

**ATKINS**

Member of the SNC-Lavalin Group



# The Barbican Estate

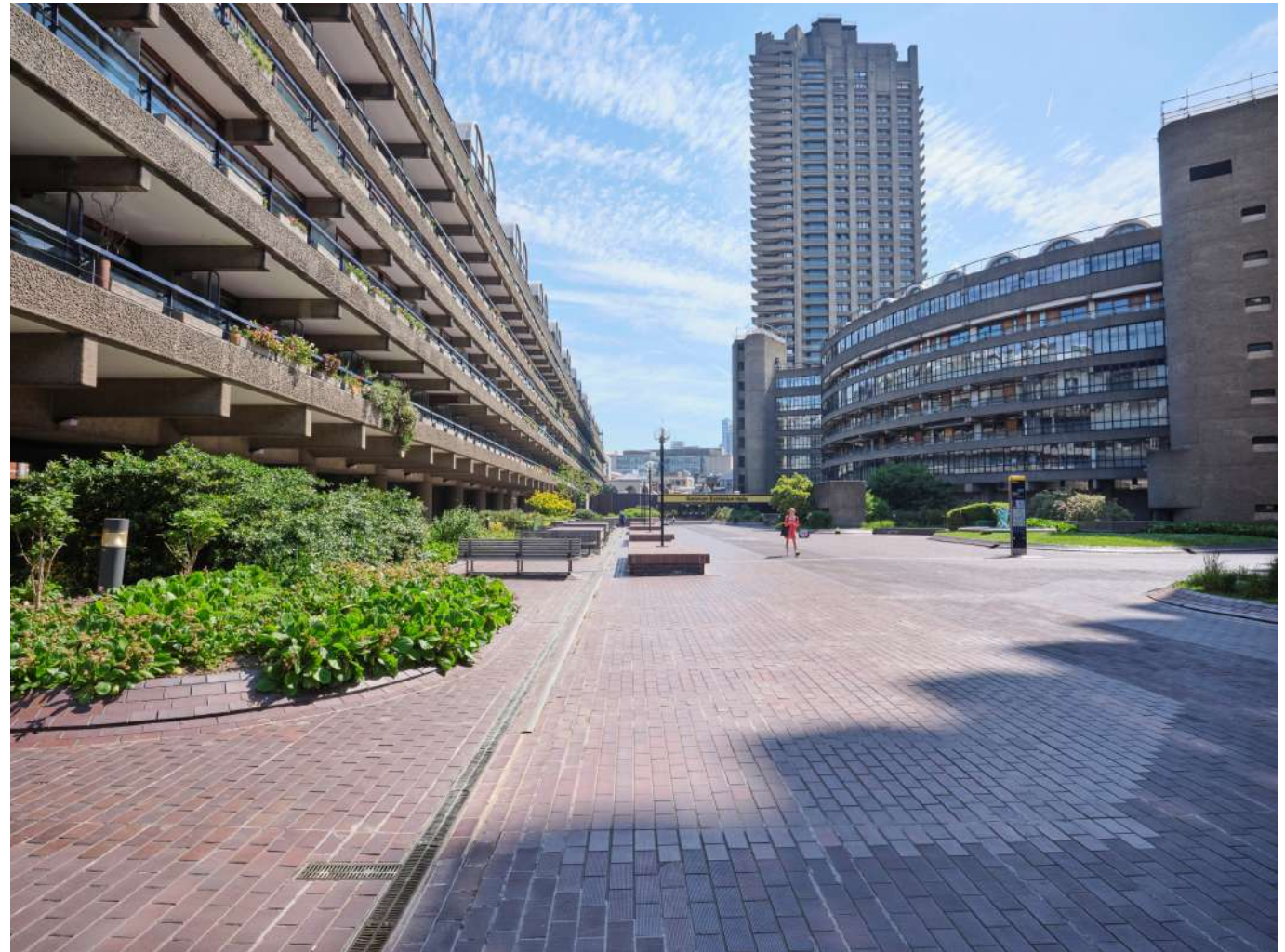
## Phase 2 Podium Refurbishment Public Consultation Webinar

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20<sup>th</sup> October 2021

# Agenda

1. Setting the Scene
2. A Unique Opportunity
3. A Rich Heritage
4. Site Analysis
5. Design Concept
6. Design Strategies
7. Summary
8. Next Steps
9. Summary



# 1

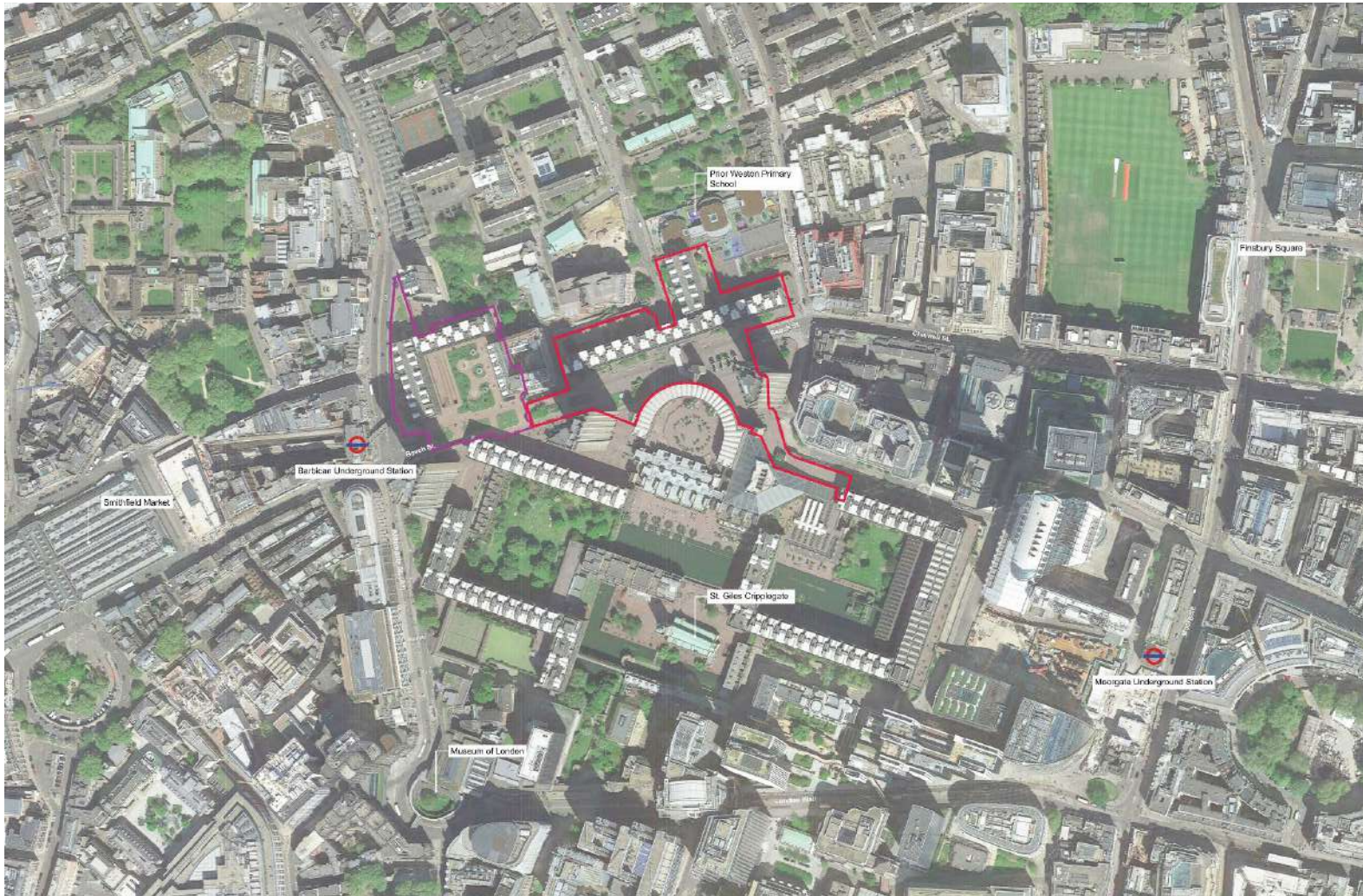
## Setting the Scene



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### Location and Justification



# Location



-  Phase 2 Study Site Area
-  Phase 1 (Complete)



# Outline of Project Justification

## The Issues

A symptom of its age, rainwater is leaking into the interior spaces beneath the podium deck.

There are also several areas of disrepair evident in broken paving tiles, broken street furniture and chemical leeching from walls, paving and planting areas.

## What Needs to be Repaired

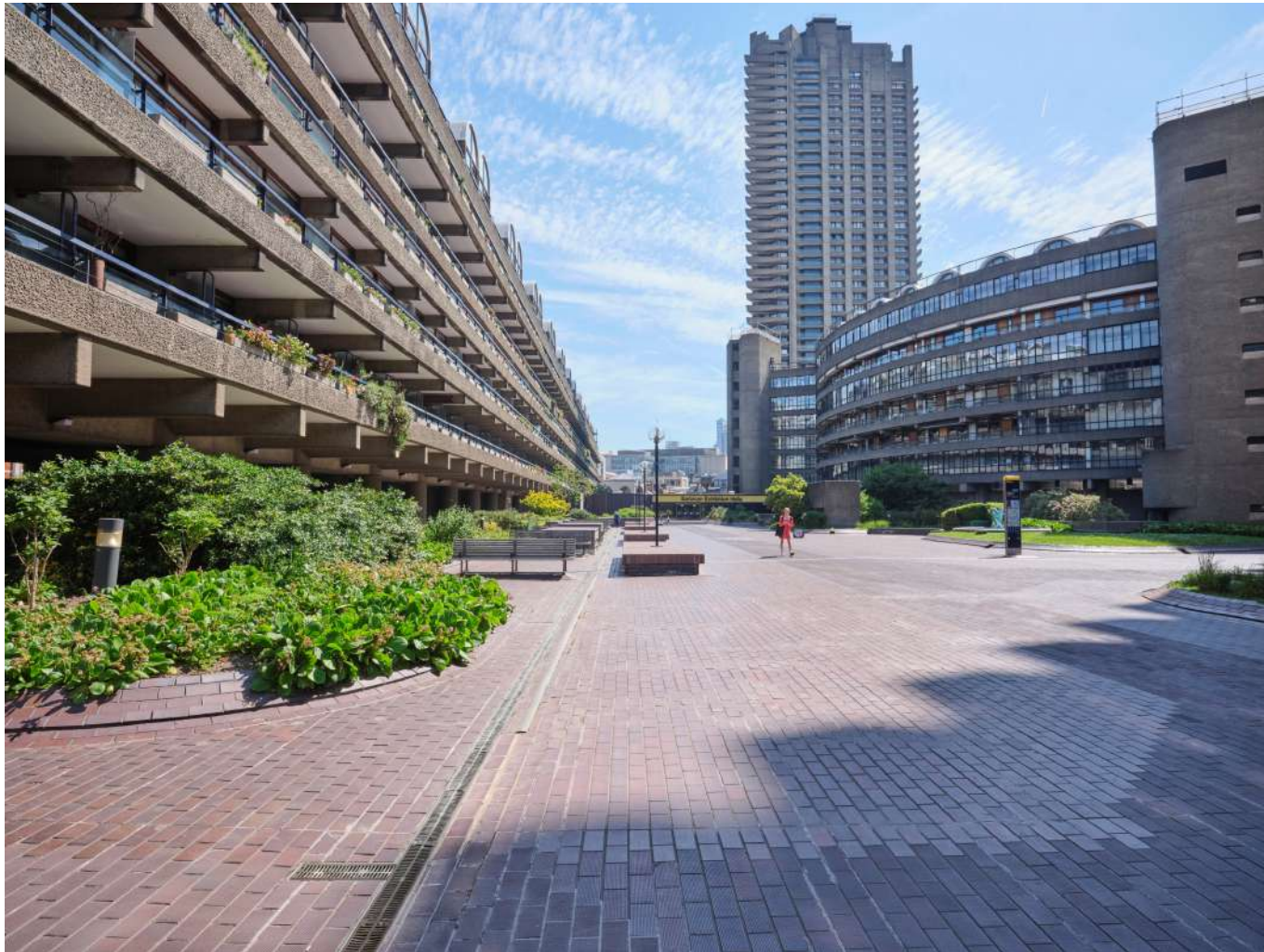
To repair the waterproofing, all public realm and planting areas within the phase 2 boundary will need to be removed entirely. This will facilitate the essential replacement of waterproofing and podium build-up elements such as insulation, screed or paving construction.

The public realm and planting areas will subsequently be replaced once this repair work has taken place.

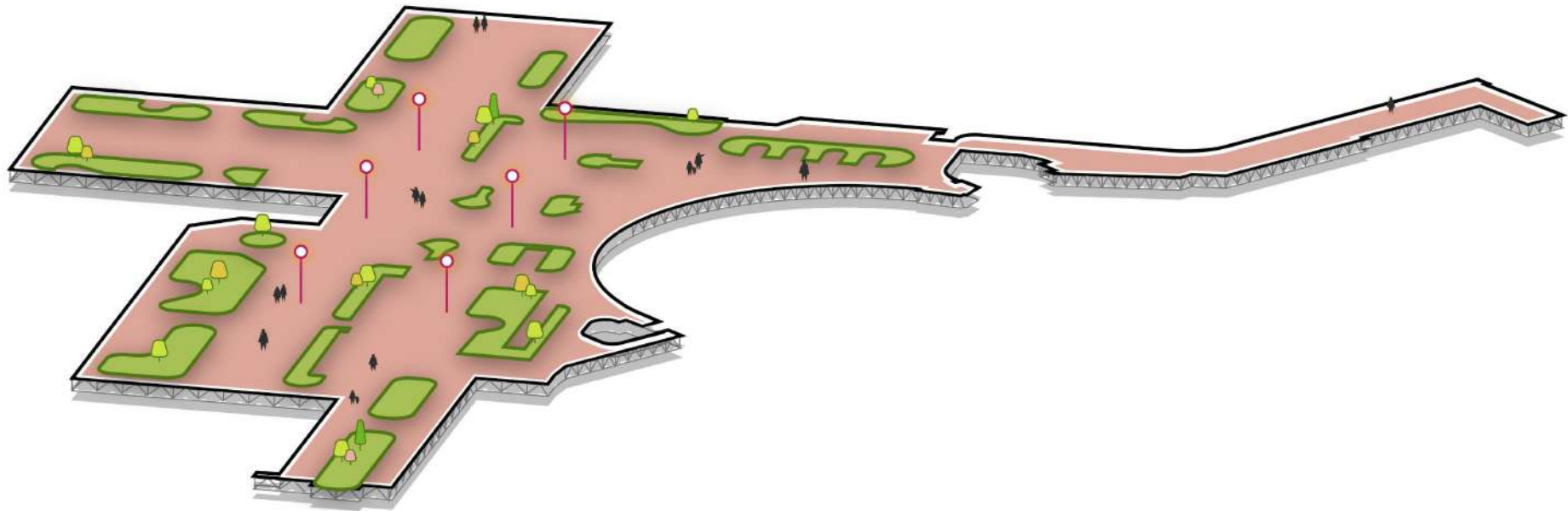




# The Podium Landscape

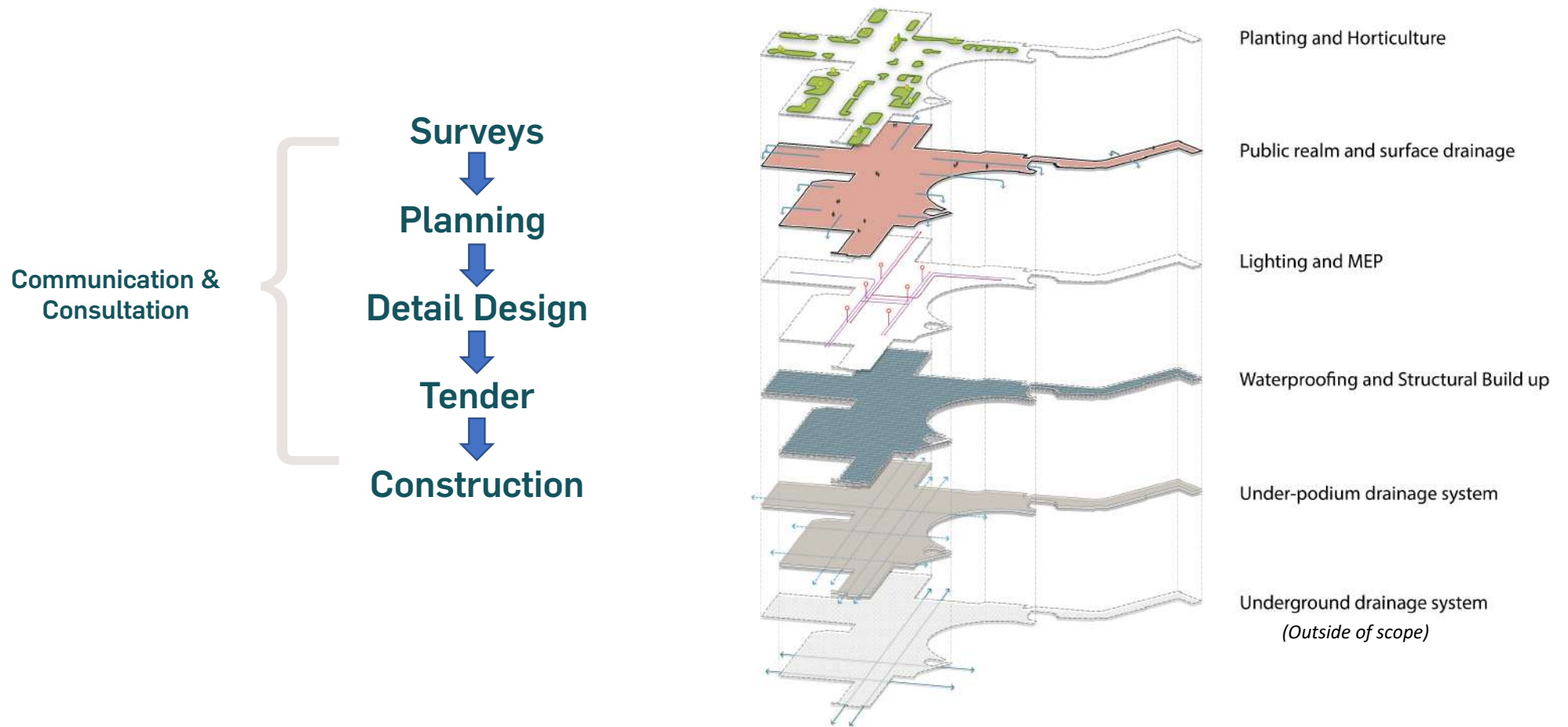


# Project Complexity





# Project Complexity





# 2

## A Unique Opportunity

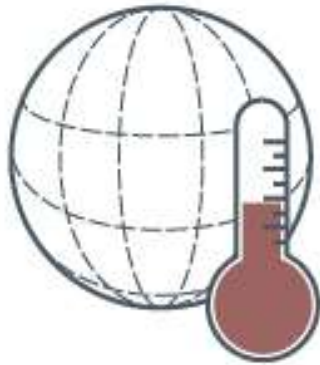
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### Enhancing the Barbican Podium Landscape

- Increasing Biodiversity in line with the City of London's Biodiversity Action Plan (BAP)
- Working towards the goals set out within the City of London's Climate Action Strategy
- Assessing and improving amenity, safety and accessibility provision for the residents and visitors alike
- Conserve and manage the Barbican's iconic urban form in line with the listed building management guidelines

# Policy and Guidance Framework

Utilising 3 key local policy initiatives to guide the design.



City of London

**Climate Action  
Strategy**

2020-2027



City of London

**Biodiversity Action  
Plan**



Historic England

**Listed Building  
Management Guidelines**

Plus many other key planning policy and guidance  
on local polices ad green infrastructure



# Combining Places for People with Places for Nature

## Combining Spaces for People with Spaces for Nature

- Creating green spaces with multiple functions to provide better water management, reduce the urban heat island and improve health and wellbeing
- Creating habitat and a diversity of human experiences in woodland, grassland/steppe habitats and wetlands.
- Spaces for recreation and fitness
- Solitary and Socially Restorative spaces
- Cultural landscape uses
- Food growing and biophilic engagement with green spaces
- A range of perceived territory from semi-private to public
- Urban greening of public spaces



# 3

## A Rich Heritage

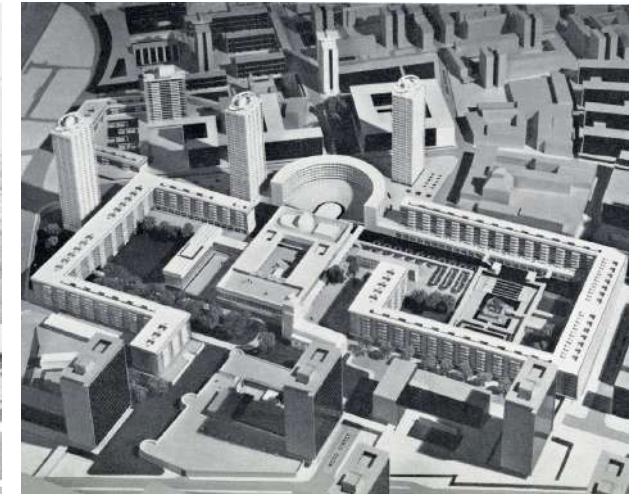
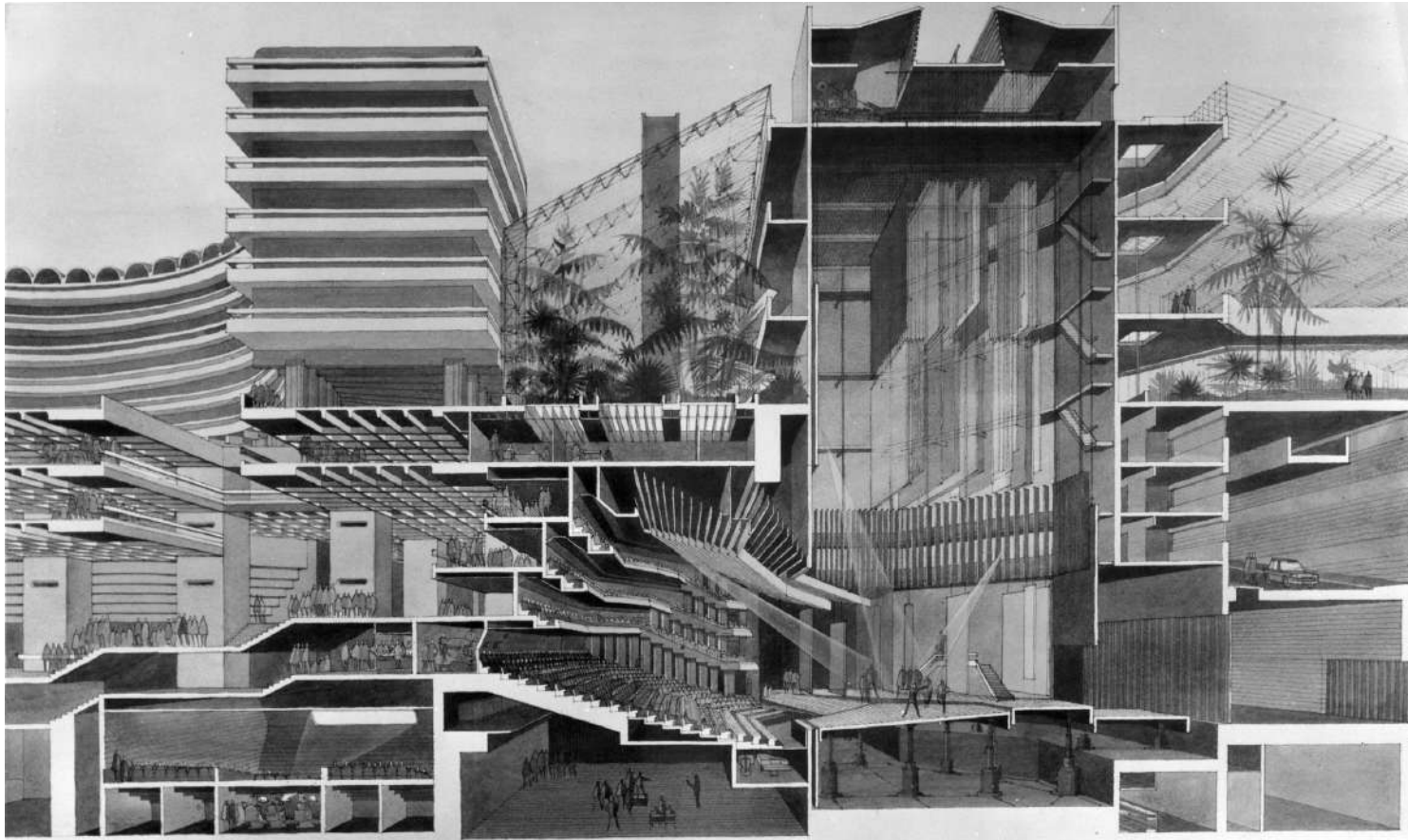
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**Protecting the Essence of the Barbican while Looking to the Future**



# Chamberlin, Powell & Bon

The original vision aimed to create a monument to hope in architecture, and was centred around the belief that the things we build can help us live better, more equal and vibrant lives.

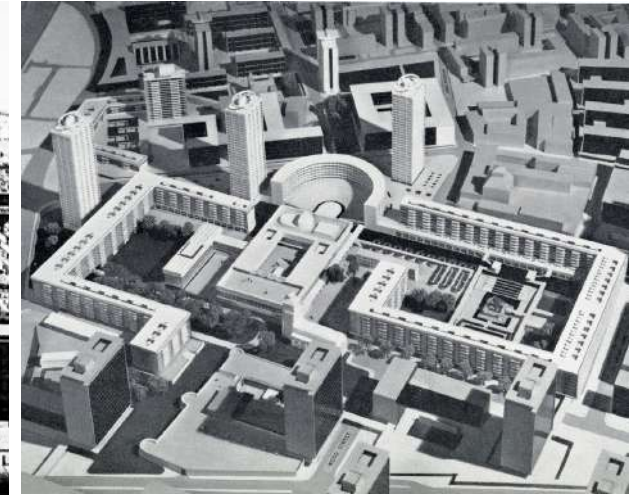
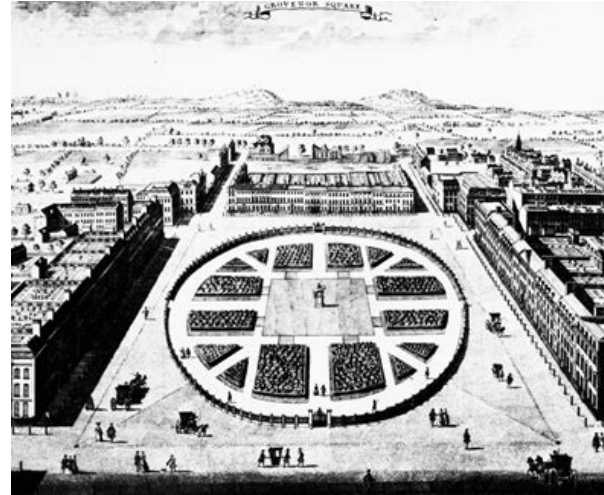




# London's Garden Squares and The Barbican

## Strong Edges, Open spaces and Intricate Surroundings

The original Barbican vision took inspiration from London's Garden Squares. The terraced housing forms their boundaries and nature is introduced into their centres using a layer of intricate, densely planted spaces surrounding a central, open grassland or lawn.





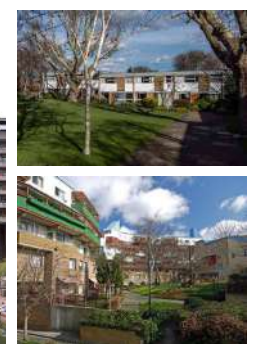
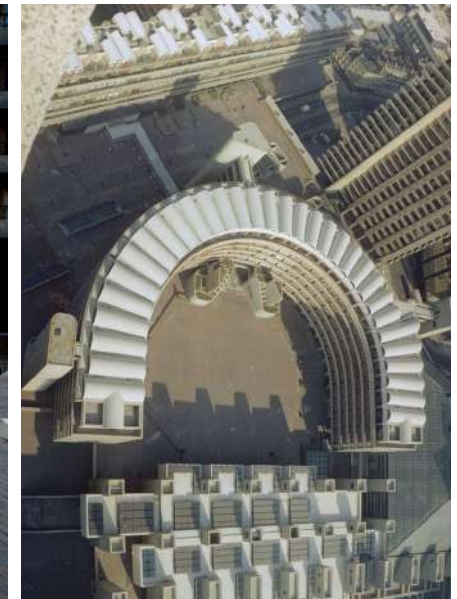
# The Podium, Janet Jack and 20<sup>th</sup> Century Landscapes

## Janet Jack and Modern Landscape Architecture

Janet Jack was an influential 20<sup>th</sup> century landscape architect who worked alongside architects such as Neave Brown to bring nature, play and a sense of serenity to inner city London's residential landscapes.

Jack's work on the Barbican's podium, like many works of 20<sup>th</sup> Century landscape architecture, distilled and abstracted nature into its component parts.

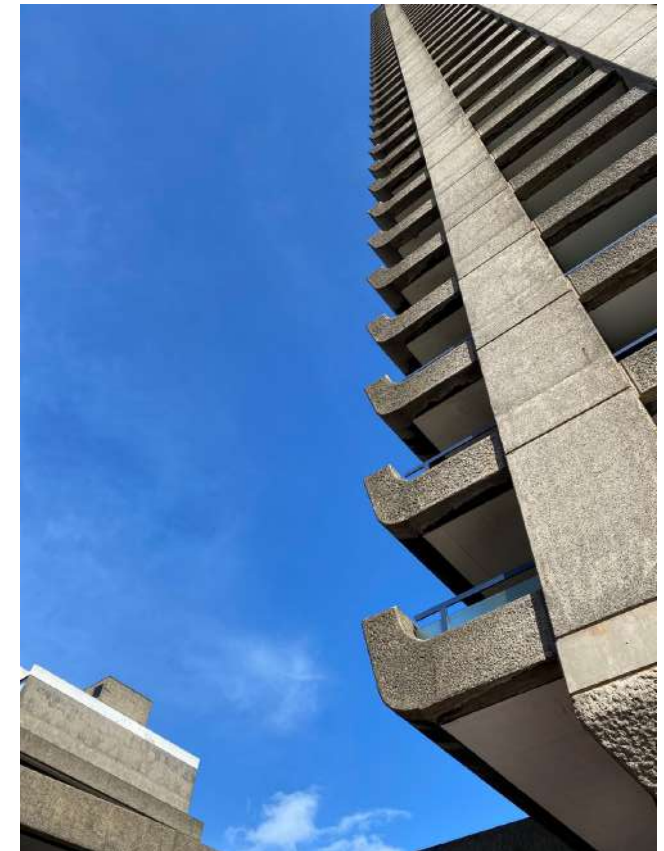
Jack created shapes that grew out of the harsh, hard; providing a range of experiences and allowing space for wildlife.



# Architectural Scale and Human Experience

## A Three-tiered Approach

"The architectural scale of the scheme, therefore, progresses in three stages from the modest and often **intimate layer** at ground level, through the larger scale of the higher layer of **long terrace terraces, reminiscent of the London squares**, to the **strong vertical dimension** expressed by the towers. Throughout, a principal aim in the design has been to create an appearance of clarity without monotony."



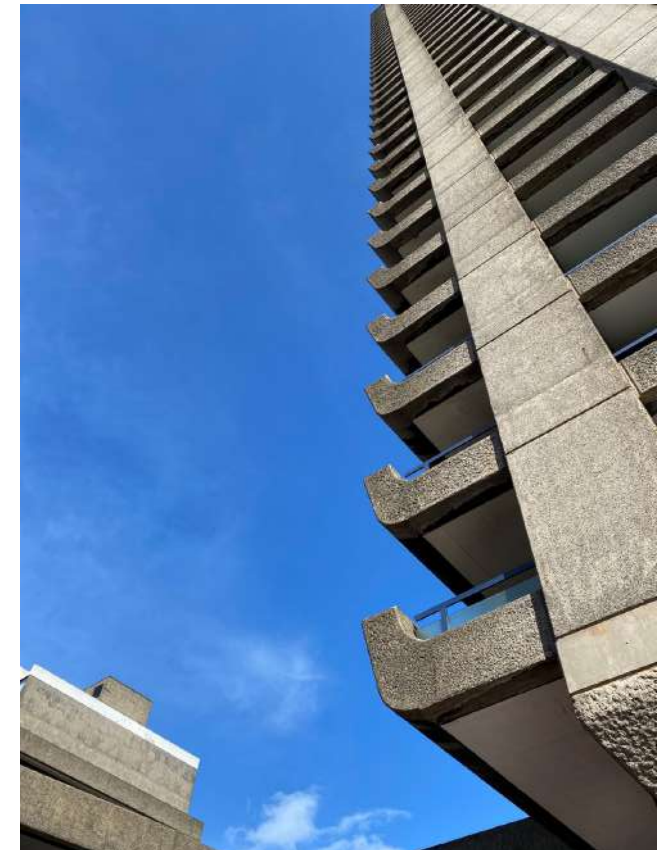
Intimate ground level missing → Larger scale terraces → Strong vertical dimension



# Architectural Scale and Human Experience

## A Three-tiered Approach

"The architectural scale of the scheme, therefore, progresses in three stages from the modest and often **intimate layer** at ground level, through the larger scale of the higher layer of **long terrace terraces, reminiscent of the London squares**, to the **strong vertical dimension** expressed by the towers. Throughout, a principal aim in the design has been to create an appearance of clarity without monotony."



Restore Intimate ground level → Larger scale terraces → Strong vertical dimension

# 4

## Site Analysis

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# The Barbican's Defining Character

- Frobisher Crescent
- Janet Jack's 1980's podium landscape
- Architectural detailing
- Lakes and features

## Circles and Curves

Curvilinear shapes have a strong presence at the Barbican giving a distinctive character to the space. Curves can be seen in landscape elements such as bullnose, plant beds, staircases, columns and vents. Indoors, curves are shown in ceiling patterns, windows and doorframes.

Sweeping circular forms provide not only structural integrity but symbolise completeness of form and flow in both the buildings and the landscape.

In the landscape, circles and curves are used to provide a variety of enclosure and openness; an abstraction of nature at the human level.





# The Barbican's Defining Character

## Planting

The Barbican's microclimates enable a broad range of plant species to thrive:

Shady areas feature a variety of woodland trees and shrubs.

Sunny exposed areas allow for perennial meadows to flourish providing visual interest all year round.

The Conservatory offers ideal conditions of temperature and humidity for exotic species to develop and immerses the visitor in a utopian world.

Water bodies at the Lakeside Terrace and Beech Gardens provide the media for wetland species to grow.

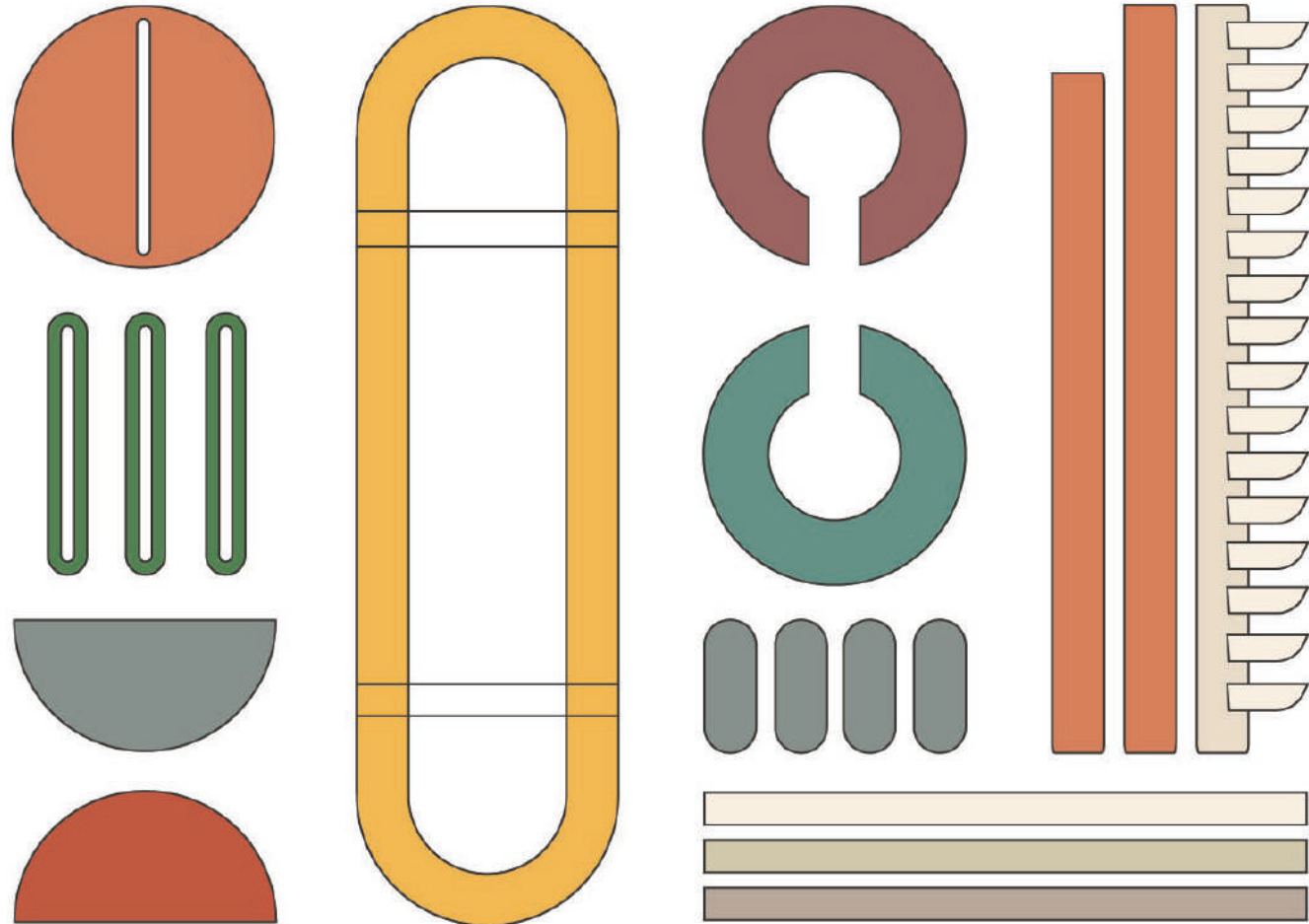
More recently, the planting seen at Beech Gardens by Nigel Dunnett represents a 21<sup>st</sup> century way of thinking about plants in designed landscapes. The planting here is directed at biodiversity and habitat structure while soil mediums work to attenuate water.



# The Barbican's Defining Character

## Distilling nature and built form into Component Parts

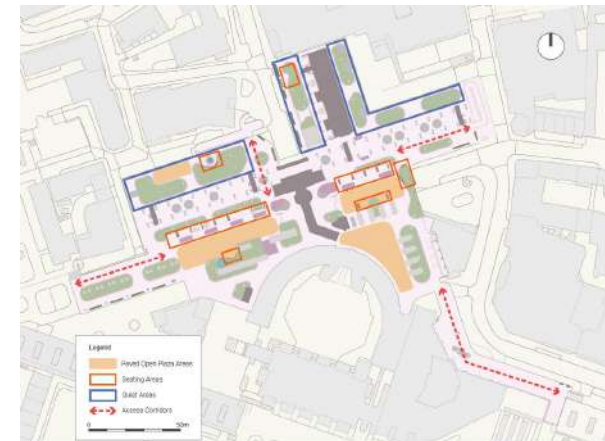
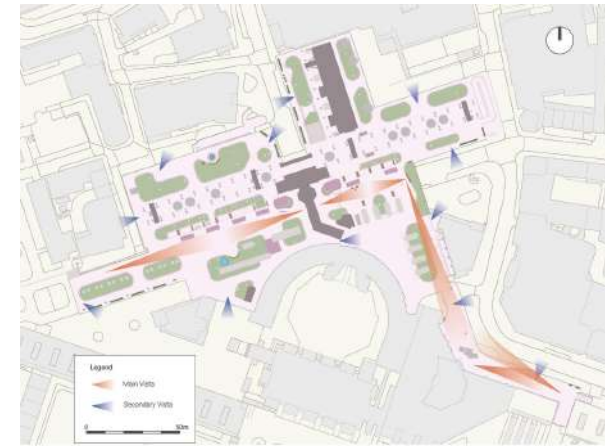
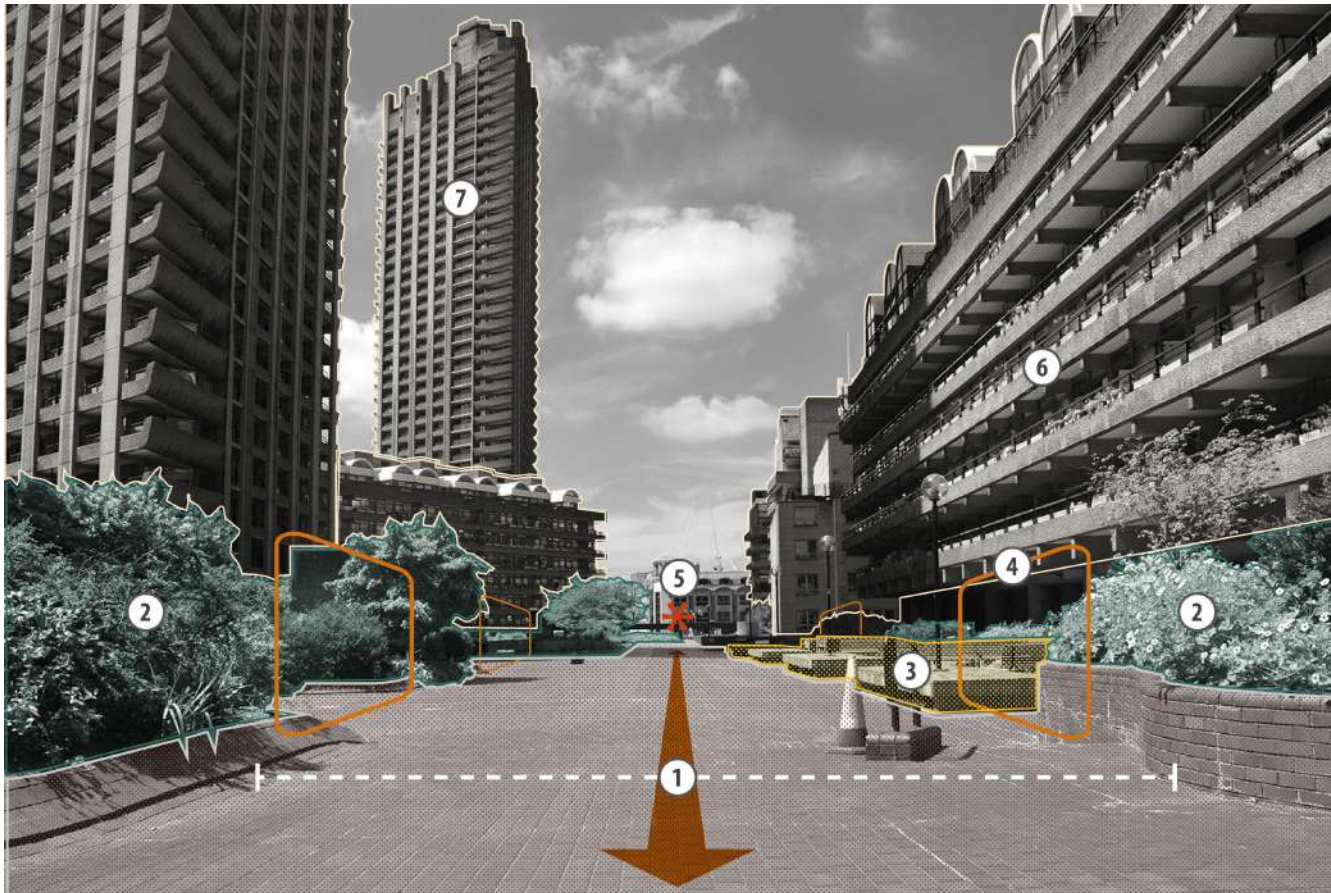
Following Modernist and Brutalist principles to distill nature and built form into their raw component parts recognising how function, atmosphere and form are created with simplified shapes. A clear presentation of this creates a distinct, immersive experience.





# Serial Vision

## Assessing the amenity and legibility of a journey through Barbican podium (small extract from full study)





# Microclimate Analysis (extract)



Figure 1: Solar radiation - 20th March



Figure 2: Solar radiation - 21st June

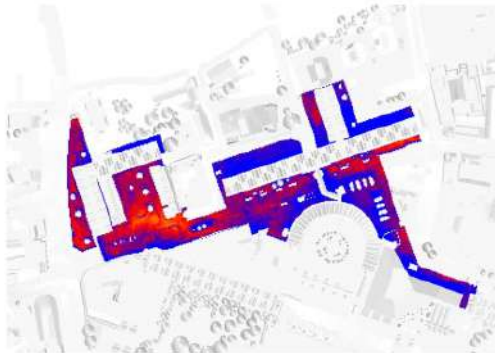


Figure 3: Solar radiation - 27th September

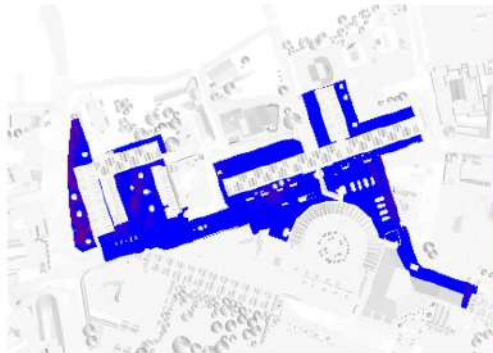


Figure 4: Solar radiation - 21st December

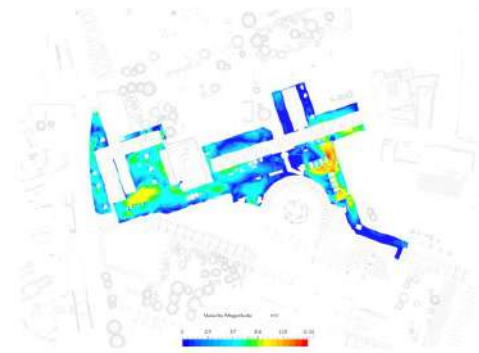


Figure 1: Average result of strongest winds - Wind direction 110 degrees

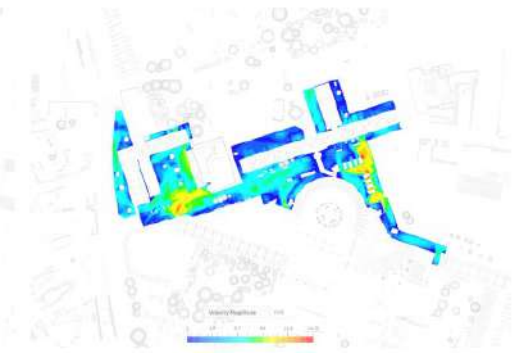


Figure 2: Average result of strongest winds - Wind direction 240 degrees

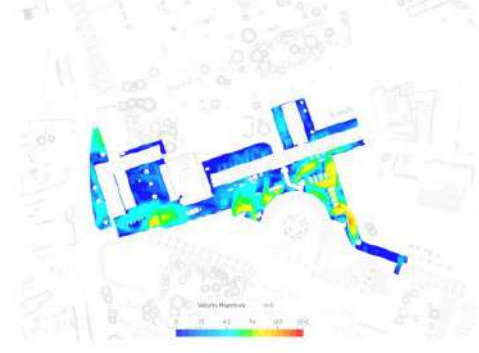


Figure 3: Average result of strongest winds - Wind direction 270 degrees

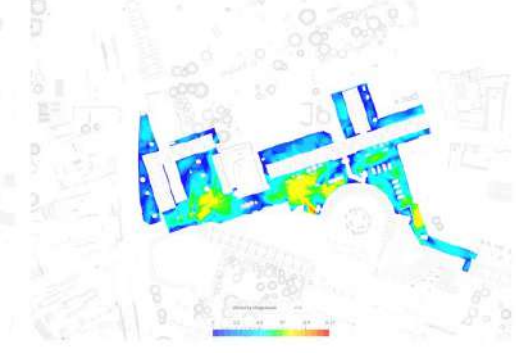


Figure 4: Average result of strongest winds - Wind direction 300 degrees

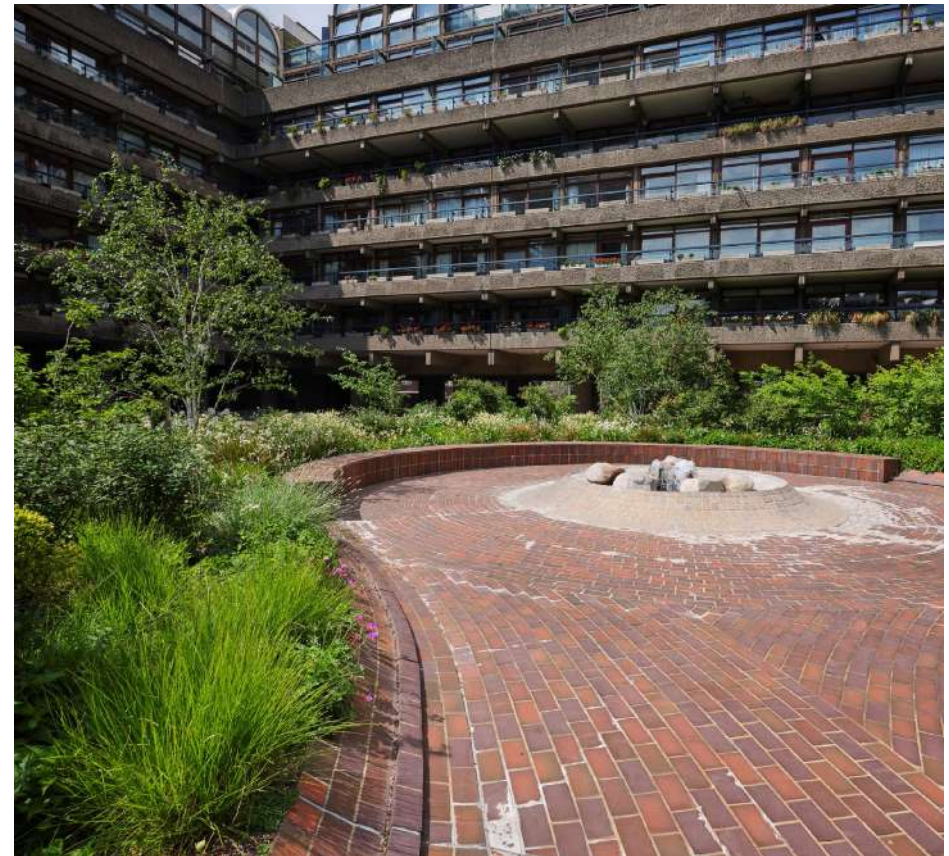
# 5

## Design Concept

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# Design Aims

1. Help create a more **climate-resilient** urban landscape, working towards the goals set out within the City of London's Climate Action Strategy 2020-2027.
2. Allow the **repair of the podium** structure to control or eradicate the existing issues of water leakage and reinstate or improve the podium space to provide the same or better public amenity
3. **Maximise amenity** functionality and value and create a green, restorative environment at the heart of the City of London
4. Create a **Safe and Accessible** environment where all people feel welcome, improving both perceived and actual safety and accessibility.
5. Conserve the essence of the Barbican's **heritage**, enabling **longevity and enjoyment of the Barbican Estate for generations** to come
6. Create an **attractive and legible public realm** with a unique character and range of immersive experiences.
7. Create a **Maintainable and Financially viable** public space



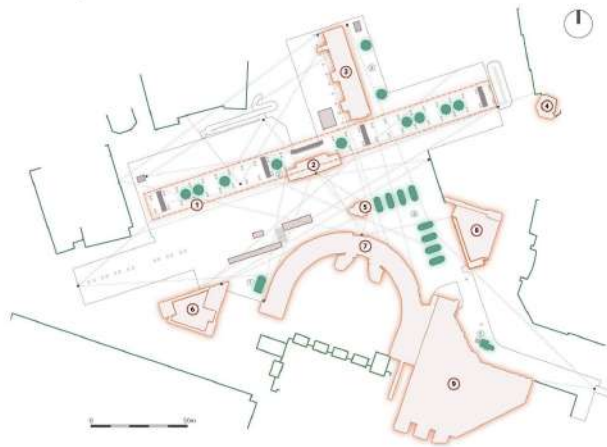


# Vision

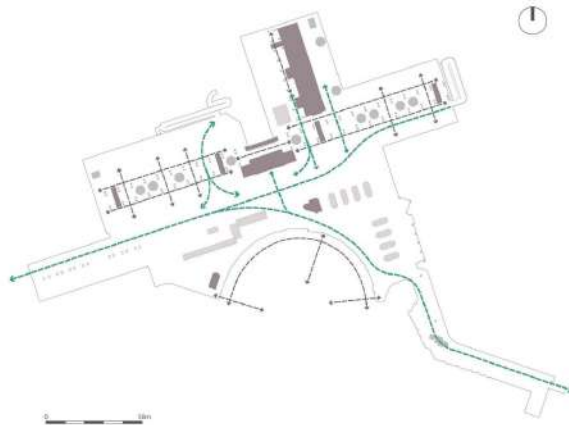


# Design Story: Strategic Principles

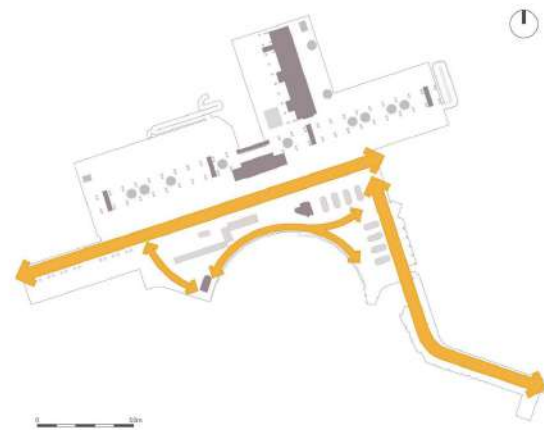
## 1 Built Form: Architectural Icons and Distinctive Objects



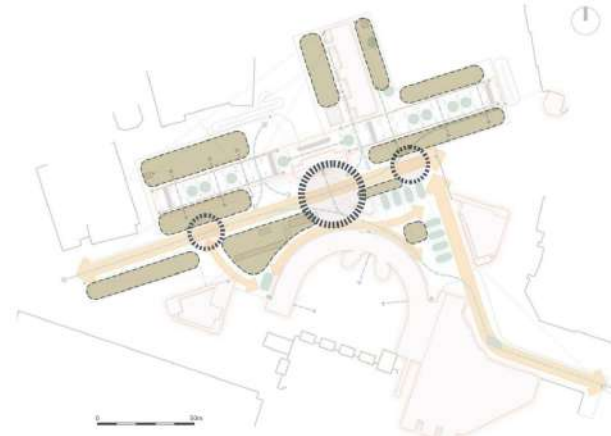
## 3 Recognise Desirable Routes



## 2 Protecting Key Vistas



## 4 Identify Nodes and Capacity of Remaining Spaces



Following the removal of the link building, we can:

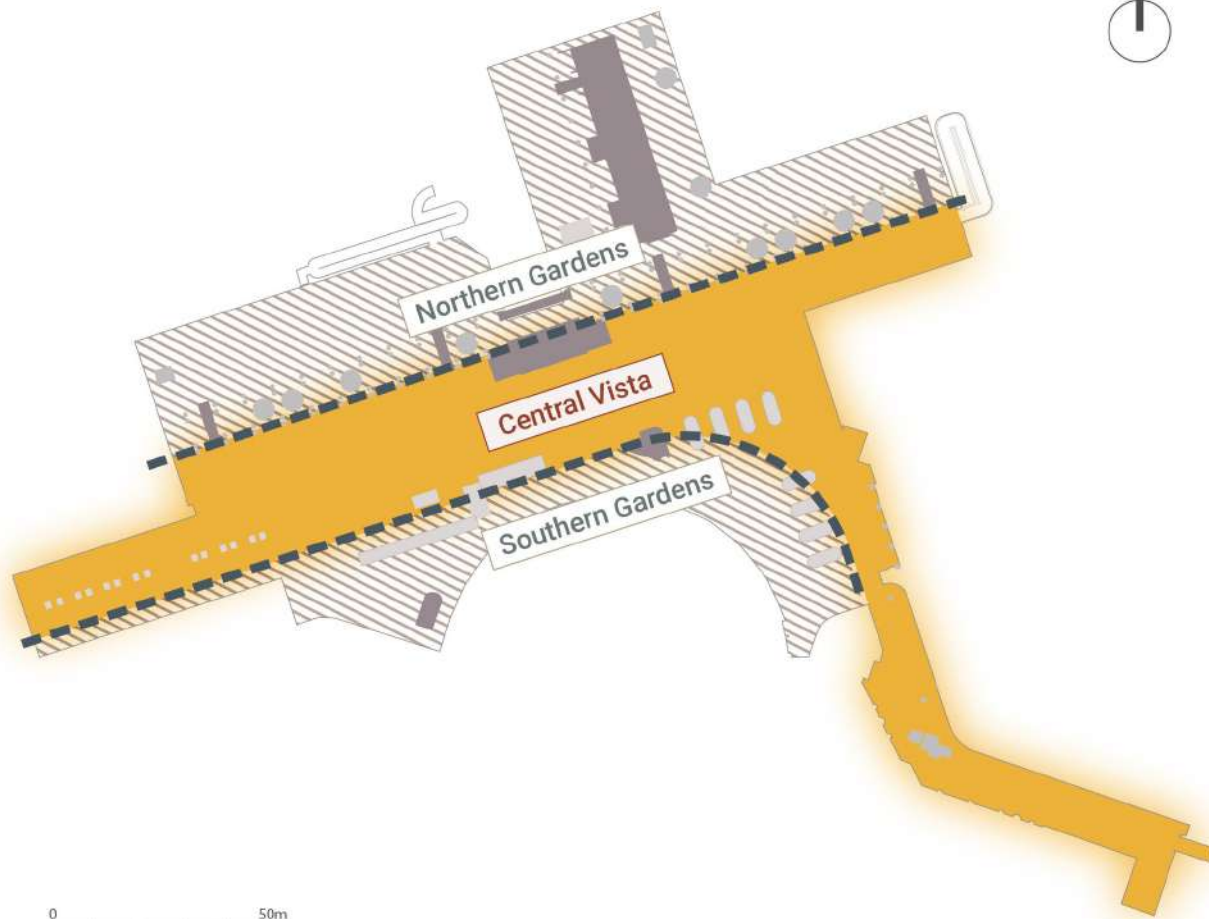
1. **Highlight and protect architectural icons** and distinctive objects within the podium landscape
2. **Protect key vistas**
3. **Recognise desirable routes** and visual connectivity away from vistas
4. **Identify the nodes** that emerge and utilise remainder spaces for **biodiversity and amenity**

Key:

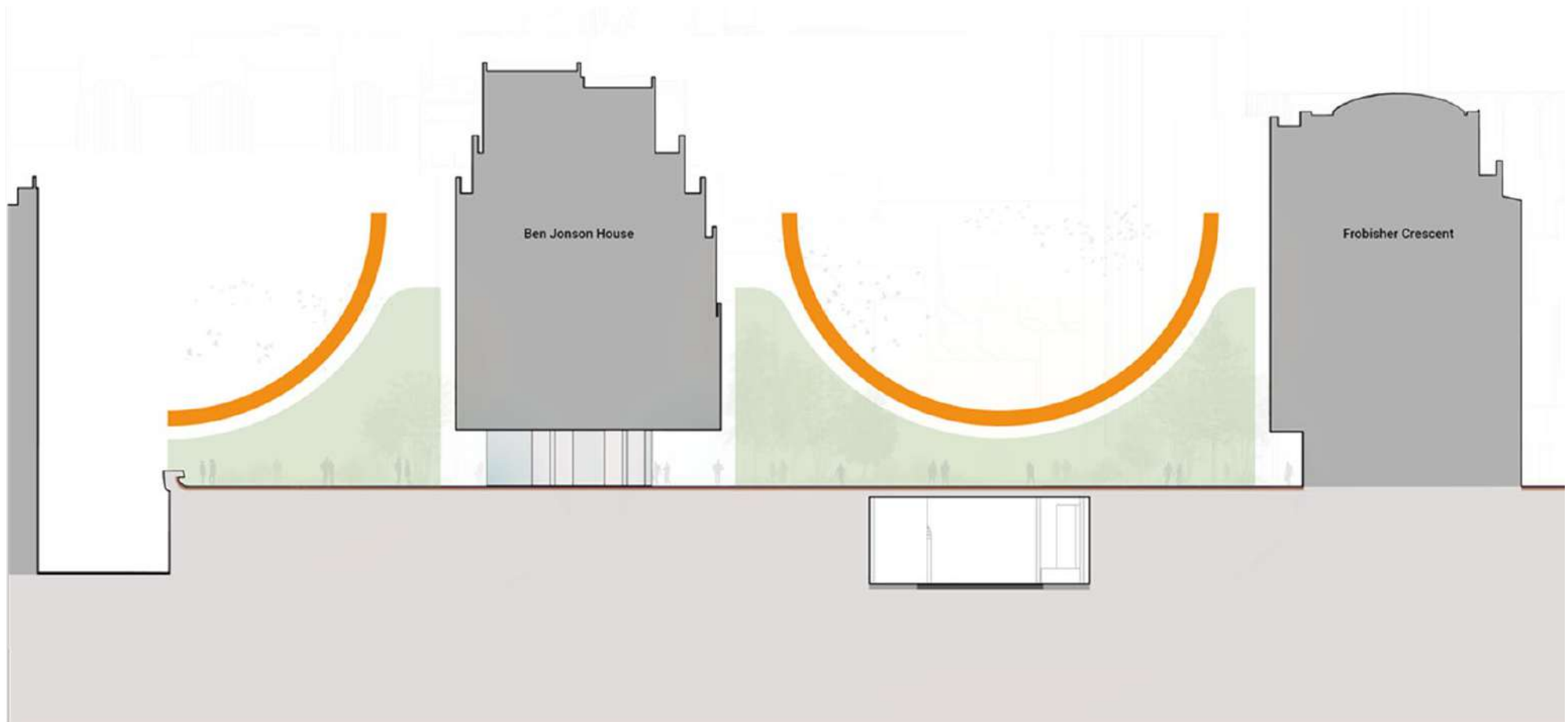
- Primary iconic architectural built form
- Primary iconic architectural built form
- Visual splays from key viewpoints
- Other built form providing enclosure/form to spaces
- Protected vistas
- Desirable route creation/protection
- Visual connectivity under built structures
- Main nodal areas created
- Areas for Biodiversity/amenity improvement away from main circulatory routes



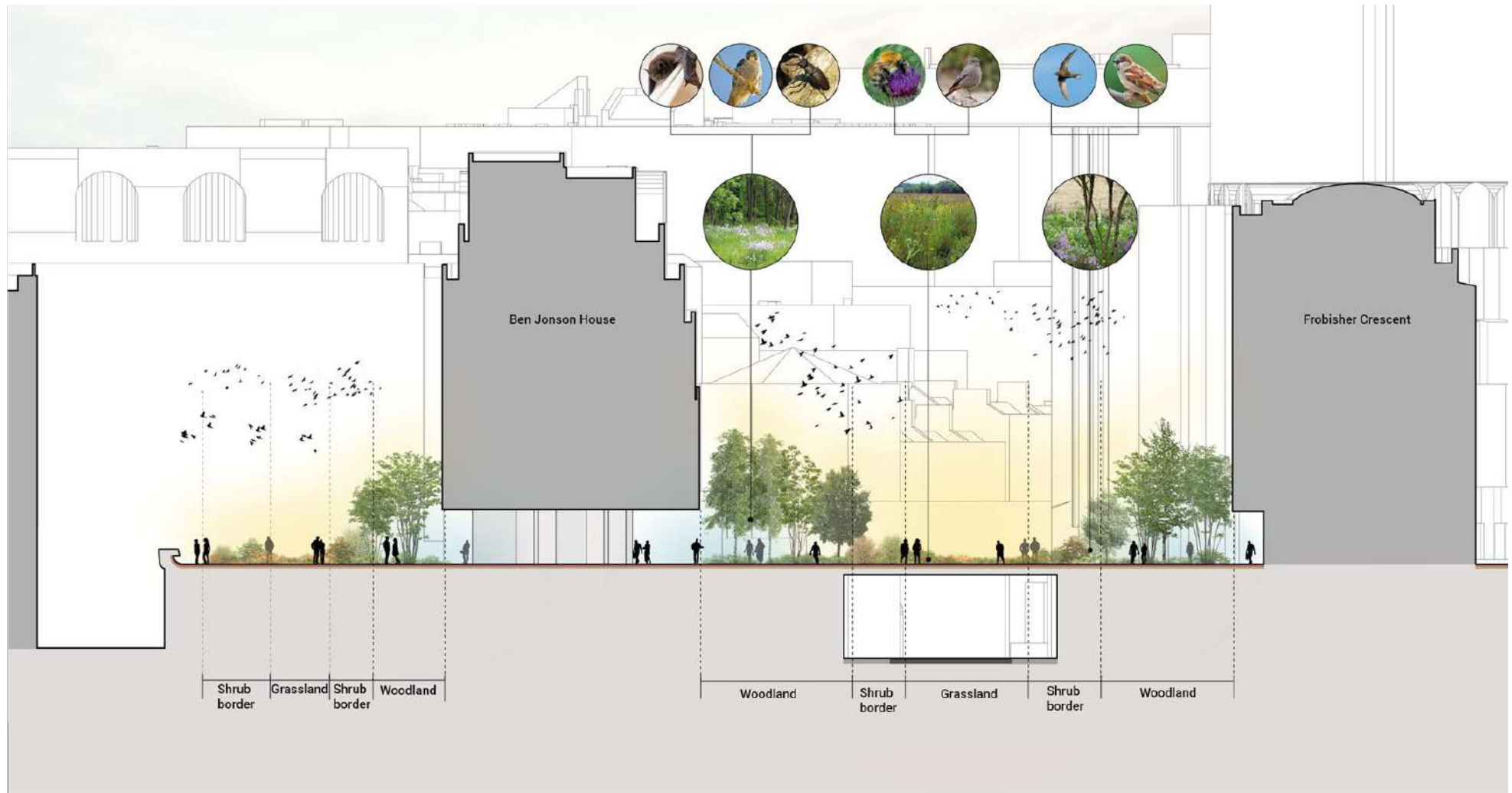
# Space Hierarchy



# Woodland-Edge Structure Diagram

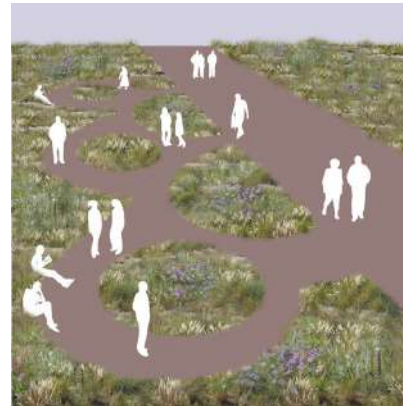
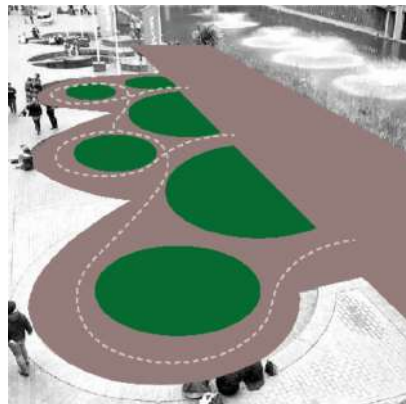
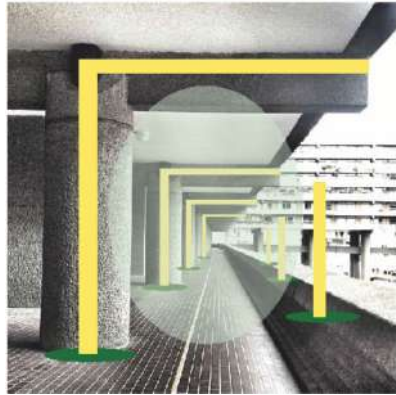


# Woodland-Edge Habitat Structure





# Design Language Exploration



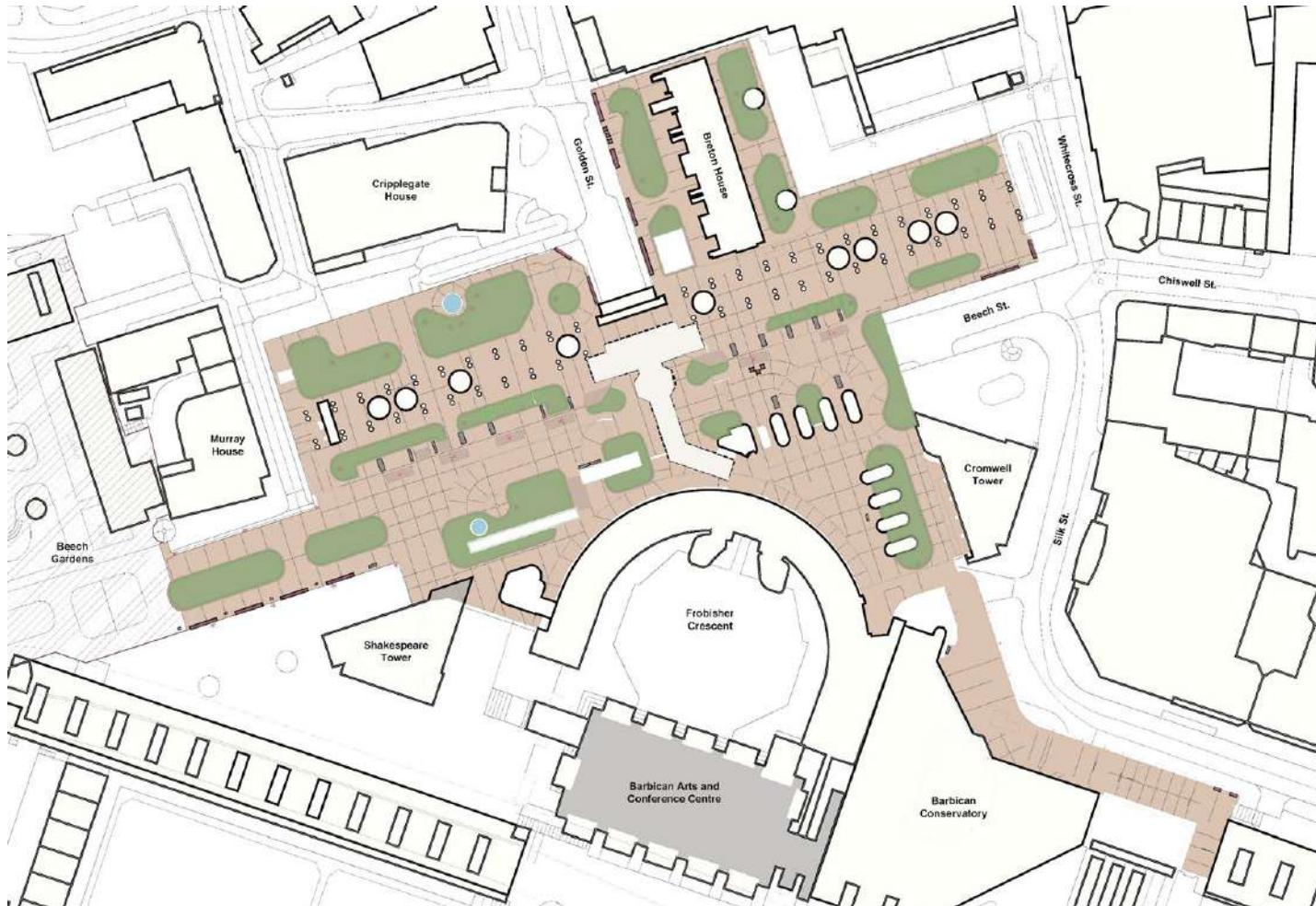


# Character Images





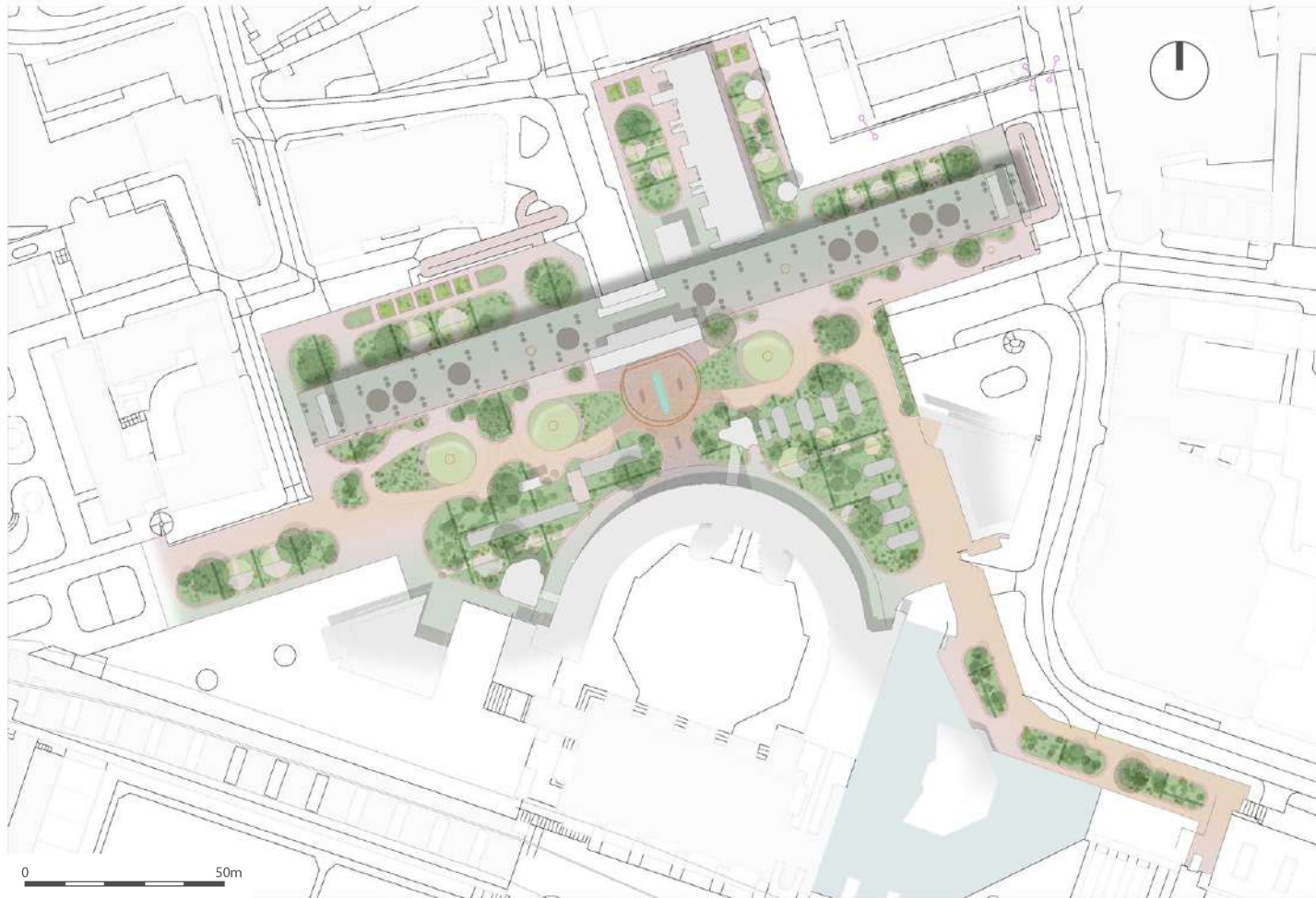
# Existing Landscape Plan



## Concept Layout Notes:

- The design takes inspiration from the **garden squares** of London that informed other parts of the Barbican Estate landscape;
- The **main vista** is broken up into 3 main 'garden squares' with central open space and more intimate, intricate spaces surrounding this;
- The vista is formed of **wide, open spaces** and generous, legible walking routes;
- The northern and southern gardens are characterised by lush, part sun part shade planting with an **intricate network of social and solitary spaces** and circulatory routes
- A **stratified woodland-to-grassland habitat ecotone** is established across the podium;
- Tree planting is used to bring structure to the ground level of the podium and create a **woodland edge habitat**;
- **The architecture and distinctive concrete objects** of the podium are framed by trees and set against naturalistic planting a juxtaposition that emphasises their brutalist character.

# Concept Layout: The Woodland Edge

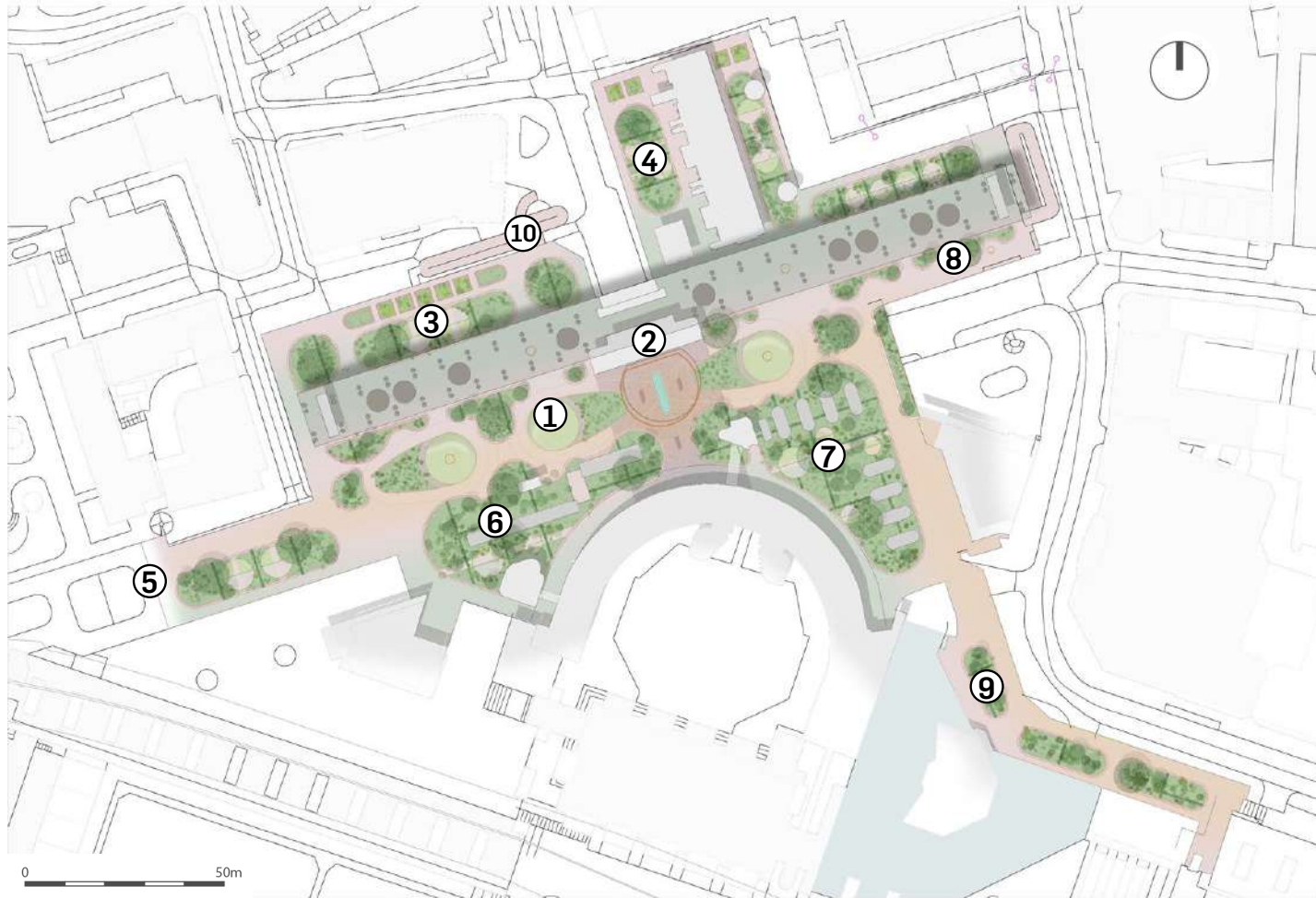


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# Concept Layout: The Woodland Edge



## Concept Layout Notes:

- ① Central vista conserving the openness of the podium and improving legibility of the space, broken up into 3 garden squares
- ② Removal of Link Building creates central break-out plaza for exhibition halls, improving step-free access
- ③ Gardens north of Ben Jonson House create tranquil, solitary spaces alongside communal planters
- ④ Breton House gardens with lush planting and communal planters with semi-private feel
- ⑤ Seamless transition from P1 to P2 with naturalistic planting areas
- ⑥ Woodland edge planting, seating areas and informal paths to the west of Frobisher Crescent
- ⑦ Atmospheric woodland understorey frames the concrete vent structures to the east of Frobisher Crescent
- ⑧ Legibility improved towards the Whitecross Street ramp Access
- ⑨ The conservatory gardens connect the lush indoor planting character with the outdoors public realm
- ⑩ Better routes to northern access ramp improves connectivity for people coming from the North, e.g: Richard Cloudesley School

# Concept Layout: The Central Vista





# Sketch Visualisation: The Central Vista





# Sketch Visualisation: The Northern Gardens





# Sketch Visualisation: The Southern Gardens



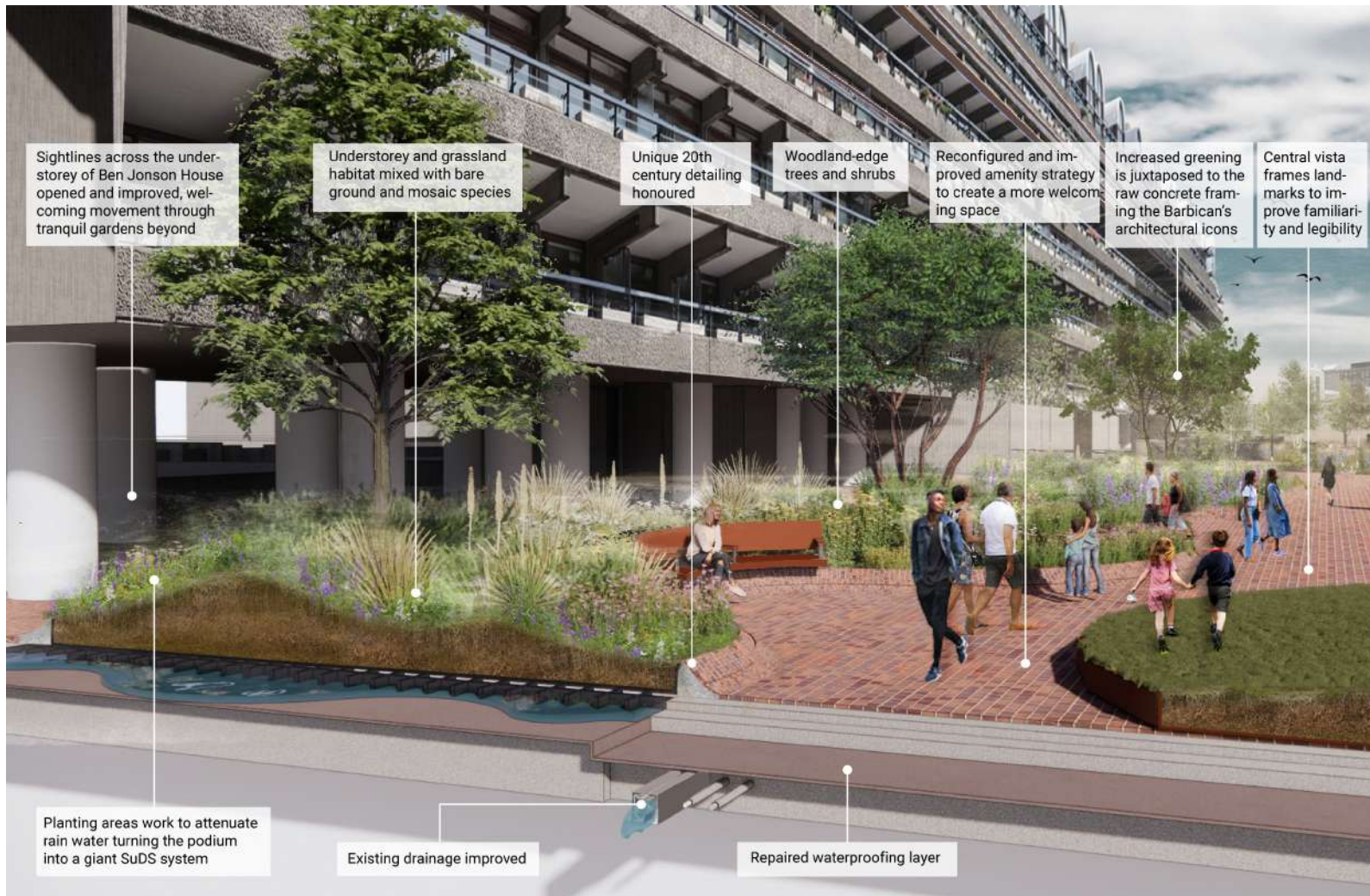


# Concept Layout: The Conservatory Gardens





# Hidden Innovation: Biodiversity and SuDS



# Project Outcomes



More than 80% increase in green area



Improve Accessibility for All



Increased Bio-diversity in line with Climate Action Strategy and Biodiversity Action Plan



Increase access to community Growing Areas



Improved Legibility and Sight-lines



Create a design that addresses anti-social behaviour concerns



Provide more, relocated seating to provide a bench at least every 44metres for improved accessibility.



Reduce maintenance costs and improve water management



Improve the amenity provision of space and redefine its uses to create more welcoming social and solitary spaces



Potential to improve lighting design to enable better perceived and actual safety enable a welcoming space day and night



# Addressing Anti-Social Behaviour (ASB)

## Concerns Raised by Residents Around ASB:

- Noise made at anti-social hours and anti-social activities such as public urination directly below residential flats; due in part to the proximity of public social/seating spaces.
- Loitering by large groups of people gathering to carry out activities such as skateboarding, parkour and scootering can feel intimidating
- Noise created by skateboarding and other sports across the podium
- Removing the link building may create a longer strip for skateboarders/scooters leading to more anti-social behaviour



## Design Considerations Arising from Consultation:

- Increase the planting areas around the 'drip-line' of the buildings to provide a buffer from social spaces
- Limit any social spaces/group seating to the central vista, and position this well away from residential balconies to reduce noise
- Reduce the size of paved areas to deter loitering of large groups and create a more garden-scale public space to signify that this is a quiet, tranquil green space.
- Increase planting around ventilation structures to deter climbing onto them
- Where the link building is removed, new seating and the potential for a new or re-located water feature will break up the space into smaller areas to address this concern
- Potential to improve/increase night-lighting provision to improve perceived and actual safety
- Planting and tree species are selected to maintain open views at eye-level, reducing dark corners or blind spots. This can improve perceived safety and reduce places for anti-social activities such as public urination.

# 6

## Design Strategies

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### Planting character and function

# Planting Character

Naturalistic perennial mixes



Woodland Understorey



Woodland Edge



Outer Conservatory



Small Lawn Areas



Communal Gardening Areas



## Colour Throughout the Seasons:

### Spring



### Summer



### Autumn



### Winter





# Street Furniture and Materiality

## Existing Seating

- Currently incoherent urban furniture strategy across the site.
- Result of various interventions
- Some furniture in state of disrepair



Wooden bench for social seating



Tiled bench for social seating



Wooden chair for solitary seating

## Proposed Strategy

- Coherence hierarchy of seating types based on podium location
- Social and solitary seating
- Accessible seating e.g: backrest and armrest, located every 40m



Solitary seating

# Paving

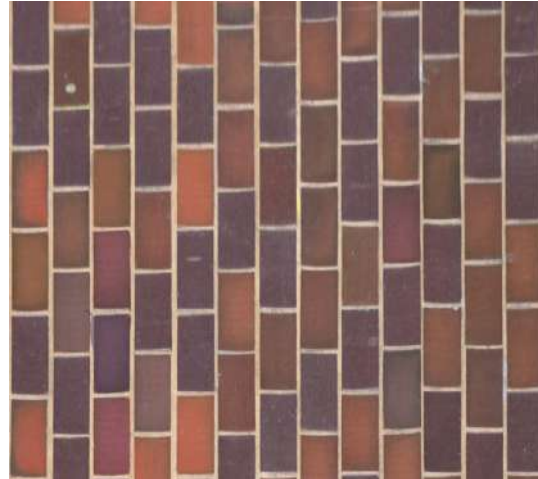
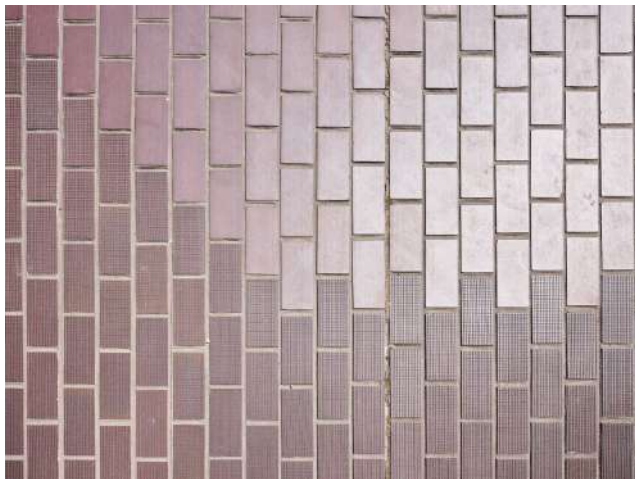
## Old Tiles



## New Tiles



## Edge Detailing





# Street Furniture and Materiality

## Other features

Bins, lighting and handrails will also follow a cohesive language in keeping with the Barbican character.



## Natural play

An element of natural play will be introduced to allow for a more engaging landscape experience.





# Construction Considerations and Phasing



## Key

- Study Site Boundary
- Extent of Phase 1 works (Not part of scope)

### Indicative Zones of Implementation (Subject to Feedback):

- Zone 1: March - 5 months
- Zone 2: 4 Months
- Zone 3: 3 Months
- Zone 4: 6 Months
- Zone 5: 6 Months

(Provisional zones and indicative construction durations)

- Re-decoration project on north side of Ben Jonson House (out of scope)
- Exhibition Hall land (beneath podium to be refurbished - out of scope)
- Indicative outline of cinema (Below podium level)
- Indicative outline of Côte Brasserie (Below Podium Level)



# Construction Considerations and Phasing



- Key**
- Total Project Extent (18,201sqm)
  - Extent of Phase 1 work (Not part of scope)
- Demolition and Construction Access:**
- Demolition: 'Yellow Shed' Link Building (512sqm)
  - Potential Storage Area on Podium
  - Potential Hoisting Points
  - Main Compound Location (indicative size, location subject to agreement with stakeholders)

# 7

## Summary

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- Podium is leaking and damaging the fabric of the building
- Podium needs to be taken up and replaced
- Working within the parameters of the original innovative vision of the Barbican
- Working within the parameters of the Listed Building Management Guidelines
- Need to respond to the Climate Action Strategy and design in climate resilience for the Barbican for the next 50 years
- Opportunity to respond to and develop Chamberlin, Powell & Bon's original innovative vision



# 8

## Next Steps

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1. Design refinement following your comments
2. Planning application in December
3. Detailed design development including planting
4. Appoint contractor 2022
5. Construction to start 2023

# Thank You

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**If you would like to share your thoughts, feedback or suggestions please get in touch:**

Via e-mail: [www.barbicanprojects.co.uk](http://www.barbicanprojects.co.uk)

Via our website: [info@barbicanprojects.co.uk](mailto:info@barbicanprojects.co.uk)

On the phone: 0800 772 0475

