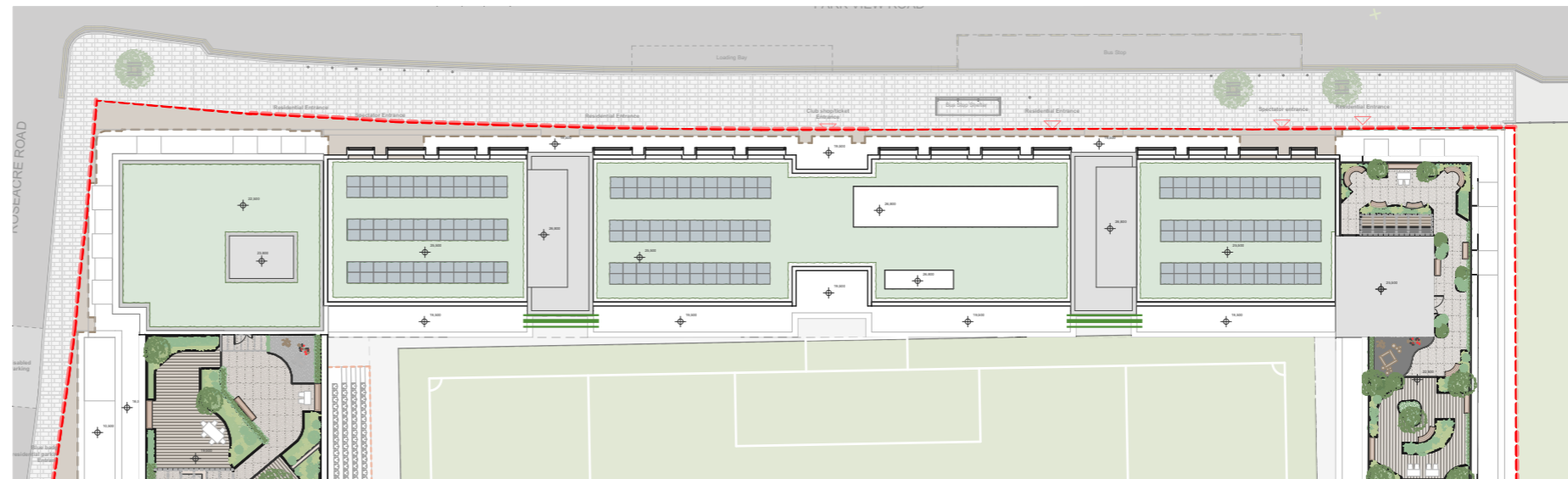
Green Walls– For supporting climbing plants

Product:- Jakob – Mesh Planting Wall

Specification:- This wall can be used on terraces where it is support by metal posts fixed to the deck and planting in adjacent beds or troughs. It can also be used at ground level where planting will be put into prepared ground.

Colour:- High Grade Stainless Steel

==== Location of green wall



LOCATION OF GREEN WALLS

Webnet Classic	Webnet Classic - KR	Webnet Classic - KR	Webnet Classic - KR
30024-0205-43	30024-0205-43-100	30024-0205-43-150	30024-0205-43-200
30,8 x 7	30,8 x 7	30,8 x 7	30,8 x 7
V04	V04	V04	V04
300	100	150	200
3000	1000	1500	2000
1500	1000	1500	2000
12	4	4	4

Webnet Classic
 - 4 Distanzhalter GreenDella
 - 4 Formanhschrauben M8
 - 4 Zylinderbolzen M8

Webnet Classic - KR
 - 4 Distanzhalter GreenDella
 - 4 Formanhschrauben M8
 - 4 Zylinderbolzen M8

Webnet Classic - KR
 - 4 Distanzhalter GreenDella
 - 4 Formanhschrauben M8
 - 4 Zylinderbolzen M8

Webnet Classic - KR
 - 4 Distanzhalter GreenDella
 - 4 Formanhschrauben M8
 - 4 Zylinderbolzen M8

Webnet Classic	Webnet Classic - KR	Webnet Classic - KR	Webnet Classic - KR
30024-0205-43	30024-0205-43-100	30024-0205-43-150	30024-0205-43-200
30,8 x 7	30,8 x 7	30,8 x 7	30,8 x 7
V04	V04	V04	V04
300	100	150	200
3000	1000	1500	2000
1500	1000	1500	2000
12	4	4	4

Webnet Classic
 - 4 Distanzhalter GreenDella
 - 4 Formanhschrauben M8
 - 4 Zylinderbolzen M8

Webnet Classic - KR
 - 4 Distanzhalter GreenDella
 - 4 Formanhschrauben M8
 - 4 Zylinderbolzen M8

Webnet Classic - KR
 - 4 Distanzhalter GreenDella
 - 4 Formanhschrauben M8
 - 4 Zylinderbolzen M8

Webnet Classic - KR
 - 4 Distanzhalter GreenDella
 - 4 Formanhschrauben M8
 - 4 Zylinderbolzen M8



JAKOB MESH SYSTEM FOR CLIMBING PLANTS

7.6 Planting palette

Green Walls


Green Walls

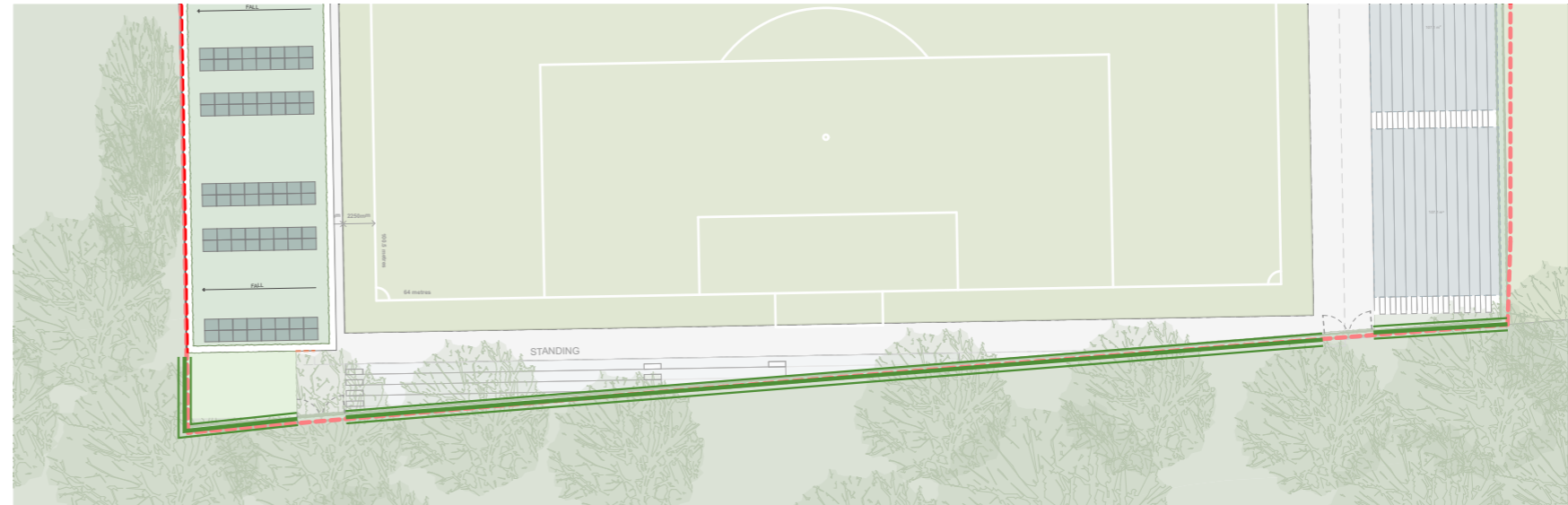
Product:- Jakob Rope Systems www.green-walls.co.uk

Ropes with a V formation 1200mm

Suitable plants include Clematis Vitalba (travelers' joy), Vitis vinifera (grape vine), Passiflora (passion flower).

All plants would be planted at ground level in small Green Blue tree pits each of 5.4m³. Plants planted two per pit, pits at 5m intervals around the base of the building.

 Location of green wall



LOCATION OF GREEN WALL



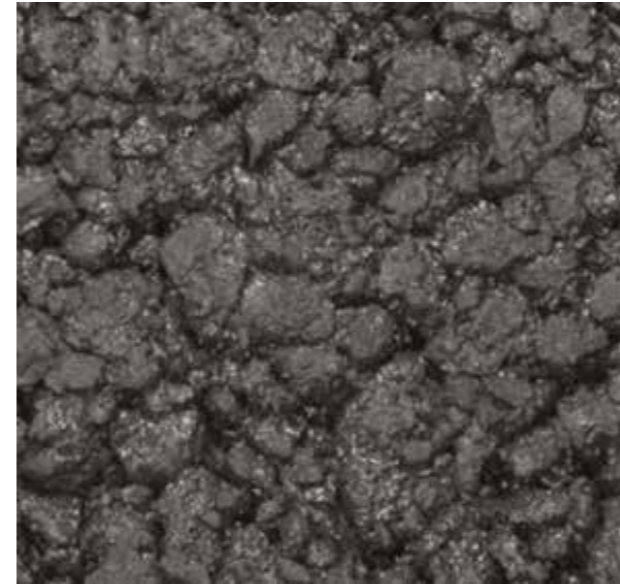
7.7 Material palette

The materials on this page were chosen for the following reasons

- Complimentary to the building design
- Hard wearing
- Low maintenance
- Slip resistance
- Manufactured from recycle material and/ or highly recyclable



STREET PAVING
Manufacturer: Tobermore
Type: Braemar
Colour: Alto Silver



VEHICULAR CIRCULATION
Manufacturer: Tarmac
Type: Asphalt Ulticolour
Colour: Dark grey



SPECTATOR CIRCULATION
Manufacturer: Tarmac
Type: Asphalt Ulticolour
Colour: Light buff



PLANTERS
Manufacturer: Adezz
Type: Andes
Colour: Corten steel

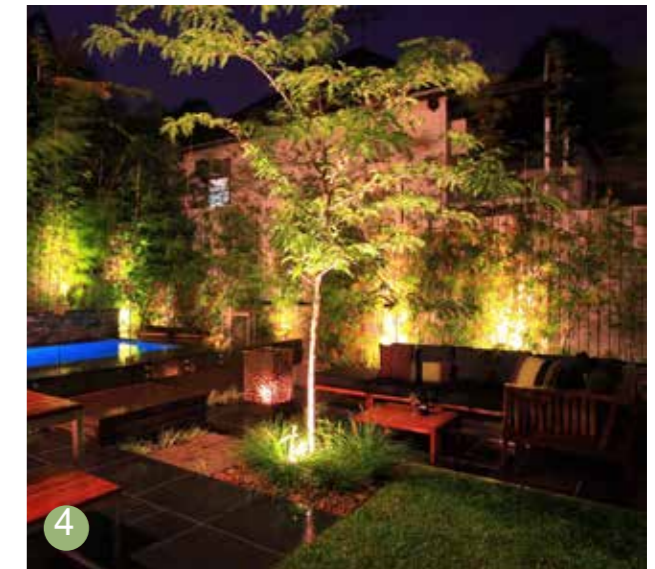
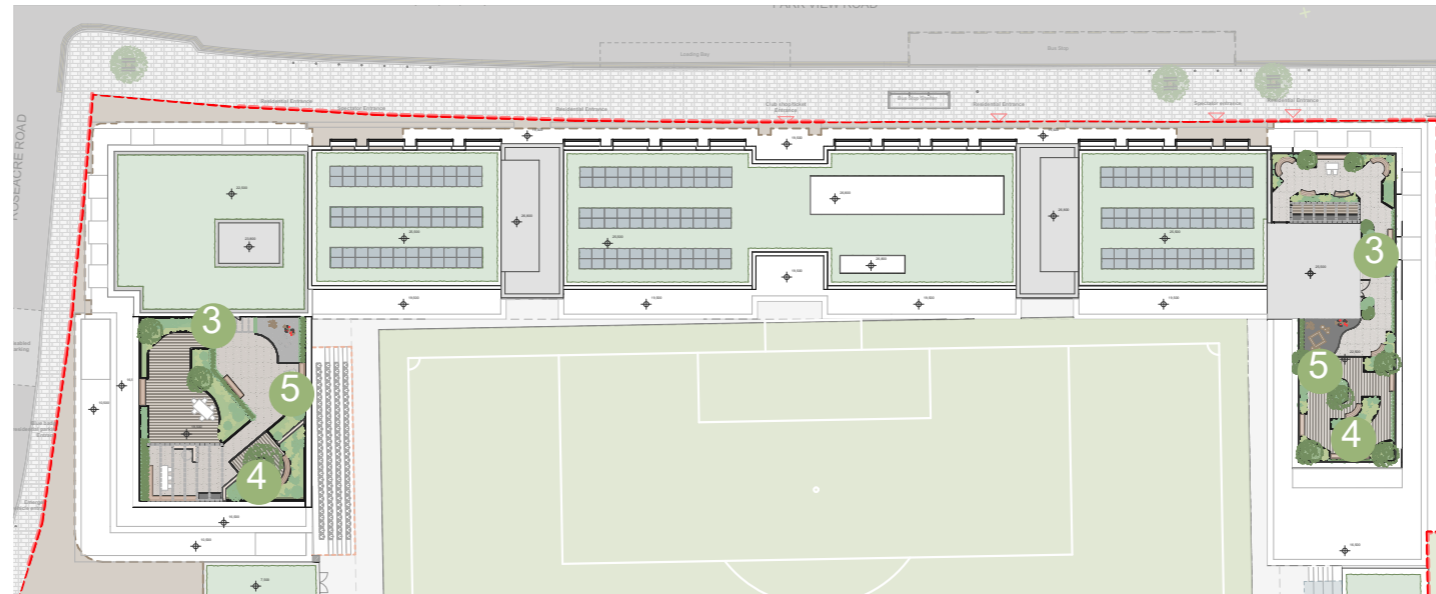


ROOF TERRACE DECKING
Manufacturer: Millboard
Type: Composite decking
Colour: Weathered Oak
Vintage



COMPOSITE WOOD PERGOLA
Manufacturer: Seventrust
Type: Composite planks & sections
Colour: Oak

7.8 Lighting strategy



- Key
- ① ENTRANCE PORTAL LIGHTING
 - ② STREET LIGHTING MOUNTED ON BUILDING
 - ③ RECESSED WALL LIGHTING TO CORE ENTRANCE
 - ④ FEATURE TREE UP-LIGHTING
 - ⑤ RECESSED STRIP LIGHTING TO PLANTERS

With the exclusion of the stadium, there are three areas where specific lighting design could enhance the scheme.

Due to the relatively narrow pavements, we believe there is benefit to mounting the street lighting on the building to keep the pavement clutter free. The stadium entrance portals also represent an opportunity to celebrate the spectator entry points.

Finally the roof terraces are an obvious area where the lighting can be discretely integrated in to the landscape proposals.



7.9 Play strategy

Play spaces in Welling

Danson Park represents the primary centre of play and leisure activity within the immediate vicinity of the site. In addition to the playgrounds and tennis courts many youth activities centre around watersports within the Boating Pool.

The Danson Youth centre provides indoor and outdoor activities for all age groups and resides within a 10min walk from the proposed site.

Apart from Danson Park there appears to be a shortage of public play/leisure space/ multi purpose sports grounds within a 5-10min walk from the applicant site. Many of the nearby open spaces belong to schools, leisure centres, golf clubs, private sports clubs and institutions etc.

The diagram above indicates the locations of children's play space within a reasonable walking distance from the site.

This study suggests and reinforces the idea that play space as part of the application scheme is important due to the relative lack of accessible nearby facilities.

Although Danson Park is adjacent to the site, the means of access is not direct for pedestrians. This may dissuade some people from walking 10min (700m) to the Danson Park playground.

SUMMARY & CONCLUSION

Overall, the proposals will deliver 277sqm of new dedicated play and playable landscape. 100% of the doorstep play requirements for young children aged 0-4 have been satisfied (181sqm), as well as 80.7% of local play (96sqm against a requirement of 119sqm) for 5-11 year olds.

All 0-4 and 5-11 play space requirements have been delivered on the West and East Wings for the blocks/units which have access to these spaces. The first-floor podium garden has been maximised for play space, and will deliver a compliant level of 0-4 doorstep play (104sqm), but will provide 65.2% of 5-11 year old play space for its occupiers (45sqm against a requirement of 69sqm).

In accordance with GLA guidance, an assessment of play opportunities has been undertaken on the basis of a 100m walk for the 0-4 age group, 400m walk for 5-11 age group, and 800m walk for 12+ age group. The assessment identifies that Danson Park is located 600m walking distance from the site, and is therefore within a suitable distance for the 12+ age group (800m requirement). On this basis, the deficiency in 12+ play provision can be satisfied off-site at the nearby Danson Park, which offers dedicated play areas, green space and sports courts



for older age groups to enjoy.

Whilst there is a shortfall in 5-11 year olds which cannot be addressed off-site in line with GLA guidance, this is considered to be a small shortfall and Danson Park is located approximately 600m walking distance from the site, only slightly above the 400m threshold, with extensive opportunities for play.

It should also be noted that there are also additional open spaces and play spaces, such as Stevens Park, Penhill Park and Falconwood Park, which offer further opportunities for play beyond the walking distances in GLA guidance.

In conclusion, the minor shortfall in 5-11 year old play space is considered to be acceptable given the circumstances, as well as the fact the proposals have sought to maximise play space within a constrained

site. Additionally, the shortfall in play space for the 12+ age group can be suitably addressed through Danson Park, in line with GLA guidance. As such, the proposals will deliver extensive private and communal amenity space and play space, and will offer residents a high-quality environment.

7.9 Play strategy

CALCULATIONS

PLAY SPACE BASED ON 104 DWELLINGS

4 BLOCKS (TWO SHARED)

10m² per CHILD

24 X 1 BED UNITS

61 X 2 BED UNITS

19 X 3 BED UNITS

ALL DESIGNATED AS MARKET HOUSING

ALL 12+ PLAY SPACE IS OFF-SITE

BLOCK A (WEST)

0-4 YEARS - 47m²

5-11 YEARS - 32m²

BLOCK B & C (CENTRE)

0-4 YEARS - 104m²

5-11 YEARS - 69m²

BLOCK D (EAST)

0-4 YEARS - 30m²

5-11 YEARS - 19m²

0-4 YEARS TOTAL - 178m²

5-11 YEARS TOTAL - 119m²

TOTAL PLAY SPACE 0-11 YEARS - 297m²

Block A

GLA Population Yield Calculator

	1 bed	2 bed	3 bed	4 bed
Market and Intermediate Units	8	12	8	
Social Units				

Total Units	28
-------------	----

Geographic Aggregation	Outer London
------------------------	--------------

PTAL	PTAL 3-4
------	----------

Notes

Sample size of 17 sites
Shaded cells require user input
Select both geography and PTAL
For developments in Outer London with PTAL 5-6 use [London/PTAL 5-6] or [Outer London/3-4] to calculate yield

Yield from Development (persons)

	Market & Intermediate	Social	Total
Ages 0, 1, 2, 3 & 4	4.7	0.0	4.7
Ages 5, 6, 7, 8, 9, 10 & 11	3.2	0.0	3.2
Ages 12, 13, 14 & 15	1.0	0.0	1.0
Ages 16 & 17	0.5	0.0	0.5
18-64	48.3	0.0	48.3
65+	1.2	0.0	1.2
Total Yield	58.9	0.0	58.9

Play Space Calculator

Total Children	9.5
----------------	-----

	Benchmark (m ²)	Total play space (m ²)
Play space requirement	10	94.5

Block D

GLA Population Yield Calculator

	1 bed	2 bed	3 bed	4 bed
Market and Intermediate Units	14	8	2	0
Social Units	0	0	0	0

Total Units	24
-------------	----

Geographic Aggregation	Outer London
------------------------	--------------

PTAL	PTAL 3-4
------	----------

Notes

Sample size of 17 sites
Shaded cells require user input
Select both geography and PTAL
For developments in Outer London with PTAL 5-6 use [London/PTAL 5-6] or [Outer London/3-4] to calculate yield

Yield from Development (persons)

	Market & Intermediate	Social	Total
Ages 0, 1, 2, 3 & 4	3.0	0.0	3.0
Ages 5, 6, 7, 8, 9, 10 & 11	1.9	0.0	1.9
Ages 12, 13, 14 & 15	0.4	0.0	0.4
Ages 16 & 17	0.2	0.0	0.2
18-64	37.8	0.0	37.8
65+	0.9	0.0	0.9
Total Yield	44.2	0.0	44.2

Play Space Calculator

Total Children	5.5
----------------	-----

	Benchmark (m ²)	Total play space (m ²)
Play space requirement	10	55.3

Block B & C

GLA Population Yield Calculator

	1 bed	2 bed	3 bed	4 bed
Market and Intermediate Units	0	42	10	
Social Units				

Total Units	52
-------------	----

Geographic Aggregation	Outer London
------------------------	--------------

PTAL	PTAL 3-4
------	----------

Notes

Sample size of 17 sites
Shaded cells require user input
Select both geography and PTAL
For developments in Outer London with PTAL 5-6 use [London/PTAL 5-6] or [Outer London/3-4] to calculate yield

Yield from Development (persons)

	Market & Intermediate	Social	Total
Ages 0, 1, 2, 3 & 4	10.4	0.0	10.4
Ages 5, 6, 7, 8, 9, 10 & 11	6.9	0.0	6.9
Ages 12, 13, 14 & 15	1.8	0.0	1.8
Ages 16 & 17	0.9	0.0	0.9
18-64	93.5	0.0	93.5
65+	2.2	0.0	2.2
Total Yield	115.8	0.0	115.8

Play Space Calculator

Total Children	20.0
----------------	------

	Benchmark (m ²)	Total play space (m ²)
Play space requirement	10	200.5

Overall

GLA Population Yield Calculator

	1 bed	2 bed	3 bed	4 bed
Market and Intermediate Units	24	61	19	0
Social Units	0	0	0	0

Total Units	104
-------------	-----

Geographic Aggregation	Outer London
------------------------	--------------

PTAL	PTAL 3-4
------	----------

Notes

Sample size of 17 sites
Shaded cells require user input
Select both geography and PTAL
For developments in Outer London with PTAL 5-6 use [London/PTAL 5-6] or [Outer London/3-4] to calculate yield

Yield from Development (persons)

	Market & Intermediate	Social	Total
Ages 0, 1, 2, 3 & 4	17.8	0.0	17.8
Ages 5, 6, 7, 8, 9, 10 & 11	11.9	0.0	11.9
Ages 12, 13, 14 & 15	3.1	0.0	3.1
Ages 16 & 17	1.6	0.0	1.6
18-64	178.7	0.0	178.7
65+	4.3	0.0	4.3
Total Yield	217.3	0.0	217.3

Play Space Calculator

Total Children	34.4
----------------	------

	Benchmark (m ²)	Total play space (m ²)
Play space requirement	10	343.8

7.9 Play strategy - Block B & C

The first-floor children's play area will have active play equipment and sheltered outdoor space for families, including common room style seating and tables.

There will also be a toilet and baby change facilities.

From the calculations on p140, we need to provide 104m² of space for 0-4yrs, and 69m² for 5-11yrs which totals 173m² of play space.

Because there is insufficient space to accommodate the required 173m², we have strategically decided to concentrate this area for doorstep play (0-4yrs) providing 100% of the space requirement. The remaining 45m² can be used for 5-11yrs.



FIRST FLOOR COVERED PLAY SPACE

Key

- PLAY SPACE 0-4 YEARS
- PLAY SPACE 5-11 YEARS



DOOR STEP PLAY - covered play space



COVERED PLAY SPACE REFERENCE

7.9 Play strategy A & D

Communal amenity and play space is provided for residents' on the fifth floor of the West wing and sixth floor of the East wing roofs as illustrated on the roof plan below.

These spaces principally provide a safe play space for children. A 1.8m perimeter glass or mesh screen will provide wind breaking and prevent items falling on the pitch or spectator areas below.

There is a dedicated large covered children's play area with children's active play equipment at first floor which is shared between Block B & C. The roof top terrace areas provide integrated play in a family setting. There are areas of dedicated space for children's play equipment, but also open space for play and more intimate areas for family groups, story time, games and the like.

TERRACE AREAS

Block A (west wing) roof terrace area - 189m²
 Block B&C (centre) first floor area - 149m²
 Block D (east wing) roof terrace area - 161.5m²

PLAY SPACE AREAS

WEST WING BLOCK A

- Communal Amenity: 110sqm
- 0-4 Play Space: 47sqm (100% of requirement)
- 5-11 Play Space: 32sqm (100% of requirement)
- TOTAL: 189sqm

EAST WING BLOCK D

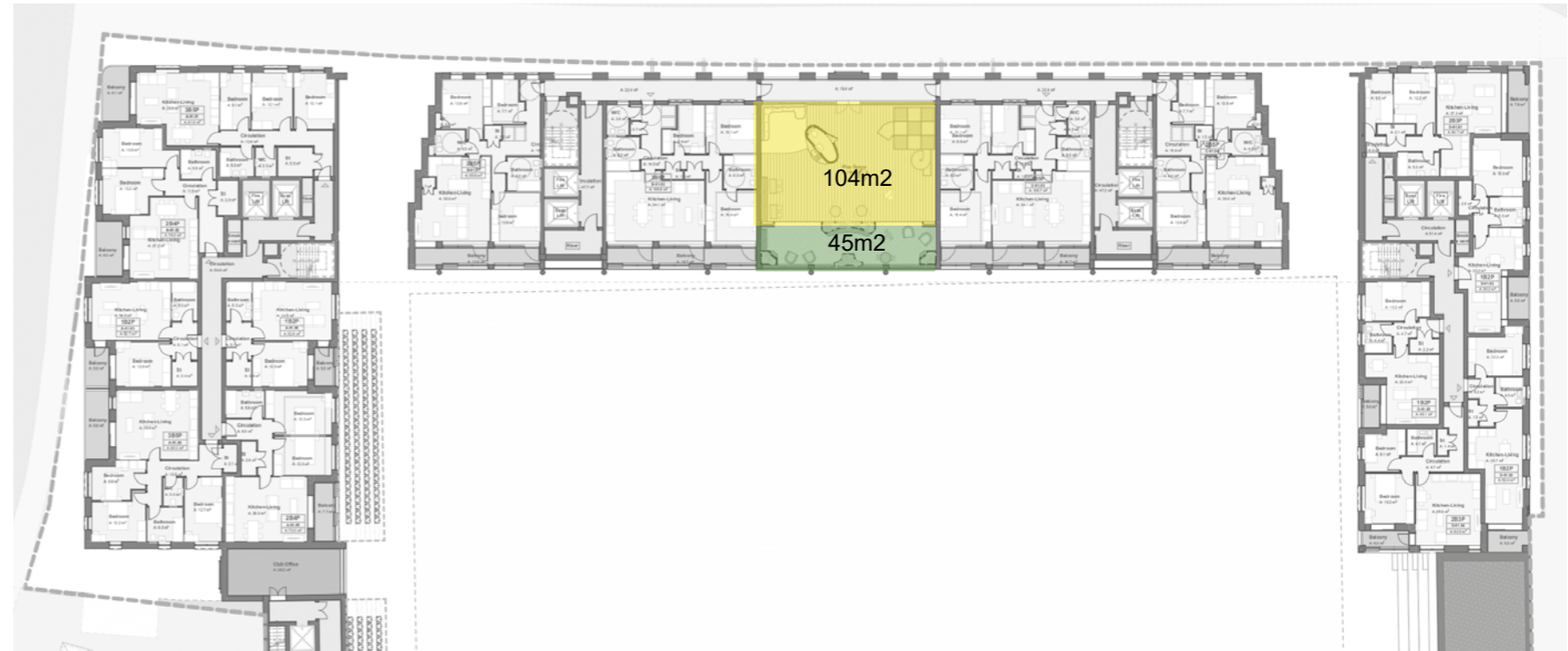
- Communal Amenity: 112.5sqm
- 0-4 Play Space: 30sqm (100% of requirement)
- 5-11 Play Space: 19sqm (100% of requirement)
- TOTAL: 161.5sqm

FIRST FLOOR - BLOCK B&C

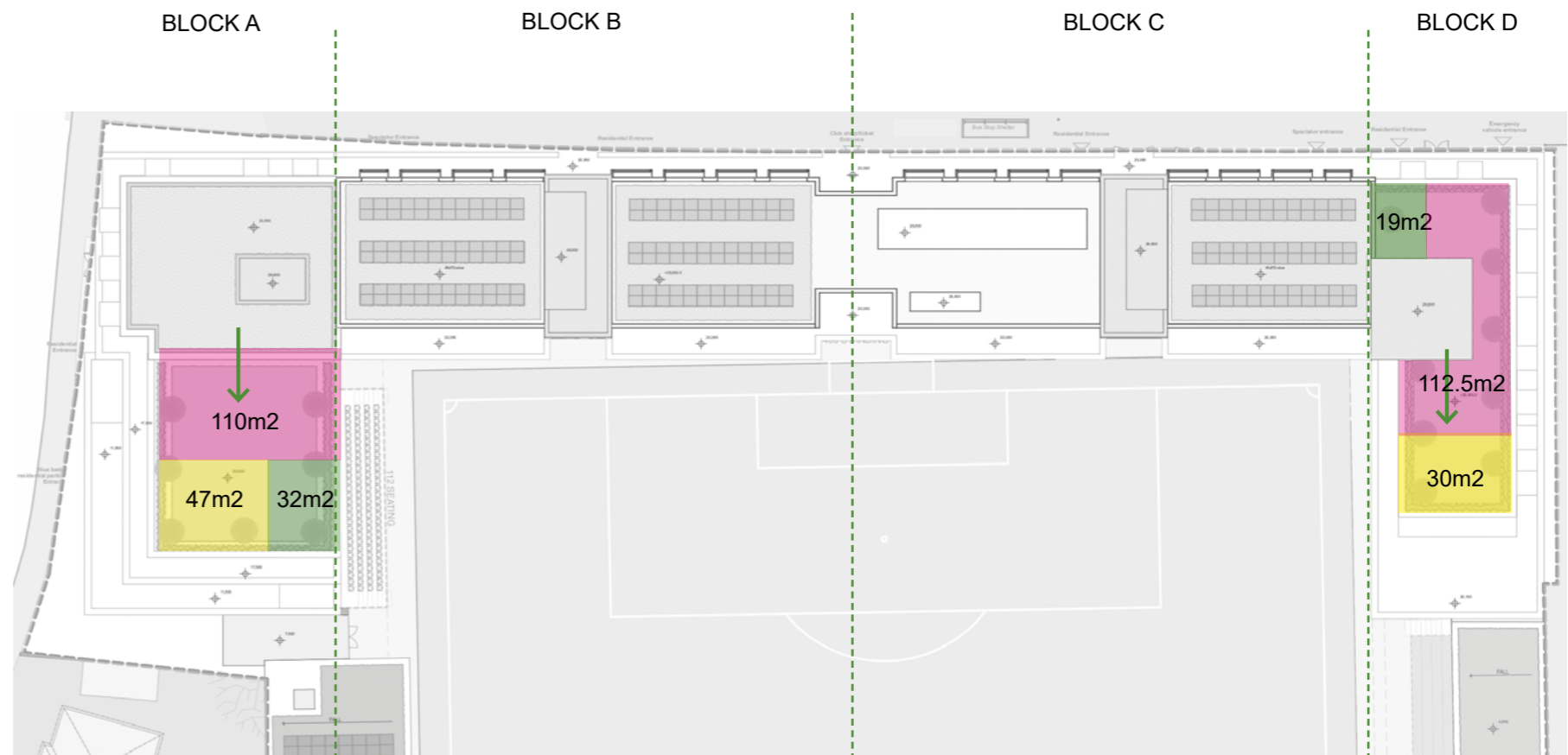
- 0-4 Play Space: 104sqm (100% of requirement)
- 5-11 Play Space: 45sqm (65.2% of requirement)
- TOTAL: 149sqm

Key

- COMMUNAL SPACE
- PLAY SPACE 0-4 YEARS
- PLAY SPACE 5-11 YEARS



FIRST FLOOR SPACE WITH REQUIRED PLAY SPACE AREAS



ROOF TOP PLAY & COMMUNAL SPACE WITH REQUIRED PLAY SPACE AREAS

Please note that the blocks of area are indicative and do not reflect the actual design intent.

7.9 Play strategy - doorstep play

This Inset terrace is located to serve the central portion of the building where the largest element of family housing is located.

The area is set within the building and is designed to provide attractive child-based amenity space for use throughout the year.

It contains about 60% indoor space and 40% outdoor space in the form of the south facing terrace.

Key

- A Feature Tree Type C

- 1 Toddler padded soft play zone
- 2 Parents seating area
- 3 Welfare Pod with accessible toilet, baby change and kitchenette faculties
- 4 Covered outdoor amenity area with gardens and seating and play space
- 5 Jungle Style active play, climbing frame and slide
- 6 Seating and tables near play area.
- 7 Raised planters at 1m high to provide greenery but also out of reach for very young children.



7.10 Public art strategy

We have identified several areas where public art-work could be integrated into the scheme.

The spectator portals have return walls which could house artwork, murals, or graphics which relate to the club and its 60 year history.

We are indicating on our drawings depictions of footballers on the metal doors and panels on the ground floor. Similarly, these could be abstracted graphics of trees to relate more to the woodland nature of Danson Park



Key

- 1 Football related artwork / graphics
- 2 Football related artwork or natural world graphics



ARTWORK EXAMPLES

7.11 Biodiversity

As can be seen from the strategy outlined above we have sought to find every opportunity to create amenity space quality landscape and planting opportunities. The planting opportunities have also been examined for their ability support wildlife to maximise the species that can be supported on site. We have included the following landscape habitats. All plants and trees have been selected on the right plant right place principle to ensure that the scheme



Container planting on roof space



Roof space bed planting, including trees.



New street trees where there is space



Green wall – trellis based system



Habitat rich boundaries – living wall



Habitat support through the use of nesting boxes

7.11 Biodiversity

It is proposed to include a number of devices to attract and provide habitat for wildlife within the development. The new planting which includes evergreen and deciduous plants, flowing perennials, shrubs and trees for diversity. We aim to attract a range of insects, birds and bats to the development. The details and number of equipment items are illustrated below.



Built in bat boxes designed to fit within brick dimensions



Bespoke metal bug hotels for communal terraces



Built in swift boxes designed to fit within brick dimensions. Woodstone invisible box



Built in starling boxes designed to fit within brick dimensions. Woodstone invisible box



Stainless steel bird feeder and water bath. Opossum Deign No1



John O'Conner Beekeeping services provide and manage both the bees and beehive with their regular maintenance programme

7.11 Biodiversity

The drawings on this page show indicative locations of bird and bat boxes. Exact locations will be identified through the next stage of work RIBA Stage 4.

Bat boxes will be installed only on lower roof tops and below eaves on park facing elevations to ensure they have good access to the parkland habitat.

Located to the rear of the stand (garden side) below the eaves.



Starling and Swift Boxes will be integrated into the brickwork under eaves lines on all elevations.

7.12 Urban greening factor

The London Plan UGF scores of 0.4 for predominately residential and 0.3 for predominately commercial developments should be applied.

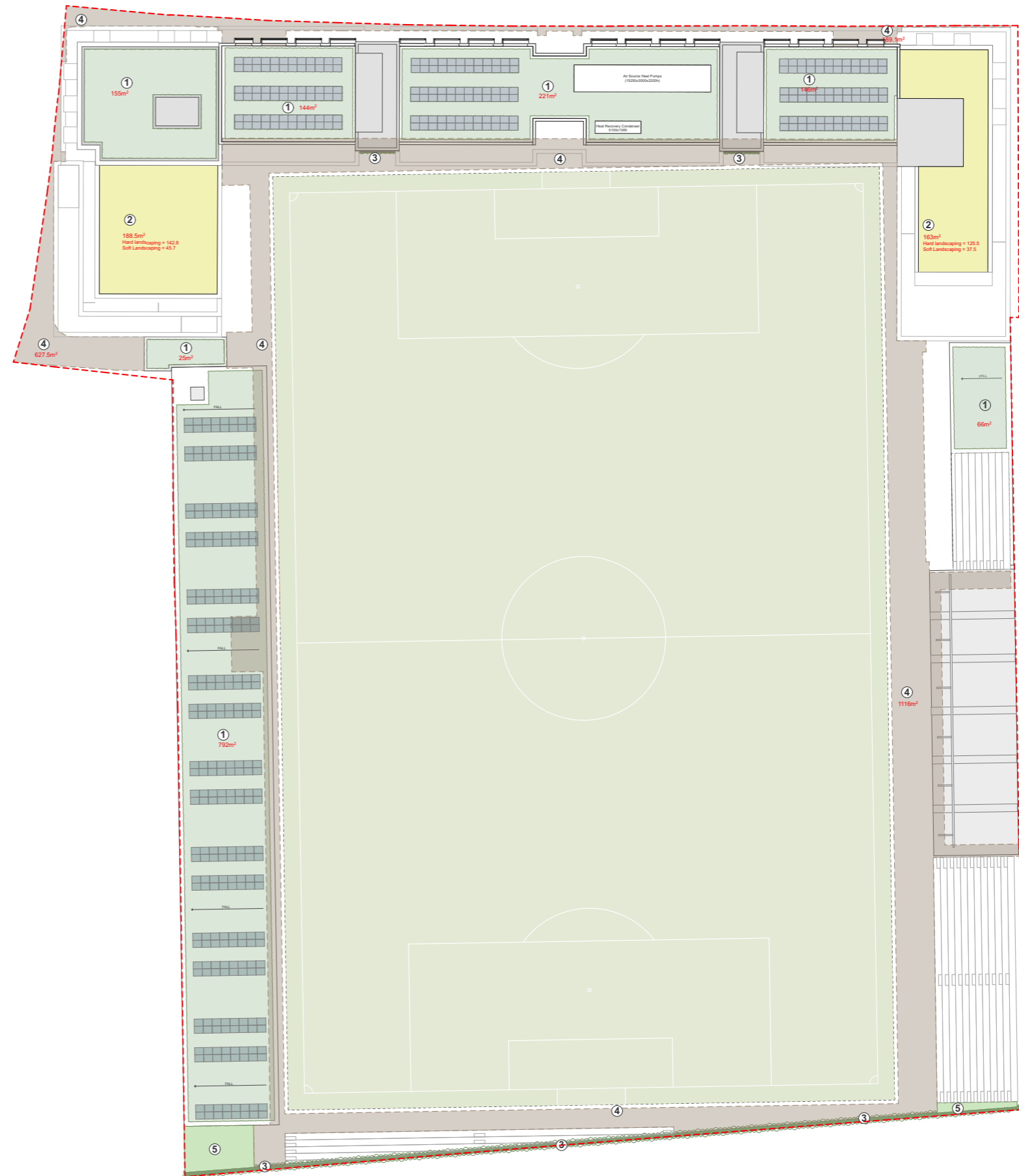
For this project, we are using 0.4 as the target factor.

Given the factor is dependant on land area, we have run two calculations. This is primarily because the artificial 3G pitch does not contribute in a positive manner to the UGF.






The first calculation includes the area of the pitch and runoff.

The second calculation excludes the area of the pitch and runoff.

It is noted that the difference is significant relative to achieving the target figure of 0.4.



KEY

-  ① Extensive green roof
-  ② Roof amenity/garden space
-  ③ Green wall
-  ④ Permeable paving
-  ⑤ Semi-natural vegetation (e.g. trees, woodland, species-rich grassland)

UGF AREA CALCULATION PLAN

7.12 Urban greening factor

Calculation including pitch

MAYOR OF LONDON

London Plan Guidance

Urban Greening Factor

Consultation draft
September 2021

Urban Greening Factor Calculator				
Surface Cover Type	Factor	Area (m ²)	Contribution	Notes
Semi-natural vegetation (e.g. trees, woodland, species-rich grassland) maintained or established on site.	1	45.7	45.7	
Wetland or open water (semi-natural; not chlorinated) maintained or established on site.	1	0	0	
Intensive green roof or vegetation over structure. Substrate minimum settled depth of 150mm.	0.8	87.9	70.32	
Standard trees planted in connected tree pits with a minimum soil volume equivalent to at least two thirds of the projected canopy area of the mature tree.	0.8	3	2.4	
Extensive green roof with substrate of minimum settled depth of 80mm (or 60mm beneath vegetation blanket) – meets the requirements of GRO Code 2014.	0.7	1549	1084.3	
Flower-rich perennial planting.	0.7	0	0	
Rain gardens and other vegetated sustainable drainage elements.	0.7		0	
Hedges (line of mature shrubs one or two shrubs wide).	0.6		0	
Standard trees planted in pits with soil volumes less than two thirds of the projected canopy area of the mature tree.	0.6	0	0	
Green wall –modular system or climbers rooted in soil.	0.6	460	276	
Groundcover planting.	0.5		0	
Amenity grassland (species-poor, regularly mown lawn).	0.4		0	
Extensive green roof of sedum mat or other lightweight systems that do not meet GRO Code 2014.	0.3		0	
Water features (chlorinated) or unplanted detention basins.	0.2		0	
Permeable paving.	0.1	1932.6	193.26	
Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone).	0	0	0	
Total contribution			1671.98	
Total site area (m²)			12289.8	
Urban Greening Factor			0.136046152	

UGF CALCULATION INCLUDING THE 3G PITCH

Calculation excluding pitch

Urban Greening Factor Calculator				
Surface Cover Type	Factor	Area (m ²)	Contribution	Notes
Semi-natural vegetation (e.g. trees, woodland, species-rich grassland) maintained or established on site.	1	45.7	45.7	
Wetland or open water (semi-natural; not chlorinated) maintained or established on site.	1	0	0	
Intensive green roof or vegetation over structure. Substrate minimum settled depth of 150mm.	0.8	87.9	70.32	
Standard trees planted in connected tree pits with a minimum soil volume equivalent to at least two thirds of the projected canopy area of the mature tree.	0.8	3	2.4	
Extensive green roof with substrate of minimum settled depth of 80mm (or 60mm beneath vegetation blanket) – meets the requirements of GRO Code 2014.	0.7	1549	1084.3	
Flower-rich perennial planting.	0.7	0	0	
Rain gardens and other vegetated sustainable drainage elements.	0.7		0	
Hedges (line of mature shrubs one or two shrubs wide).	0.6		0	
Standard trees planted in pits with soil volumes less than two thirds of the projected canopy area of the mature tree.	0.6	0	0	
Green wall –modular system or climbers rooted in soil.	0.6	460	276	
Groundcover planting.	0.5		0	
Amenity grassland (species-poor, regularly mown lawn).	0.4		0	
Extensive green roof of sedum mat or other lightweight systems that do not meet GRO Code 2014.	0.3		0	
Water features (chlorinated) or unplanted detention basins.	0.2		0	
Permeable paving.	0.1	1932.6	193.26	
Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone).	0	0	0	
Total contribution			1671.98	
Total site area (m²)			5096.6	
Urban Greening Factor			0.328057921	

UGF CALCULATION EXCLUDING THE 3G PITCH

7.13 Maintenance Strategy

Overview

The landscape management following installation is the key to its long-term success. Good maintenance for both hard and softscape will ensure that the quality of the design is realised and the landscape retained as a useable and attractive environment.

To ensure success, we have established some key management and maintenance operations. This approach will ensure trees and planting areas are maintained that hardscape and site furnishings are retained in good working condition.

Management and Maintenance Objectives

The list below are key aims and objectives:

- Long term sustainable landscape
- Maintenance of plant vitality and biodiversity
- Cleanliness
- Repair

Long Term Sustainable Landscape

To ensure that the scheme is highly sustainable all aspects of the future management and maintenance of the landscape will be environmentally sensitive. Plant health will be ensured by ensuring good growing conditions, no pesticides or herbicides will be used. Hand work will be used where possible and the use of petrol or diesel machines should be eliminated in favour of electric plant is mechanical assistance is require.

Examples of these principles include:

- Supporting local nurseries and minimising transport through local plant and equipment sourcing.
- Using organic, slow releaser fertilisers such as hoof and horn.
- Planting to provide a dense ground cover within planting beds, minimising the need for mulching and weeding.
- Mulching clippings and cuttings in place rather than bagging and removing; this helps prevent evaporation and provides essential nutrients
- Not cutting herbaceous perennials seed heads and grasses till the spring to provide shelter and wildlife habitat while minimising the need for maintenance.
- Ensuring that the wildlife homes are annually cleaned out and maintained to make sure that wildlife as well as the plants are providing full benefit.
- Rainwater recycling is being used for irrigation to minimise use of water.

Maintenance Of Plant Vitality and Biodiversity

- The key to ensuring the vitality of the plants and wildlife habitat is ensuring that it is installed correctly to specification. To that end a full 5 year planting and maintenance plan will form the basis of the contract tender to ensure quality is achieved. A 5 year guarantee on the new tree planting and green wall planting will be sought.
- The installation will be supervised and inspected to ensure it is well executed.
- Once installed and before site handover a maintenance contract will be put in place.

Cleanliness

- To ensure the landscape looks good and is therefore providing benefit and well used in the future it will be important that the site is retained clean and tidy. A regular litter pick, cleaning of leaves in the autumn, drains and corners, seating and planted areas will be included in the maintenance plan.

Repair

Repairs will be minimised in the first instance by the use of a high quality specification of plants and materials. A planned maintenance regime is desirable as this will also minimise the need for future repair and will prevent items falling into disrepair. This plan will include:-

- A quarterly check on equipment and redecoration in accordance with manufacturer's recommendation.
- A quarterly check on plant health. Replace of plants generally either in the autumn of spring (or as required by the plant species) using pot grown plants to maximise their chances of success.



Summary

Through careful intervention we have managed to design a landscape scheme that will transform the site whilst preserving the functionality of the use of the club. The site will be intensified in terms of use with residential housing provided along side the enhanced club facilities.

The site offers only limited natural habitat at the moment and whilst the main football pitch is currently grass, the grass is kept for football use and has limited bio-diversity.

The proposal has sought to maximise bio-diversity where possible. The intensified use sits comfortable with increased nature. Bird, bat and insect boxes, sources of food and water are features in the proposal that are necessary and useful to help provide new habitat but are also features of the design that will be attractive and of interest to the new site users and residents.

The landscape provides for the needs of the new residents through the provision of generous private terraces and new communal spaces that are the focus of the landscape design. The new provision includes a diversity of space and many opportunities for all occupants to use the outdoor and indoor communal provision throughout the year.

The façades host green walls on the south side and many bird and bat boxes appropriately placed to facilitate access to Danson Park.

At ground level, residential entrances will be celebrated with container planting and believe there is space for 3 news street trees located on the widened pavement.

The landscape is bio-diverse with species rich planting, low environmental impact hard landscape products and has been designed with practical maintenance in mind so that it will be easy to keep in good shape for the residents and users in future years.