

Hanover and Princess Court, Cambridge
Members Briefing
August 2025

**Pollard
Thomas
Edwards**



Team

Client

Cambridge Investment Partnership

Employers Agent

TSA Riley

Planning Consultant

Carter Jonas

Architects

Pollard Thomas Edwards

Landscape Architects

MOOWD

Communication and Engagement Consultant

Concillio

Sustainability/M&E Consultant

Qoda

Transport Consultant

KMC Transport and Planning

Fire Consultant

Affinity

Daylight Sunlight Consultant

Rapleys

Heritage Consultant

RPS Tetra Tech



MOOWD



TSA Riley



RAPLEYS

Carter Jonas

QODA



Pollard
Thomas
Edwards





Site Context

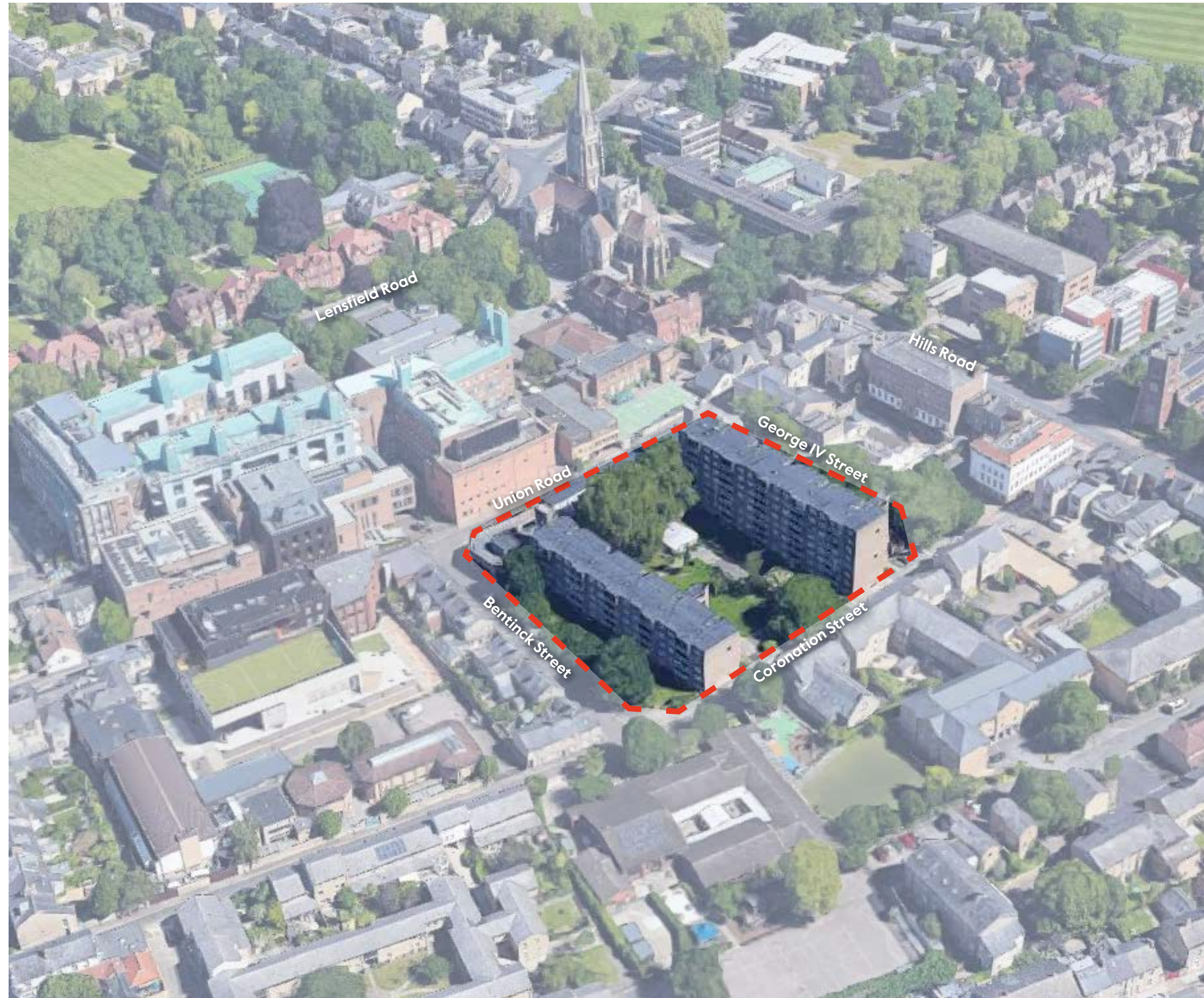
The Site

- Site (0.76 ha)
- Existing buildings form an “n” shape:
 - Two linear North–South residential blocks
 - The three-storey parking garage sits partially below ground level (by approximately 1.2m) and presents a tall, blank brick wall with no architectural features other than ventilation holes.
- The two existing blocks are 5 and 8 storeys and comprise 127 one, two and three bedroom flats. The homes are now vacant due to building safety issues.
- Central open space with single-storey community building
- The Site is within the Controlled Parking Zone.



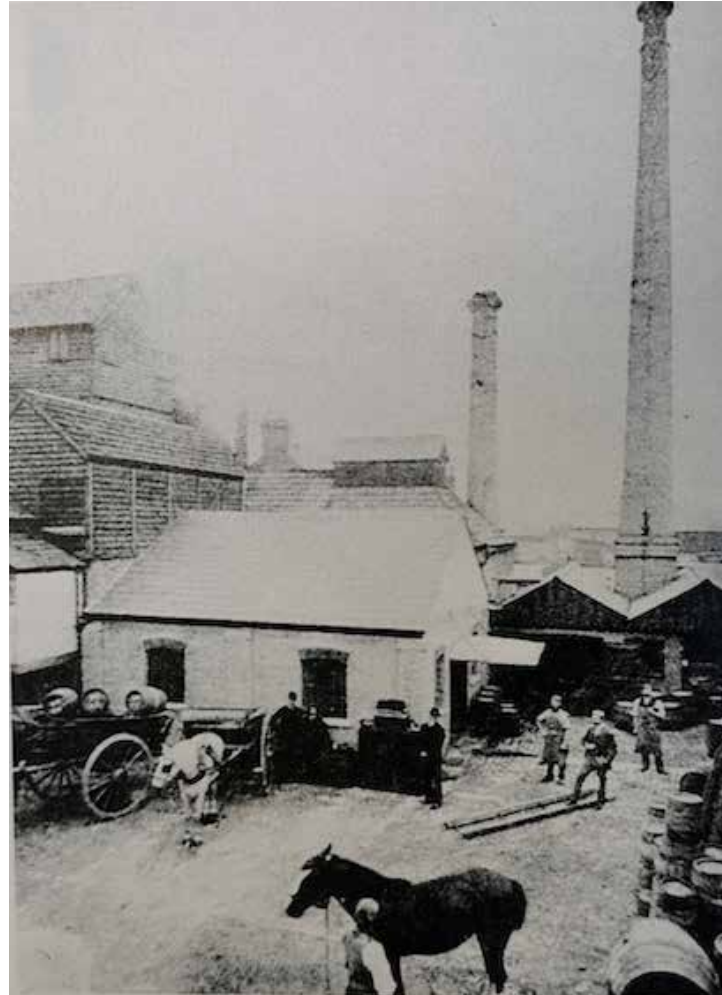
Site Location

Pollard Thomas Edwards



Historical Context

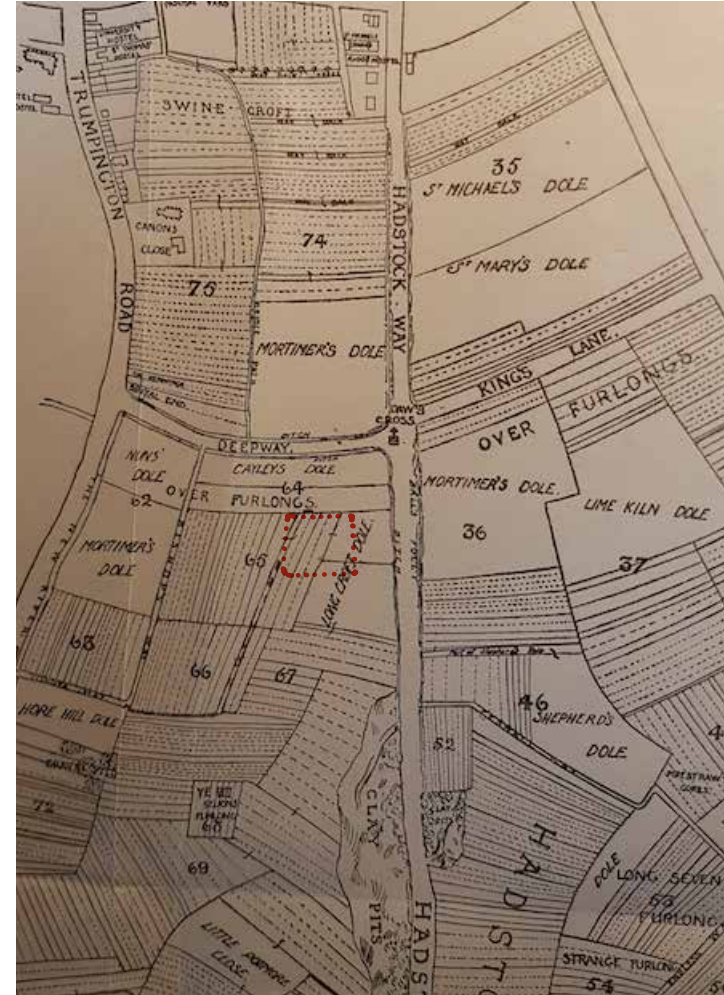
- Site lies within Cambridge's New Town area, developed around 1820
- Originally dense 19th-century terraced housing
- Major 1960s redevelopment replaced historic housing
- Hanover Court and Princess Court completed in 1967



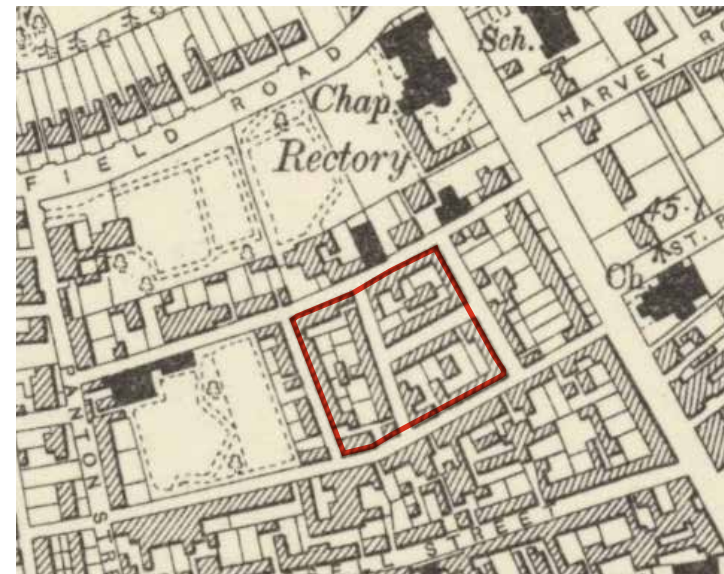
ALBION BREWERY, CORONATION STREET



DOLPHIN PUB, CORONATION STREET



14TH CENTURY MAP



1901 MAP



1927



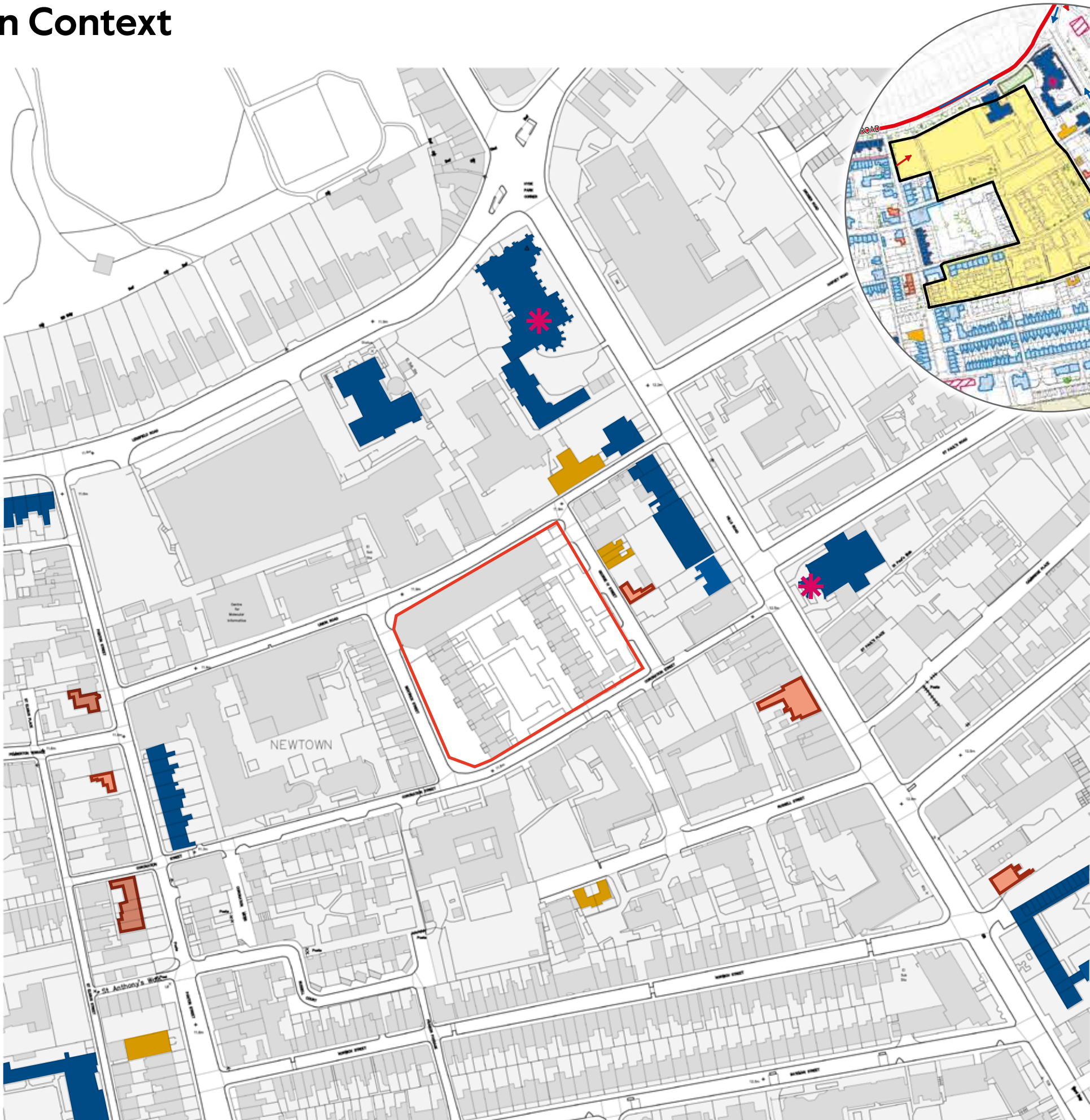
1938



1950

Heritage & Conservation Context

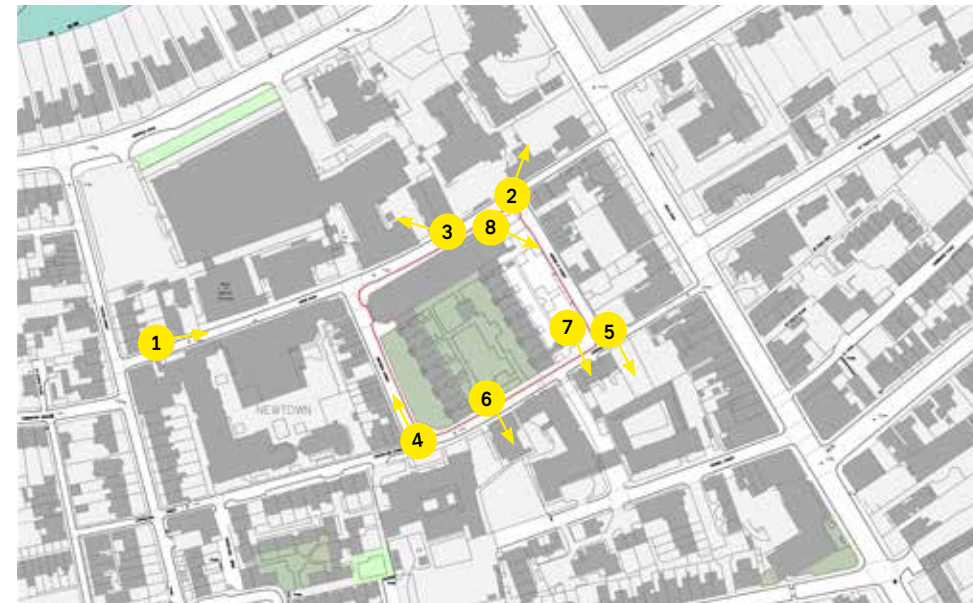
- No designated/non-designated heritage assets on site
- Lies within Central Conservation Area: New Town & Glisson Road character area
- Wider study area: Hills Rd, Lensfield Rd, Panton St, Norwich St
- High concentration of listed buildings, esp. along Hills Rd
- Predominantly brick-built (gault, buff, brown, red)
- Common features: tall windows, horizontal banding, linear rhythm



NEW TOWN AND
GLISSON ROAD
CONSERVATION
AREA TOWNSCAPE
ANALYSIS

EXTRACT FROM NEW
TOWN AND GLISSON
ROAD CONSERVATION
AREA APPRAISAL
MARCH 2012

- ✱ LANDMARK
- LISTED BUILDINGS
- BUILDINGS OF LOCAL INTEREST
- PROPOSED BUILDINGS OF LOCAL INTEREST





Bentinck Street



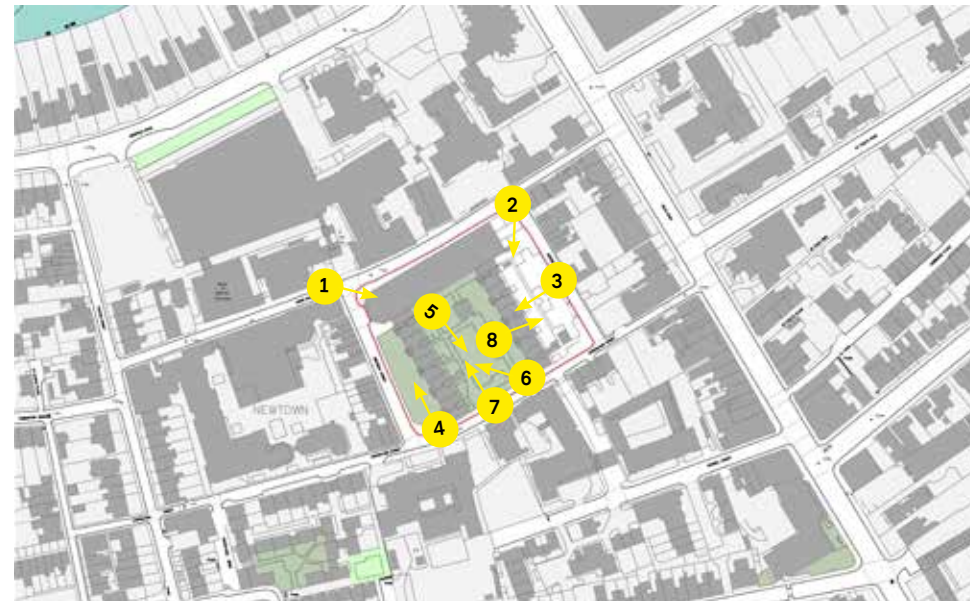
Coronation Street



George IV Street



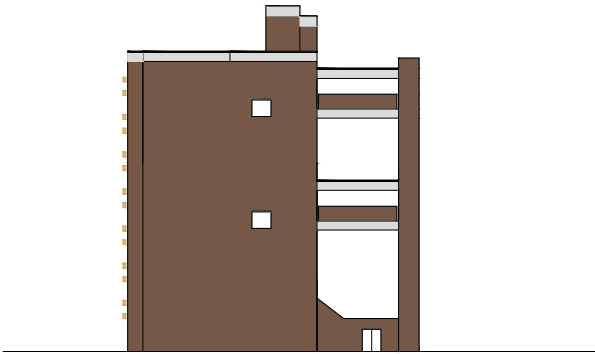
Union Road



Existing Building



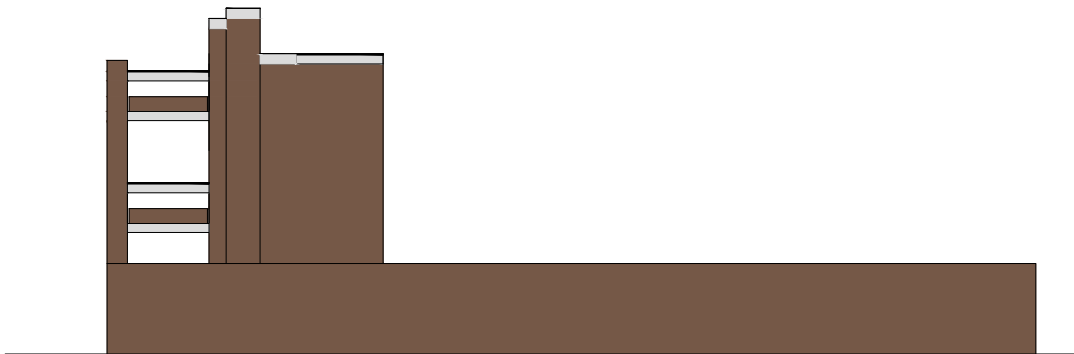
HANOVER COURT - SOUTH WESTERN ELEVATION
VIEW FROM PRINCESS COURT AND CORONATION STREET
EXISTING ELEVATION



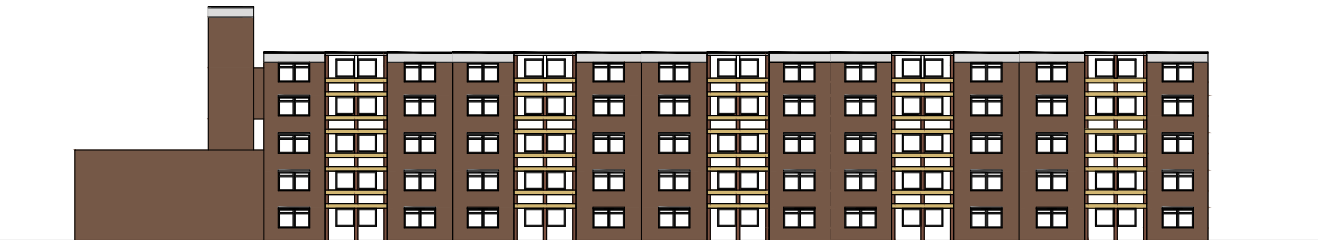
HANOVER COURT - SOUTH EASTERN
ELEVATION
VIEW FROM CORONATION STREET
EXISTING ELEVATION



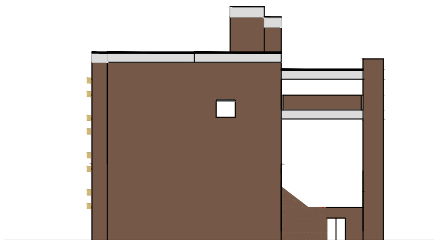
HANOVER COURT - NORTH EASTERN ELEVATION
VIEW FROM GEORGE IV STREET
EXISTING ELEVATION



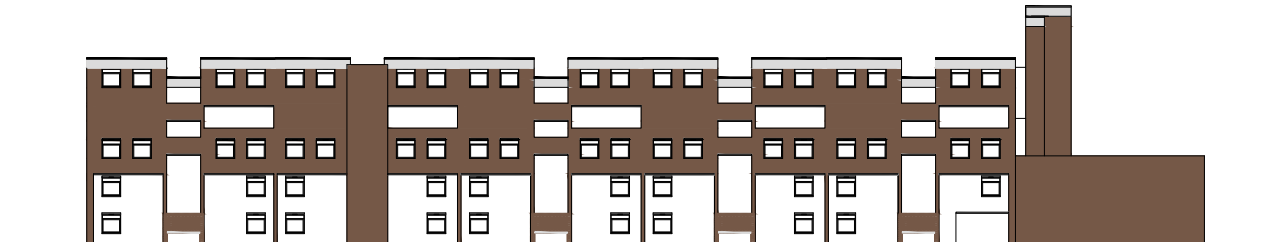
HANOVER COURT - NORTH WESTERN
ELEVATION
VIEW FROM UNION STREET
EXISTING ELEVATION



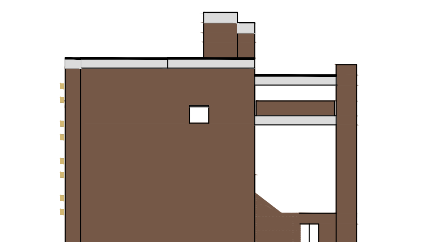
PRINCESS COURT - SOUTH WESTERN ELEVATION
VIEW FROM BENTINCK STREET
EXISTING ELEVATION



PRINCESS COURT - SOUTH EASTERN
ELEVATION
VIEW FROM CORONATION STREET
EXISTING ELEVATION

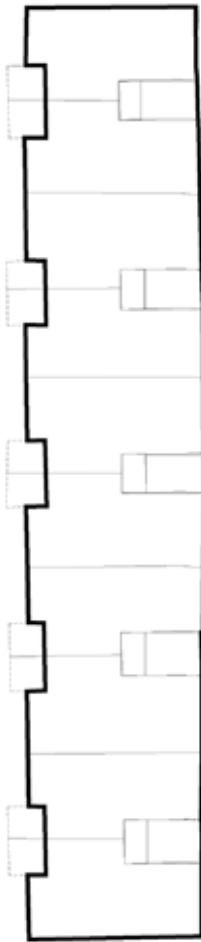
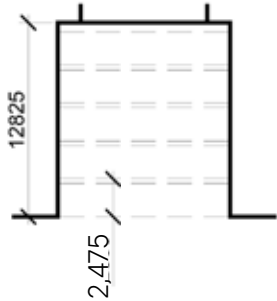


PRINCESS COURT - NORTH EASTERN ELEVATION
VIEW FROM HANOVER COURT
EXISTING ELEVATION



HANOVER COURT - SOUTH EASTERN
ELEVATION
VIEW FROM CORONATION STREET
EXISTING ELEVATION

PRINCESS COURT
STOREY HEIGHTS



Existing Building Reports on Condition

–Retrofit or meaningful adaptation unviable

Key issues include:

–Inflexible structure: loadbearing internal walls prevent layout reconfiguration

–Undersized units: ~20% smaller than modern standards

–Structural risks: shallow floor bearings, risk of collapse with interventions

Fire safety failings:

–Constructed to outdated fire standards and strategy

–Uncompartmented risers and walkways

–Inadequate escape routes

–Poor access for firefighting

–Full-height refuse shafts increase fire spread risk

–A waking watch is required for ongoing occupation

–Home now mostly vacant due to building safety issues



Existing Building Diagram


- Buildings no longer meet modern standards for:
 - Functionality
 - Accessibility
 - Sustainability
- Only 52 cycle spaces provided vs. 190 required, discouraging cycling in a cycle-friendly city
- Decommissioned refuse chutes; some residents walk over 50m to bin stores
- Garden is underutilised and lacks meaningful amenity value.
- Community room of circa 65 sqm




Constraints

- 1. Poor relationship of existing buildings to streetscape
- 2. Existing substation
- 3. Scale and proximity of neighbouring buildings
- 4. Substantial trees on site with varying categories


KEY




Slope / ramp




Building of heritage interest




Existing Pedestrian/Cycle Routes




Existing context buildings




Context façades with windows




Existing Residential Buildings on site




Existing Multi Storey Garage




Existing substation




Noise Source




Active Frontage



Category A Tree



Category B Tree



Category C Tree



Opportunities

- 1. Retain substantial street trees and supplement with new trees.
- 2. New buildings to better respond to the existing street orientation
- 3. Improve the pedestrian experience along the street edge
- 4. Optimise a central green amenity, that is more clearly and safely connected
- 5. Provide buildings that compliment the existing context
- 6. Provide new sustainable homes for mixed tenures.
- 7. Reducing car parking and improving secure cycle parking facilities

KEY

Excellent proximity to public transport connections

Improved Pedestrian/Cycle Routes

Opportunities for new green edges and centre

Active frontage to respond to surrounding streets

Existing buildings

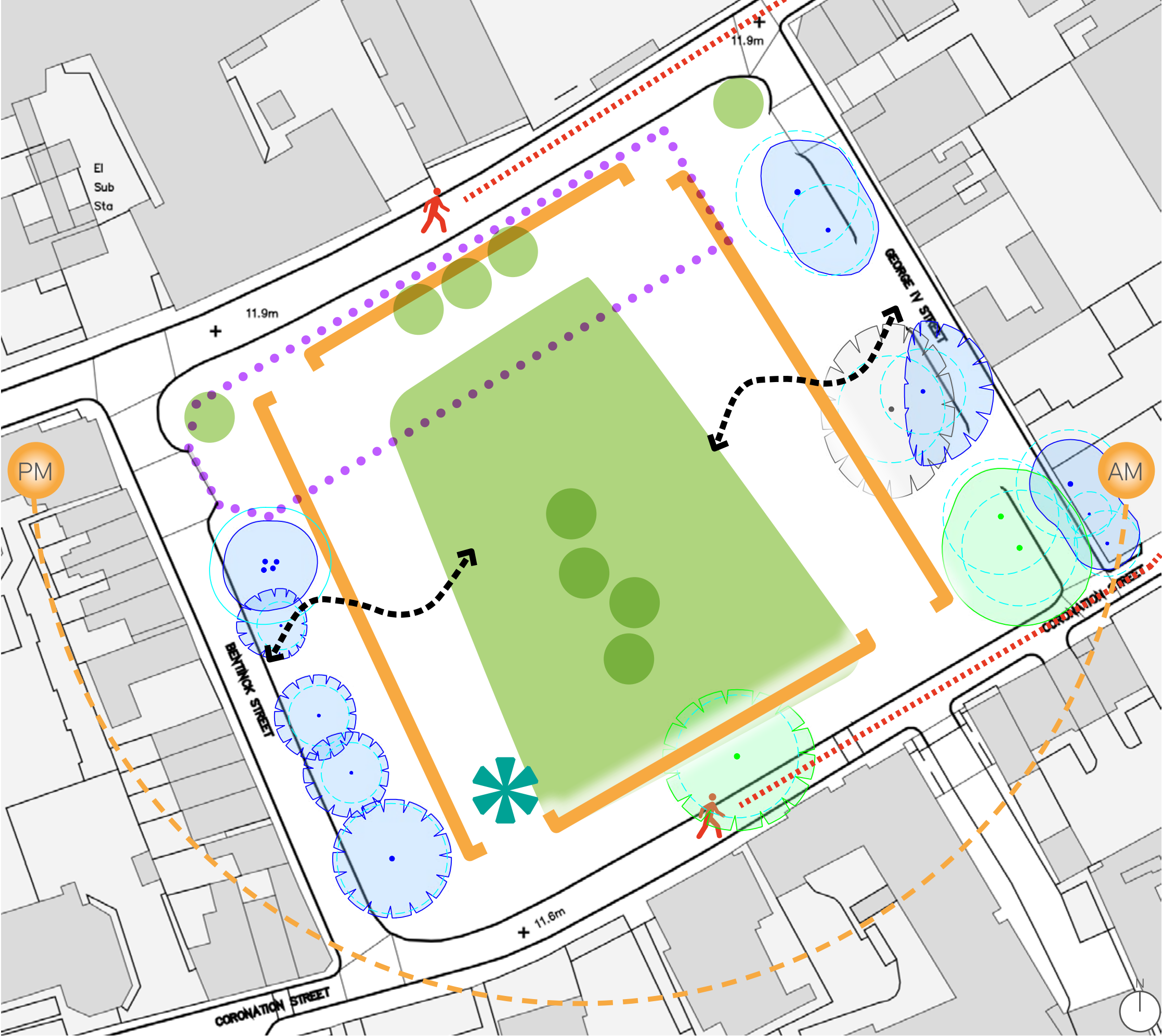
Category A Tree

Category B Tree

Category C Tree

Opportunity for new accessible community room

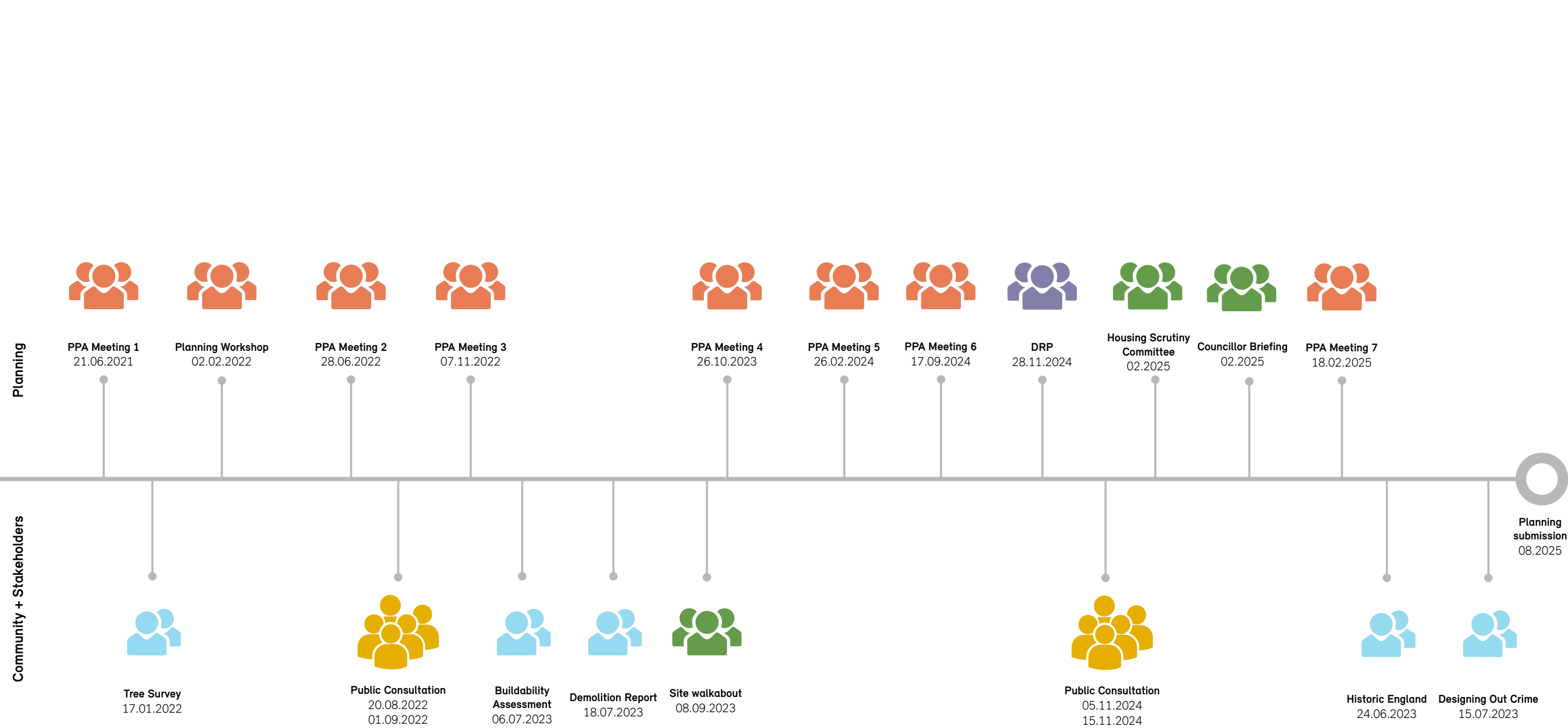
Position of existing car park



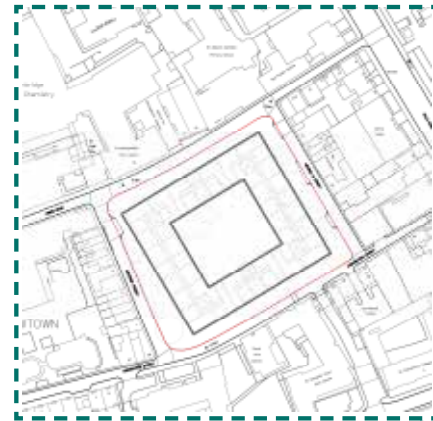


Scheme Development

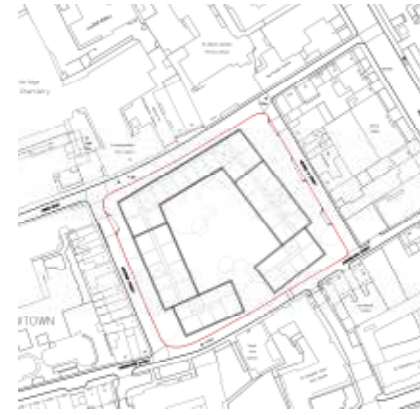
Pre-Application and Consultation Timeline



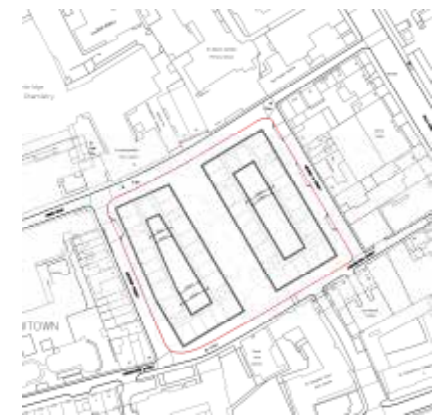
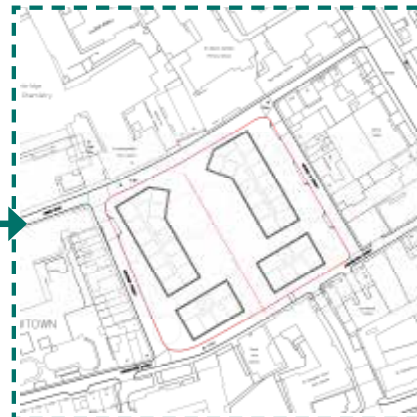
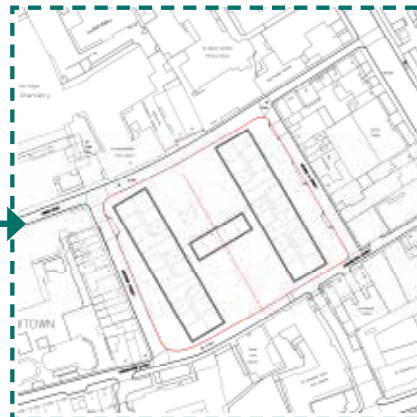
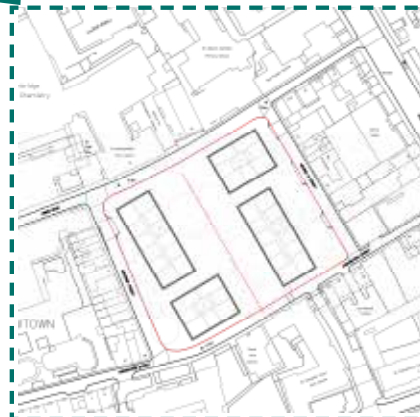
Pre-Application 02 - 28.06.2022



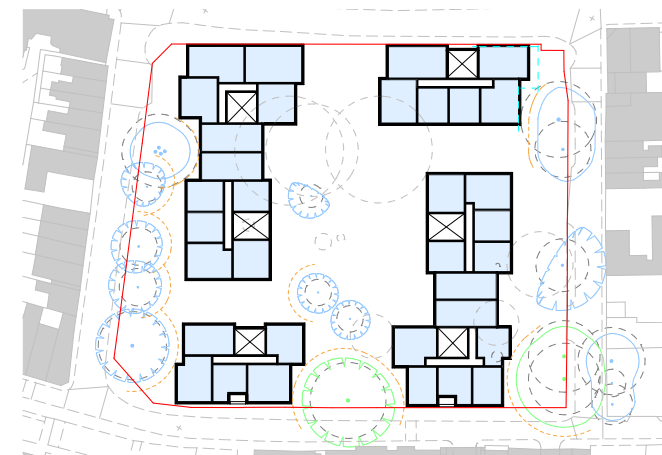
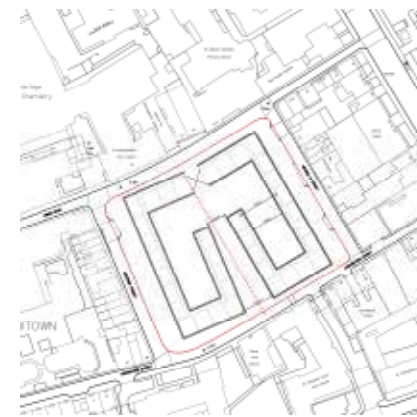
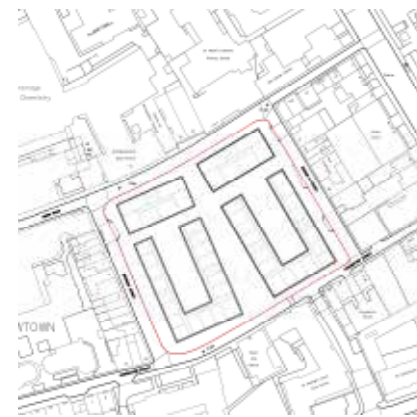
COURTYARDS



MANSION BLOCKS



GALLERY ACCESS



Public Consultation

–Held on 21st October 2024; flyers sent to 918 local addresses

–38 attendees including current/former residents, local councillors

–**Positive reception overall, especially:**

–Support for landscaping and re-provision of affordable housing

–Agreement that existing buildings should be replaced

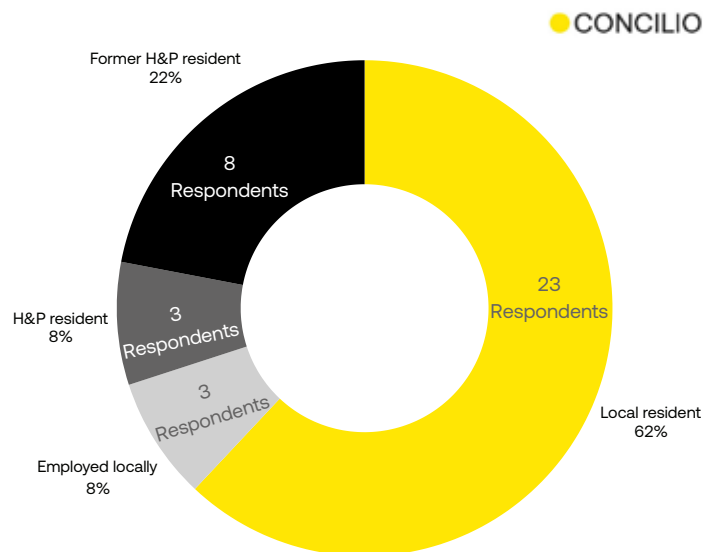
–**Key concerns raised:**

–Parking and density

–Integration of affordable homes into the wider community

–Desire to retain remaining mature trees

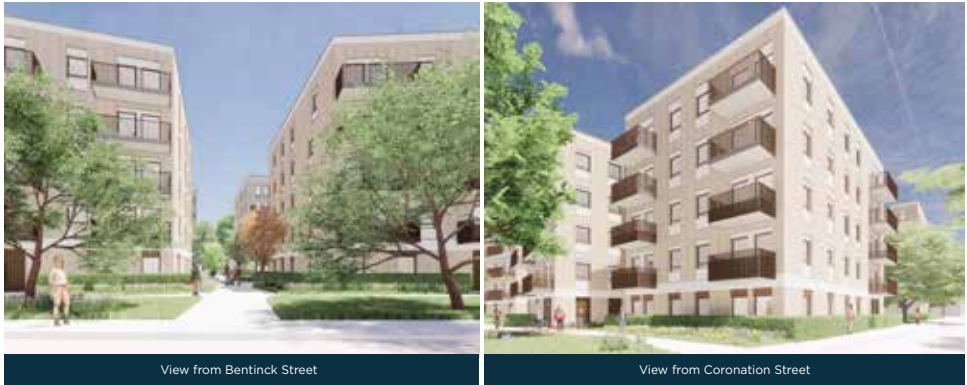
–Questions on tenure separation by block



21 October 2024 Consultation



Visuals



Improved community spaces

Our proposals include improved community spaces for social events, play and community groups.

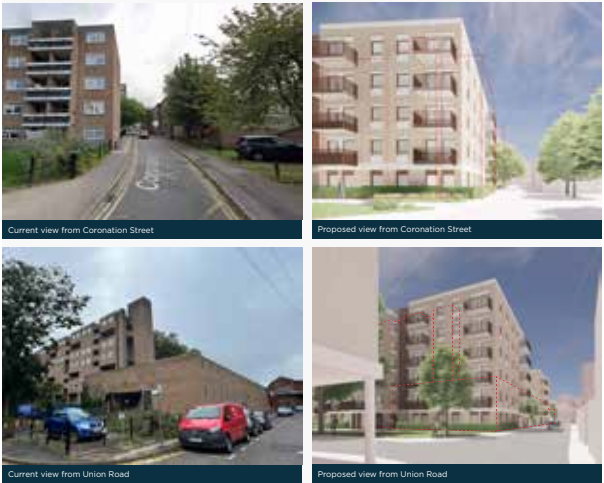
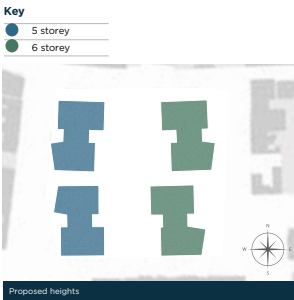
The Community Room will ensure that community is at the heart of the new estate, serving as a welcoming hub where residents and the local community can come together.

Our enhanced outdoor spaces are designed to be used all year around to provide a welcoming environment no matter the time of year. We have crafted new play areas where children will be able to enjoy outdoor spaces around the new Estate.



Heights

The existing blocks on the Estate are a combination of 5 storeys (13m high) and 8 storeys (20.5m high). We are proposing four new blocks of 5 storeys (16.7m high) and 6 storeys (19.9m high) that maximise the quantity of the homes while balancing design objectives. The western blocks will be 5 storeys tall while the eastern blocks will be 6 storeys tall. The diagram on this board shows you how the heights will be distributed across the Estate.



Youth Engagement

–Workshops with 30 Year 6 students from St Paul’s C of E Primary

–Activities included site visits, placemaking workshops, and design exercises

Children’s observations:

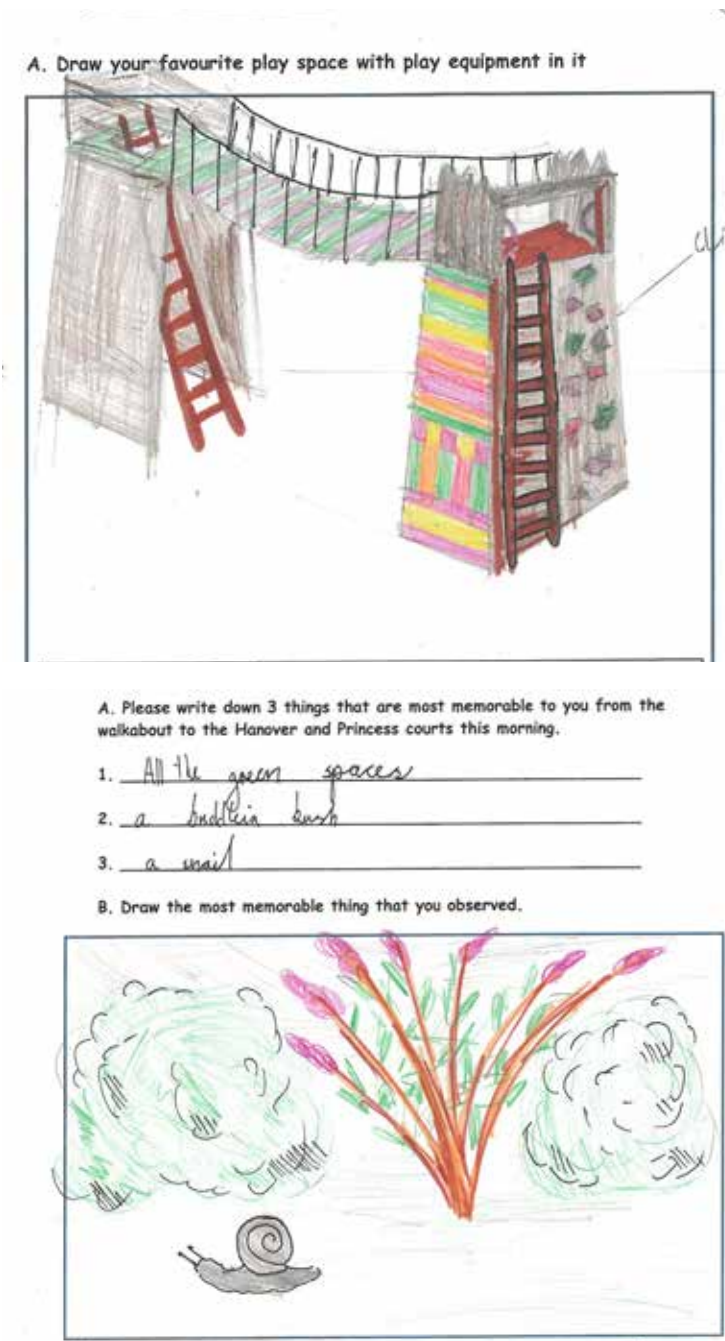
–“Ominous” garage entrance, visible bins, and lack of play variety

–Recognition of trees, wildlife, and resident importance

Outcomes included student-designed ideas for:

–Play equipment, street furniture, bird boxes

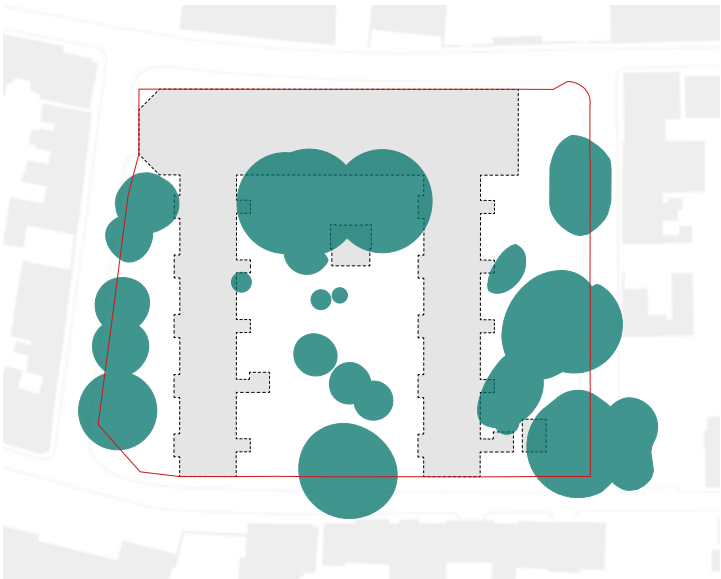
Delivered in partnership with Greater Cambridge YES, design team & school



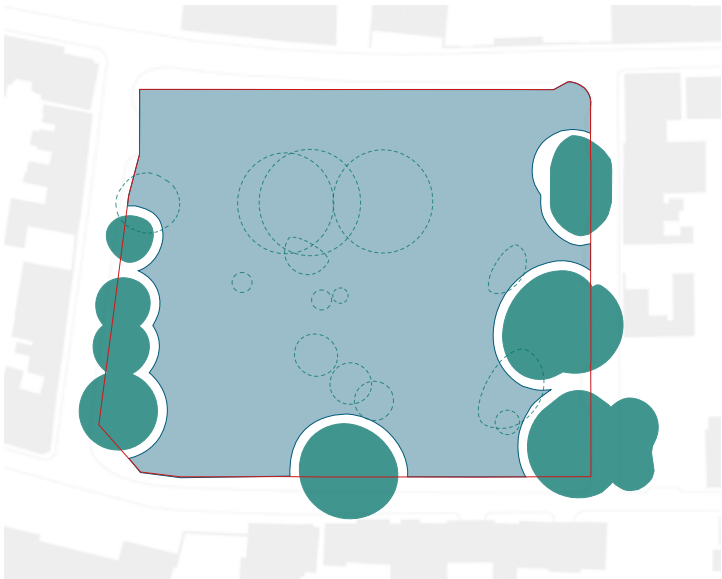
YES Workshop photos and worksheets



4.1 Design Strategy



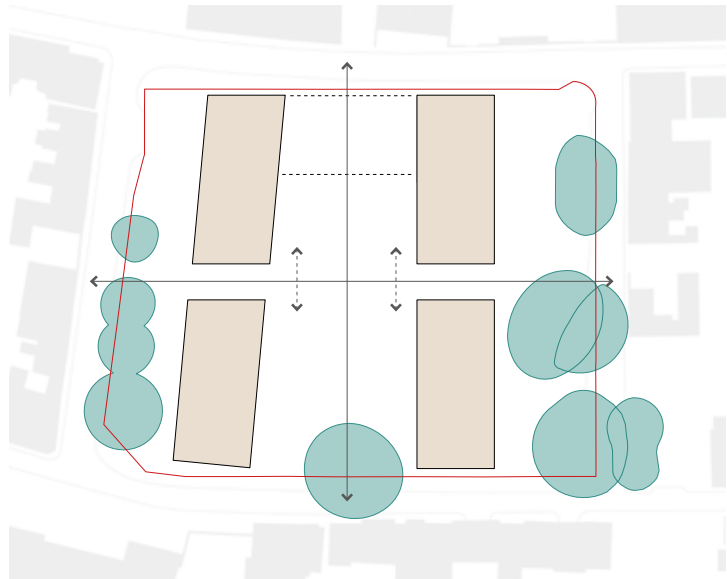
1. Site
Assumes demolition of existing buildings based on extensive surveys.



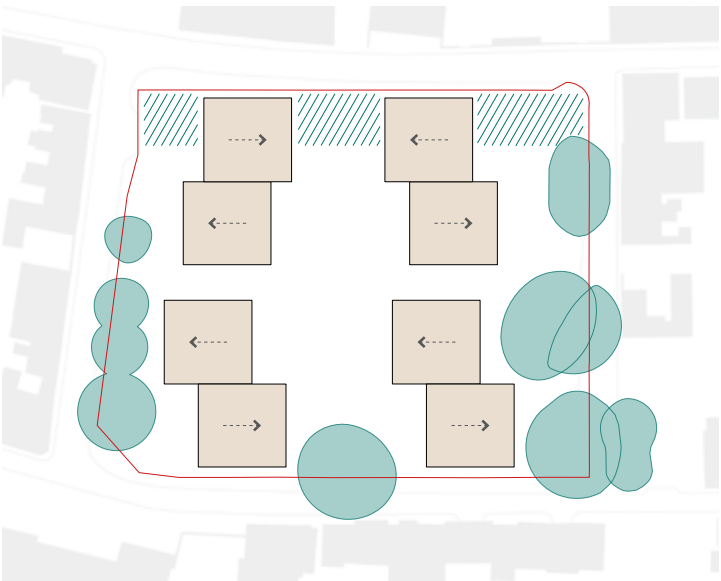
2. Developable Area
Assumes removal of 3no. plane trees. Low grade central trees to be removed. Based on RPA and recommended 2m offset of surveyed canopy.



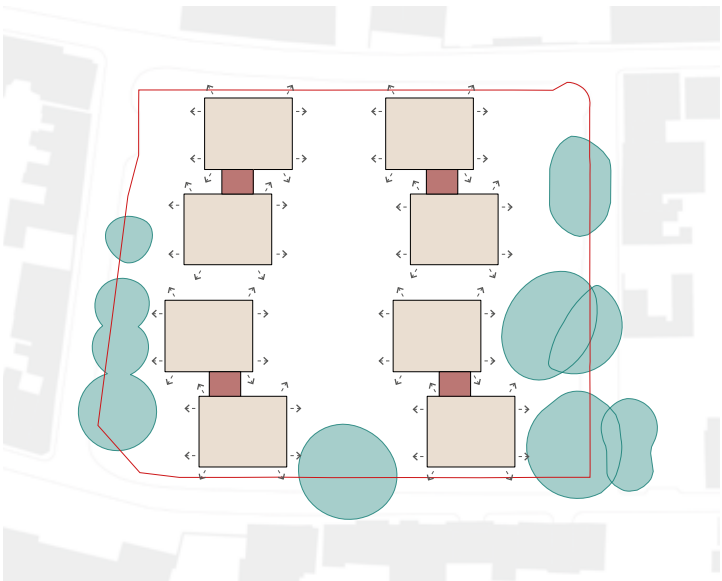
3. Maximise Building Footprint



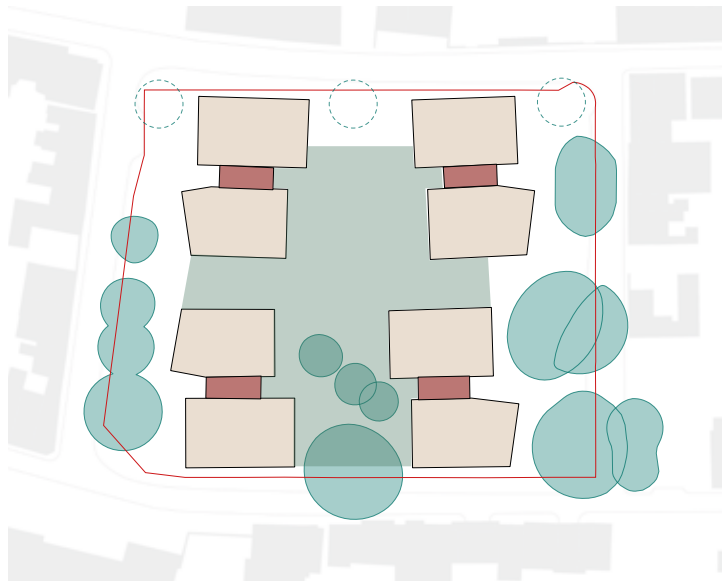
4. Connectivity
Integrate physical and visual permeability through site.



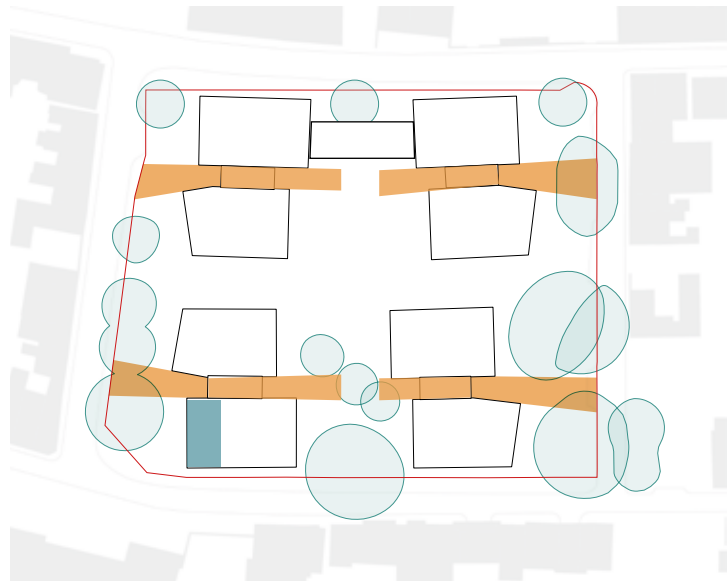
5. Modelling
Adjusting building volume to fit within trees. Opportunities to add perimeter trees to the northern boundary.



6. Dual Aspect
Adapt the building mass to introduce a central core and maximize dual aspect accommodation.

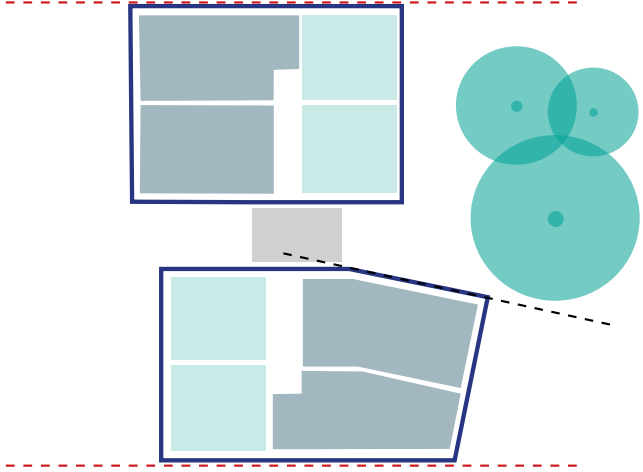
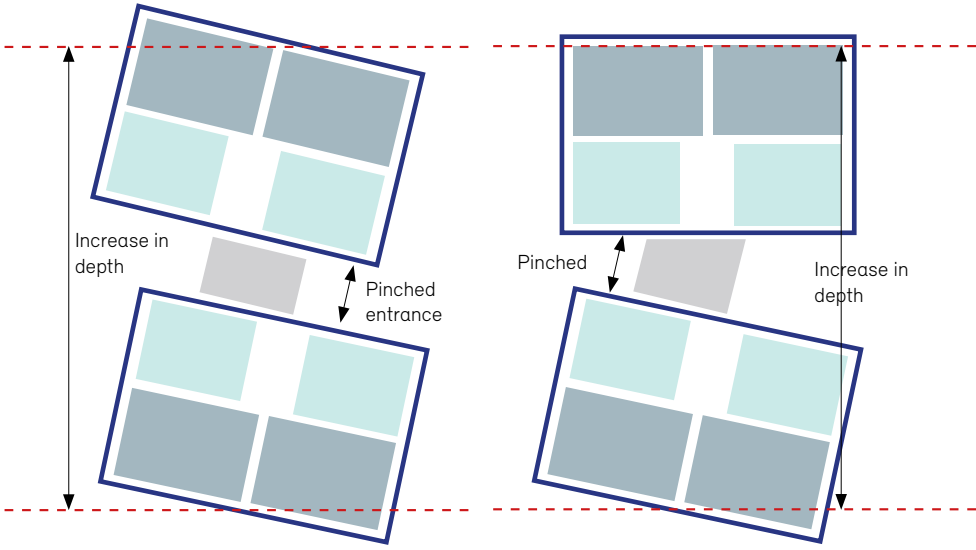
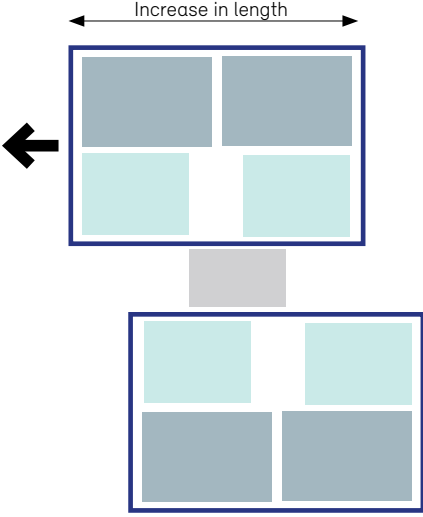
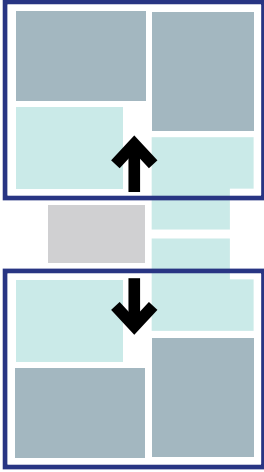


7 - Building Volume
Model building volume to respond to setting. Integrate additional street trees.



8 - Celebrate Building Entrances
Infill piece to northern edge introduced to reinforce street edge. Community room to south west corner of site.

4.1 Design Strategy - Massing and Form



1
Pull 'cinch' blocks apart to create greater articulation of facade and enable maximum dual aspect flats

2
Increase block length to accommodate habitable area from centre.

3
Crank core to decrease depth and aid 'fit' around trees.

- This option adds additional area to circulation and increases overall depth of building creating

4
Introduce regular angle to blocks;

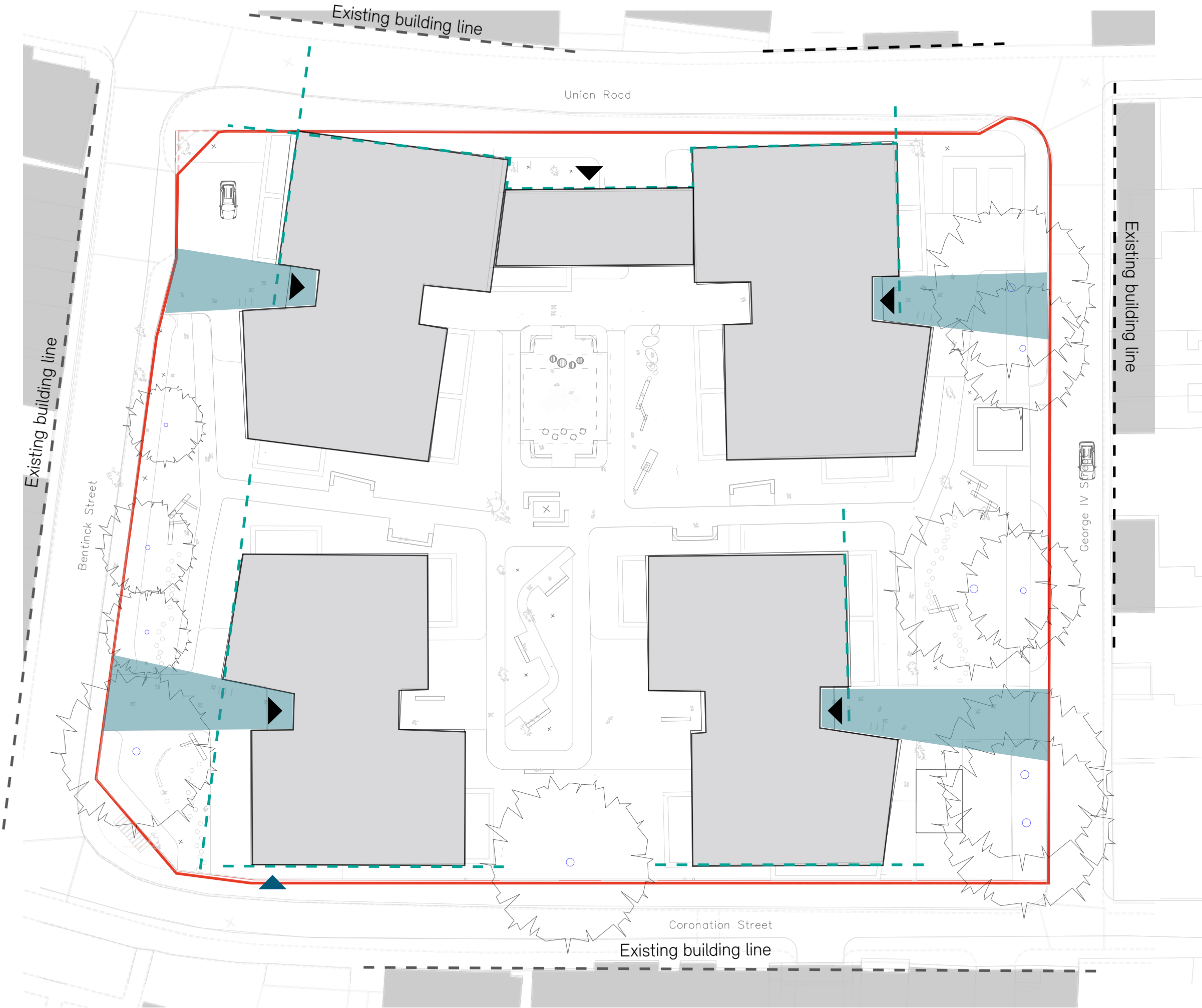
- maintains depth to fit within site
- reduces circulation to achieve good net to gross
- adds greater articulation to streets
- responds more dynamically to tree locations
- highly regular floor plans and flat types for building



Proposals

Site arrangement

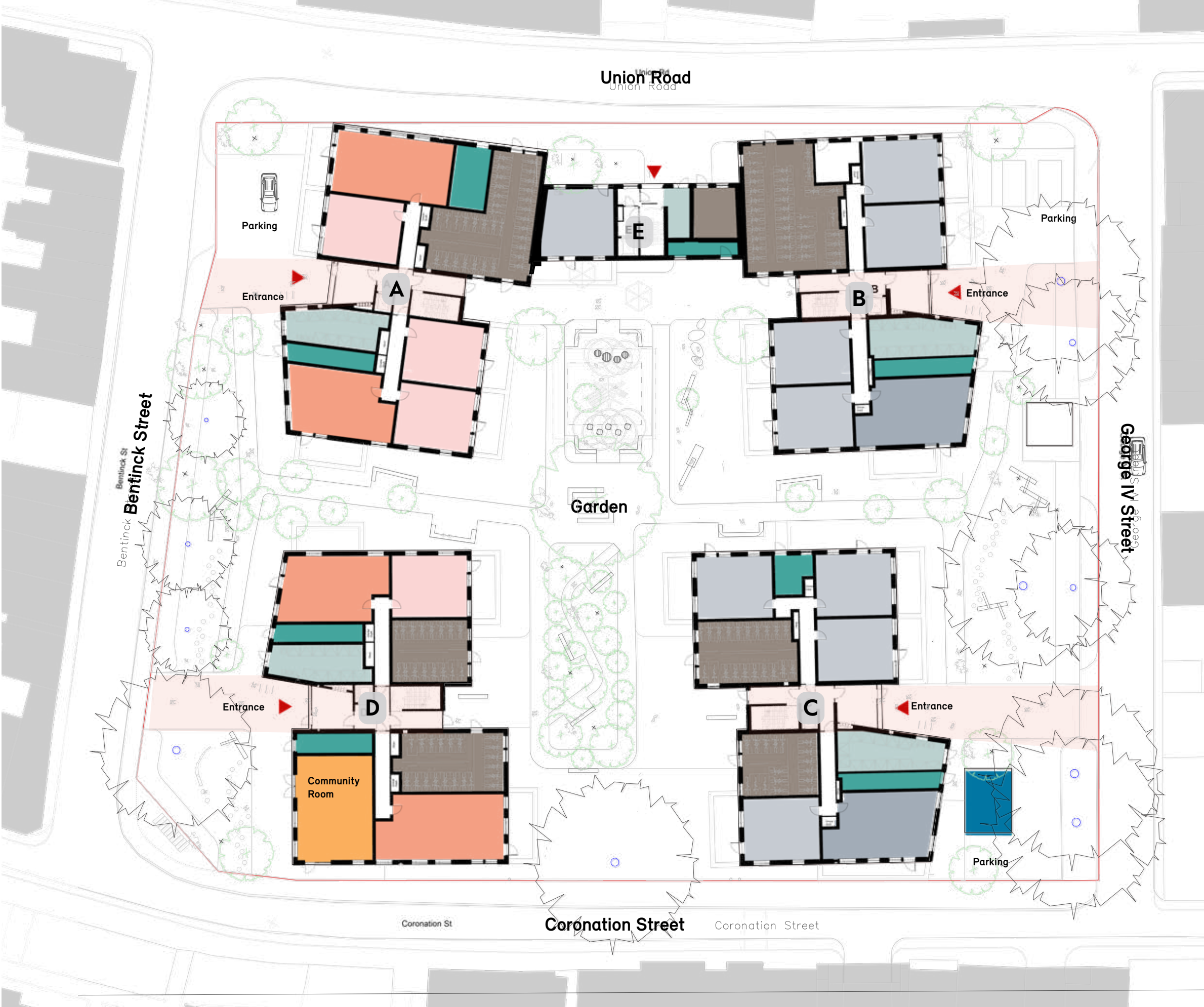
- Five blocks (A-D + E) respond to street geometries and existing trees
- Buildings enclose arranged around the communal garden
- Entrances clearly defined using angled façades



KEY

—	Existing building line
- - -	Proposed building line
▶	Residential entrance
▶	Community room entrance

Building Layout



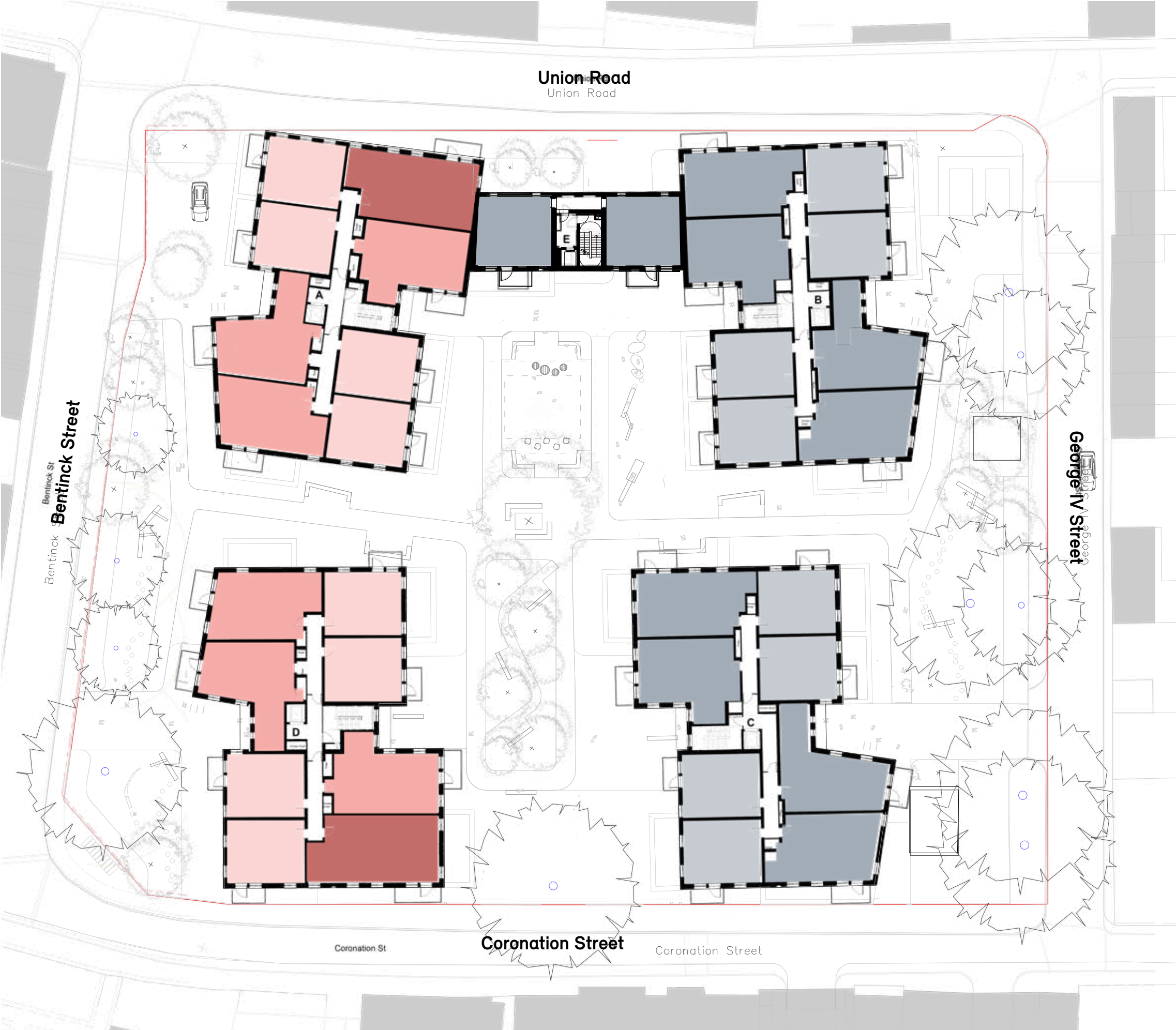
KEY	
	1 Bed Affordable
	2 Bed Affordable
	3 Bed Affordable
	2 Bed M4(3) Affordable
	1 Bed Private
	2 Bed Private
	Refuse
	Cycle Store
	Plant
	Existing Substation
	Community Room

Tenure



5th Floor plan

KEY	
	1 Bed Affordable
	2 Bed Affordable
	3 Bed Affordable
	2 Bed M4(3) Affordable
	1 Bed Private
	2 Bed Private



Accommodation Schedule

Existing - Affordable

Total	NIA	Count	bedrooms	bedspaces**	hab rooms*	NIA/Count	Bedrooms/Count
Hanover	2640	51	63	115	114	51.7	1.25
Princess	1580	31	36	67	67	50.9	1.2
Total	4220	82	99	182	181		

Existing - Private

Total	NIA	Count	bedrooms	bedspaces**	hab rooms*	NIA/Count	Bedrooms/Count
Hanover	1412	27	38	65	65	52.3	1.4
Princess	948	18	24	42	42	51.7	1.3
Total	2360	45	62	107	107		

* assumes bedsit counts as 1 habitable room per dwelling; 1 bedroom counts as 2 hab rooms, 2 bedroom counts as 3 hab rooms and 3 bedroom counts as 4 hab rooms

** assumes bedsit counts as 1 bedspace per dwelling; 1 bedroom counts as 2 bedspaces; 3 bedroom counts as 3 bedspaces; 3 bedroom counts as 6 bedspaces

Affordable	Studio	1 bed	2 bed	3 bed
Size/sqm	38	51	58	98
Apartments	19	28	34	1
Mix	23%	34%	41%	1%
Total	82			
	Inc. accessible homes = 0%			

Private	Studio	1 bed	2 bed	3 bed
Size/sqm	38	51	58	98
Apartments	9	10	26	0
Mix	20%	22%	57%	0%
Total	45			
	Inc. accessible homes = 0%			

Total	Studio	1 bed	2 bed	3 bed
Size/sqm	38	51	58	98
Apartments	28	38	60	1
Mix	22%	30%	47%	0.7%
Total	127			
	Inc. M4 Cat(3) homes = 0%			

Proposed

Total	NIA	Count	bedrooms	bedspaces	hab rooms	NIA/Count	Bedrooms/Count
Affordable	4775	72	118	190	186	66	1.6
Private	5280	93	122	198	226	57	1.3
Total	10055	165	240	388	412		

Existing to proposed affordable NIA = 1.28

Existing NIA/Proposed average home size (65sqm) = 65 homes

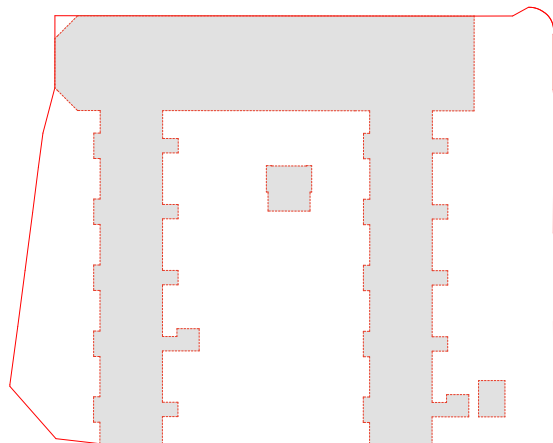
Affordable	Studio	1 bed	2 bed	3 bed
Min Size/sqm	-	50	70	86
Apartments	-	38	26	8
Mix	0%	53%	36%	11%
Total	72			
	Inc. 4 M4 Cat(3) homes = 5%			

Private	Studio	1 bed	2 bed	3 bed
Min Size/sqm	-	50	70	86
Apartments	-	53	40	0
Mix	0%	57%	43%	0%
Total	93			

Total	Studio	1 bed	2 bed	3 bed
Min Size/sqm	-	50	70	86
Apartments	-	91	66	8
Mix	0%	55%	40%	5%
Total	165			

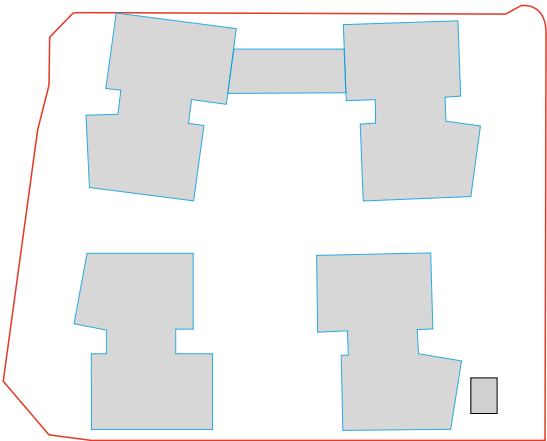
Building Footprint

- Proposed footprint: 4% reduction
- Garden space: = 61.5% of total site



Existing Footprint

Building	2931
Substation	33
Community Room	68
Total	3032

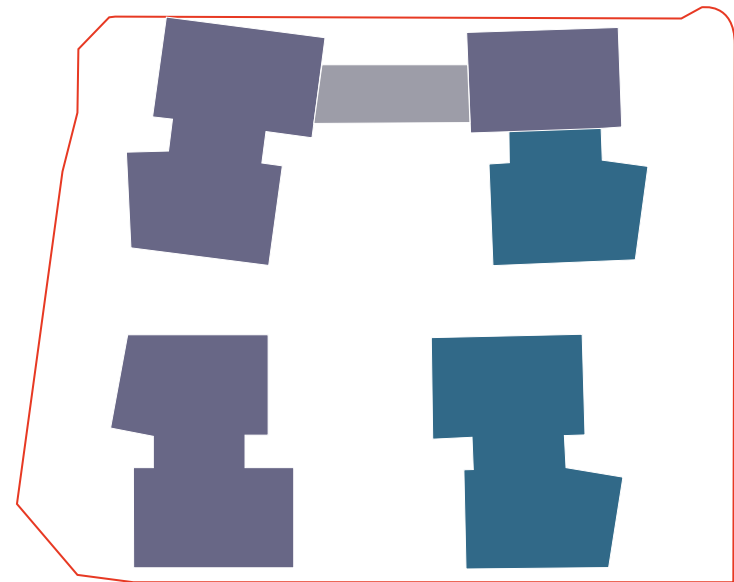


Proposed Footprint

Building Footprint	2871
Existing Substation	33
New Substation	17
Total	2921
= 96% of existing	



Building Heights



KEY

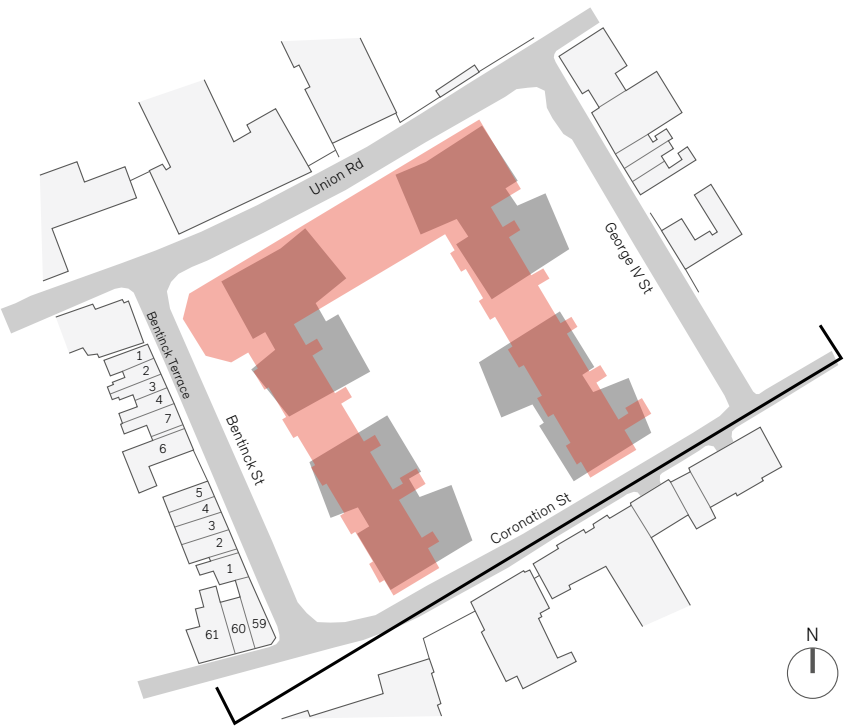
- 1 storey
- 2 storey
- 3 storey
- 4 storey
- 5 storey
- 6 storey



Scale in Context

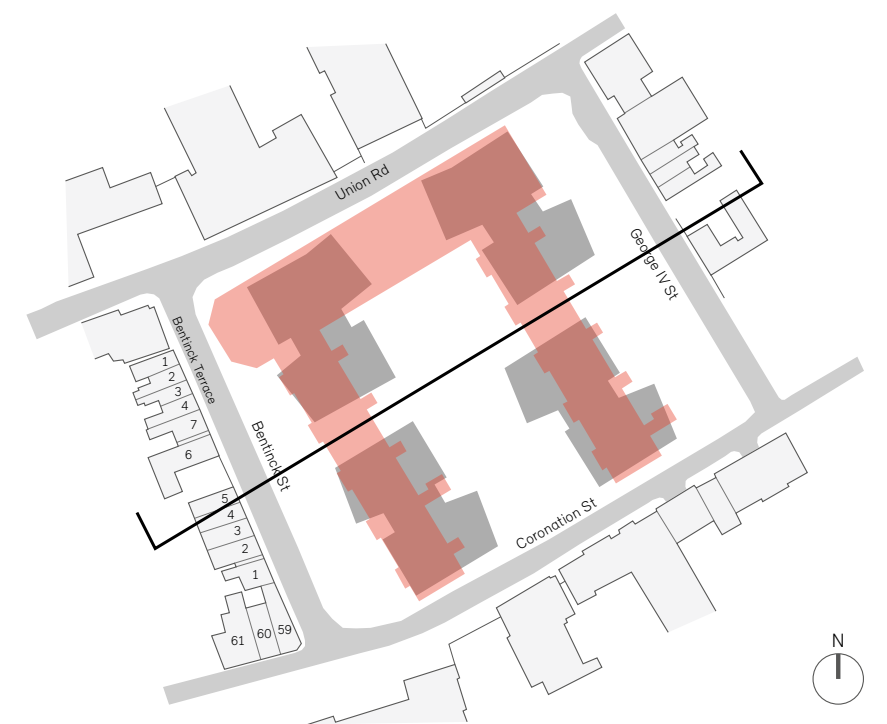


Existing Bentinck St





Existing Bentinck St



Character



Key principles of the conservation area -

- Proportion
- Rhythm
- Uniformity

Do that by using key features

- lintels
- pilasters
- banding

LINTEL
CONTEXT



PRECEDENT



PILASTER
CONTEXT



PRECEDENT



BRICK DETAILING
CONTEXT



PRECEDENT



WALLS
CONTEXT



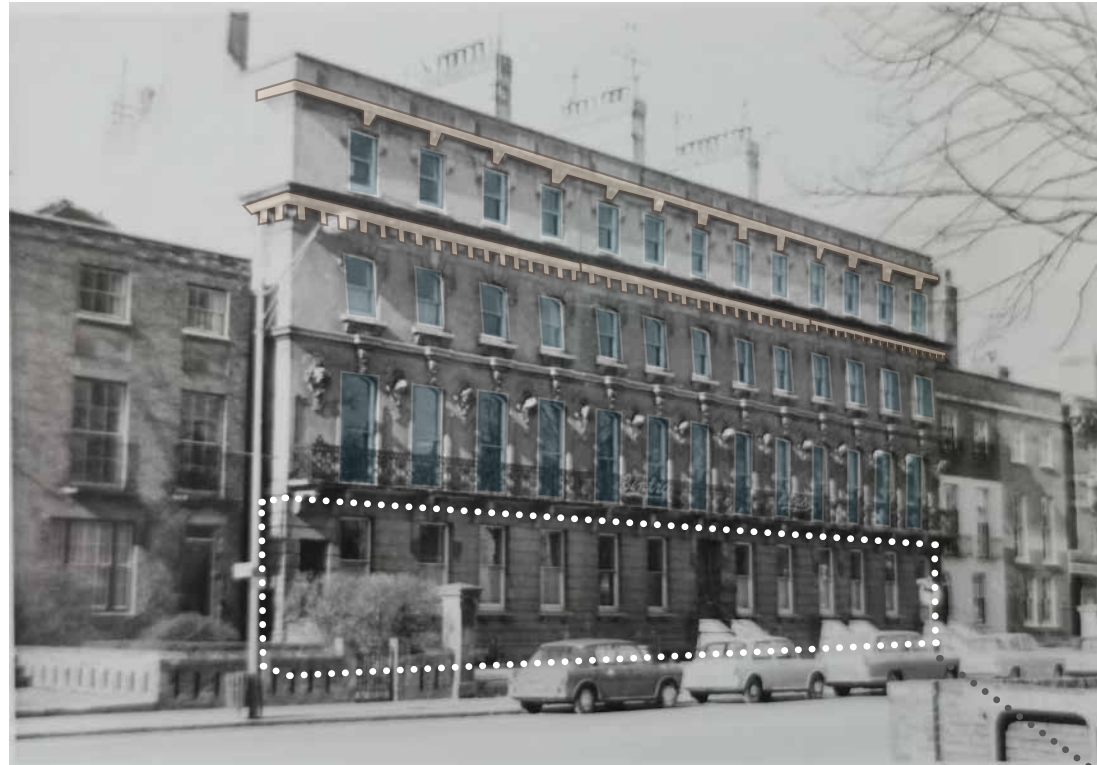
PRECEDENT



Architectural Articulation - Context

The surrounding area includes a strong Georgian architectural character, with notable examples such as Cintra House and Wanstead House on Hills Road providing key design references. Several defining elements contribute to the distinct identity of these buildings:

- Proportions
- Strong Base Proportions
- Datum Banding & Window Alignment
- Fenestration Hierarchy



Architectural Articulation – Response

In response to the Georgian context, the proposals incorporate key design features that refine the building's proportions and detailing:

- Enhanced base articulation: Wider plinth banding grounds the buildings
- Raised datum banding: Visually connects ground and first floor windows
- Structured fenestration rhythm:
 - Regular window placement
 - Gradual reduction in window scale up the elevation, reflecting Georgian hierarchy



Proposed Elevational Articulation



Brick Detailing to central piece amended. Horizontal textured brick detailing to pick up on ornate banded of conservation context buildings

Variation in colour and depth of balconies



White smooth brick



Grey metalwork



Light Buff brick



Warm Grey brick



Warm grey/taupe balconies



Glossy tiles

Entrance brought forward and height raised. Canopy added with integrated signage.

Increase to height of base datum

- Buff brick with white detailing used externally and echoed internally
- Entrance interiors feature glossy ceramic tiles matching exterior tone/profile
- Horizontal banding of tiles reinforces continuity from outside to inside
- Texture shift (matte to glossy) adds interest while maintaining design coherence

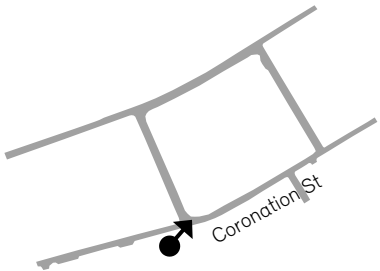
Proposed Entrance



Proposed View



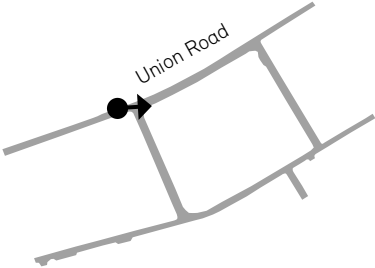
Existing View



Proposed View



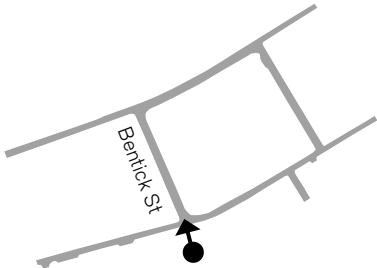
Existing View



Proposed View



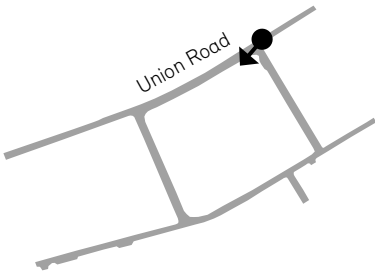
Existing View



Proposed View



Existing View



Heritage

- Contemporary design ensures legibility of old vs. new phases
- Architectural references drawn from Hills Road, including rustication & banding
- Union Road enclosure reintroduces historic perimeter block pattern
- Improves setting of Grade II Wanstead House* with built form reflecting conservation area character
- Building heights along Union Road reduced to address heritage concerns





Landscaping

Landscape Concept Plan

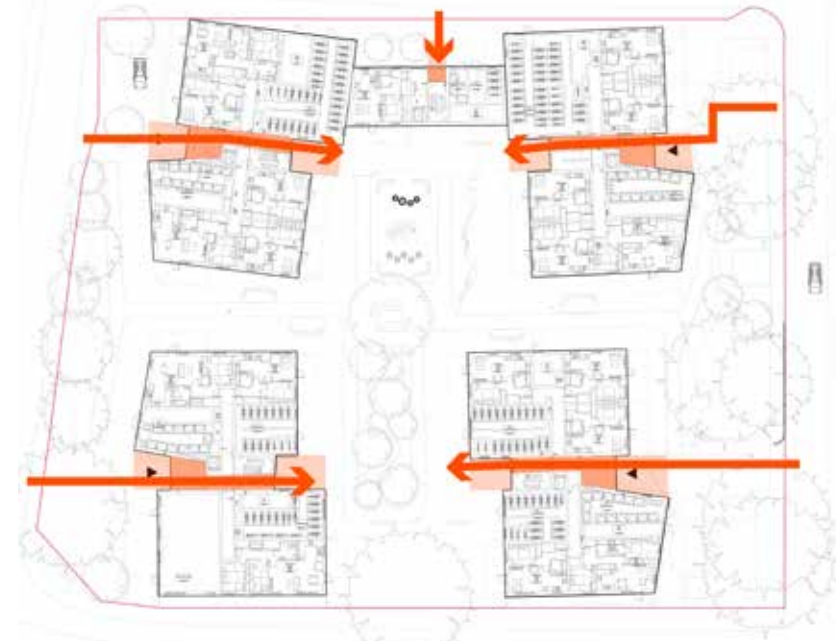
- 1. **Union Road Greening** introduces a new green edge that enhances the site’s frontage, improves streetscape character, and strengthens biodiversity through native planting and new tree avenues.
- 2. **The Community Centre** Terrace offers a flexible, semi-public space for social interaction, framed by sensory planting and integrated seating.
- 3. **The Neighbourhood Play Space** provides inclusive, intergenerational play opportunities with natural materials, climbing structures, and nature-based features.
- 4. **The Community Heart** is a central garden organised around a mature tree, acting as the development’s social hub with informal seating, biodiverse planting, and space for resident-led activities.
- 5. **The Sensory Garden** offers a quieter landscaped zone for rest and reflection, with aromatic planting, sheltered seating, and year-round interest.
- 6. **Water-Responsive Planting** integrates SuDS features such as rain gardens to manage surface water, support pollinator habitats, and create ecologically rich public spaces.
- 7. **Play on the Way** introduces informal, incidental play features—stepping stones, logs, and planting trails—along key pedestrian routes to support active exploration.
- 8. **Private Residential Gardens** at ground floor level provide defensible, well-planted spaces that offer privacy while contributing to the wider green setting.
- 9. **Pocket Spaces** include benches and resting spots along central paths to encourage pause and social interaction.
- 10. **The Sub Station** is discreetly located within planting and accessed via George IV Street.
- 11. **The BCP Area** ensures a dedicated bin collection point with clear 10m access for refuse pick-up.



Public Realm, Movement & Access

- Clearly defined public, resident, and private zones using materials, planting, and levels.
- All routes step-free and 2m wide (1.7m in tighter courtyards), with tactile paving and lighting.
- Wheelchair-friendly seating with adjacent hardstanding.
- Gradients and play surfaces designed for full accessibility.

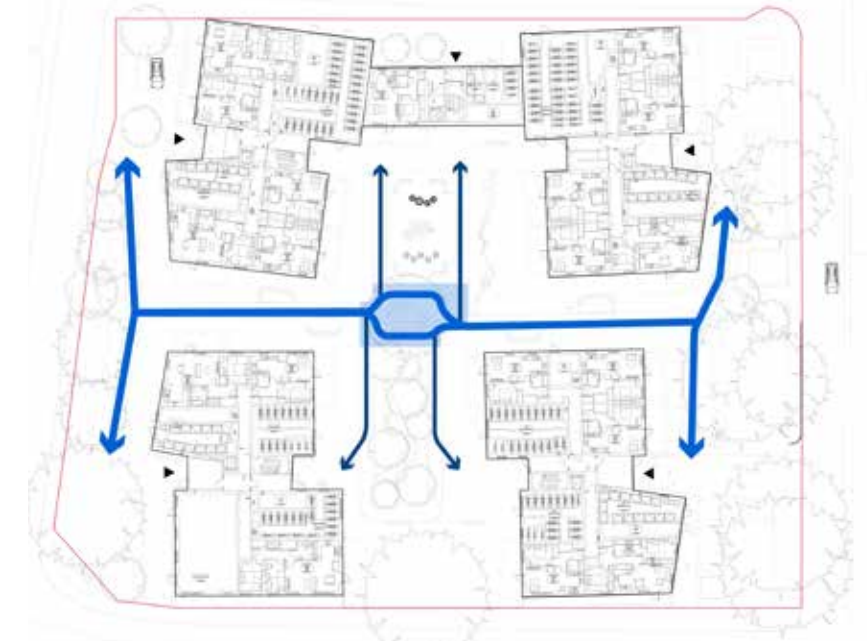
O1 Primary Routes



Legend

- Block Access Routes
- Internal Atriums
- External Atriums

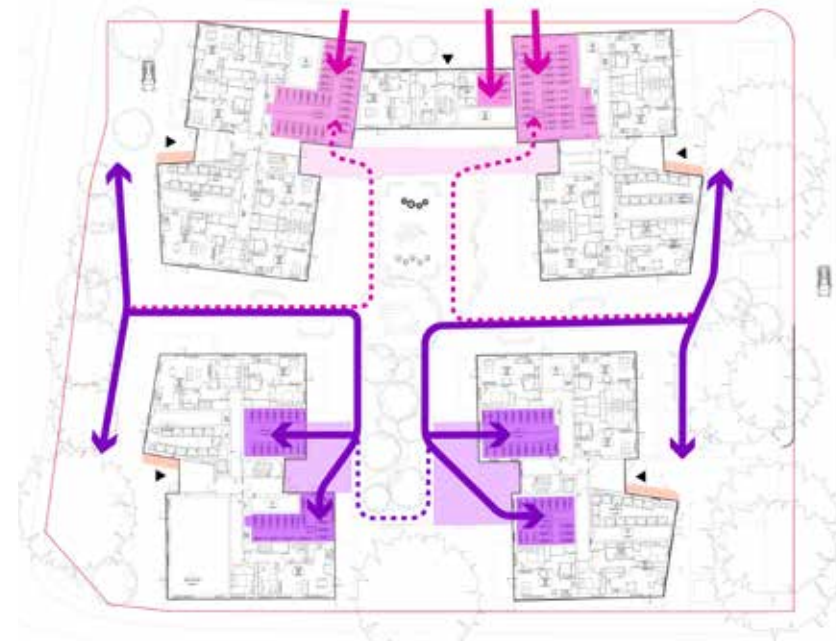
O2 Secondary Routes



Legend

- Core N-S & E-W Links
- Resident Focused Movement
- Community Heart

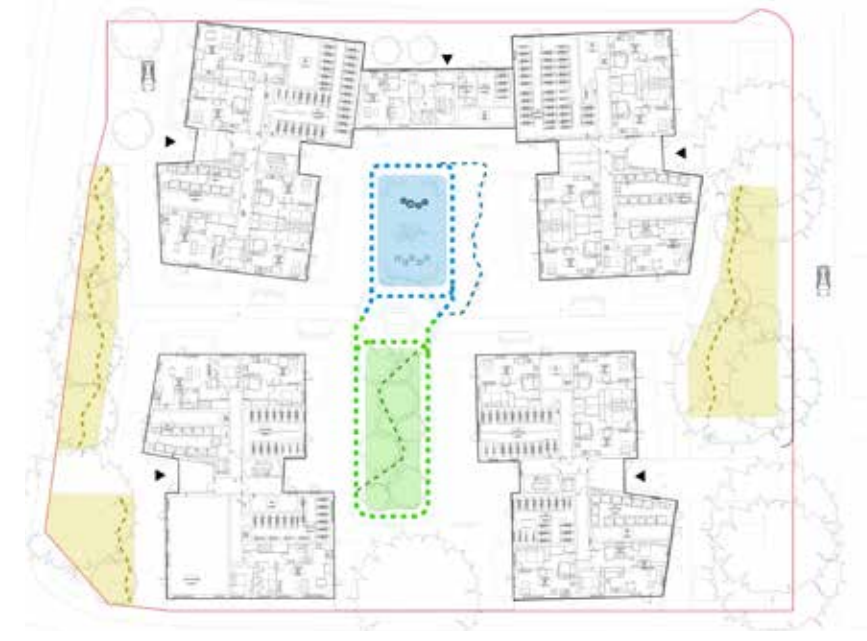
O2a Secondary – Bike Store Access:



Legend

- Blocks A & B Bike Store Acces
- Blocks A & B Secondary Access Route
- Blocks A & B Bike Stores
- Blocks A & B Bike Store Public Realm
- Blocks C & D Bike Store Acces
- Blocks C & D Secondary Access Route
- Blocks C & D Bike Stores
- Blocks C & D Bike Store Public Realm
- Visitor Bike Parking

O3 Tertiary Routes – Play and Community Circulation:



Legend

- Play Area Circulation
- SuDS Play Circulation
- Play Area
- Sensory Garden Circulation
- Sensory Garden Internal Circulation
- Sensory Garden
- Nature-Based Play On The Way
- Play On The Way Nature Zones
- Community Heart

Public vs Private

- Thresholds defined using hedging, paving, and corten vertical markers—not gates or fences.
- Public spaces are open and welcoming; private gardens remain defensible but green.
- Material changes and planting layers reinforce spatial cues and ownership.



Mature vegetation and strategically placed trees



Defined hedges (min 500mm width)



Extensive planting between building facade and seating



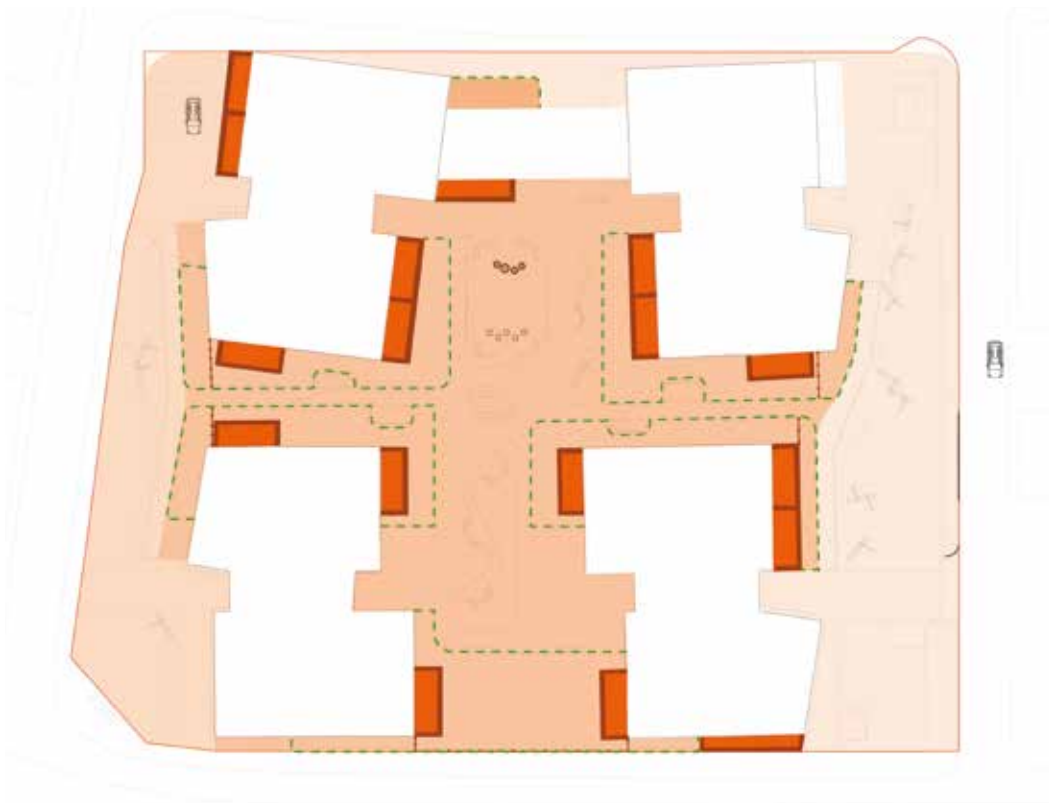
Flags & sets combination frame adjacencies



Material change from paver to gravel



High contrast paving edges using "accent" material



Legend

- Public
- Resident's Focused
- Private
- Permeable Vegetative Boundary
- Impermeable Vegetative Boundary
- Structural Boundary Elements



Replacement of existing low fence along Coronation St.



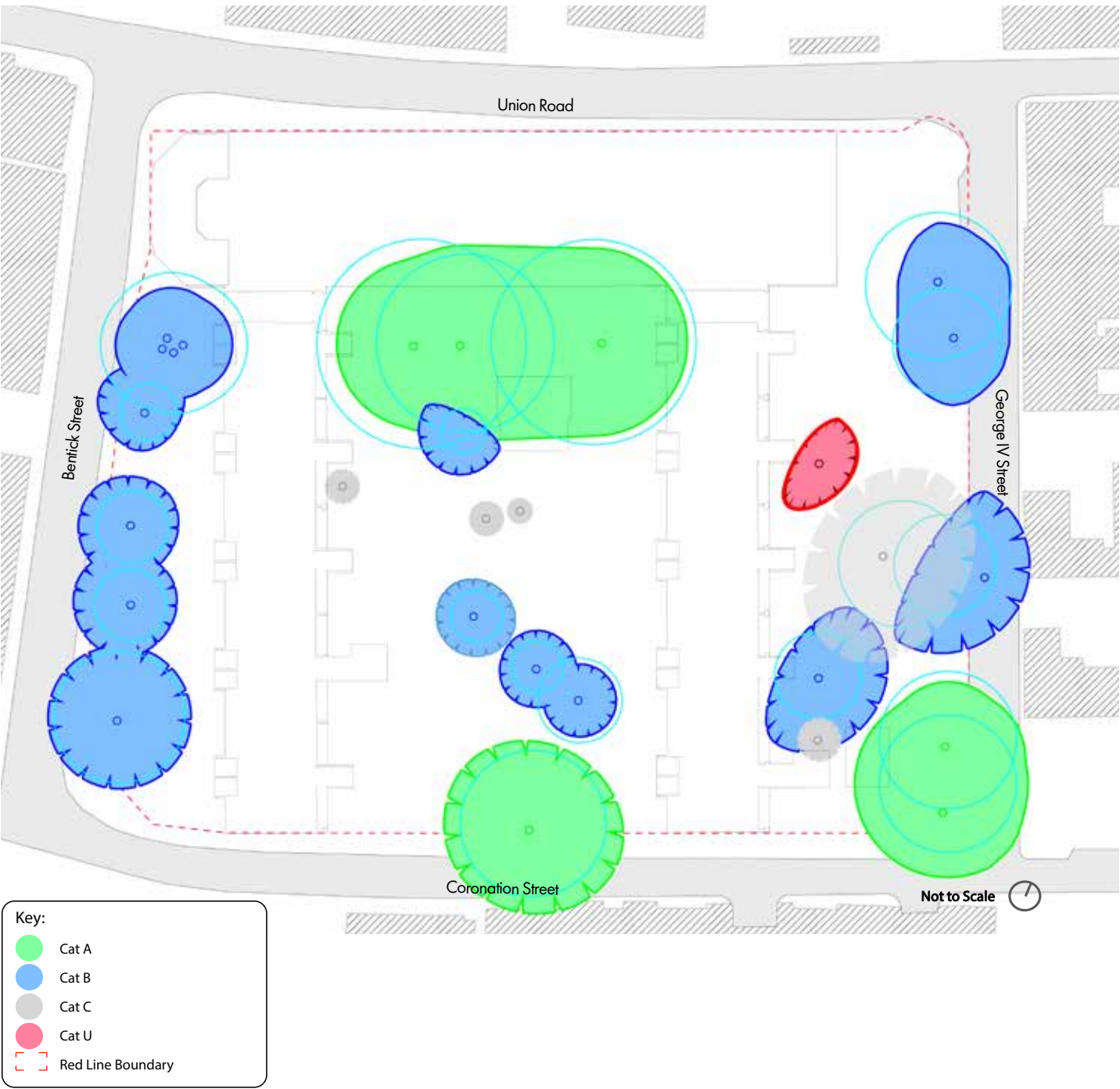
Low Wings



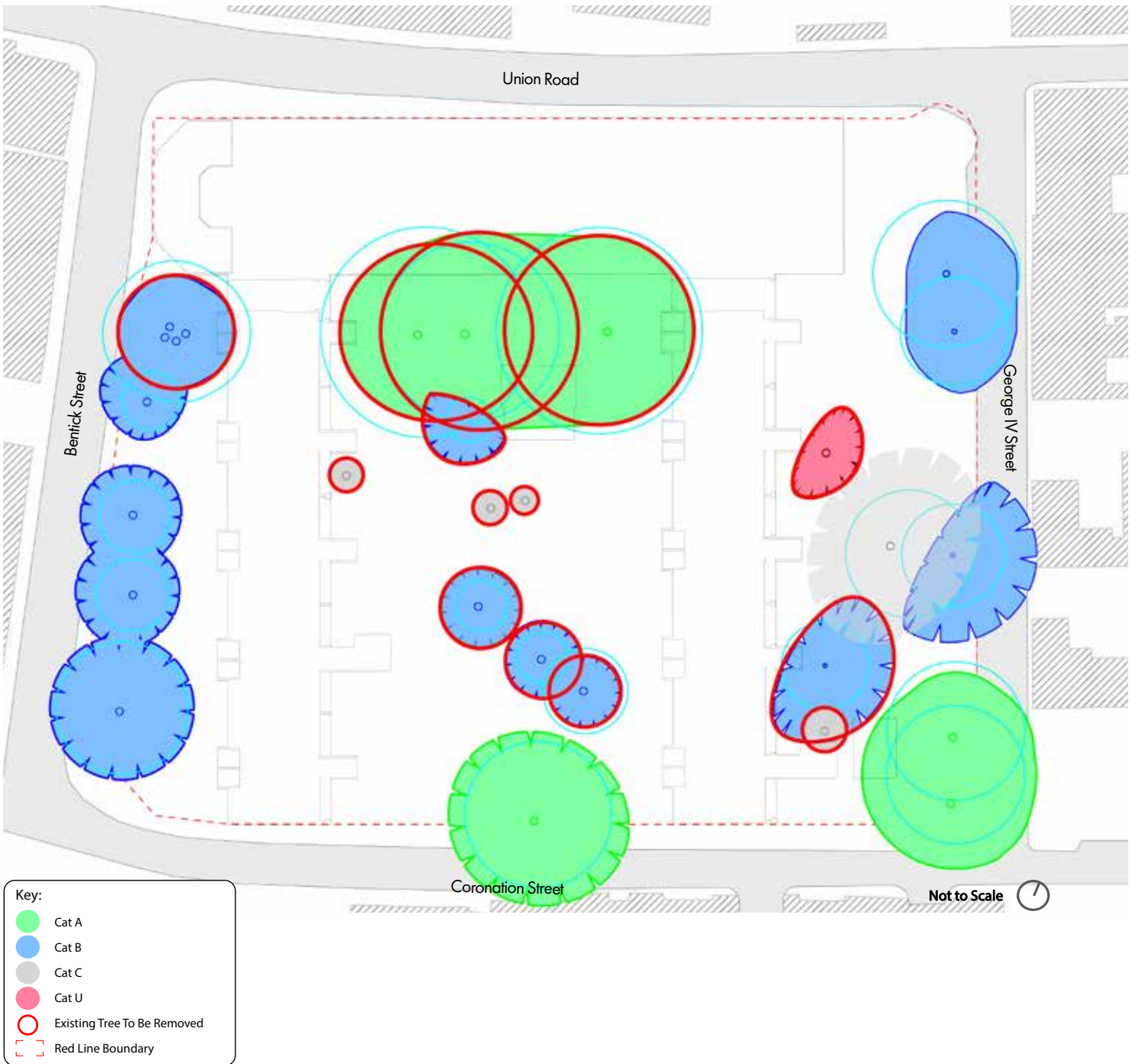
Integrated gateways

Tree Removal/Retention

Existing trees on site

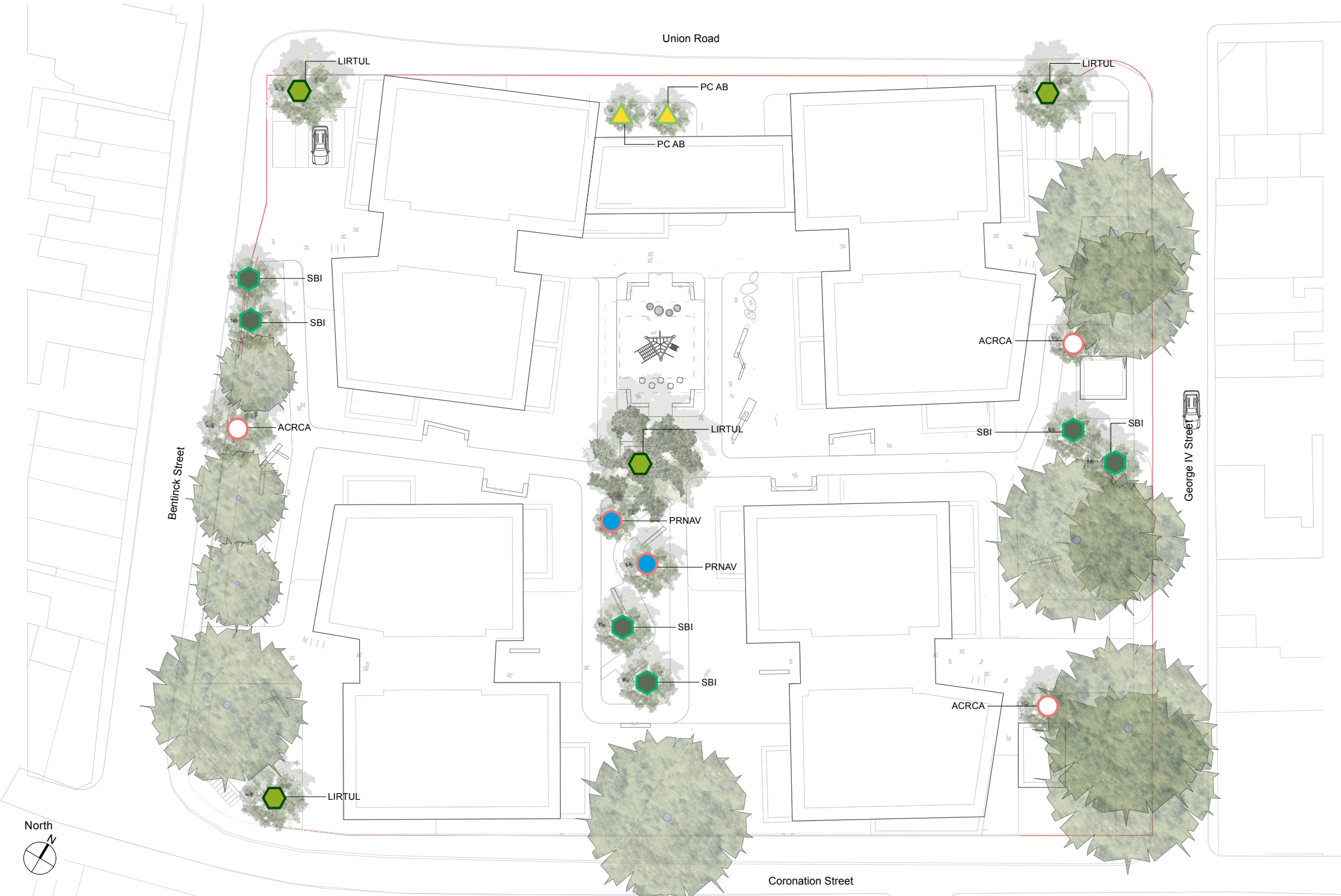


Trees to be removed




Tree Strategy & Canopy Cover


- 3x Cat A trees removed, offset with 17 diverse new trees including Tulip Tree and Field Maple.
- Tree canopy cover increases from 2,390m² to 2,450m² (+2% over 20 years).
- Tree layout supports biodiversity and aligns with Cambridge's Tree Strategy.





Tree Planting Plan


Legend


 Liriodendron tulipifera (Tulip Tree)

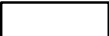
 Pyrus calleryana 'Autumn Blaze'


 Acer campestre (Field Maple)

 Betula pendula (Silver birch)


 Amelanchier lamarckii (Snowy mespilus)


 Prunus avium (Wild Cherry)

 Proposed Building

 Site Boundary

Trees

 Existing Tree

 Proposed Tree

- Structural soils, engineered growing media, and permeable surfaces ensure root health.
- Tree zones designed for longevity with embedded irrigation and monitoring.
- SuDS and planting areas designed for long-term ease of maintenance



Name: Liriodendron tulipifera (Tulip Tree)
Area: Secret Garden + Biodiverse Envelope
Size: Large



Name: Acer campestre (Field Maple)
Area: Biodiverse Envelope
Size: Medium



Name: Betula Pendula (Silver Birch)
Area: Biodiverse Envelope
Size: Medium



Name: Prunus avium (Wild Cherry)
Area: Secret Garden
Size: Small



Name: Pyrus calleryana 'Autumn Blaze'
Area: Secret Garden
Size: Small



Name: Amelanchier lamarckii (Snowy mespilus)
Area: Secret Garden
Size: Small

Planting Strategy

- Mixed native and ornamental species chosen for climate resilience and biodiversity.
- Year-round structure and sensory interest through layering and texture.
- Edible and aromatic planting enriches amenity areas.
- Pollinator-friendly strategy integrated throughout.

SuDS & Water Management

- Site-wide SuDS strategy includes rain gardens, permeable paving, and green roofs.
- Supports surface water management, improves infiltration, and enhances biodiversity.
- Water-responsive planting palette ensures performance and visual quality year-round.



SuDs & Drainage

- Site-wide SuDS strategy includes rain gardens, permeable paving, and green roofs.
- Supports surface water management, improves infiltration, and enhances biodiversity.
- Water-responsive planting palette ensures performance and visual quality year-round.



Planting Mix 1 - Ornamental Shade Tolerant Planting to North facing aspects



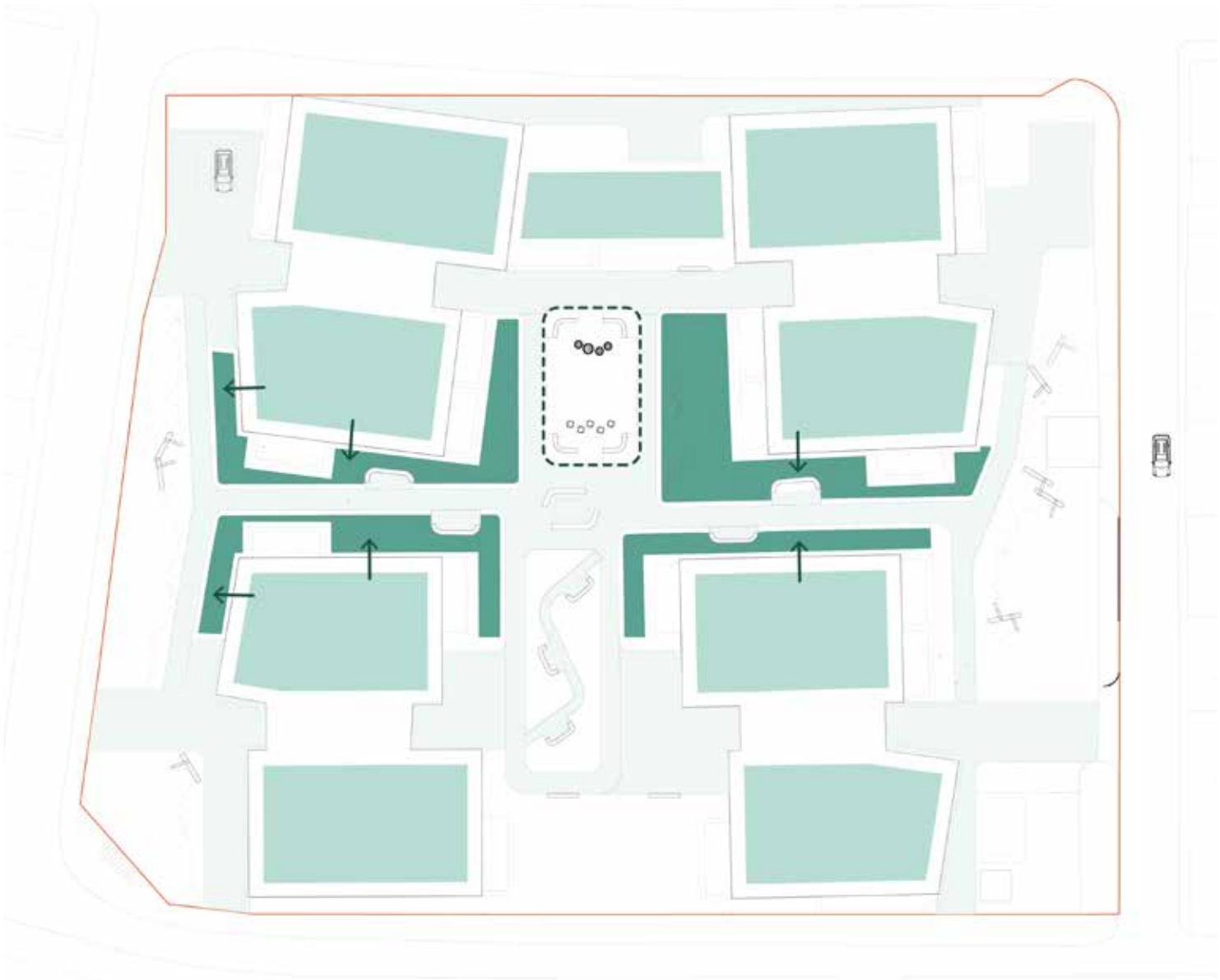
Planting Mix 3 - Ornamental Grasses Shrubs, Herbaceous, Herb and Structural Planting to South facing aspects



Planting Mix 2 - Ornamental Bulb focused mix with, Grasses, Shrubs, Herbaceous, Herb and Structural. Planting for dappled shade and under trees



Planting Mix 4 - Water Responsive Planting Palette



- Legend**
- Green Roofs
 - Rain Gardens - Lined
 - Permeable Paving
 - Proposed Tank Location
 - Indicative Downpipe Connection

Biodiversity and Ecology

- Enhanced habitat diversity through varied planting and SuDS
- Species selected to support pollinators and native wildlife
- New trees, wildflower turf, and nectar-rich species boost ecology
- Gaps in boundaries allow hedgehog movement
- Bird and bat boxes integrated into buildings and trees



Pollinator rich species selection



Multi-season native species planting selection



Wildflower mix



Log benches



Insect hotels



Deadwood retention



Hedgehog highways



Bat boxes

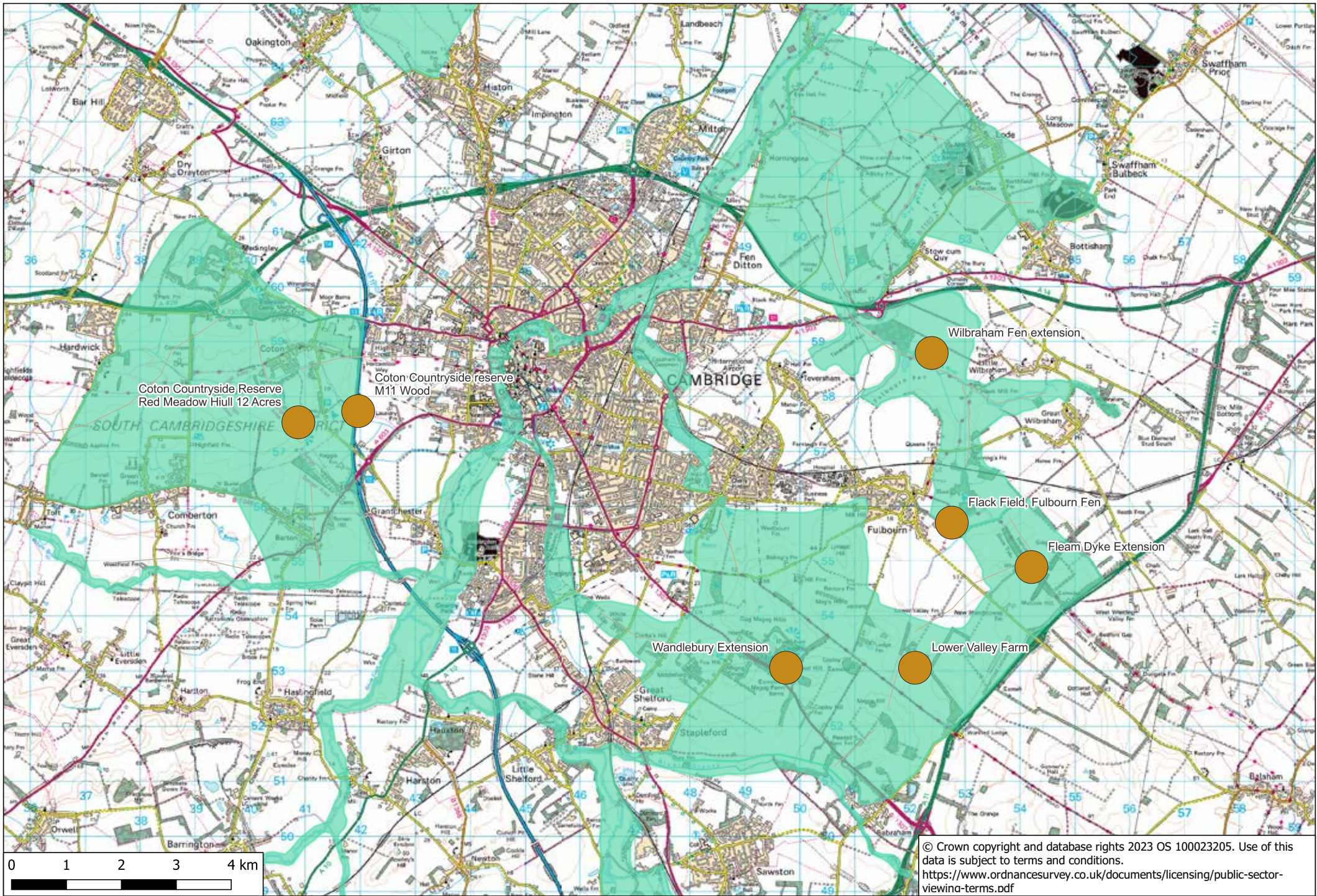


Bat friendly lighting

BNG

The biodiversity value of the proposed development has been carefully reviewed through the design process but is not expected to achieve a 20% net gain on site. Discussions with the Council's Ecologist have been held to review options for off-site enhancements in the area local to the site. A defined set of local improvements have not however been able to be identified to date. CIP remain committed to delivering a 20% biodiversity net gain and at this time, the strategy assumes that off-site credits will be purchased from a local established habitat banks within the strategic Cambridge Nature Network. If more local solutions do emerge, these will however be reviewed with the Council's Ecology Officer.

**Cambridge Nature Network:
Biodiversity Net Gain Sites**



Play + Amenities

- Formal and informal play integrated across the site.
- “Play on the Way” uses natural materials to embed activity into daily movement.
- Fully inclusive surfacing and spatial design for all age groups and abilities.
- Amenity spaces support intergenerational use and casual socialisation.



Rope Pyramid



Jumping Discs



Sound Cushions



Play Typologies Diagram

Legend

105 m / 628 m ² Nature-Based Play on the Way	Nature-Based Play on the Way
150 m ² Destination Play	Play on the Way Connectivity
49 m ² SuDs Biophillic Play	Destination Play Connectivity
	SuDs Biophillic Play Trail
	SuDs Play Links



Rest and Dwell Spaces Diagram

Legend

Dwell Spaces
Seating
Restful Routes



Log Levels



Cut Log Pathway



Magnifying Posts



Glacial Boulders

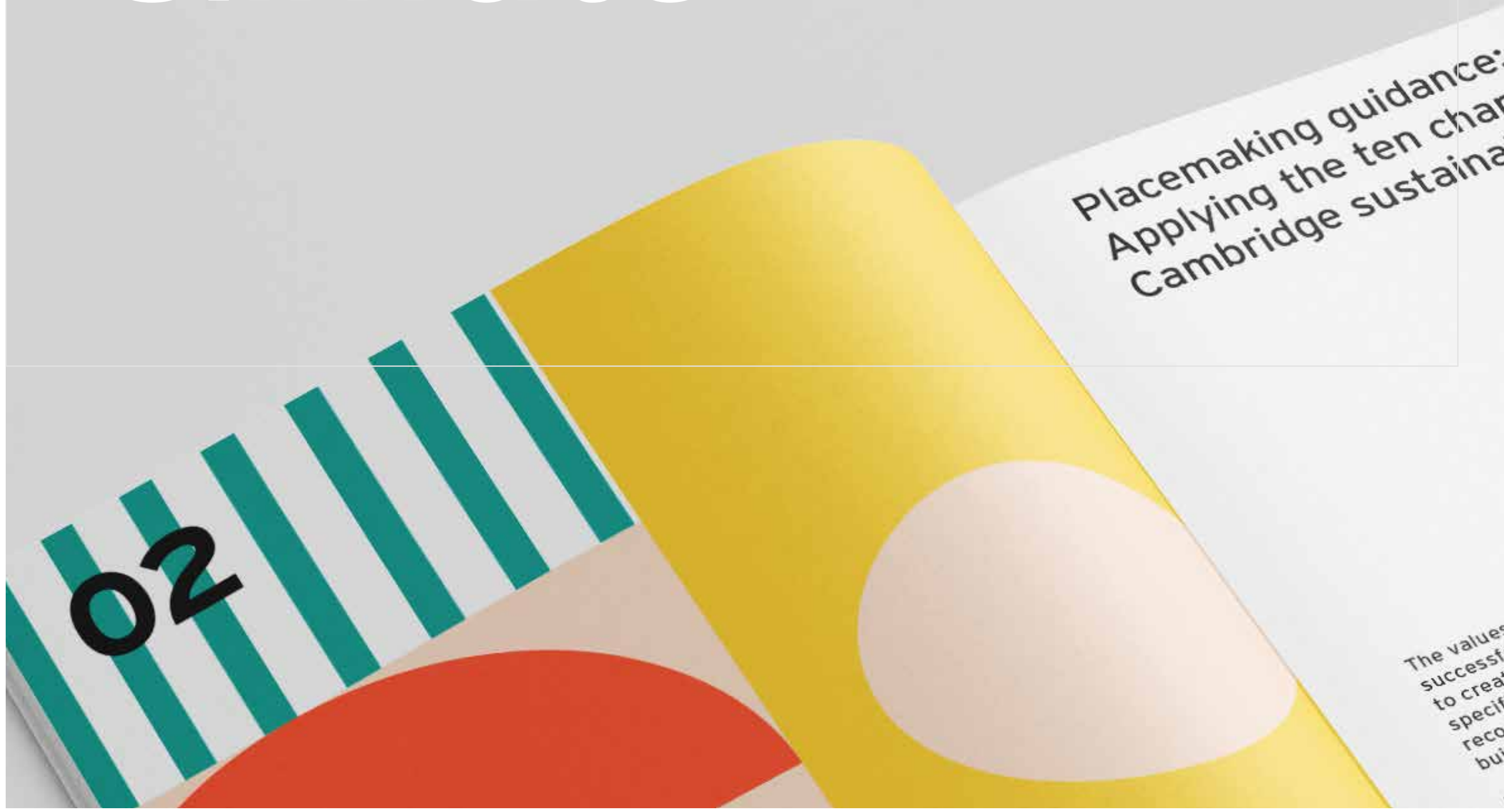


Elevated Wooden Walkways



Embedded Elements

Climate



Energy & Carbon Performance

Passivhaus Principles

The scheme is designed using Passivhaus Principles, promoting the fabric first approach and applying the following guidelines for Passivhaus design:

- Low Building Form Factor
- Airtight Construction
- High quality insulation and windows
- Installation of mechanical ventilation with heat recovery (MVHR)
- Minimise thermal bridging
- Careful design of windows to maximise winter solar gain
- Minimise overheating through use of solar shading to create comfortable spaces



Passivhaus Planning Package modelling tool used for low energy performance assessment

Cam Standard

Developed to define Passivhaus Principles

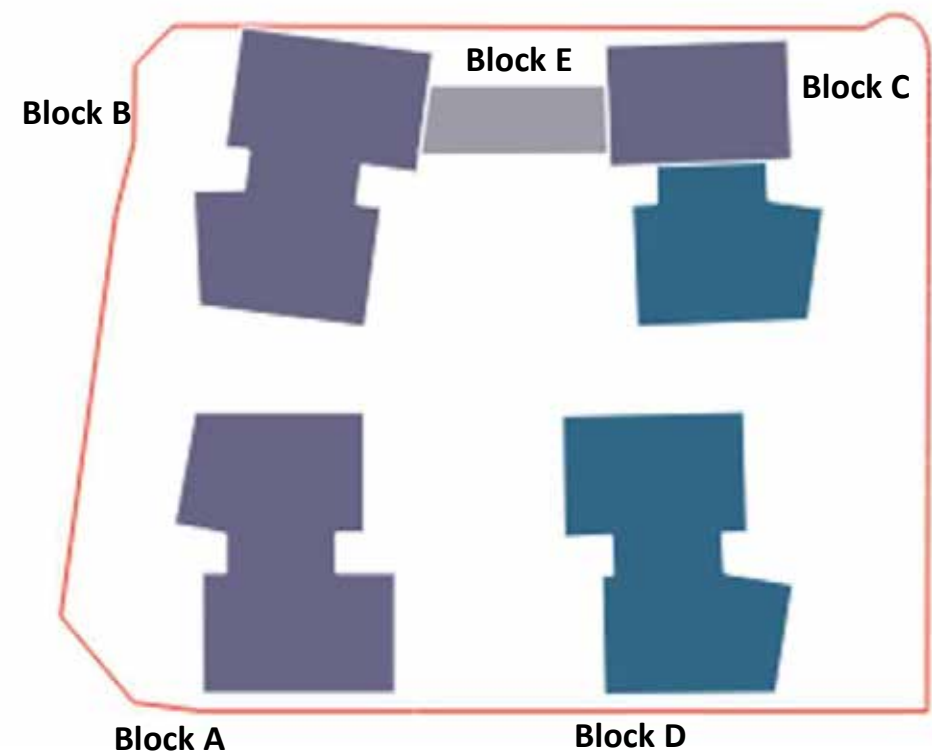


Cam Standard certification requirements (minimum)	
Requirement	Limiting Value
Annual space heating demand	Up to 40 kWh/(m2.a)
Annual space cooling demand	< 15 kWh/(m2.a)
Primary energy renewable (PER) demand	60 to 75 kWh/m2a (up to 75 kWh/m2a with PVs); or a project specific PER calculated using the PHPP for high occupancy density buildings
Airtightness	1 p to 1.0 Air Changes per Hour @50Pa
Overheating	< 10% occupied hours above 25°C
Design temperature (winter)	20°C
Design temperature (summer)	25°C in conjunction with Building Regulations Part 6 assessment for residential buildings
Window installed U-value	< 0.85 W/(m2K)
MVHR efficiency	>= 75%
MVHR Specific Fan Power (SFP)	< 0.45 Wh/m3 (1.62 W/l/s)
Passivhaus Consultant	Passivhaus or AECB Consultant
Passivhaus Certifier	Not applicable
Passivhaus Institute (PHI) Assessment	Not applicable
Quality Assurance	
PHPP Model	Required for all schemes
Evidence	Certificates, delivery notes, photographs, confirmation of performance specification, declarations
Independent Certification	Not applicable

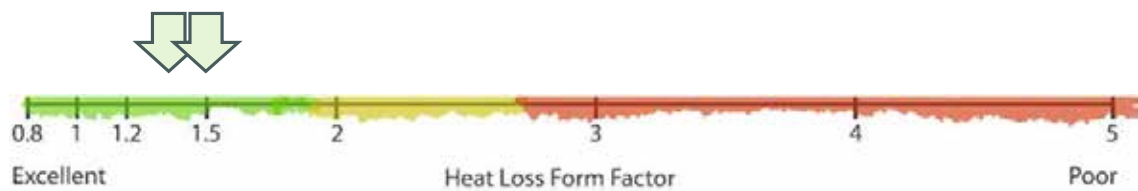
Sustainable Housing Design Guide - 2024 addendum

3

Building Form Factor Assessment



Block B+C+E | Market Sale = 1.3
Block A+D | Affordable = 1.5



Scheme Specifications

		Affordable Housing Spec		Market Sale Spec
Form Factor		<1.5		<1.5
Windows		0.5 g-value, 0.85 W/m ² K U -Value	⇒	0.5 g-value, 1.2 W/m ² K U -Value
External Wall		0.15 W/m ² K	⇒	0.18 W/m ² K
Floor		0.13 W/m ² K		0.13 W/m ² K
Roof		0.12 W/m ² K		0.12 W/m ² K
Thermal bridging		0.05 to 0.25 W/mK		0.05 to 0.25 W/mK
Airtightness		Airtightness < 1 ach@50Pa	⇒	Air permeability <3 m ³ /h.m ² @50Pa
MVHR		1.5 -2.5 m supply/exhaust ducts 77% HR	⇒	10m supply/exhaust ducts 77% HR
Solar shading		150 mm Window Reveal		150 mm Window Reveal



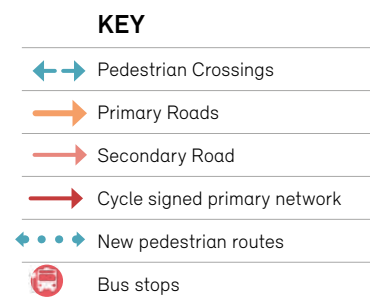
Wider Vehicle, Cycle and Pedestrian Movement

Existing

- Site is well connected to Cambridge city centre, station, and bus routes
- Current layout prioritises cars, with fragmented pedestrian/cycle routes
- Streets originally designed for terraced housing limit permeability
- On-street parking and service access dominate ground-level experience

Proposals

- New pedestrian route between Bentinck St & George IV St reinstates historic link
- Route improves permeability while retaining garden's semi-private character
- Play routes along adjacent streets create safer journeys for children
- Strategy prioritises walking, cycling and inclusive access while maintaining vehicle access



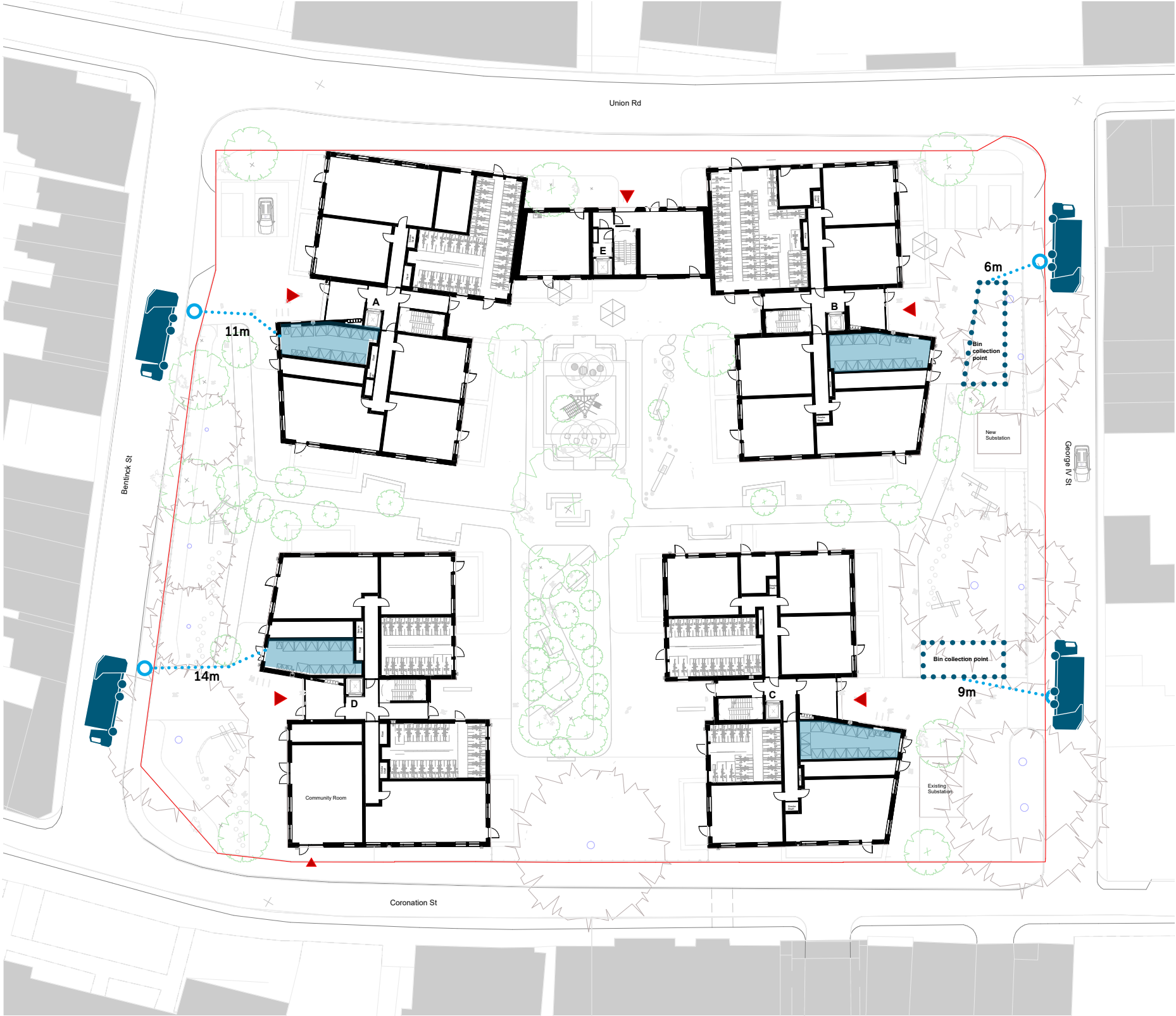
Parking strategy




- Minimal car parking in line with sustainable transport goals
- 4 accessible parking bays for M4(3) homes + 1 car club bay (open to local residents)
- 247 secure cycle spaces (including 14 for larger bikes) within bin stores
- 26 visitor cycle bays located at building entrances



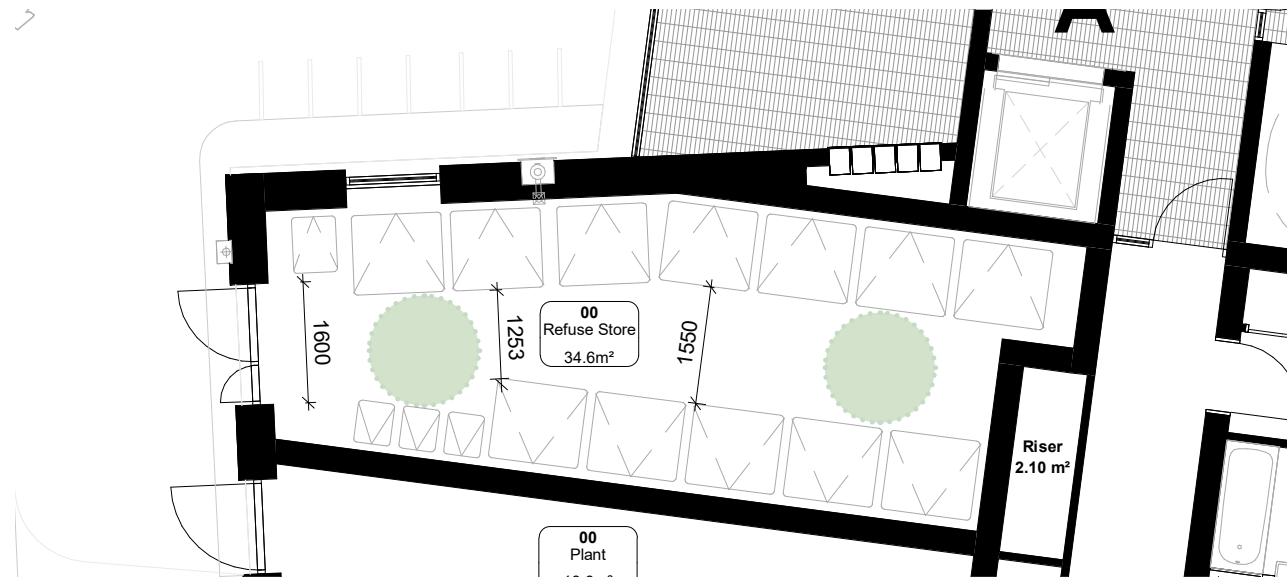
Refuse strategy

- Servicing and bin collection from surrounding streets
- Refuse stores positioned for safe access and to protect mature trees
- All flats within 30m of designated waste store
- Strategy developed with Greater Cambridge Shared Waste Service

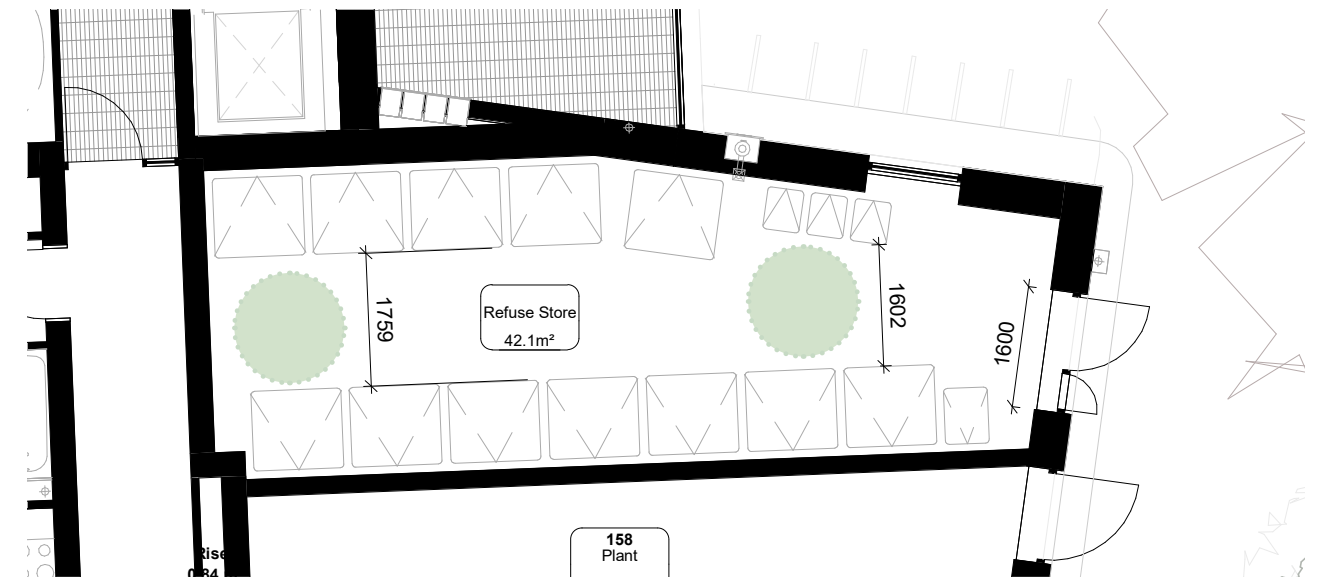


Key	
	Refuse Collection Vehicule
	Refuse Collection Drag Distance
	Refuse Collection Point

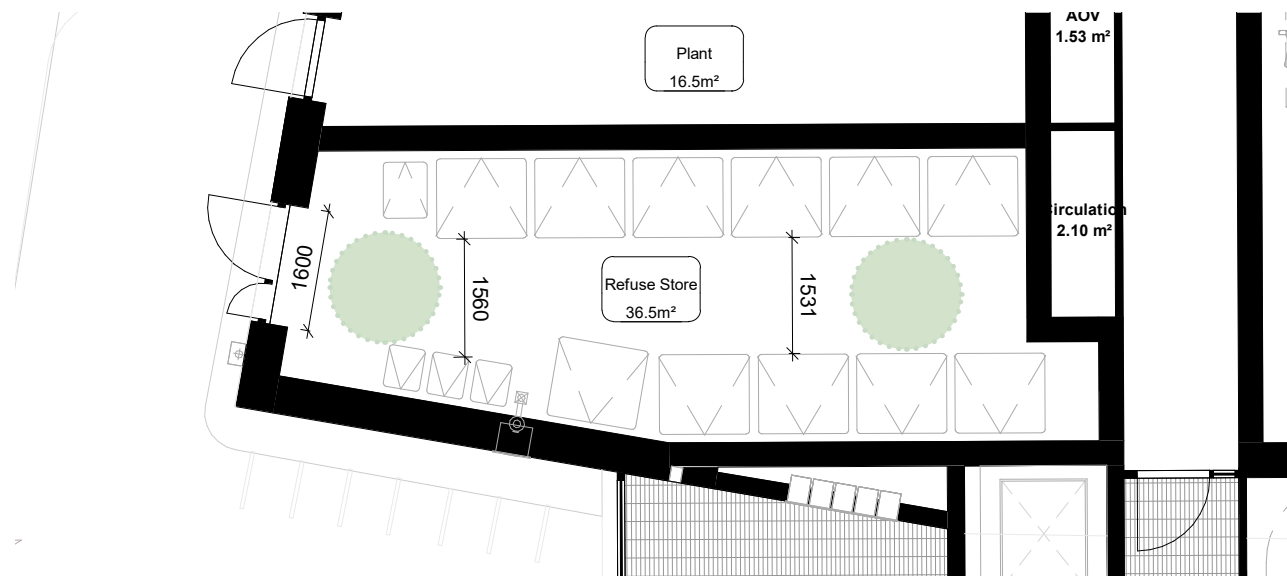
Block	No. Floors	1 bed	2 bed	3 bed	Total	Refuse/ Litres	Recycling/ Litres	Refuse 1100l bins	Recycling 1100l bins	Green 240l bins	Food Waste 140l bin*
Block A	5	20	13	4	37	5145	5154	6	6	1	3
Block B	5-6	22	19	0	41	5555	5555	6	6	1	3
Block C	5-6	24	21	0	45	6105	6105	7	7	1	3
Block D	5	18	13	4	35	4925	4925	5	5	1	3
Block E	4	7	0	0	7	770	770	1	1	1	1
Total		165									
**Quantum confirmed in email dated 23/04/2024 "...add on some 140l green bins at each block for food waste. For each block you would need 3 x 140 litre green bins."											



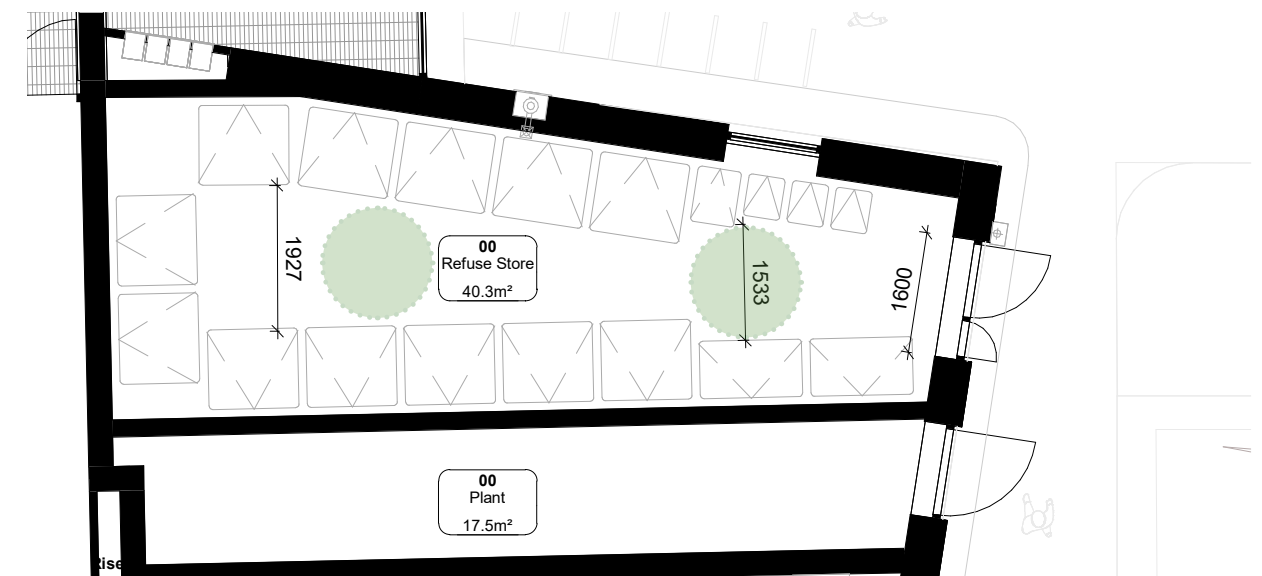
Block A bin store



Block B bin store



Block D bin store



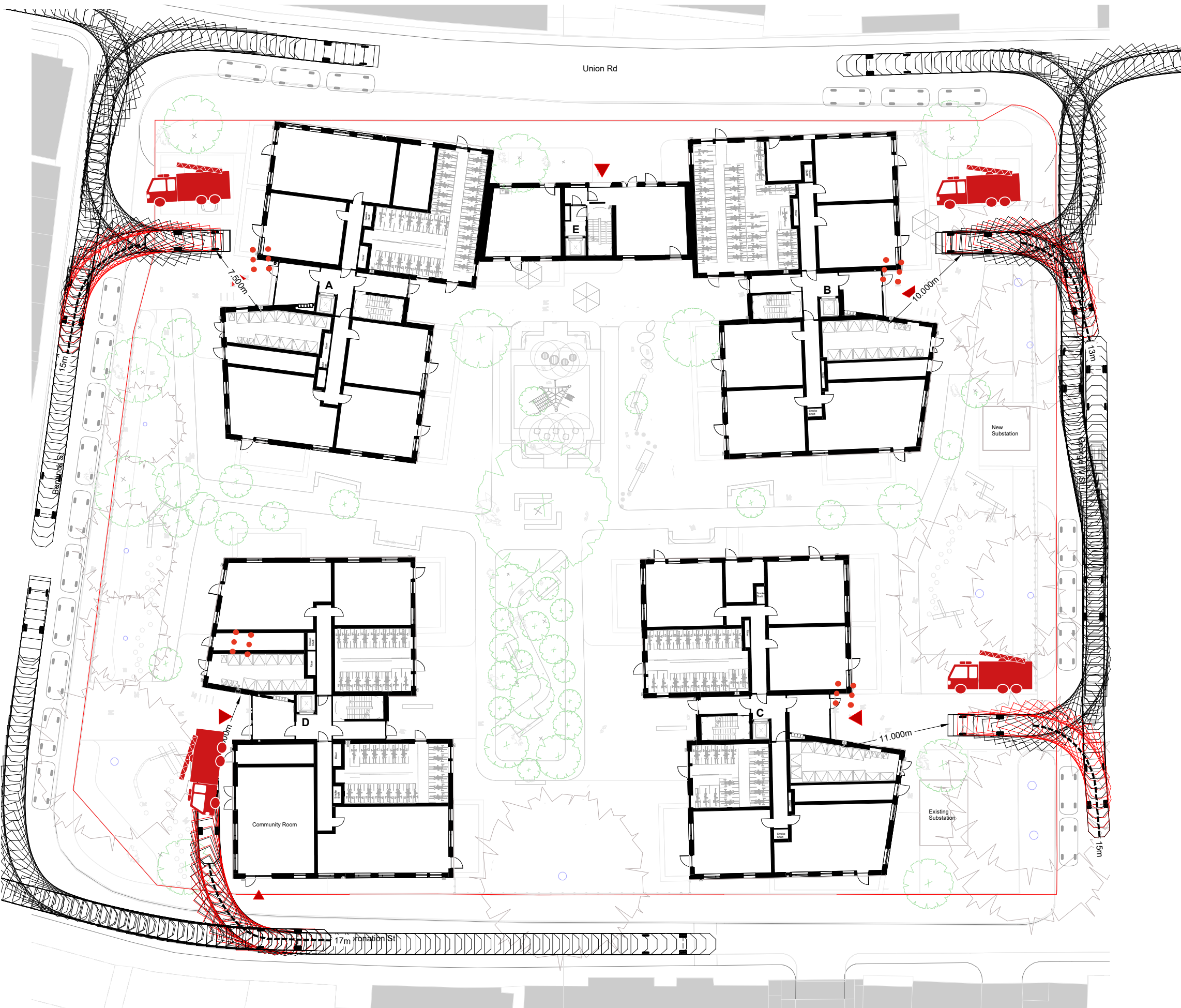
Block C bin store

Key

1500mm Wheelchair turning circle

Emergency vehicles and fire

- Dry risers within 18m of fire vehicle access points, visible from road
- Compliant with Approved Document Part B
- Stair cores, lobbies and entrances reviewed with fire consultants



Key	
	Fire Vehicle
	Route to dry riser inlet
	18m Radius from dry riser inlet

Inclusive access

- All homes meet M4(2); 5% of affordable homes meet M4(3) wheelchair standards
- 4 M4(3) homes at ground floor with private gardens and dedicated parking
- Step-free access from parking to lifts; all blocks include lifts
- Corridors min. 1500mm wide; supports families, older residents, and people with reduced mobility
- Design supports lifelong living and future adaptability



Ground floor showing location of WC accommodation

Example layout

Homes have been designed to include:

- 1500mm clear width for turning circle in entrance hall of home, maintained for 1800mm in entrance hall
- 300mm nib to leading edge of doors
- Minimum 200mm to following edge of doors
- Minimum 850mm clear opening width of doors
- Clear width of circulation is a minimum 1050mm, with 1200mm when approach to door is not head on
- A space within living area for wheelchair charging and transfer with power socket
- Each bathroom has level access shower with clear access zones and turning circle
- Principal bedroom to be 13.5sq.m, a minimum of 3000mm wide
- Single bedroom to be 8.5sq.m, minimum of 2400mm wide
- Each flat has a private balcony, minimum 1500mm clear depth with a turning circle free from the door swing
- All residents have level access to shared landscaped gardens with seasonal planting, seating and shade

Typical Floor Plan showing M(4)3 provision in WC home Scale 1:100 @ A3

Key

Entrance zone

1500mm turning circle




wheelchair transfer zone



Safety and Security

- Layout promotes safety through passive surveillance and active frontages
- Communal entrances fitted with PAS 24-rated, fob-accessed doors
- Private entrances also PAS 24-rated for individual security
- Secure post lobbies at each core form clear security thresholds
- Design discourages anti-social behaviour and supports resident confidence



Key	
	PAS24 Rated Fobbed Accessed Door
	Secure Post Lobby
	Passive Surveillance

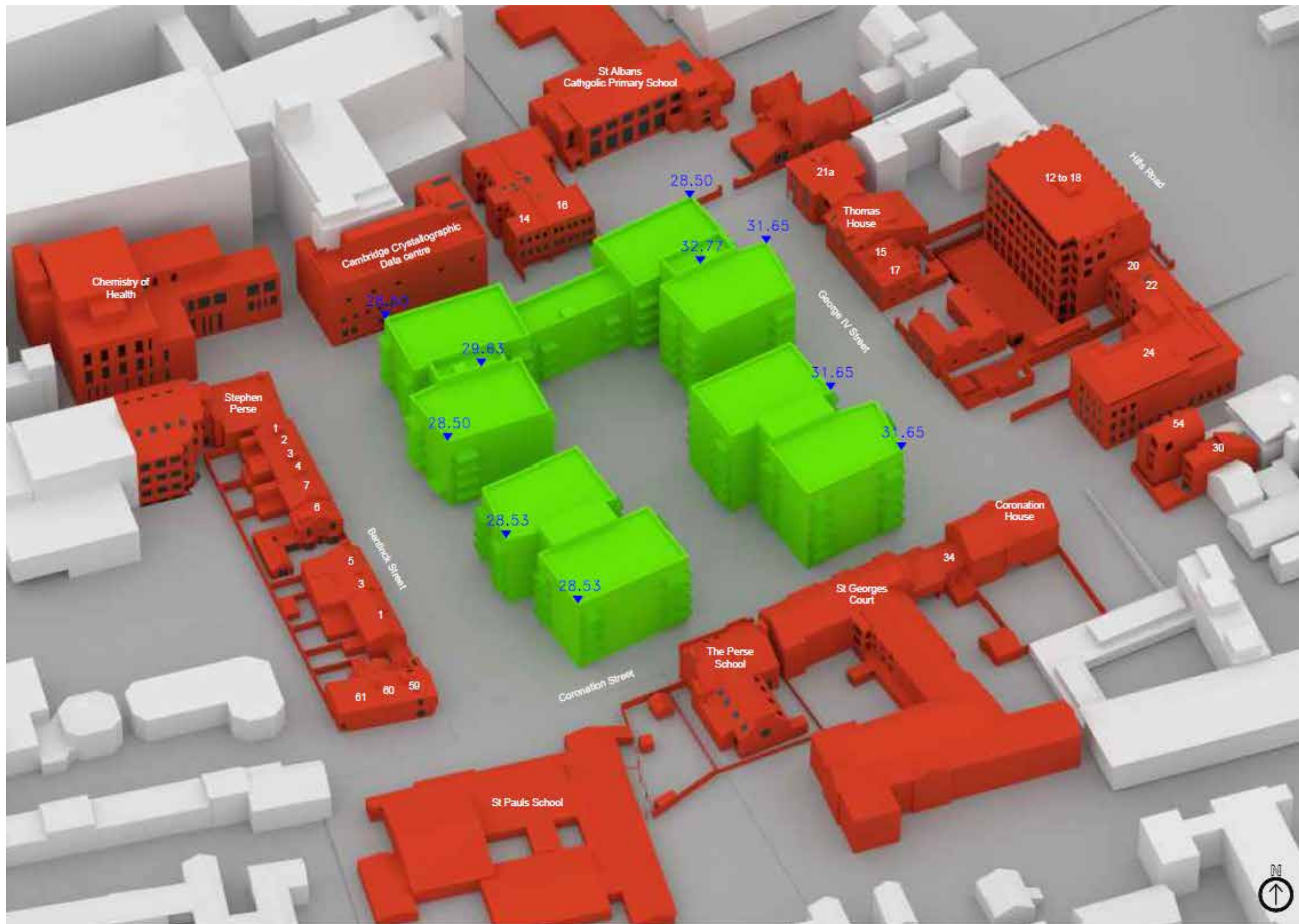
BRE Daylight & Sunlight (Neighbouring)

- 98% of tested windows meet or exceed BRE VSC recommendations. 3 neighbouring windows fall short but sit within the minor loss category and are only one of multiple windows serving the room.
- All neighbouring windows pass BRE direct sunlight test
- 85% of rooms meet Daylight Distribution (DD) targets
- Most DD shortfalls are minor; just 5 rooms show moderate deviations. A good portion of the impacts are to bedrooms with a lower expectation for natural light. The impacts are spread and not concentrated in one area, so as to reduce the overall impact on the properties as a whole.
- All moderate loss rooms retain over 50% DD – an accepted standard
- BRE and NPPF both recommend flexible interpretation in urban contexts
- No daylight/sunlight reason to withhold planning approval



BRE Daylight & Sunlight (Internal)

- SDA test shows 94% of 412 rooms meet or exceed BRE guidelines
- Only 23 rooms fall short, across Blocks A, B, and D
- 106 of 163 homes meet sunlight exposure targets
- All amenity areas substantially surpass BRE targets
- Results improved through iterative design development
- BRE and NPPF allow flexibility where justified
- High compliance reflects balanced and considered design
- 86% of proposed homes are dual aspect





Summary

Conclusion

This carefully considered scheme brings a vital Cambridge site back into use, replacing outdated, unsafe and unsightly buildings with high-quality new homes that reflect current standards for safety, sustainability, and accessibility. The proposal delivers 165 new homes, of which 45% are affordable, and includes four accessible homes at ground floor with private gardens and parking.

While the number of homes increases, the footprint of the new buildings is 96% of the existing, making room for more green amenity space and improved permeability through the site, with new views and routes created between buildings. The design balances the need for housing with minimal impact on neighbours, maintaining building heights along Bentinck Street and introducing generous setbacks, fewer balconies, and breaks between blocks for privacy and outlook.

The scheme also prioritises sustainable transport, with 247 secure cycle parking spaces, limited on-site car parking, and a new car club space open to both future and existing residents. New buildings are designed to high environmental standards, aligned with the Cambridge Sustainable Housing Design Guide, and incorporate a new community room and enhancements to the public realm. The existing mature trees are retained wherever possible, with opportunities for new legacy planting to improve biodiversity and support wellbeing.

This is a once-in-a-generation opportunity to transform an underperforming site into a safe, inclusive and sustainable neighbourhood that better serves both existing and future residents of Cambridge.



165

Proposed homes



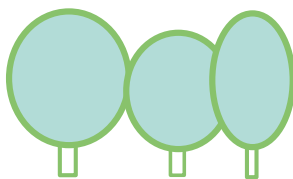
45% Affordable

Proposed affordable homes



5%

Proposed wheelchair homes provision



Retain & Legacy

Retain as many existing trees as possible. Opportunities for new legacy tree planting



High sustainability standards

New homes designed to Cam Standard. Efficient form factor, fabric first, balancing daylight a



Community Room

New accessible community room with dedicated external space circa 80sqm



247

Proposed cycle spaces in secure stores plus visitor cycle parking



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