Federated Hermes

CARTWRIGHT PICKARD

MEPC

2+3 Angel Square

NOMA

Design and Access statement

June 2022 _P03

Document history

Revision	Reason for Issue	Date	Prepared by	Checked by
-	Draft issue	08/06/22	RO	PC
P_01	Planning	22/06/22	RO	PC
P_02	Planning	29/06/22	RO	PC
P_03	Planning	08/09/22	RO	PC

Contents

1.0 Introduction
1.1 Introduction
1.2 Project brief

2.0 The site and its context
2.1 Site location
2.2 Wider connectivity
2.3 Historic context
2.4 Surrounding context
2.5 Opportunities
2.6 Planning context

3.0 Design Principles
3.1 Context + Character
3.2 Massing concept
3.3 Site arrangement
3.4 Materials
3.5 Consultation
3.6 Technical baseline

4.0 Design Layout
4.1 The proposed development
4.2 Lower ground
4.3 Upper ground
4.4 Typical upper
4.5 Level 11
4.6 Level 12
4.7 Level 13
4.8 Roof Level
4.9 Core arrangement
4.10 Accommodation schedule

5.0 Design Facade
5.1 Façades
5.2 2 Angel Square - Base
5.3 2 Angel Square - Middle
5.4 2 Angel Square - Winter garden
5.5 2 Angel Square - Top
5.6 3 Angel Square - Base
5.7 3 Angel Square - Middle
5.8 3 Angel Square - Winter garden
5.9 3 Angel Square - Top
5.10 Scale verified views
5.11 Visuals

6.0 Public realm
6.1 Landscape design and access statement

7.0 Sustainability
7.1 Working towards carbon zero

8.0 Access
8.1 2 Angel Square
8.2 3 Angel Square
8.3 Inclusive access
8.4 External building signage strategy

9.0 Conclusion
9.1 Conclusion

10.0 Drawing list
10.1 CP drawing list

1.0 Introduction

1.1
Introduction

This design and access statement has been prepared by Cartwright Pickard on behalf of MEPC and Federated Hermes to support an application for full planning permission comprising:

Erection of 2 Angel Square, a 14 storey building (excluding roof top plant) to form a mixed use office development (Use Class Egi) with two flexible commercial units at Upper Ground floor Level (Use Classes Ea, b, c, e, f, and / or Use Class Sui Generis (p) and (q)), and with a flexible office (Use Class Egi) and/ or restaurant (Use Class Eb) space at Level 12, along with Lower Ground Level car and cycle parking, hard and soft landscaping and other associated works;

Erection of 3 Angel Square, a 13 storey building (excluding roof top plant) to form a mixed use office development (Use Class Egi) with two flexible commercial units provided over Lower and Upper Ground Floor Levels (Use Classes Ea, b, c, e, f, and / or Use Class Sui Generis (p) and (q)), a further flexible commercial unit at Upper Ground Floor Level only allowing for ancillary seminar space and / or Sui Generis Use Class (t) Cinema space, together with an ancillary gym space at Upper Ground Floor, as well as Lower Ground Level car and cycle parking, hard and soft landscaping and other associated works

The statement explains in detail the reasoning and approach behind the design.

This includes the following:

- Client brief and aspirations;
- Analysis of the site context and constraints;
- Key design principles of the development;
- Proposed massing, use and quantum of development;
- Appearance and materials;
- Approach to sustainability and carbon reduction;
- Inclusive design measures

This document should be read in conjunction with the supporting planning documents.

Project team

- MEPC/Federated Hermes
- Gardiner & Theobald (Project Managers & costs)
- Cartwright Pickard (Architect)
- Jolie Studio (Interiors)
- Planit (Landscape)
- Buro Happold (Structure)
- Buro Happold (MEP/Utilities/Acoustics/VT/Wind)
- Jenson Hughes (Fire)
- Curtins (Transport)
- Orsa (Principal Designer)
- Deloitte (Planning consultant)
- Cundall (Carbon)
- Mainer (BREEAM)
- Stephen Levrant (Heritage and Conservation consultant)
- Salford Archaeology (archaeology)
- Pager Power (TV Reception and Aviation)



1.2
Project Brief

In November 2015, planning permission was granted at the Site for the "Erection of a part 10 / part 11 storey, and a part 12 / part 13 storey building with plant rooms above to form a mixed use development comprising Class B1 office use (maximum of 49,622sq.m) and commercial units maximum of 1,591sq.m (Use Classes A1, A2, A3, B1 and D1) along with associated basement car parking, hard and soft landscaping and associated works, including the creation of a new pedestrian route between Angel Street and Miller Street" (Ref. 109865/FO/2015/N1) ('the 2015 Planning Permission'). The 2015 scheme was fully in accordance with the NOMA Masterplan.

The 2015 Planning Permission allowed for a phased delivery of the scheme, so that 2 Angel Square could be delivered ahead of 3 Angel Square (or vice versa) and each phase was subject to a different implementation period. As such, the permission for 2 Angel Square expired in November 2018, whilst the permission for 3 Angel Square remained extant until 12 November 2020. Neither phase of the 2015 Planning Permission was implemented prior to expiration.

In February 2020 Planning Permission was granted for a revised scheme for 2 and 3 Angel Square comprising the "Erection of an 11 storey building and a 12 storey building with plant rooms above to form a mixed use development comprising 39,184 sq.m (NIA) of Class B1a office use and commercial units of 1,286 sqm (NIA) (Use Classes A1, A2, A3, A4, B1a and D1) along with associated lower ground level car parking, hard and soft landscaping and associated works, including the creation of a new pedestrian route between Angel Street and Miller Street" (Ref. 124973/FO/2019) ('the 2020 Planning Permission').

The 2020 Planning permission remains extant until 30 September 2022.

The proposed development comprises two office buildings of a similar nature and scale to that which was approved on the site in 2020, with a proposed two storey increase in height to 2 Angel Square to deliver two office buildings as follows:

2 Angel Square – 14 storeys (LG + UG + 12); and

3 Angel Square – 13 storeys (LG + UG + 11).

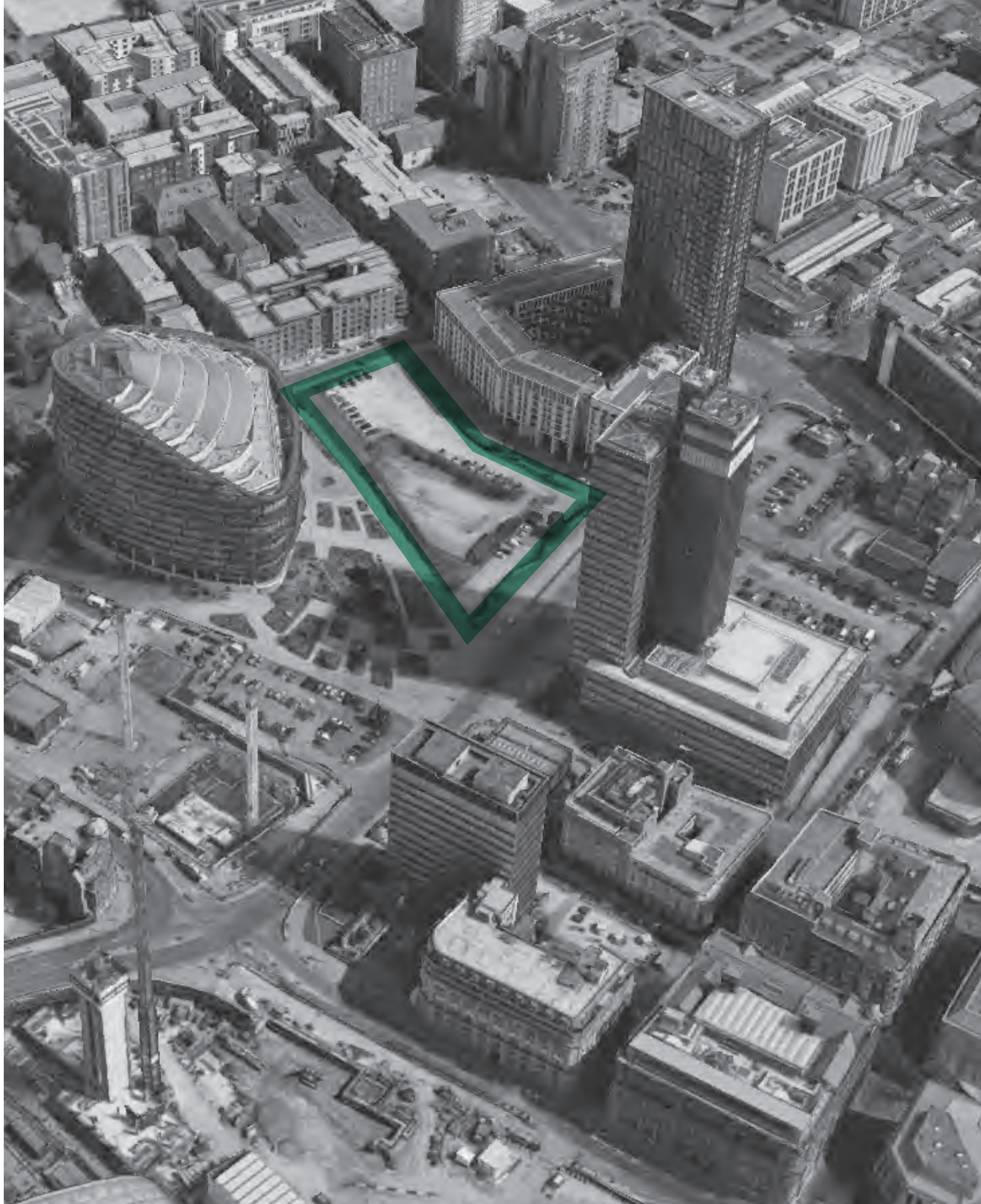
The footprint and main access from Angel Square are very similar to that of the previously consented scheme.

The revised proposal is being brought forward to deliver buildings that reflect the further improved ambitions for sustainability at NOMA, building on the legacy of 1 Angel Square to deliver best in class 'next generation' buildings in terms of sustainability and net zero carbon. Th team have sought to deliver buildings with a distinct character and enhanced architectural merit.

The proposed development is designed to be fully smart enabled and is targeting BREEAM Outstanding and NABERS 5 Star, as a MEPC base minimum standard specification.

The design philosophy for plots 2 and 3 is to have a unique character that interacts with the dynamic public realm and helps to activate it, alongside responding to the highly prominent locations overlooking the public realm. These new proposals are designed with a greater character and architectural

The buildings should also acknowledge the historic location, and the greening and increased soft landscaping of the masterplan as it moves through the estate. It is important that the two buildings complement each other, as well as the existing architecture.



2.0 The site and its context

2.1
Site location

The application site is located north of Manchester City Centre bounded by the inner ring road A665 Miller Street, and Angel Street covering approximately 0.83Ha. To the east of the Site is Angel Mews which provides a north / south pedestrian link and public space between the Site and Angel Gardens. The Co-operative Group Headquarters, 1 Angel Square, is located to the west beyond Angel Square.

The site forms a key part of the NOMA regeneration area of the city to which the NOMA Masterplan and associated Strategic Regeneration Framework (SRF) relates. The SRF and Masterplan was originally endorsed by Manchester City Council (MCC) in 2009, updated in 2010, 2013, 2015 and most recently in 2020. The 2009 Masterplan and subsequent Update Reports set out a commitment to create a commercially-led, mixed use destination underpinned by core development objectives of job creation, placemaking and supporting communities. It forms a material consideration in the determination of planning applications within the area.

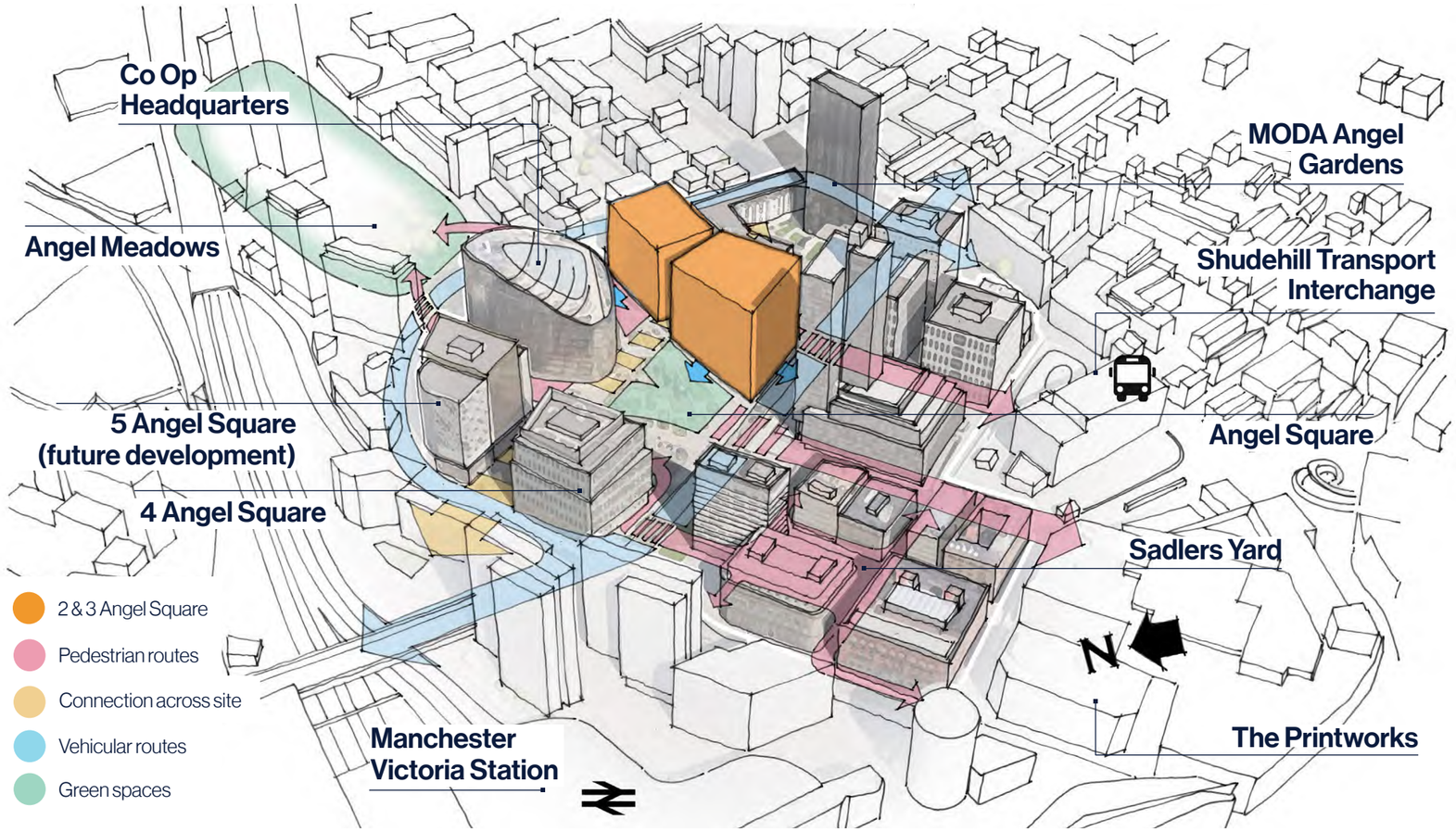
Since endorsement of the first NOMA Framework in 2009 the development context for NOMA has evolved and NOMA has had to respond to this. For example, through the endorsement of earlier Framework updates NOMA has shifted from being a mixed residential and commercial development, to one that is now commercially-led.

The 2020 SRF document provides an update on the progress to date of the NOMA regeneration project and outlines the next phases of work and investment to complete the transformation of the area, as well as the challenges ahead.

The 2020 SRF highlights that as NOMA enters into the next phase of development it needs to continue to respond to a changing context, notably the economic growth of Manchester and demand for Grade A office space; the increasing focus on sustainability and climate change; and the changing regeneration context and NOMA's pivotal role in this, particularly the Northern Gateway, New Cross and Great Ducie Street.

The site is surrounded by an array of key amenities including bus stops, train stations and Metrolink stations. Local residential areas such as Angel Meadows, The Green Quarter, Victoria Quarter and Ancoats are within a 2,000m catchment area of the site and therefore within the preferred maximum walking distance of the site (as specified within the Chartered Institution of Highways and Transportation guidance).

It is within close proximity of some of Manchester's important transport hubs, Victoria Station to the west and Shudehill Interchange to the south. These enable the site to be extremely accessible by public transport. Both the Manchester Arena and the Arndale Shopping Centre can be reached within a short walk from the site.

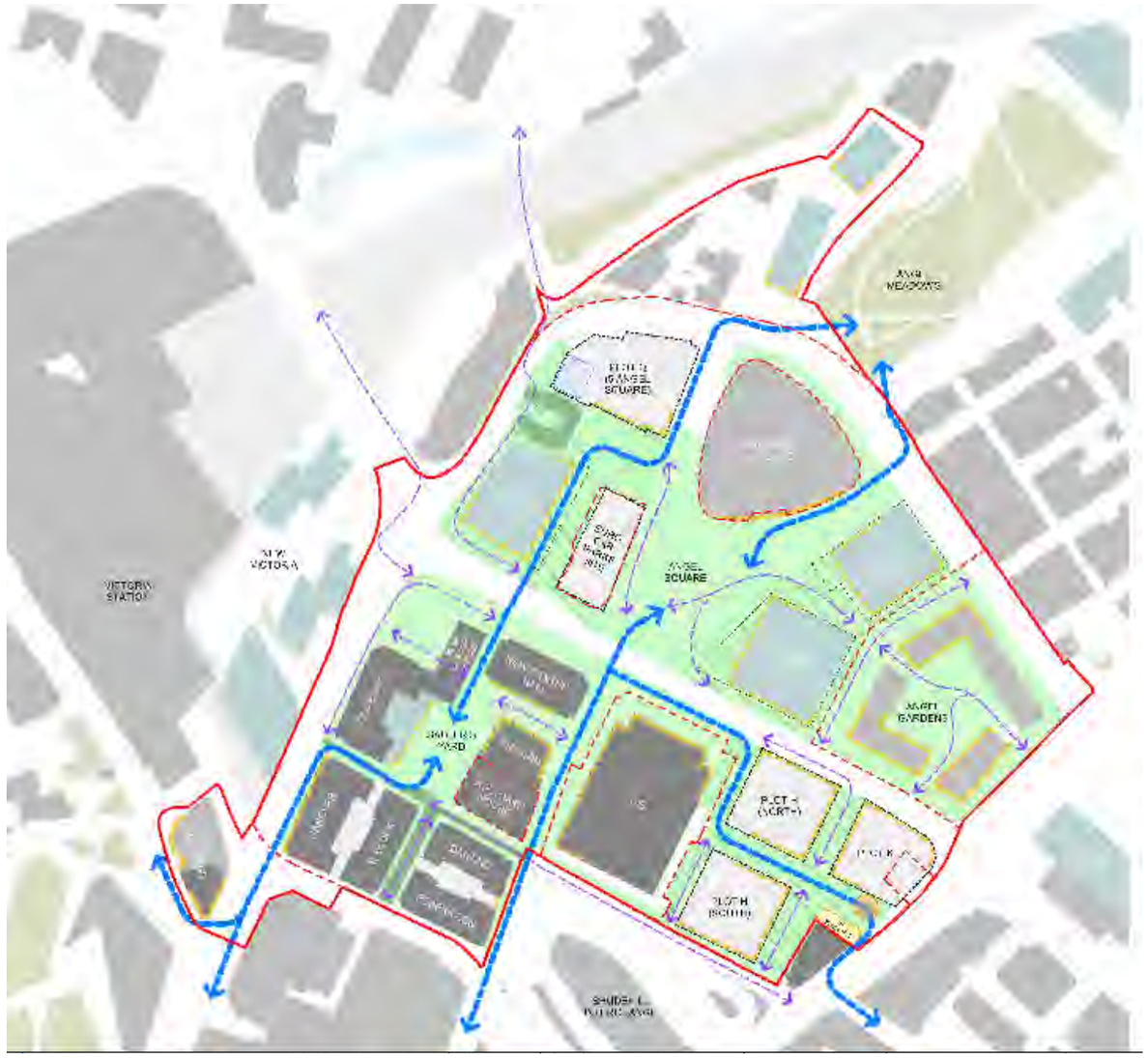








2.2
Wider Vision



NOMA Masterplan 2020

NOMA Masterplan and Framework update 2020

A Strategic Regeneration Framework and Masterplan originally endorsed by Manchester City Council in 2009, updated in 2010,2013, 2015 and 2020. It is a commercially-led, mixed use destination at the northern gateway to the city centre, covering an area of approximately 20 acres. To date NOMA has delivered c.807,000 sq. ft. of office development, of which just over 457,000 sq. ft. is in the historic estate. A further 836,000 sq. ft. is in the pipeline (either on-site or in the planning process). Working in partnership with MCC and other key stakeholders, NOMA has already made significant progress in delivering its vision, including:

Delivery of 1 Angel Square office in 2013 - the iconic head office for The Co-operative Group.

Construction of the 36 storey Angel Gardens residential development comprising 460 private rented sector apartments and ground floor retail, bar and restaurant uses.

Construction of the 187-bedroom Hotel Indigo, which comprised the refurbishment and reuse of the Grade II Listed City Buildings together with a new 14 storey rotunda tower; the scheme helped to link NOMA with the City Centre.

Investment in bringing historic buildings back into active, viable use; this includes the £34 million refurbishment of Hanover, now the northern HQ of Amazon, and the refurbishment of Old Bank, Dantzic, Federation, and Redfern buildings.

The refurbishment of the Grade II listed New Century Hall also just completed and undergoing fit out to be returned to the city cultural and entertainment offering to be called 'New Century' – a social hub including an 800 person events space, a Kitchen bringing local independent street food and a creative campus all under one roof.

Delivery of new public space with Angel Square and Sadler's Yard, home to the Pilcrow, a community built public house and the heart of the historic estate. The delivery of such public realm spaces have had a particularly significant impact in terms of places making helping to enhance connectivity within NOMA into other areas of the City.

A range of temporary events, exhibitions and markets, have been hosted in Sadler's Yard and the adjacent buildings, including Manchester International Festival events and Project Oubliette (a temporary interactive educational space with a series of mathematical challenges), which further establish its status as a destination in the City Centre;

Improvements to the road network have also completed including to the Inner Ring Road, dropping Miller Street to two lanes and introducing a one-way system that improves traffic flow and allows NOMA to be fully linked with the rest of the City Centre. This was also co-ordinated with the installation of enhanced utilities networks which has allowed NOMA to accelerate the delivery of key major sites that would not have been possible without these improvements.

A key part of responsible and considered development is to expand the capacity of the energy and electrical network to accommodate new people and buildings. In line with the endorsed NOMA Masterplan and SRF, the Applicant has invested £5.5 million in a new primary substation on the Site of 5 Angel Square, in order to fulfil capacity requirements now and in the future.

Construction is well-underway at 4 Angel Square following the granting of planning permission in August

2019 and is on track to complete in January 2023.

A truly sustainable temporary Marketing Suite is under construction on Plot N along Miller Street to help promote NOMA and assist with the commercial strategy for securing future occupiers. The temporary structure is built from timber and is able to be moved and possibly gifted for community use in the long term.

Around 6,000 people currently work at NOMA, which has been estimated to generate in the region of £210 million in wages and £380 million in GVA per annum.

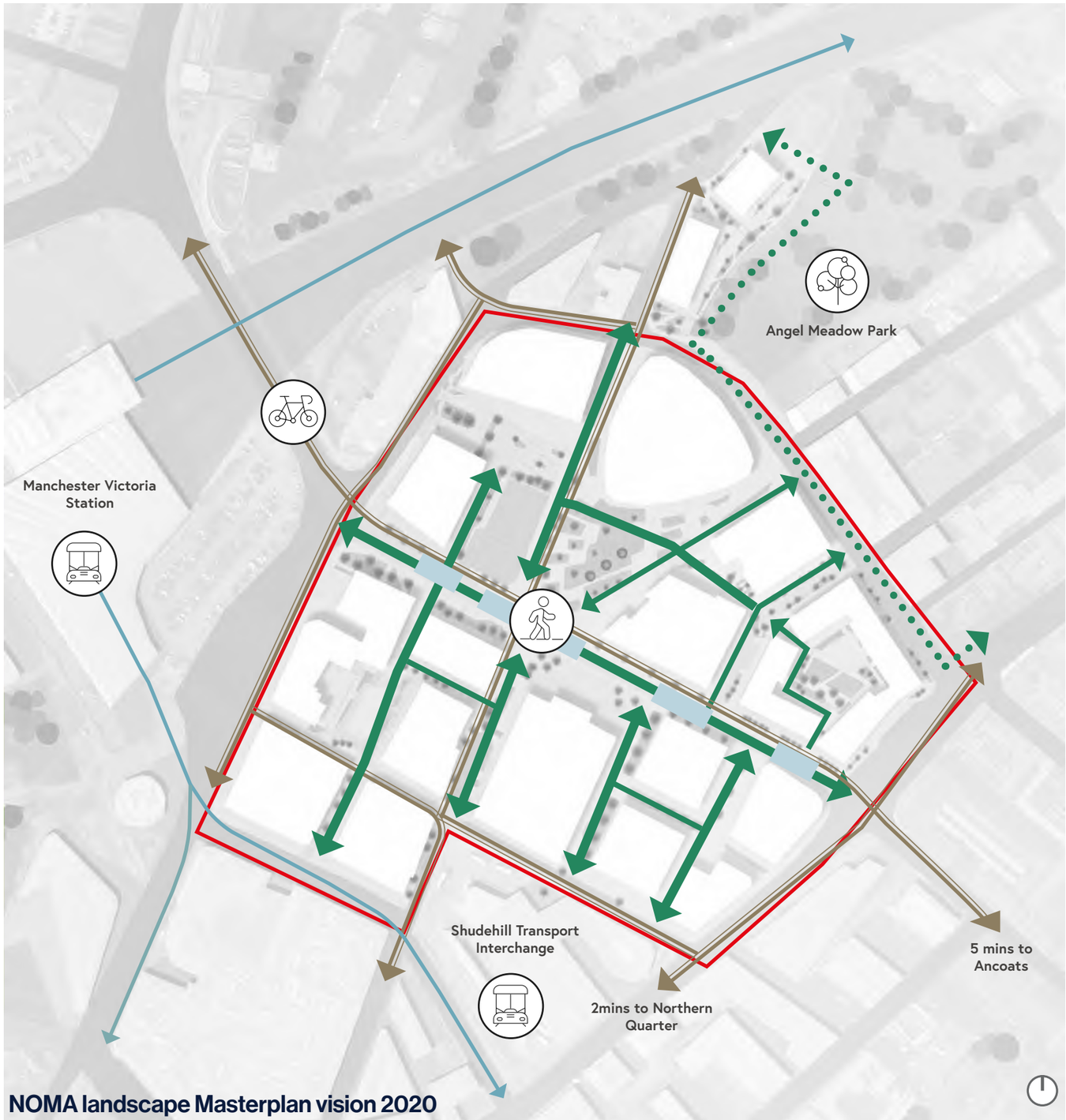
Over £150 million of construction investment in NOMA has been created, alongside 280 construction jobs per annum, including 47 apprenticeships.

£4.5 million of social value has been generated through volunteering, training, apprenticeships and health & well-being initiatives at NOMA

Around 20,000 visitors have attended events at NOMA since 2014.

More than 1,000 volunteers have taken part in activities in NOMA.

From April to July 2018, a NOMA Partnership project with Manchester Metropolitan University saw 1,500 school children take part in an immersive game experience, designed by students, to help them build confidence in maths.



NOMA landscape Masterplan vision 2020

2.3
Historic context

The Site

The site is bounded by 1 Angel Square (the Co-operative Group headquarters), Miller Street, Angel Gardens residential scheme and Angel Street. The site currently comprises two development plots, identified as Plots M & N on the endorsed NOMA Masterplan, which are in temporary use as surface car parking. Whilst not within a conservation area the site is adjacent to the Shudehill and Smithfield conservation areas to the south and numerous listed buildings.

Listed Buildings

01 The Grade II New Century House.

02 The Grade II Redfern House.

03 The Grade II Holyoake House.

04 The Grade II CIS tower.

05 The Grade II Smithfield Market Hall.

06 The Grade II Old Bank Building

07 The Grade II Hanover Building

08 The Grade II 29 Dantzic Street

Conservation areas

The Shudehill Conservation area.

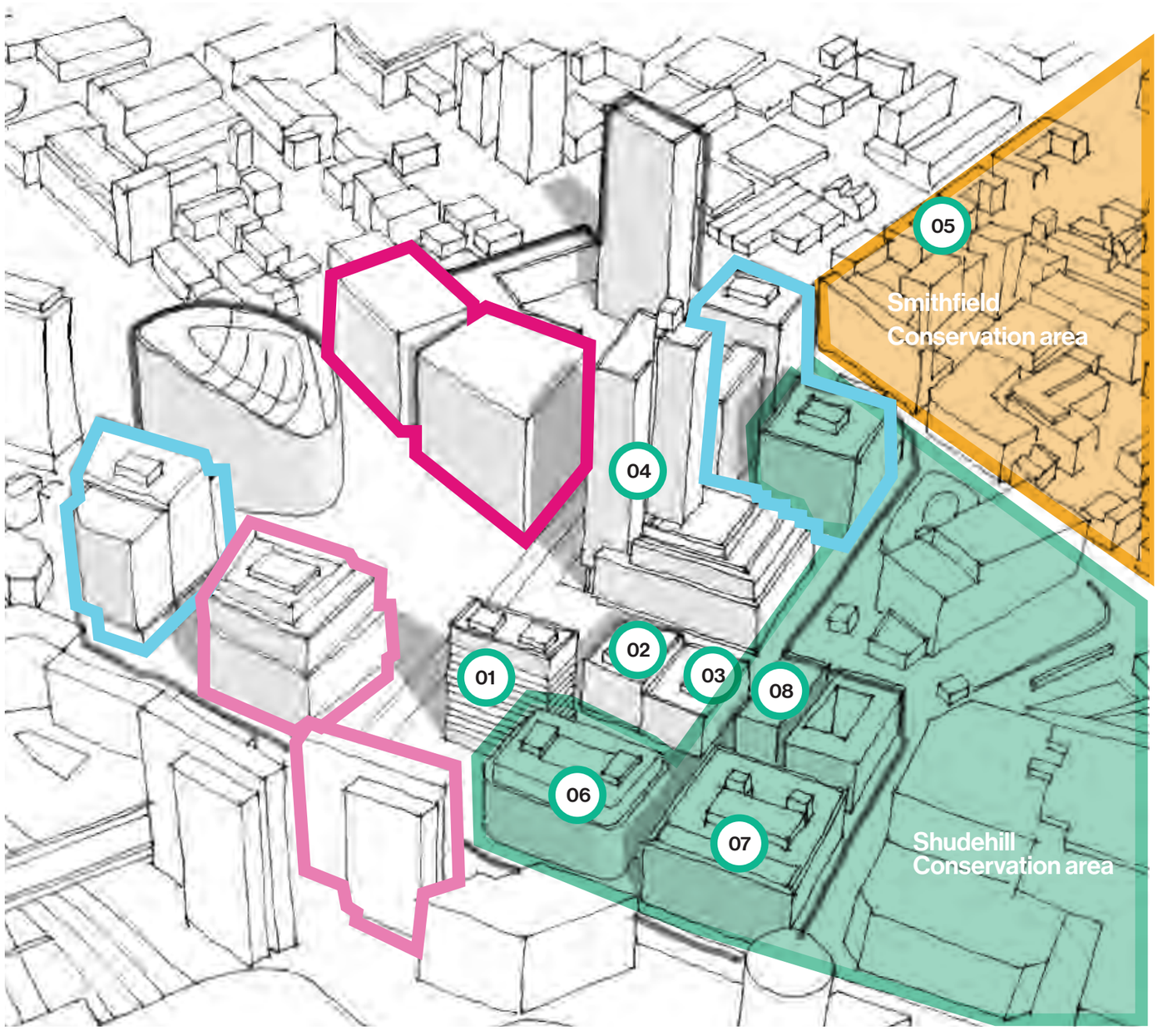
The Smithfield Conservation area.

2 and 3 Angel Square

Consented schemes 2019

Future development sites

Under construction



Aerial View

Sketch aerial view of NOMA Masterplan

Historical mapping

The earliest known map of Manchester, dating to c 1650, shows several properties along Miller Street and Shudehill. Miller's Lane, the forerunner of Miller Street, is documented from the 1580s, and may have originated as a convenient link between the local manorial corn mill and the eastern approach to the town via Shudehill and what is now Swan Street. Almshouses were built in 1680 on Miller Lane (now Miller Street) to support the poor of the City. In 1794 however, the trustees secured an Act of Parliament which enabled them to demolish the almshouses, and in 1808 they sold the land on 99-year leases for warehousing. The most notable development of this period, within the NOMA masterplan site, was the construction of the Shudehill Mill on Miller Street, which became obsolete as a cotton-spinning mill in the 1840's.

By 1807 the site area and surrounding neighbourhood has developed considerably more and now shows the location of St. Michael's Church and its burial grounds and the emergence of the warehousing and foundry on the newly named Millers Street. Angel Street now links the church to Back Lane and the top of Shude Hill.

Liverpool and Leeds Railway Station (now Victoria Station) appears on the Slater 1848 map but it is evident that there hadn't been much development of the proposed site since the early 1800s. During the period of the Industrial Revolution, the massive population increase in the area lead to rapid and unplanned growth, prompted by the upsurge in the cotton industry. New streets were formed such as Hanover Street and Balloon Street.

By 1900 the road network and Victoria Station are as established as they are today. The local tram network is shown travelling along Rochdale Road, Swan Street and Corporation Street. Millers Street is now named Miller Street. St. Michaels Church remains but was soon demolished in 1935 to become Angel Meadows.

The Site also incorporates the footprint of the former Shudehill Mill, established by Richard Arkwright in 1780-3, and part of its associated engine houses. It sits across three NOMA development plots - the Site and Angel Gardens. Whilst the Site is of immense historical importance, all physical remains were removed as part of a controlled and comprehensive archaeological excavation in 2015.

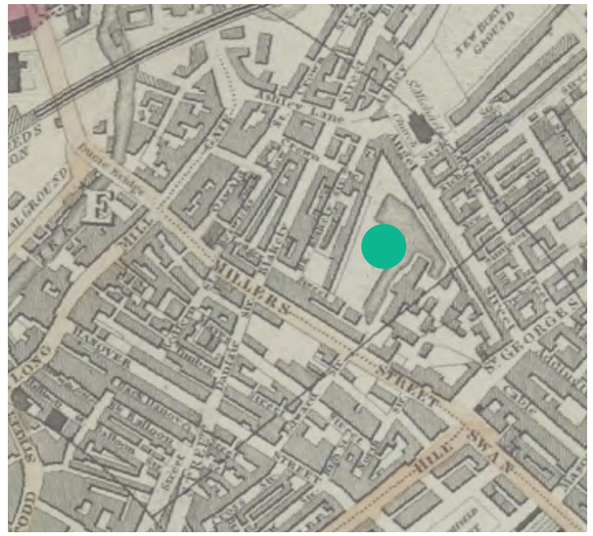
Please refer to the Heritage Statement prepared by Heritage Architecture for further details and the Archaeological report on Shudehill Mill by Salford Archaeological.



1787 Historic map of Manchester.



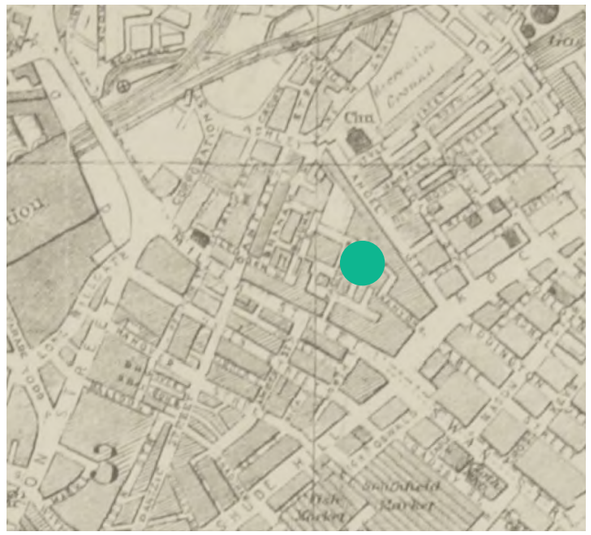
1807 Historic map of Manchester.



1848 Historic map of Manchester.



1884 Historic map of Manchester.



1920 Historic map of Manchester.



1960 Historic map of Manchester.

2.4
Surrounding context



View A
North west along Miller Street



View B
South west from Rochdale Road



View C
South from Angel Meadows



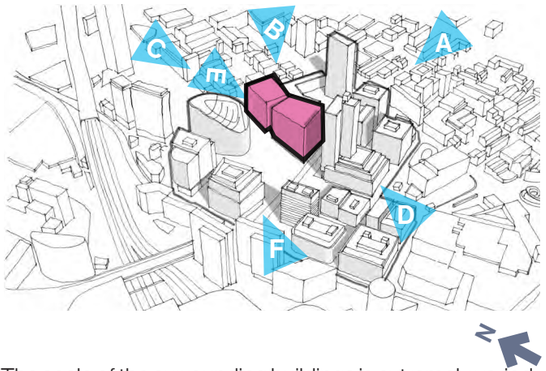
View D
North east towards 1 Angel Square



View E
South west from Angel Street



View F
North east towards 4 Angel Square



- The scale of the surrounding buildings is extremely varied. North of Angel Street buildings are predominantly ground plus 5 or 8 storeys of residential accommodation. East of the site is the Angel Gardens residential tower and to the south of Miller Street is the CIS tower and surrounding lower rise commercial buildings that form part of the Shudehill area of the city.

- There are a number of grade 2 listed buildings within the Shudehill and the Smithfield conservation areas with a number of more modern additions from throughout the 20th century.

- New buildings or significant refurbishments are being constructed or have been completed in the immediate context at 4 Angel Square, CIS tower and New Century Hall.

- There is a broad mix of materials across the NOMA estate and Angel Meadows, from faïence,stone and brick to metal and glass on the CIS tower and associated buildings.

2.5
Opportunities

This page highlights key site opportunities identified through our site analysis, that have informed the design development of the proposals.

Topography

- Level changes are significant across the site. Any proposal must successfully reconcile these changes whilst maintaining public frontages and engagement with public realm.
- Levels drop diagonally over 7m from Angel Street to Miller street.

Permeability

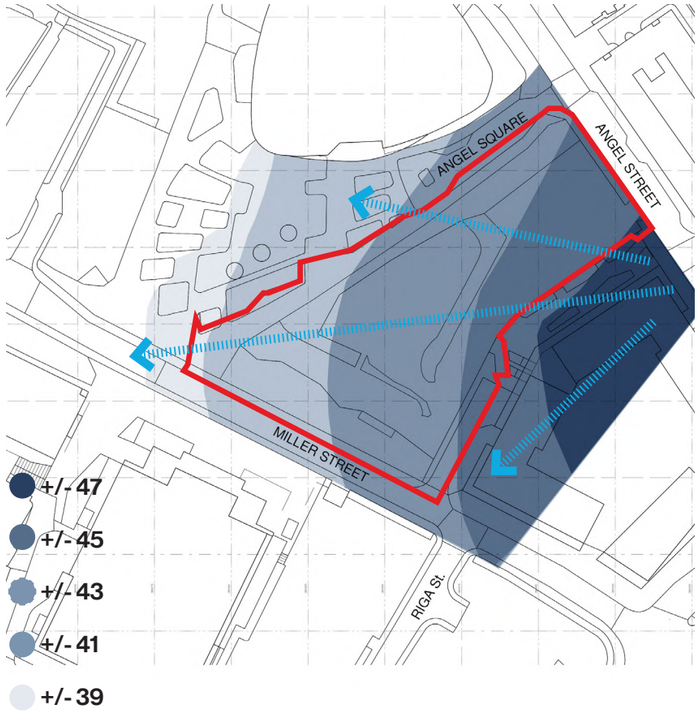
- Opportunity for large glazed openings animating the surrounding street scape.
- Opportunity for a pedestrian route along Thread Street and down a series of landscaped steps to Angel Square, between the two buildings.
- Primary and secondary pedestrian routes are required to the east and west and to pass between the two development plots as part of the agreed masterplan. (See adjacent diagram).
- Active frontages are required to a significant extent of both buildings under the SRF. These must front Angel Square and Thread Street. There is no 'Front or back'.
- Improved connection to the public realm and Angel Square from previous consented schemes.

Prominence

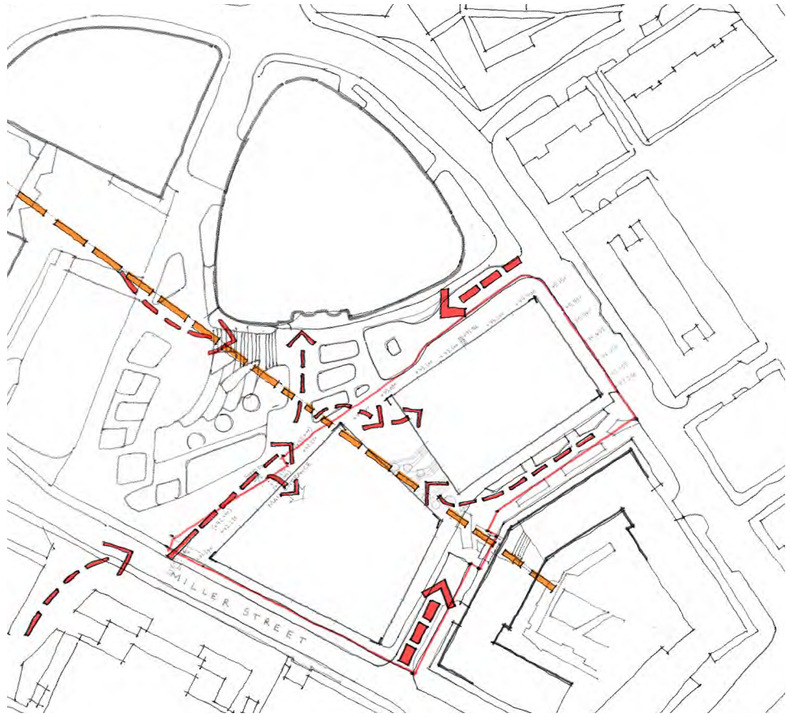
- The consented scheme for 2 Angel Square is eleven storeys. 3 Angel Square is twelve storeys.
- There is an opportunity to create two architecturally impressive buildings on a key gateway site, improving the overall character of the area from what is currently a surface car park

Public realm

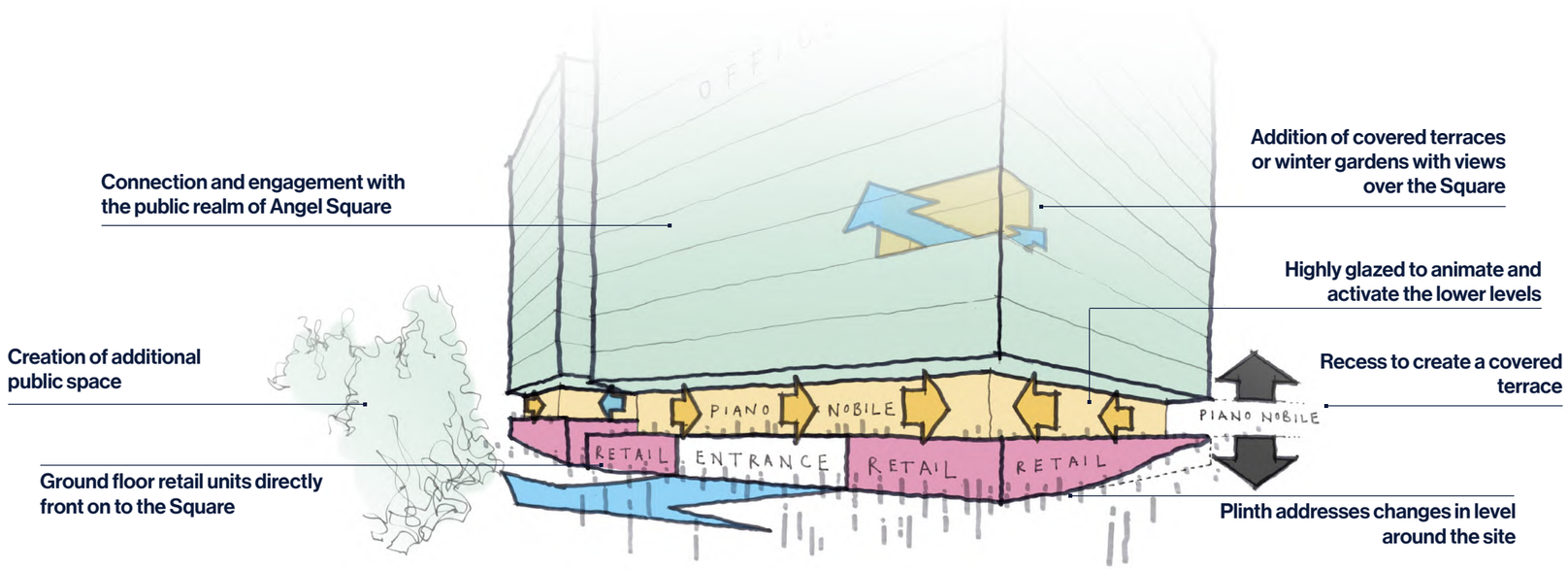
- The two buildings will be integral to the re design of Angel Square, which will be submitted as a separate planning application.



Site topography



Proposed connectivity



Plinth concept and connectivity to public realm

2.6
Planning context

1. Planning Policy Framework

Section 38(6) of the Planning and Compulsory Purchase Act 2004 states:

"If regard is to be had to the development plan for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise".

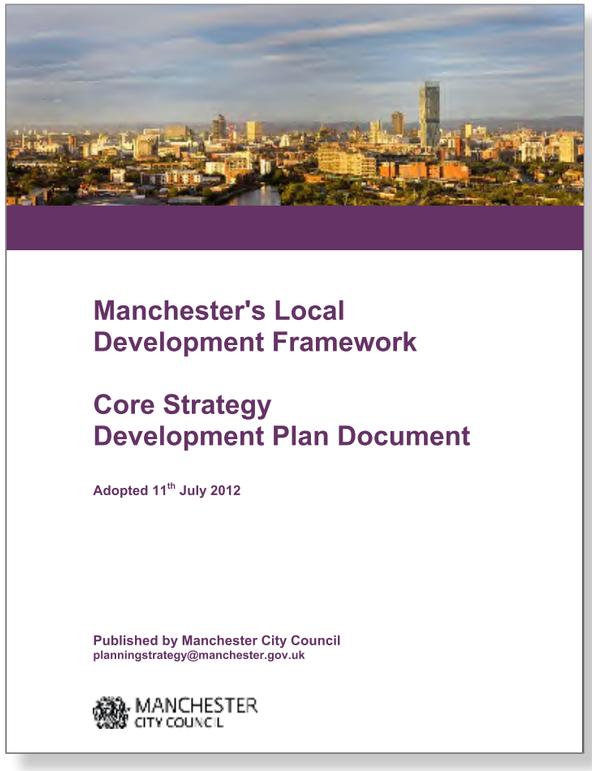
This Section details the relevant documents that make up the Development Plan and material considerations such as guidance and MCC Strategic objectives. Detailed assessment of the Proposed Development against the Development Plan and material considerations is provided within this Section 6 of this Statement.

The Local Development Framework (LDF) is a collection of statutory Development Plan Documents (DPDs) that together set out the vision and spatial strategy for the future development of Manchester. To-date only the Core Strategy DPD has been adopted by Manchester City Council. Within this context, the Development Plan comprises:

- Manchester Core Strategy (2012);
- Manchester Proposals Map (2012)
- Guide to Development in Manchester Supplementary Planning Document (2007);
- Saved Policies of the Manchester UDP (2005);
- Greater Manchester Joint Waste Development Plan Document (2012); and
- Greater Manchester Joint Minerals Plan (2013).

The following published policy, executive reports and guidance documents are of material considerations relevant to the Proposed Development:

- National Planning Policy and Guidance:
- National Planning Policy Framework (NPPF) 2021, and
- Planning Practice Guidance (NPPG).
- The Greater Manchester Strategy 2017;
- Our Manchester Strategy 2016-2025;
- NOMA Strategic Regeneration Framework 2020
- Climate Change Emergency and Playing Our Full Part on Climate Change (2018);
- Manchester Climate Change Framework: 2020-2025 (2020);
- City Centre Transport Strategy (2019);
- Design for Access 2 (2003); and
- GD04 Waste Storage and Collection Guidance for New Developments (2017).



Adopted Manchester Local Development Plan

Manchester Core Strategy (2012)

The Core Strategy was adopted on 12 July 2012. It sets the overall strategic direction for planning in Manchester over the plan period from 2012 to 2027. The policies of the Core Strategy establish where major development and other forms of investment should be located in order to be sustainable, meet local needs and take full advantage of opportunities.

The Proposed Development is located within the regional centre and city centre fringe as defined within the Core Strategy, where there is a focus to support economic growth and access to job opportunities.

Saved Policies of the UDP (1995)

The UDP was adopted in July 1995. Coinciding with the adoption of the Core Strategy in 2012 significant proportions of the UDP have been replaced, however, a number of polices were saved on 11 July 2012 and remain extant.

The Site is allocated in the UDP for commercial / business uses under UDP Saved Policy HC10b.

Guide to Development in Manchester Supplementary Planning Document (2007) and Technical Guidance (2015)

The Guide to Development in Manchester - Supplementary Planning Document and Planning Guidance (SPD) was originally adopted on 11 April 2007. The document reflects and provides guidance on the importance of creating attractive, well designed, well maintained neighbourhoods. It includes a set of reasoned principles which will guide developers, designers and residents to the sort of development which is anticipated in Manchester.

In addition, technical guidance for developers was published in December 2015. It is composed of two documents, GD03 Environmental Protection and GD05 Planning and Noise.

The documents reflect and provide guidance on the importance of creating attractive, well designed, well maintained neighbourhoods. It includes a set of reasoned principles which will guide developers, designers and residents to the sort of development which is anticipated in Manchester.

Material Considerations

The Government is committed to a plan-led system of development control, which was given statutory force by Section 38(6) of the 2004 Planning and Compulsory Purchase Act. Where an adopted or approved development plan contains relevant policies, Section 38(6) requires that an application for planning permission or an appeal shall be determined in accordance with the plan, unless material considerations indicate otherwise.

NPPF

The National Planning Policy Framework (NPPF, 2021) sets out the Government's planning policies for England and how these are expected to be applied. It sets out the Government's requirements for the planning system only to the extent that it is relevant, proportionate and necessary to do so.

The NPPF must be taken into account in the preparation of local and neighbourhood plans and is a material consideration in planning decisions.

NPPG

The NPPG was published in March 2012 and is regularly updated. It sets out advice, information and best practice on a wide range of planning issues with the overall objective of becoming a single source for planning guidance which is maintained as a live resource.

The NPPG stresses the importance of well-designed places and good design that takes the opportunity to improve the character and quality of an area and the way it functions. Good design is set out in the National Design Guide under the following characteristics:

- Context;
- Identity;
- Built form;
- Movement;
- Nature;
- Public spaces;
- Uses;
- Homes and buildings;
- Resources; and
- Lifespan.

NOMA Masterplan and SRF

NOMA is underpinned by an endorsed Masterplan and SRF endorsed by MCC originally in 2009, updated in 2010, 2013, 2015 and most recently in 2020. The 2009 Masterplan and subsequent Update Reports set out a commitment to create a commercially led, mixed use destination underpinned by core development objectives of job creation, placemaking and supporting communities.

Since endorsement of the first NOMA Framework in 2009 the development context for NOMA has evolved and NOMA has had to respond to this. For example, through the endorsement of earlier Framework updates NOMA has shifted from being a mixed residential and commercial development, to one that is now commercially led.

The 2020 SRF document provides an update on the progress to date of the NOMA regeneration project and outlines the next phases of work and investment to complete the transformation of the area, as well as the challenges ahead.

The 2020 SRF highlights that as NOMA enters into the next phase of development it needs to continue to respond to a changing context, notably the economic growth of Manchester and demand for Grade A office space; the increasing focus on sustainability and climate change; and the changing regeneration context and NOMA's pivotal role in this, particularly the Northern Gateway, New Cross and Great Ducie Street.

It forms a material consideration in the determination of planning applications within the area.

3.0 **Design** Principles

3.1
Context and character

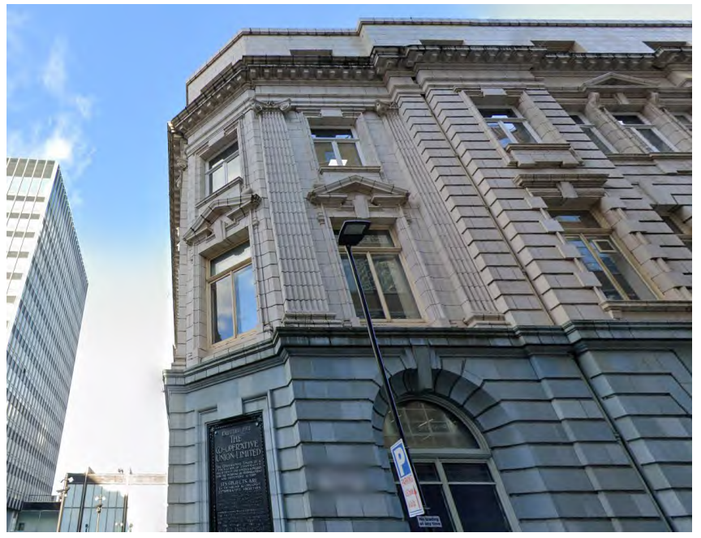
Shudehill and the City

Shudehill and the former Co-op listed estate represents the evolution of Manchester's commercial architecture throughout the 20th Century, including baroque, Art Deco and the International style of the CIS tower and New Century Hall.

As such, multiple reference points can be made in style and materiality.

Colour tones can make further nods to the changes in material palette, such as the use of steel, large expanses of ribbon glazing and faïence.













Angel Meadows and north of Angel Street

The area to the north of Angel Street is a mix of both new build residential and remodelled former red brick commercial buildings from the late 19th and early 20th centuries.

Variety, interest and embellishments can be found in the mix of brick used, lintels and sill details on these earlier commercial buildings.

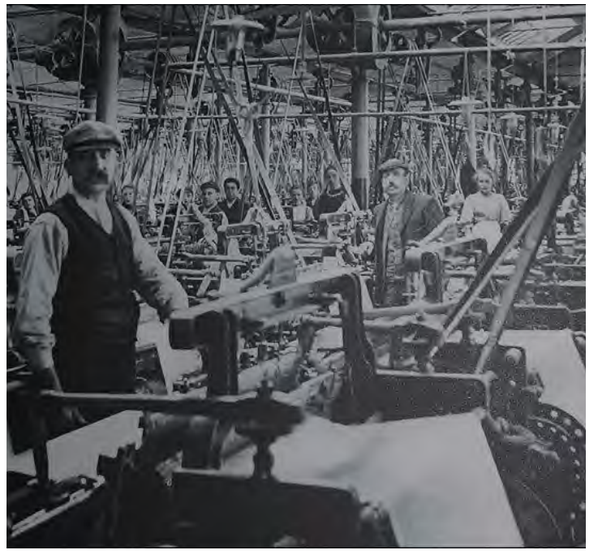
Facade references

A number of key design drivers for the facade approach were established from the outset. These were:

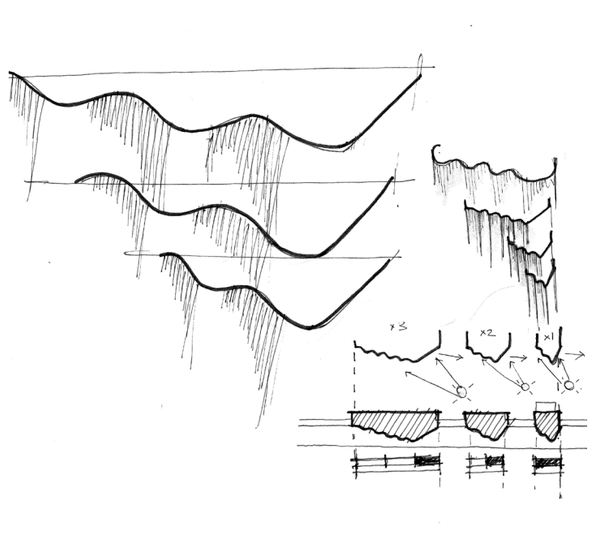
- LS Lowry paintings and colour palette formed an important cultural and artistic record of Angel Meadows and its surrounds.
- The site straddles the site of Arkwright"s Mill. A cotton mill established in the late C 18th which employed a pioneering approach to technology.
- Contextual and material references. Faïence and ceramic glazes can be found across a number of buildings in the near vicinity to the site.
- Colour tones will reference the mills and brick architecture of Angel Meadows and the Mid century architecture of the Shudehill conservation area.
- Shadow and reflections across the material surface and form. Opportunity to create a fluid 'curtain' to the facade where asymmetry breaks up the ordered rhythm and mass, introducing different scales which add layers of interest and intrigue - it is in understanding the asymmetry that helps creates a more memorable facade.
- Environmental and fabric first approach to create solid to glass facade ratios..
- Targeting BREEAM Outstanding and significant carbon reduction targets against contemporary benchmarks.
- Optimising the possible use of off site manufacture
- Reducing whole life carbon and prioritising a circular approach to material installation and selection.
- Internal interest and variation through changing window modules.
- Add moments of craft and detail through the interesting use of materials - high quality design appropriate to its context.



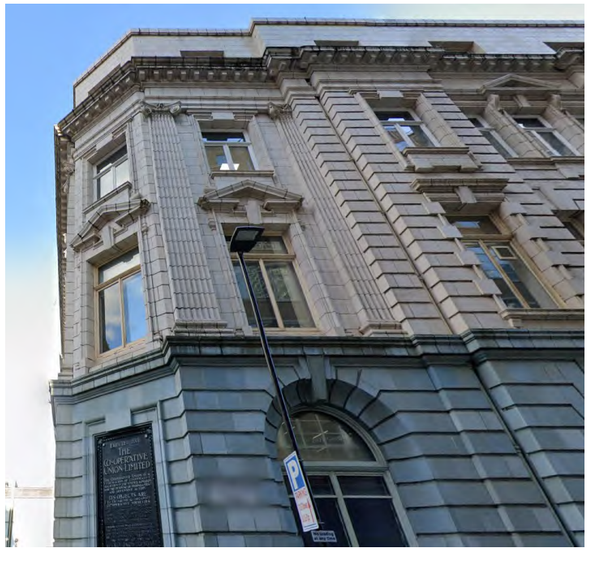
01. Direct cultural references to Angel Meadows.



02. Direct historic references to Arkwright's Mill.



03. Interpretation of weaving references in building fabric.



04. Blue grey glazed faïence in local context



05. Red/umber glazed faïence in local context



06. Contemporary use of terracotta to create form, depth and reflectance.

3.2
Massing concept

Consented building heights

The 2020 consented scheme for 2 Angel Square is eleven storeys. 3 Angel Square is twelve storeys.

There is a concern that 2 Angel Square is deferring to 3 Angel Square within the masterplan.

The buildings are to be read as a balanced pair in scale, facade treatment and area.

The team explored proposals that add 2 additional storeys on 2 Angel Square in both master planning and architectural terms.

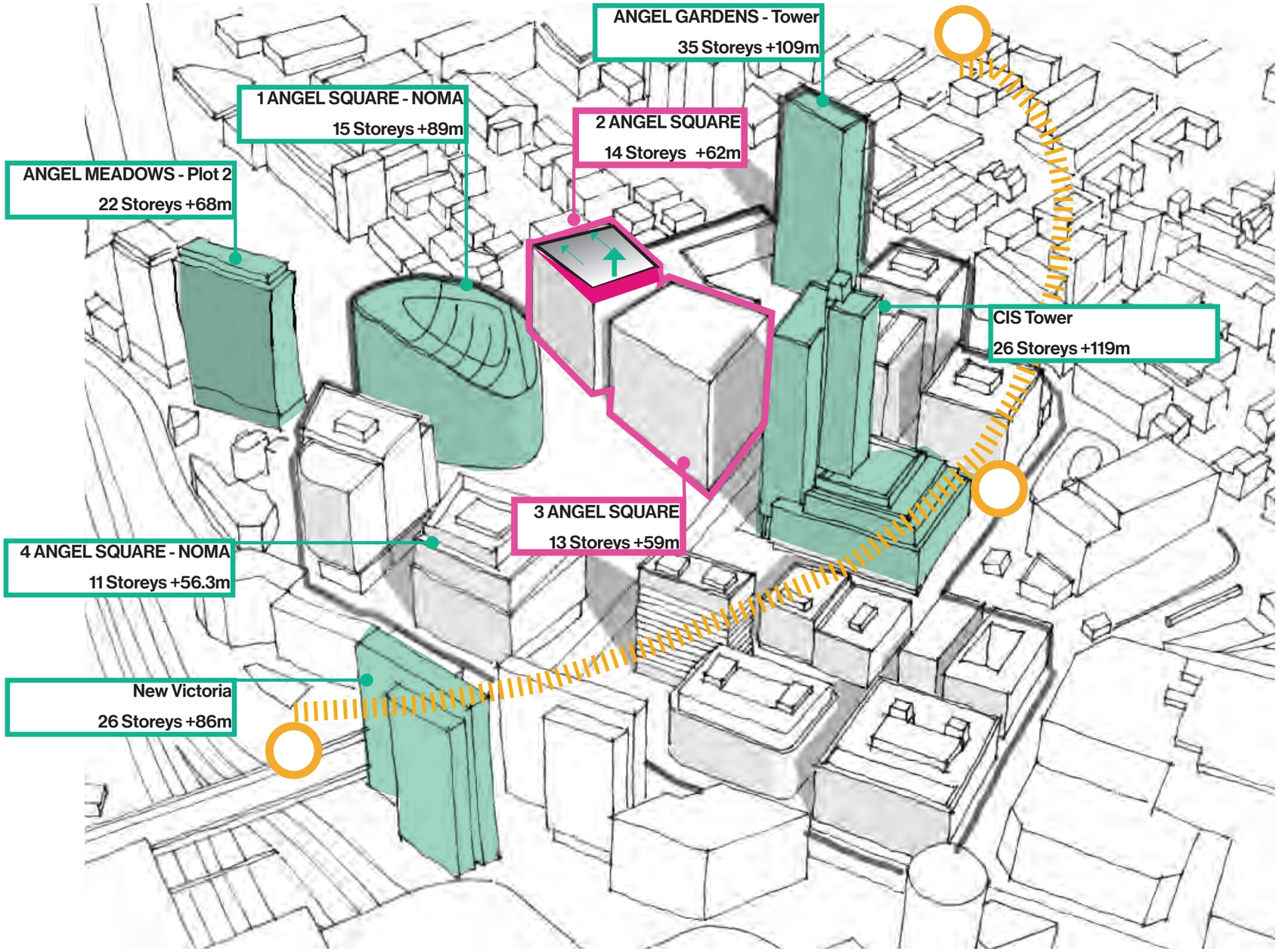
Proposed building heights

2 Angel Square

- LG, UG, 12 upper floors
- Adding additional storeys to 2 Angel Square will create more variation in building heights along the Angel Street facade of NOMA.
- A taller 2 Angel Square will frame views of 1 Angel Square from Angel Meadows with 5 Angel Square to the north west
- A ring of taller building forms a backdrop to Angel Square and face south to the city.
- Locating taller buildings to the north of the public realm will reduce overshadowing onto Angel Square.
- Adding height onto 2 Angel Square rather then 3 Angel Square minimises impact on adjacent heritage assets and gives equal importance to 2 Angel Square.

3 Angel Square

- LG, UG, 11 upper floors
- The omission of a single storey from 3 Angel Square will have minimal impact on 3 Angel Square's presence onto Miller street and connection to the wider NOMA masterplan.
- Associated area reduction will create comparable areas between both buildings.



Aerial View

Adjacent tall building heights

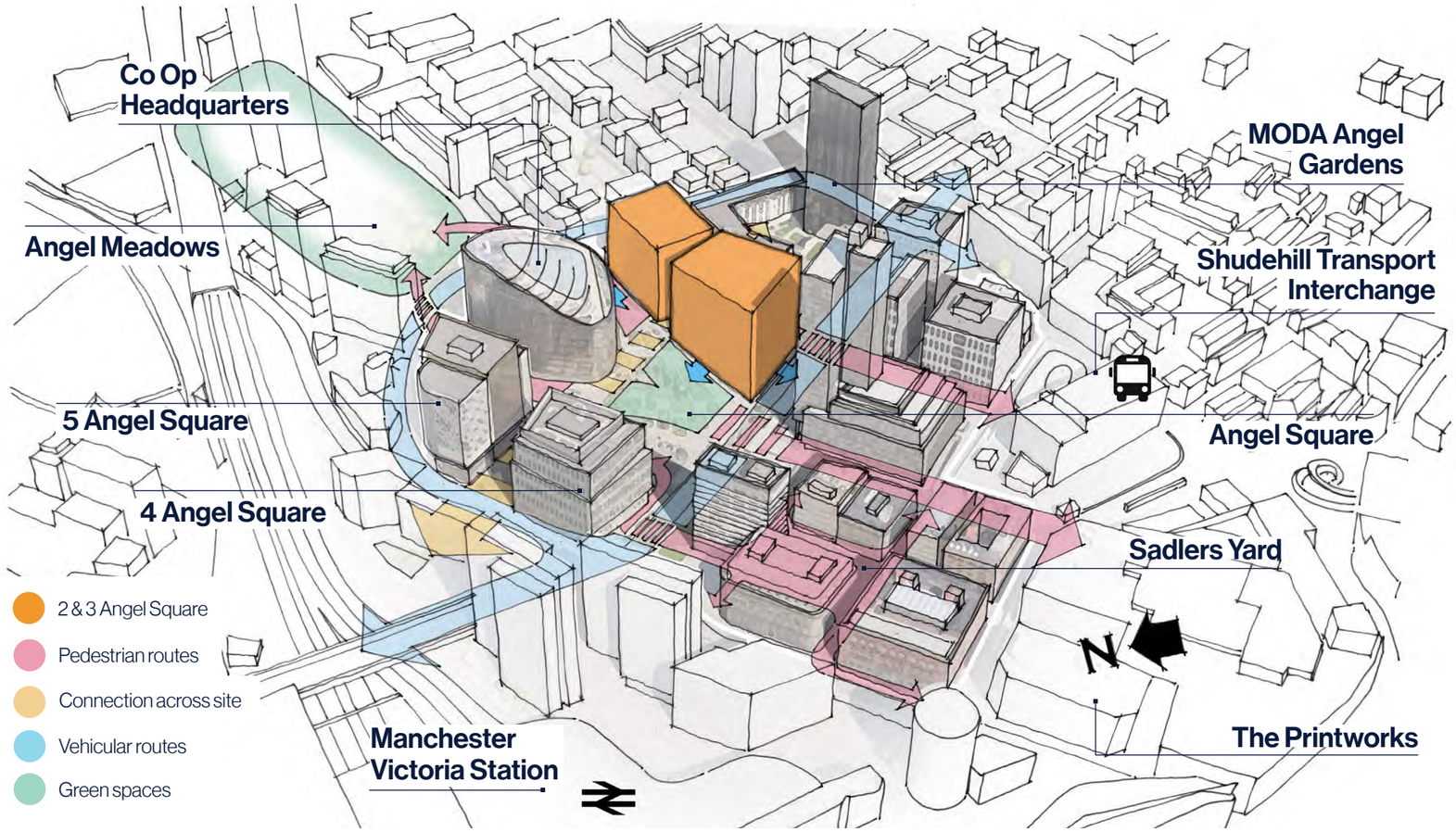
3.3
Site arrangement

Key site attributes

- Angel Square, and the buildings that define it, must create a bold and lasting sense of place that will become a destination.
- Site topography falls significantly from north east to south west.
- Key pedestrian activity and connections run east-west linking the northern gateway to the city, and north-south linking 4 and 5 Angel square through to Angel Gardens via 2 and 3 Angel Square.
- Established vehicular access is from Miller Street and Angel Street

Key design drivers

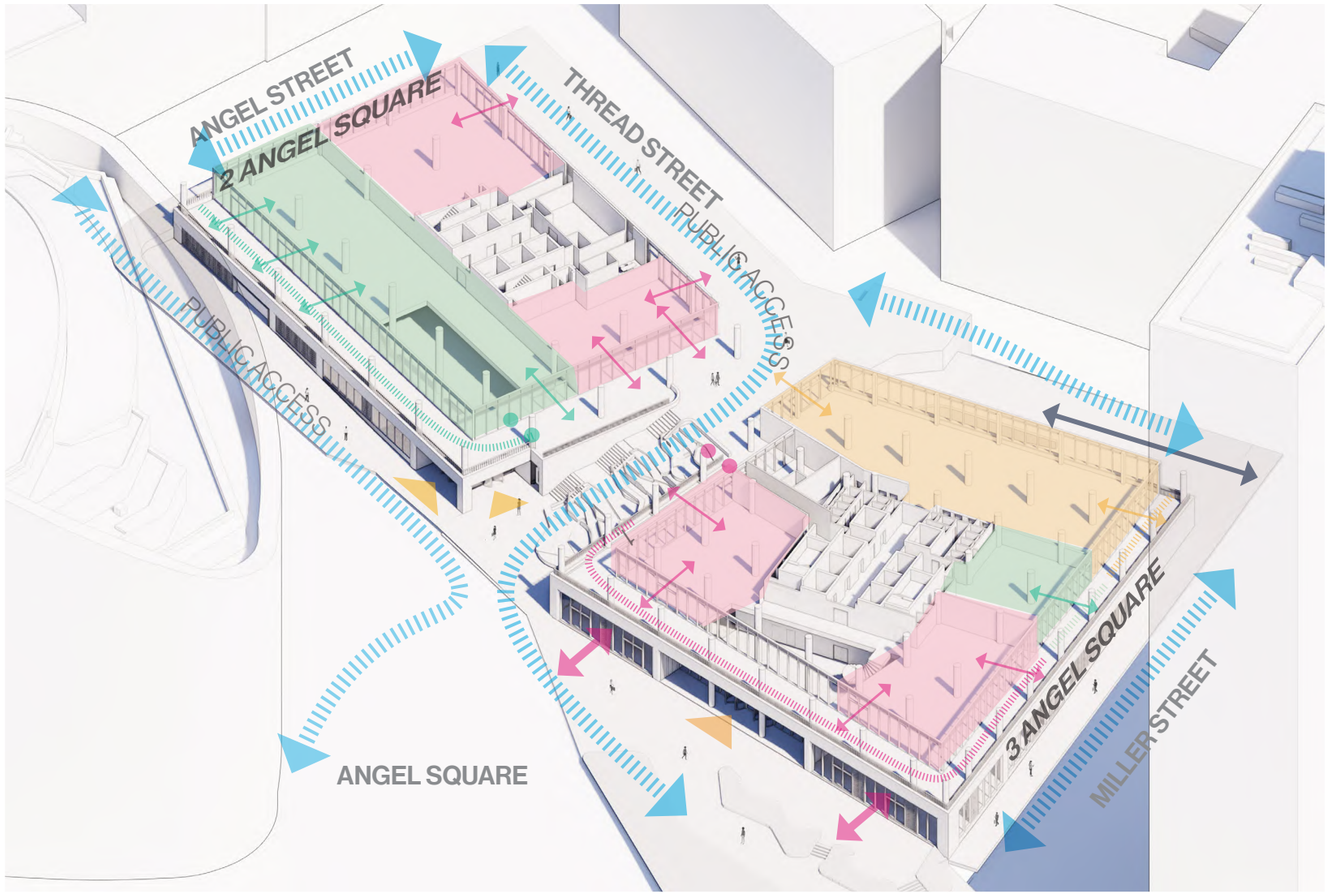
- Level changes are significant across the site. Any proposal must successfully reconcile these changes whilst maintaining public frontages and engagement with public realm.
- Levels drop diagonally over 7m from Angel Street to Miller street. (See diagram on previous page).
- Primary and secondary pedestrian routes are required to the east and west and to pass between the 2 development plots as part of the agreed masterplan.
- Active frontages are required to a significant extent of both buildings under the SRF. These must front Angel Square and Thread Street.
- As part of the client's brief, the latest proposals were required to better address the public realm and ensure their is better connection to evolving proposals for Angel Square.
- Need to create buildings that are comparable in prominence and architectural merit;
- Consideration of impacts on daylight, sunlight and overshadowing;
- Consideration of impacts on wind and implementation of any required mitigation;
- Minimising any impacts from acoustics, highways and servicing and air quality.











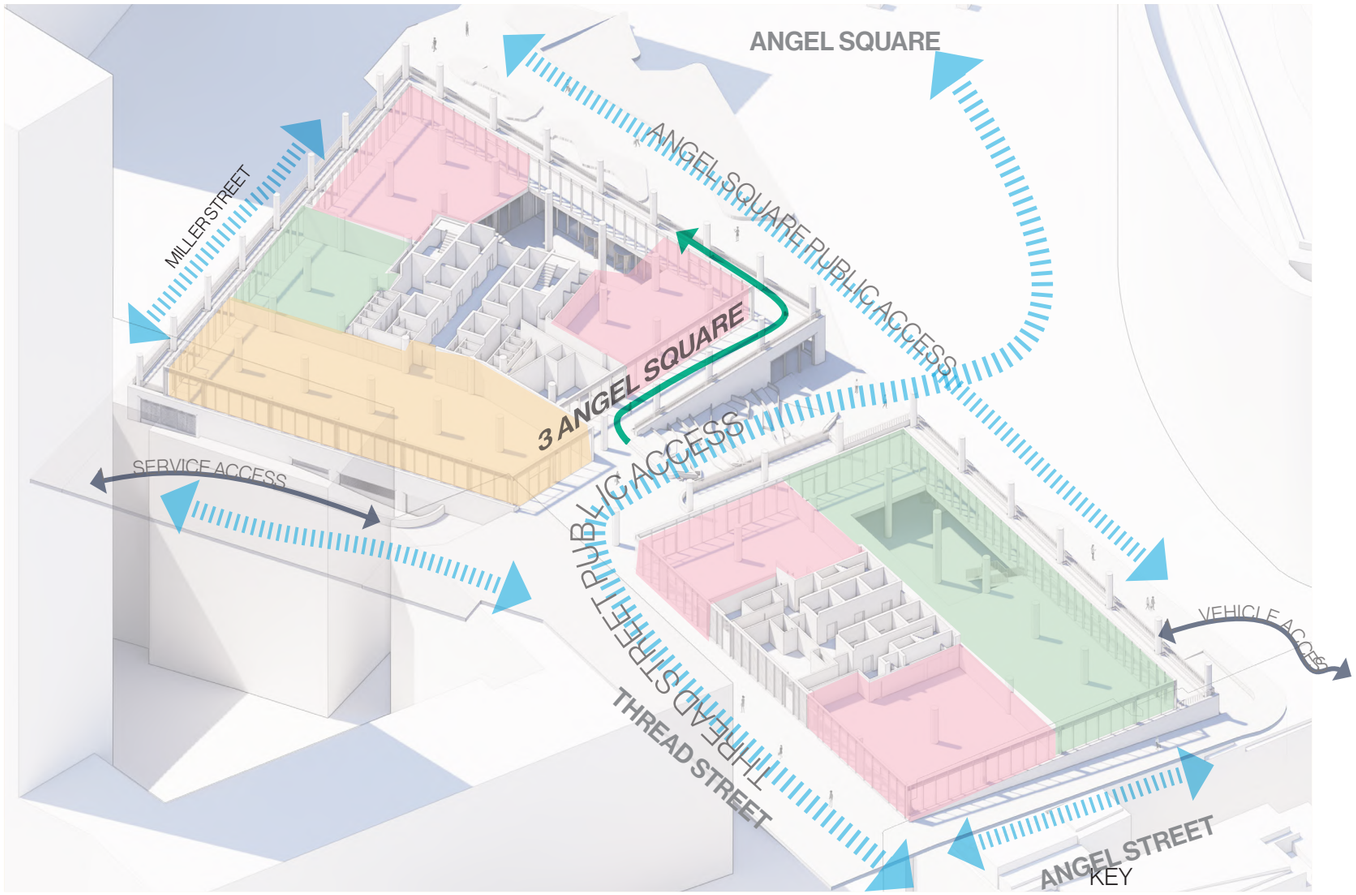
Terrace access - view from Southwest

KEY

- **Public pedestrian routes**
- **Vehicle access**
- **Main entrance**
- **Terrace access**
- **Secure access**
- **Extent of demise**
- **Commercial unit**
- **Tenant facility**
- **Cinema/seminar**

Key plinth design drivers

- The main entrance to both buildings is accessed directly from Angel Square as the building's primary address.
- The commercial units in 3 Angel Square are accessed directly from Angel Square and will spill out onto the public realm.
- The Miller Street elevation of 3 Angel Square is highly glazed and the cycle hub is access from Miller Street.
- The commercial units and proposed cinema are accessed from Thread Street and provide animation and activity along the public route.
- The upper ground terrace to both buildings will be access via the relevant demise and offer additional outdoor amenity for occupiers.
- This primary pedestrian route is designed to lead people form Angel Street, via Thread Street and the steps down to Angel Square with public facing commercial units facing this route wherever possible.
- The terraces are extensions of the demises to the commercial units or tenant lounge areas providing them with additional external amenity spaces.
- The use of a 'plinth' allows the building to form part of the public ream and be seen as an extension of this opposed to a more civic scaled 2 or 3 storey colonnade that is sited.
- The plinth and integral planting scheme soften this approach further. Materials proposed are natural stone with a textured finish that replicates some e of the materials being used within the landscaping palate.
- A planting and landscaping scheme is being proposed that is integral to the design of the terraces, allowing planting to spill over the face of the plinth from the upper terrace. This gives the plinth a far more organic feel than the panel perceives.



Public realm access and connections - view from Northeast

- Public pedestrian routes
- Vehicle access
- Main entrance
- Terrace access(Commercial units only)
- Secure access
- Extent of demise
- Commercial unit
- Tenant facility
- Cinema/seminar

Key plinth design drivers (cont.)

- Levels of access are separated into public, semi private and private.
- Full public accessibility is provided along Thread Street down to Angel Square via the landscaped steps between the two buildings.
- The upper ground terrace to 3 Angel Square provides access to the 2 commercial units and their outside seating areas only.
- The terraces will be secured via sliding gated screens after standard operating hours.
- The upper ground terrace to 2 Angel Square is accessed solely via the internal tenant lounge area.

3.4
Materials

Swatches



Stone plinth
Grey York stone

Solid stone blocks sourced from local regional quarries with a textured finish. Stone to be pointed with matching mortar (exact colour TBC)

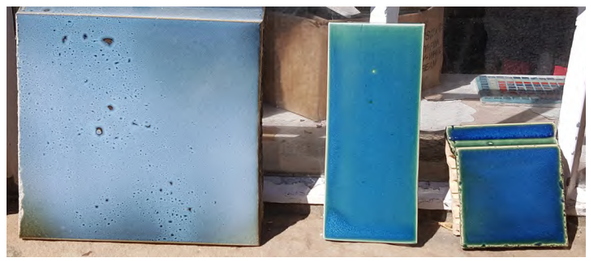




Sills
Aluminium & GRC

Sill soffits: light grey coloured finish with exposed aggregate. Sill top surface: Soft silver finish anodised effect PPC





Rain screen cladding
Glazed terracotta

2 Angel Square to have 3 tones of vermilion red3 (Dark, mid, light) exact colour TBC. Angel Square to have 3 tones of Prussian blue (Dark, mid, light) exact colour TBC.



Metalwork (generally)
Anodic PPC coating

Dark bronze finish - anodised effect PPC finish - to match tonally to the blackened/patinated steel. Finish to be applied to louvres, window frames and fins to windows on upper levels

The following materials have primarily been selected through our analysis of the context and public realm - products, finishes and tones which will sit harmoniously within its setting.

The materials also have low embodied carbon, are sourced locally wherever possible and can also be designed to be demounted and recycled at end of life.

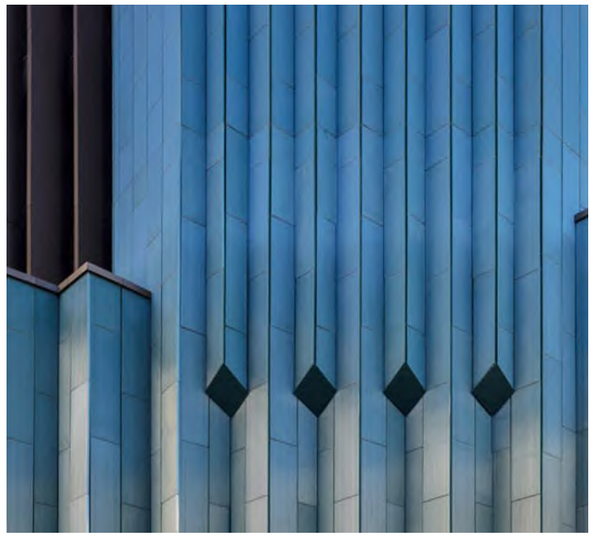
We have selected a limited palette of high quality materials which we feel are appropriate to this area of the City. Within these finishes there will be variations in tone, texture, depth and reflectance to add further visual interest to the façades.

The chosen materials are sustainable, robust, durable and will age gracefully. Whilst they complement their historic surroundings, the way in which they are used and designed will provide a striking and contemporary addition to Manchester.

Examples



Example of variation in colour tone across a large expanse of grey York stone.



Illustrates subtle changes in colour and tone adding visual interest. Colour to complement but be distinct from stonework below



Image shows bronze anodised effect PPC - offers greater variation and depth of colour than standard, flat PPC

3.5
Consultation

Manchester City Council Pre-Application Meetings

Three pre-application meetings with Manchester City Council (MCC) have been held prior to submission, to present the proposals for 2&3 Angel Square and obtain their feedback.

The proposals have been developed throughout the design process, testing various options on the height and mass of the buildings, in particular 2 Angel Square to better understand the context and to gauge feedback from Manchester City Council (MCC). A process of design-review has been undertaken, which has resulted in the building roof scape stepping down towards Angel Street, with greater height focussed within Angel Square.

The grounding of the building and associated connections with the developing public realm has also been explored, developing a proposal that maximises public frontages and connectivity to Angel Square, Angel Street, Miller Street and Thread Street.

Detailed studies of the facade approach have been explored and presented to MCC with further refinement on key details and colour choice following input from the Officers and also site visits to buildings identified by Officers where lesson's could be learnt. Additional information has been developed to ensure design proposals are robust , weather well and are refined.

The proposals were presented to Places Matter design review panel and have been presented to Greater Manchester Police, whilst various consultants have been carrying out consultation with various technical consultees such as the Lead Local Flood Authority and Environmental Health.

A public consultation process was also undertaken from Monday 9th May to Friday 17th June 2022, with a consultation event taking place on 17 May 2022.



February 2022

Areas of review covered in this meeting:

- Highlighting the client's brief and design aspirations
- Presenting proposed layouts.
- Presenting an increased scale and relationship of 2 Angel Square building to Angel Street and Angel Meadows.
- Establishing the revised design principles.
- Establishing material proposals and facade approach.
- Identifying public realm approach and improved connectivity.



April 2022

Areas of review covered in this meeting:

- Following comments in the first pre-app. The height of 2 Angel Square adjacent to Angel Street was reduced and is proposed to crown at the Angel Square address.
- Understanding relationship of buildings to the street scape and views from Miller Street and Angel Street.
- Establishing sustainability aspirations.
- Present developing public realm proposals.
- Present ongoing wind analysis and daylight assessments.
- Programme to planning submission.



May 2022

Areas of review covered in this meeting:

- Public consultation responses.
- A response to the Places Matter panel review and comments on building form, facade approach and success of plinth.
- Detailed studies of the facade approach and sill details.
- Public realm updates.
- Wind mitigation update.
- Programme to planning submission.



Aug 2022

Areas of review covered in this meeting:

- Cill detail.
- Use of GRC as a facade material.
- Revised cill proposals.

3.6
Technical baseline

Heritage

A Heritage Statement has been prepared by Stephen Levrant Heritage Architecture Ltd, which has been prepared in the context of relevant national and local heritage planning policy. In particular, the statement is presented to accord with the national policy requirement of NPPF (2021) paragraph 194, to describe the significance of the heritage assets affected, and the consequent potential impact of the current proposals. The emphasis, as required by the NPPF, is to provide a proportionate amount of information in order to allow the proposals to be assessed by the local authority (Manchester City Council) and their heritage impact understood.

The Site is located to the northern edge of Manchester city centre, and the range of retail, office, leisure, residential and transport infrastructure associated with the City.
The Site is bounded by 1 Angel Square (the Co-operative Group headquarters), Miller Street, Angel Gardens residential scheme (completed 2019) and Angel Street.

The Site is adjacent to a number of listed buildings; Section 66 of the Act requires the Local Planning Authority to "have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses," when considering whether to grant planning permission.

Section 72 of the Act is also of relevance as it requires the Local Planning Authority to pay special attention to the "desirability of preserving or enhancing the character and appearance" of the conservation areas. Consequently, it is important to consider the site as a contributor to the townscape character of the conservation area and the impact of the proposed works on this aspect of the wider historic environment.

A visual impact assessment has been prepared in accordance with the revised Historic England guidance. The viewpoints were agreed with MCC planning officers prior to the preparation of the assessment. Viewpoints were taken from Miller Street, Swan Street, Great Ancoats Street, Rochdale Road and Old Mount Street. The proposals have been demonstrated to result in two instances of negligible beneficial, and eight instances of neutral impact.

Overall, the assessment of 7 views has illustrated that the Proposed Development will result in some clear visual change but will not impede upon the ability to understand and appreciate the significance of these designated heritage assets. The proposed office buildings are of a suitable scale and quality for the NOMA area, comprising a positive response to the emerging character of the NOMA estate, as envisioned within the NOMA Masterplan. The two proposed office buildings at Plot 2&3, Angel Square will encourage further activity and footfall into the area whilst providing a new, sustainable development. The relative impact upon the settings of the listed buildings closest to the site is thus considered to be negligible beneficial. Therefore, the proposals will not result in any 'harm' as defined by the NPPF and comply with local and national planning policies regarding the built historic environment.

For full details please refer to the Heritage Statement submitted as part of this application.

Wind Assessment

A wind assessment has been prepared by BuroHappold Engineering which assesses the likely Wind Microclimate effects of the Proposed Development upon the Site and the surrounding area, including in a future scenario where other committed developments are built out. This report also describes the methods used to assess these effects, the existing baseline conditions, the proposed mitigation measures required to prevent, reduce or offset any significant negative effects and the likely residual effects after these measures have been adopted.

A quantitative assessment of wind effects has been undertaken. Wind effects and mitigation measures have been discussed in the operation and mitigation sections. The residual effects predicted are negligible for most parts of the Masterplan, with some major beneficial effects around the CIS Tower, One Angel Square and associated public realm.

A quantitative study has been undertaken to predict and analyse wind conditions for the detailed planning application. The baseline model was produced to determine the reference conditions on the site. The proposed scheme wind effects were analysed against the baseline by performing a Computational Fluid Dynamics study. The new activities introduced to the site have been accounted for.

The criteria used in this study were based on the LDDC version of the Lawson Criteria (henceforth referred to as 'LDDC Lawson Criteria'). Like most criteria used in assessments of pedestrian wind conditions, it relates to a threshold wind speed and a threshold frequency to the suitability of an activity. A Computational Fluids Dynamic Assessment was carried out to assess the impact the proposed development will have on site. A phased approach was studied that includes the assessment of Plots 2 and 3, individually and together.

Wind conditions on site are tolerable for diverse activities in most areas, and no safety concerns/failures were found within the Proposed Development or the nearby perimeter with mitigation. The baseline conditions show areas of wind acceleration on Miller Street and Rochdale Road. These areas of wind acceleration are influenced by the One Angel Square, CIS and Plot L (Angel Gardens) buildings. All of these existing conditions are outside the redline boundary of the building. The new development has a minor beneficial effect in reducing wind speeds at these areas, however the conditions along Miller Street and Rochdale Road remain as shown in the existing baseline for comfort. The Proposed Development helps to remove the safety areas found in the baseline conditions; this is a major beneficial effect.

Mitigation in the form of Wind screens have been incorporated along Miller Street and to the North of the Plot 2 building within the public realm.

Both the residual and cumulative effects were found to be negligible. The residual effects predicted are negligible for most parts of the Masterplan, with some major beneficial effects around the CIS Tower and the One Angel Square and associated public realm.

In summary the addition of landscape on Miller Street and towards the northeast of the development has proved to work in reducing wind speeds. However, adverse wind conditions are likely to remain minor adverse to negligible at the top of Angel Street and on the corner with Rochdale Road. Other areas within the development are likely to be suitable for the planned activities once landscape and mitigation measures have been implemented.

Noise

A Noise Impact Assessment has been prepared by Buro Happold to evaluate the findings of the acoustic survey in relation to the proposed development. The existing noise climate at the proposed development is such that acceptable internal ambient noise levels (IANLs)can be achieved with conventional double-glazed constructions.

It is understood that mechanical ventilation (specifically MVHR units) is to be used to provide the ventilation requirements for all spaces.

A target daytime, plant noise level at the facades of the nearest-affected NSRs has been set. The corresponding Rating Level is based on achieving -5 dB below the lowest background noise level measured over a long-term survey, Representing that which would be incident on nearest-affected, NSRs. It is anticipated that the limiting plant noise level will be achieved due to the design-based requirement to control noise levels at noise-sensitive areas of the proposed scheme, which are likely to be significantly closer than the NSRs themselves.

Based on the above, the proposed development is considered suitable in compliance with all relevant national and local planning requirements, and concerns on the grounds of noise need not be considered a significant barrier to development. A detailed assessment is provided as part of this application.

Air Quality

Buro Happold has been commissioned by MEPC Limited to undertake an air quality assessment to support a detailed planning application for the proposed NOMA 2 & 3 Angel Square development. There is a risk of air quality impact during both the construction and operational phases of the development, namely from transport emissions, combustion plant emissions and emissions from construction activity (demolition, earthworks, etc.).

Given the scale of the development, there is high risk of dust soiling and low risk of health impacts during the construction phase. A suite of mitigation measures is presented in Section 6 of the detailed report, these will be implemented within the Construction Management Plan (CMP) in order to minimise emissions during construction. Ensuring these measures are implemented effectively and reviewed regularly during the construction phase, the impact on local air quality during construction will be not significant.

With regards to operational impacts, emissions from both traffic and combustion plant associated with the proposed development have been considered.

Although the Proposed Development includes 30 car parking spaces, there are approximately 100 spaces currently on site which will be removed as part of the development. The project transport consultant has confirmed that it is therefore likely that there will be a net decrease in traffic flows as a result of the

development, and therefore the impact from traffic emissions associated with the Proposed Development can be ruled not significant.

The assessment of combustion plant emissions has been scoped out of this assessment as the energy strategy solely relies on emission free equipment to meet hot water and energy demand. A back-up generator has been proposed for life safety purposes but given the limited testing hours and roof level flue, the impacts form this generator will be negligible. The Proposed Development is located in area of poor air quality, within the GMCA Air Quality Management Area and in close proximity to monitoring sites that have exceeded long term air quality objectives. As the Proposed Development is office, commercial and retail space, the only relevant objectives are the hourly objectives, and these have been met at nearby monitoring locations.

It is therefore considered with the implementation of recommended construction mitigation measures; the Proposed Development would not have a significant impact on air quality and the site is suitable for the proposed use.

Environmental impact

Manchester City Council's Guide to Development SPD requires developers to prepare and submit an Environmental Standards Statement (ESS) with planning applications. This ESS relates to the proposed office and commercial development of 2 & 3 Angel Square by MEPC.

The ESS confirms that the proposed development will be exemplary in terms of its environmental and sustainability performance. The applicant has committed to achieving a BREEAM rating of at least Excellent and has am ambition to achieve Outstanding.

A key part of the building's sustainable credentials is the approach taken to building energy performance and the use of renewable energy. The project engineers have designed a highly efficient building and have specified roof mounted solar PV as well as air source heat pumps for space and water heating.

The buildings include cycle storage and changing facilities to encourage sustainable transport choices and is well located in terms of public transport options.

A waste management strategy has been prepared that sets out how waste and recycling streams will be sorted and collected and how recycling will be encouraged of building occupants.

The building design also includes efficient low-flow taps, showers and WCs to minimise water use. In terms of ecology and biodiversity, the site is of low ecological value at present but the value will be enhanced through the development process through the landscaping strategy and the installation of bird and bat boxes.

The construction process will be managed by a Construction Environmental Management Plan to minimise disruption to neighbours and ensure best practice site management. This would be supported by a Site Waste Management Plan that will prescribe best practice for the reduction of waste generation and the sorting and recycling of arisings.

The site is not in close proximity to any waterways and is not located in the flood risk zone. Therefore, no risks to or from watercourses are anticipated; however, surface water attenuation will ensure that the development does not present a risk to controlled surface waters.

In summary, the applicant has committed to very high standards of building performance and best practice on site that demonstrate compliance with local and national planning policy and industry best practices.

Daylight/sunlight analysis

The daylight sunlight impact of the development has been fully assessed as set out in the accompanying Environmental Statement.

Transport

Curtins has been appointed on behalf of NOMA (GP) Ltd to provide traffic and transportation advice in relation to the redevelopment of 2 & 3 Angel Square. The proposed development comprises plots M and N of the adopted NOMA Masterplan, known as 2 and 3 Angel Square.

The site has previously received consents for similar developments (application reference: 109865/FO/2015/N1 and 124973/FO/2019). Additionally, in 2021, NOMA (GP) Limited obtained planning permission for a temporary marketing suite for NOMA (up to 5 years) within the southern portion of Plot 3 (application reference: 129631/FO/2021). At the time of writing, the marketing suite is undergoing construction. This document provides an update to the approved schemes from 2015 and 2019.

A review of baseline conditions and highway safety in the vicinity of the site has been undertaken. It is concluded that there is no existing safety issue in the study area that is likely to be exacerbated by the proposed development.

It is considered the site is highly accessible by sustainable modes of transport, which are also usable by those with limited mobility and are wheelchair accessible. The surrounding area exhibits good levels of pedestrian and cycling infrastructure, and there are a number of public transport opportunities within acceptable walking distance of the site.

Sensitivity tests using TRICS and Census data have demonstrated that any vehicular impact would be negligible on the surrounding area in terms of highways, traffic and transportation. Furthermore, it has been demonstrated there are alternative off-site parking options for the few users that would choose to drive / existing drivers that currently frequent the car park, and that the impact on car parking throughout the city centre would be insignificant.

Measures outlined in the accompanying Framework Travel Plan (Document Reference: 81536-CURXX-XX-T-TP-00002) will be implemented to encourage more staff and visitors to travel by sustainable modes, reduce reliance on the private car, and further reduce the number of vehicular trips associated with the development.

A review of relevant local and national transport planning guidance has been undertaken. It is considered that the proposed development conforms with such policy.

It is reasonable to conclude that the proposed development is in accordance with Paragraph 111 of the NPPF, as it would not have an unacceptable impact on highway safety, nor would there be a severe residual cumulative impact on the surrounding highway network.

From a traffic and transportation perspective, there are no reasons why the development proposals should not be granted planning approval.

Waste Management

Curtins has been appointed on behalf of NOMA (GP) Ltd to provide traffic and transportation advice in relation to the redevelopment of 2 & 3 Angel Square.

The proposed development involves Plots 2 & 3 of the adopted NOMA Masterplan (in which the site is denoted as Plots M & N.

The Waste Management Strategy (WMS) has been prepared to consider the potential refuse and recyclable waste volumes, including potential organic waste, and for all uses of the proposed development. The WMS also provides details of the collection arrangements.

The waste forecast has been calculated based on the recommendations set by the Waste Storage and Collection Guidance for New Developments (GD04), Version 6.00 and further supported by the estimations set on the Code of Practice BS 5906:2005.

The office use has been calculated as Office Use (Use Class E(g)). For robustness, the waste generation of the retail uses at the lower and upper ground floors of both plots has been calculated as a worst-case scenario (F&B – Use Class E(a, b, c)).

The report concludes that both the office and retail / restaurant use will be served by private refuse collections. The bins will be transported to the collection point by the management company for the office uses and the staff for the retail / restaurant uses.

The collection point for Plot 2 would be located along the Angel Square turning circle layby, located directly opposite Plot 2; whereas the collection point for Plot 3 would be located along the service road to the east of Plot 3, adjacent to and shared with the Angel Gardens development.

Plot 2 is anticipated to be served by five-times-a-week collections for both the office and retail / restaurant uses, whereas Plot 3 will be served by five-times-a-week collections for both the office and retail uses. The collection frequency is subject to be updated following occupation, as typically the waste generated by both the office and retail uses varies significantly based on the final occupier.

The proposals include a waste storage room at the lower ground floor levels. The size of the bin stores has been determined accordingly whilst consideration to segregation and recycling has been given.

From a waste management perspective, there are no reasons why the development proposals should

not be granted planning approval.

Drainage

The drainage strategy has been prepared by Buro Happold in support of the planning application to set the principles for the drainage design to serve the 2&3 Angel Square development. The exact configuration and nature of the drainage would be determined at the detailed design / discharge of planning conditions stage. The full report should be read in conjunction with the Buro Happold Flood Risk Assessment (FRA).

As a result of the existing conditions on site, surface water flows are anticipated to discharge to the existing combined public sewer located within the boundary.

The strategy for the surface water drainage of the scheme will be to collect the surface water runoff generated and discharge to the existing combined public sewer located within the boundary at a restricted flow rate.

Attenuation storage will be required to facilitate the reduction of the proposed flows, and SuDS will be included wherever practicable. Permeable paving has been explored as a possible option.

Proposed surface water discharge rate is 9.55l/s and it has been estimated that the attenuation volume require will be 500m^3 that will be provided mainly within below ground tanks and permeable paving.

A separate foul drainage system will be provided to collect all foul water generated from site via gravitational flow (where possible) from below ground floor level and discharge to the existing public sewer. United Utilities confirmed that the foul water from this site can be drained at an unrestricted rate to the public combined sewer network.

Please refer to the full strategy report submitted as part of this application for more details.

Crime Impact

2 and 3 Angel Square

A Crime Impact Statement has been prepared by Greater Manchester Police Design for Security. The following features of the proposed development are stated to make a positive contribution to the prevention of and fear of crime:

- The building footprints at ground floor level are relatively simple and contain no areas of potential concealment.
- The main pedestrian entrances to the buildings are located in prominent locations and are readily apparent on approaching from the surrounding public realm.
- Speed gates will restrict access from the reception of the building into the circulation cores, restricting access to employees and legitimate visitors.
- The passageway/stepped area between the two buildings will be subject to high levels of natural surveillance from the ground floor commercial uses of the building, which will be a deterrent to antisocial behaviour such as loitering in this area.
- All doors and shutters appear to be flush with the external elevations of the buildings, removing areas of potential concealment that could be subject to abuse. There are no features of the building footprint that could conceal an offender from view.
- Glazed elevations to most of the public elevations will help to enliven the street scene and enhance natural surveillance of and from the building.
- The ground floor/lower ground floor units will provide an active frontage to Angel Square and the streets/areas surrounding the building. The retail offering to the rear of the building will provide a frontage to this area.
- The proposed offices and ground floor commercial unit will generate additional activity in the local area, which can deter criminals from operating in the area and reduce the potential for antisocial behaviour.
- Cycle storage for staff is provided in a designated room within the buildings. Entry to this area must be restricted to genuine cyclists only and requires access-controlled doors. Space is identified for secure storage lockers, allowing cyclists to store personal items / clothing.

A number of recommendations have been made by the Crime Impact Officer. These are as follows. Our responses are indicated in bold:

The steps between the two buildings, providing access to Angel Square from Angel Gardens should be illuminated to a high standard to deter antisocial/criminal behaviour such as loitering, or drug/alcohol consumption. Any vegetation in this area should be carefully designed so that sight lines are not obscured, and pedestrians can view any potential threats.

A lighting strategy has been proposed as part of this application and will be developed further during the consulation period.

Access to the upper ground floor terraces should be restricted when the associated commercial units are closed, to prevent these areas being misused by those anti-socially, or criminally, minded. These terraces should be illuminated to a high standard to prevent misuse when it is dark but the premises are open.

Sliding gates are proposed adjacent to the terrace access points from Thread Street, which will be closed off after hours. The terraces will beenfit from being well lit via the commercial units and lighting in the terrace soffit. They will also benefit from passive surveillance from the units and also strategically placed CCTV cameras. This will form part of the building management and security strategy and is indicated later in the access strategy section of this design and access statement.

The office reception should be staffed during standard office hours (i.e.8am-6pm) to allow visitors to be vetted before being permitted access into the building. There should be a video/audio intercom on the main entrance to allow staff to vet visitors to the building when the main reception is not staffed.

This will form part of the building management and security strategy.

Access into and around the office building should be governed with an auditable access control system.

This will form part of the building management and security strategy.

Access into the proposed bicycle store should operate on an access control system, with access restricted to genuine users. Cycle stands should be Sheffield style, or similar, allowing both wheels and the frame to be locked.

This will form part of the building management and security strategy and is indicated later in the access strategy section of this design and access statement.

The plans appear to indicate that cyclists will use the main entrance of the building to access to cycle store. If external access is provided to the cycle store they should be particularly well illuminated so that it can be used early in the morning and late in the evening when it is dark.

Access to the bike store for 2 Angel Square is via the car park. The access to the bike store of 3 Angel Square is via it's own secure access from Miller Street. Both will be well lit and benefit from a public and easily viewed frontage. Additional CCTV cameras will be located to view access.

Individual office suites should have a secure door set (i.e. BS PAS 24 or LPS 1175 SR 2).

This will form part of the building management and security strategy.

The building should be covered by a monitored intruder alarm (see section 4.4 for more details). Individual offices and ground floor commercial unit(s) should have the infrastructure so that any tenants can easily install an intruder alarm.

This will form part of the building management and security strategy.

A comprehensive CCTV system should be installed to monitor all external doors and elevations, the reception area, circulation cores, all plant/back-of-house functions, and the cycle store. Individual offices and ground floor commercial unit(s) should have the infrastructure so that any tenants can easily install a CCTV system if required.

This will form part of the building management and security strategy.

Any blank facades should be treated with an anti-graffiti coating, to an approximate height of 2000mm, so that graffiti can easily be cleaned.

This will be reviewed and be subject to the specification of materials in these locations. Anti graffitti paint may not be suitable for the ongoing condition of the proposed material. The material proposed within these areas is a natural stone, however it has a heavily textured surface which will not be compatible for graffitti.

Angel Square Public Realm & Landscaping

Access to Angel Square from surrounding roads should be restricted with bollards rated to BS PAS 64, or similar rated HVM products, to prevent unauthorised vehicles from entering the space.

Bollards have been installed at access points off the public highway as part of previous schemes and a parallel application for Angel Square. A review will be undertaken by a security consultant to determine appropriate measures during the consultation period.

Landscaping should be carefully designed so that it does not encourage illegitimate use or block sight lines, to the advantage of offenders, or those antisocially minded. It is recommended that low planting does not exceed 1000mm in height (from floor level) and tree canopies do not fall lower than 2400mm, to ensure good sight lines can be maintained.

This will form part of the planting specification and ongoing estate management regime.

Any external seating areas should be well defined with the use of permanent, or removable/temporary, barriers, to prevent offenders from easily accessing tables and stealing personal property. It is highly recommended that any tables have a clip/hook on the underside so that bags can be stored securely and out of reach.

This will form part of the building management and security strategy.

Bicycle parking should be provided for users of the public realm. Parking for bicycles should be located in highly visible locations where they can be easily seen by users.

These are proposed in highly visible e public locations such as Miller Street and Angel Street.

Footpaths should be illuminated to deter congregation/loitering and allow pedestrians to view any potential threats. The footpaths should be wide enough to reduce the potential for pedestrians to pass each other with plenty of space.

A lighting strategy has been proposed as part of this application and will be developed further during the consultation period.

Materials used in the public realm should be robust and difficult to damage/deface. Any timber used should ideally be treated with a fire retardant to reduce the risk of arson.

Please refer to the PLANIT IE Design and access statement for details. Materials proposed form part of the existing NOMA pallet and are designed to be robust and durable.

Maintenance of newly installed features (i.e. lighting, signage, gates etc.), should be incorporated into the management & maintenance procedures.

A lighting strategy has been proposed as part of this application and will be developed further during the consultation period.

For full details please refer to the Crime impact report submitted as part of this application.

4.0 Design Layout

4.1
The proposed development

The proposed development is for 2 new 'next generation' sustainable office buildings. The buildings comprise high quality office accommodation with mixed use and commercial retail at the lower and upper ground levels, with flexible office and restaurant use and a roof terrace at level 12 of 2 Angel Square and a roof terrace at level 11 of 3 Angel Square.

2 Angel Square will be applying for use classes:

A mixed use office development (Use Class Egi) with two flexible commercial units at Upper Ground floor Level (Use Classes Ea, b, c, e, f, and / or Use Class Sui Generis (p) and (q)), and with a flexible office (Use Class Egi) and/or restaurant (Use Class Eb) space at Level 12

3 Angel Square will be applying for use classes:

A mixed use office development (Use Class Egi) with two flexible commercial units provided over Lower and Upper Ground Floor Levels (Use Classes Ea, b, c, e, f, and / or Use Class Sui Generis (p) and (q)), a further flexible commercial unit at Upper Ground Floor Level only allowing for ancillary seminar space and / or Sui Generis Use Class (t) Cinema space, together with an ancillary gym space at Upper Ground Floor.

2 Angel Square

Office Use Classes Egi	GIA	25,237sqm inc.
Inc. flexible office (Use Class Egi) and/or restaurant (Use Class Eb) space at Level 12		
flexible commercial use classes (Use Classes Ea, b, c, e, f, including Use Class Sui Generis (p) and (q))	GIA	566sqm
Total	GIA	25,803sqm

- 15 Car parking spaces (3 of which are EV charging points)
- 122 Bicycle spaces
- 122 Lockers
- 13 Showers inc. Accessible

3 Angel Square

Office Use Classes Egi (including gym and flexible commercial /or Sui Generis Use Class (t) Cinema space/Seminar space	GIA	29,841sqm
Mixed Use Classes Ea, b, c, e, f, including Use Class Sui Generis (p) and (q))	GIA	1097sqm
Total	GIA	30,938sqm.

- 15 Car parking spaces (3 of which are EV charging points)
- 148 Bicycle spaces
- 148 Lockers
- 17 Showers inc. Accessible



4.2
Lower ground

- The primary access to the office provision for both 2 and 3 Angel Square is from Angel Square at the lower ground level.
- Two commercial units within 3 Angel Square can be accessed directly from Angel Square or indirectly via the reception area to promote a blended approach to the office entrance experience. Both units will benefit from outside seating areas directly in front of the respective unit.
- Some plant rpovision is located in the lower ground so that the upper ground floor space and the amount of glazing is maximised. Plant, parking, waste and cycle access are all located in the least prominent, north east corner of the plans for both buildings. This also minimises the amount of 'non-active' frontage at ground floor and is also the most convenient location for service access
- There is cycle storage in the lower ground floor providing 122 cycle spaces for 2 Angel Square and 148 cycle spaces for 3 Angel Square with additional space and provision for electric bikes and maintenance. Enhanced cycling provision is provided to encourage more sustainable modes of transport and promote health and well-being
- Directly adjacent to the cycle store in both buildings are high quality changing facilities, lockers, and drying rooms. Extra provision has been provided for future expansion of the showers should further be needed. Space will be used for storage in the meantime
- A laundry is provided within the changing areas.



4.3
Upper ground

- The 2 commercial units within the upper ground floor for 2 Angel Square are accessed off Thread Street.
- The 3 stand alone commercial units within 3 Angel Square are either accessed internaly from the level below or directly from the end of Thread Street or via the upper roof terrace.
- Where the terrace to 3 Angel Square faces onto Miller Street this provides direct external amenity for each of the commercial units and for the tenant gym.
- The terrace to 2 Angel Square provides direct external amenity for the tenants lounge area. This lounge connects with one of the Thread Street commercial units.
- These provide a blended approach to the contemporary office experience, offering multiple user experiences.
- All terrace level façades have large extents of glazing, shaded by the terrace soffit.
- The terrace is secured by sliding screens that limit access onto the terraces from the top of the public steps after hours.



4.4
Typical upper floor

- A typical office floor plate is based on a standard 1.5m space planning grid, to enable flexible internal arrangements - from open plan to a more cellular arrangement
- This 1.5m space planning grid is the basis of all our setting out including the structure and the façades
- A typical office layout is shown opposite, and would generally include the following principles:
- The workplace is designed for an occupancy level of 1:8 (environmental control) on all floors, 1:6m² for fire strategy and 1:10m² for wc provision (1:12 if considering absenteeism). Passenger lift design utilises BCO occupancy and performance requirements
- Maximise natural light to the East, West and North façades
- Meeting rooms and other cellular office spaces can be configured in 3m / 4.5m / 6m modules
- Cellular spaces could be organised centrally around the core, where there is less natural daylight
- Brew points / Print stations would be located near to the core
- Breakout spaces for informal meeting spaces are located where required
- Larger picture windows provide varied internal spatial arrangements
- Our structural solution provides utilises a mid span column. This has minimal impact on internal spatial arrangements but has a significant impact on embodied carbon and associated structural efficiencies.
- This solution provides ultimate flexibility, views across the floor and is generally considered to be more desirable to tenants
- The floor plate on 2 Angel Square can be split into two separate tenancies. The floorplate on 3 Angel Square can be split into four separate tenancies. This will require an additional lobby off the main core entrance to provide separate entrances to the separate units.
- The space planning grid would also provide maximum flexibility should the building be required to change use in the future.
- Typical office floors benefit from either one or two corner winter gardens. These are external terraces protected by sliding glazed screens to maximise use throughout the year.



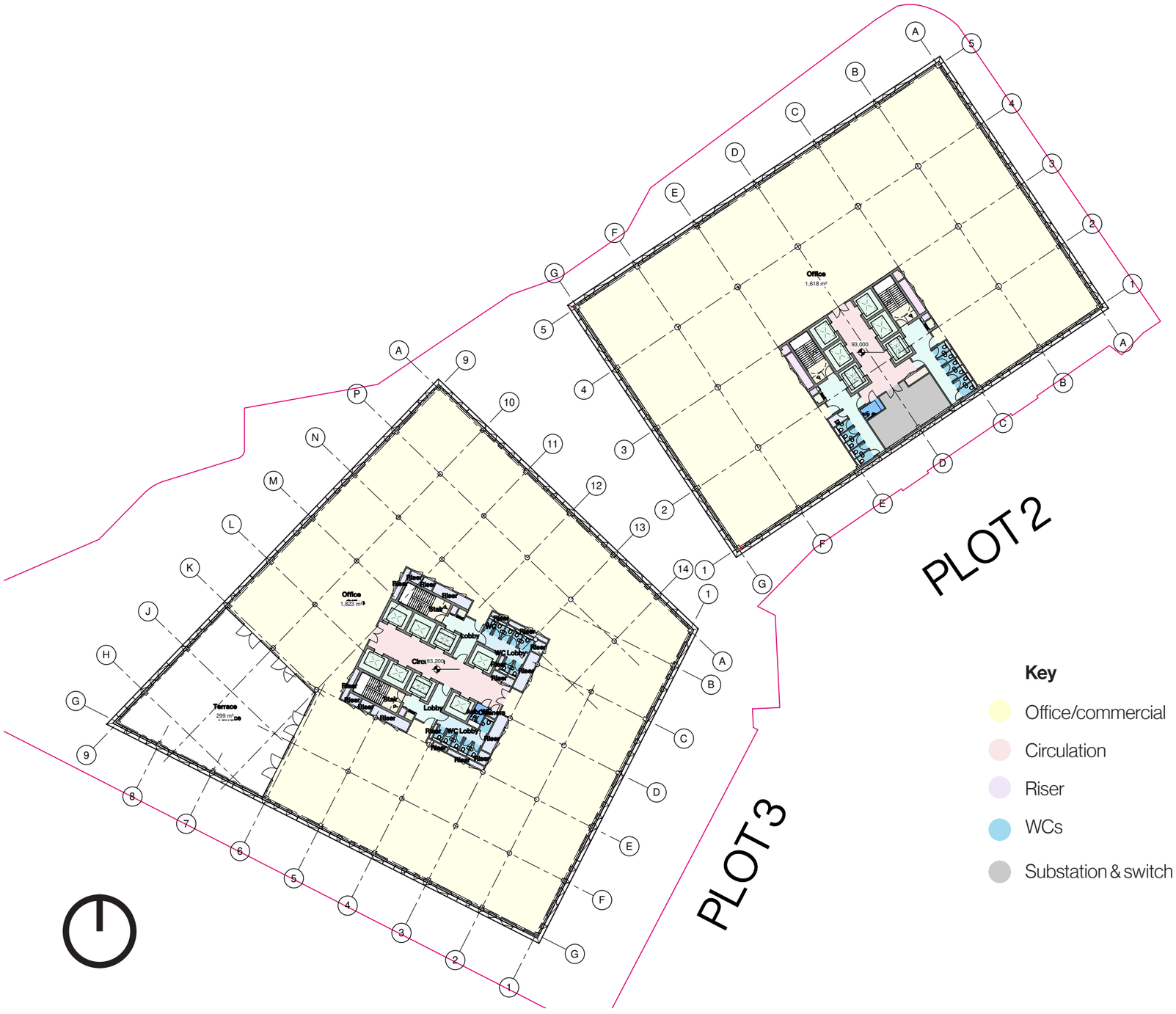
4.5
Level 11

3 Angel Square

- At level 11 on 3 Angel Square there is a prominent west facing roof terrace proposed for tenant and visitor use.
- The terrace is set within a perimeter balustrade and provides external amenity space for the building's users as part of our overarching health and well-being initiative as well as fantastic panoramic views across NOMA, Manchester and beyond.
- This will link directly to the proposed internal uses of a tenant and visitor lounge with bookable facilities, wellness suites and seminar rooms.
- Our fire fighting stair continues up to serve level 11.

2 Angel Square

- Level 11 of 2 angel Square is a typical office plan.



4.6
Level 12

2 Angel Square

- At level 12 on 2 Angel Square there is a prominent north east facing roof terrace proposed for tenant and visitor use.
- This level with be a flexible restaurant / office use class and ventilation requirements have been future proofed should a restaurant use be implemented.
- The terrace is set within a perimeter balustrade and provides external amenity space for the buildings users as part of our overarching health and well-being initiative as well as panoramic views across Angel Meadows park and beyond.
- Our fire fighting stair continues up to serve level 12 as do all the lifts.

3 Angel Square

- A perimeter route provides access for the facade and maintenance strategy.
- The external plant is concealed behind a full height louvre screen.



4.7
Level 13

2 Angel Square

- A sloping extended parapet conceals the plant space.
- Our fire fighting stair continues up to serve level 13 as does one of the fire fighting lifts to provide access for future access to roof top plant.
- Photovoltaics are located around the roof to provide a source of on site renewable energy

3 Angel Square

- The proposed location for the PV array is indicated on the adjacent plan.



4.8
Roof level

2 Angel Square

- Approximately 200sqm's of photovoltaics are located around the roof to provide a source of on site renewable energy. The area for this array is indicated on the adjacent plan i the blue hatch.
- The array will be sat below the top of the surrounding louvre screen and will be concealed.

3 Angel Square

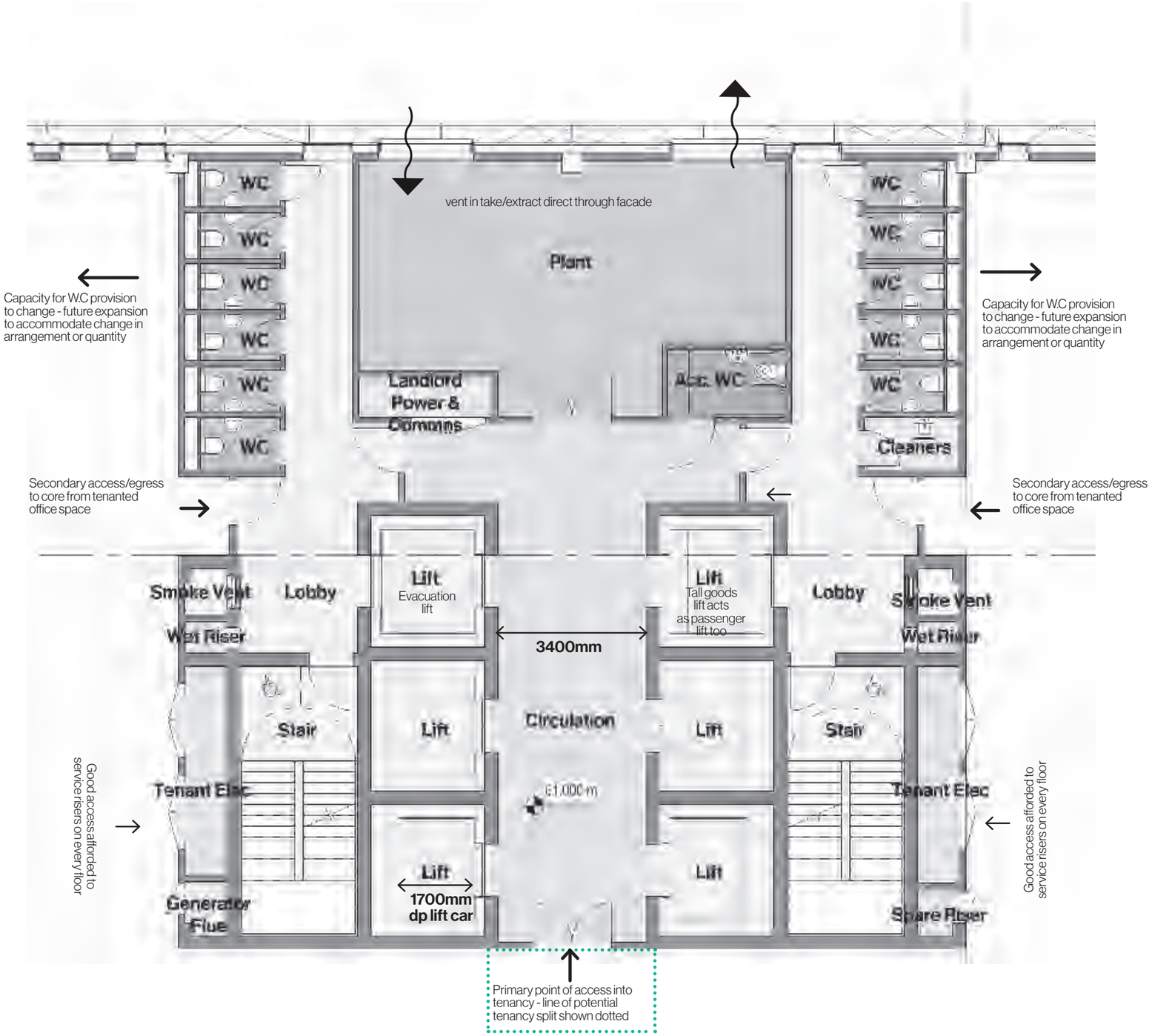
- Approximately 610sqm's of photovoltaics are located around the roof to provide a source of on site renewable energy. The area for this array is indicated on the adjacent plan in the blue hatch.
- The array will be sat below the top of the surrounding louvre screen and will be concealed.



4.9
Core arrangement

2 Angel Square

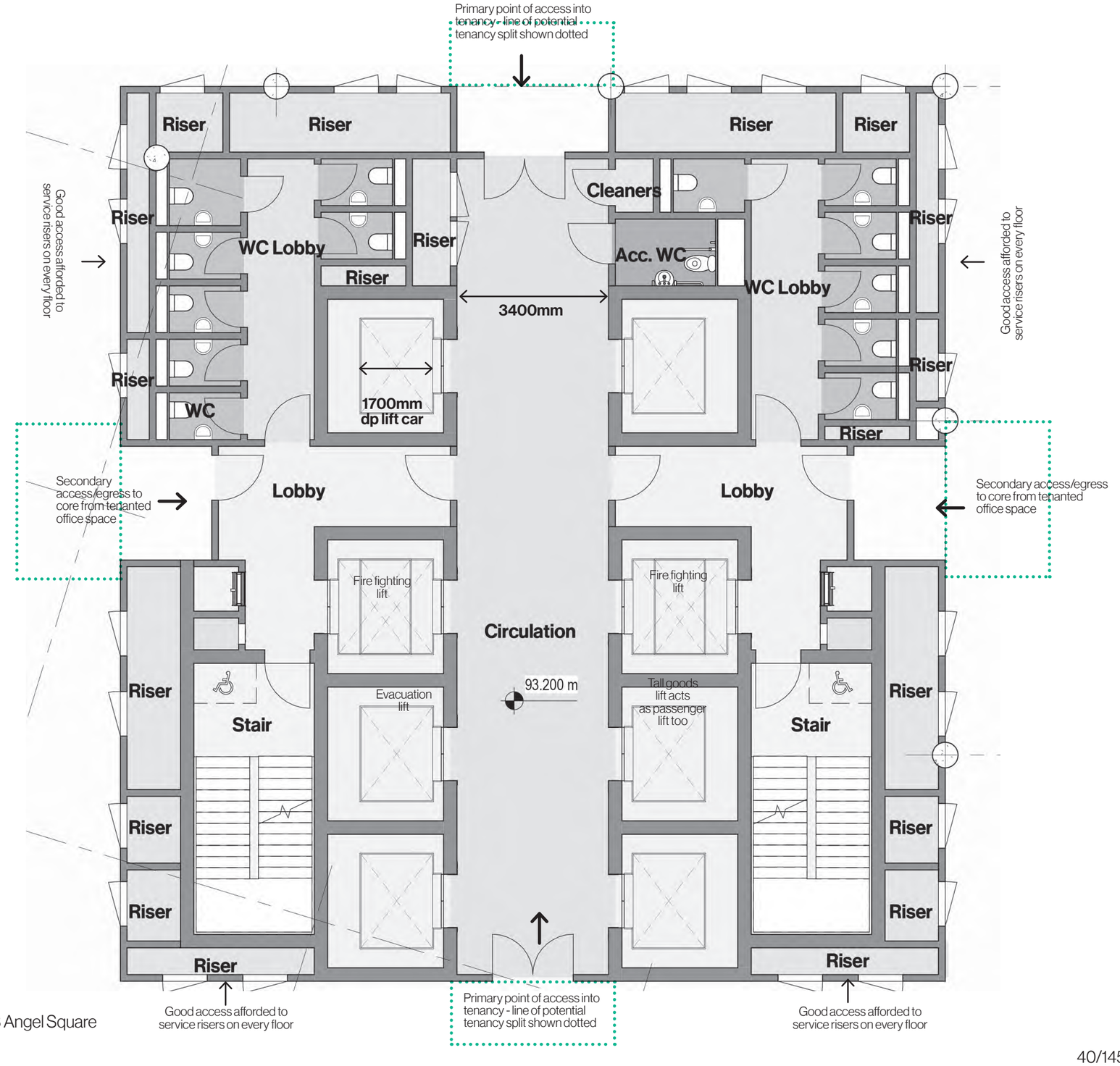
- The core for 2 Angel Square has been developed over a number of months with input from the design team and client. Various iterations and options were considered with an aim of improving net:gross and creating a legible plan with well proportioned floor plates.
- A central core option was favoured at RIBA Stage 0/1 but as the scheme developed this was then off set as this improved efficiencies and provided good quality, generous floor plates on the west, north and south sides of the building.
- The lift lobby is 2x the depth of the lift car (1700mm) = 3400mm, in line with BCO recommendations.
- Risers are split and arranged either side of the core allowing good access to the risers and ease of connections to services on both sides of the building.
- The central lobby can provide access for up to two tenancies, with 2 means of escape from each half of the building.
- The lift strategy has been developed by Buro Happold - 6 lifts in this central bank serve the upper floors of the building. One of the lifts could act as a designated lift to a top floor restaurant should this be desired. Two lifts are fire fighting lift s and another is a shared passenger/goods lift. The goods lift is tall rather than deep to limit impact on the areas.
- A W.C zone has been created at the rear of the core - the location, design and placement of risers allows this 'zone' to expand should tenants require different arrangements or quantities.
- A W.C zone has been created at the rear of the core . WC provision is based on the use of 'superloos' serving the whole floor plate, but could be split male/female should the tenant so desire.
- An on floor plant has been designed by Buro Happold to serve each floor plate. This reduces the amount of M& E equipment required on the roof and provides additional on floor servicing flexibility.



Core arrangement for 2 Angel Square

3 Angel Square

- The core for 3 Angel Square has been developed over a number of months with input from the design team and client. Various iterations and options were considered with an aim of improving net:gross and creating a legible plan with well proportioned floor plates.
- A central core option was favoured at RIBA Stage 0/1 and this has been developed further on that basis.
- The core is designed to serve up to four different tenancies with the addition of a small lobby. Riser arrangements are split and sized to suit this requirement.
- The lift lobby is 2x the depth of the lift car (1700mm) = 3400mm, in line with BCO recommendations. Lifts are 26 person/2000kg in line with the Buro Happold VTA.
- Risers are split and arranged either side of the core allowing good access to the risers and ease of connections to services on both sides of the building.
- The lift strategy has been developed by Buro Happold - 8 lifts in this central bank serve the upper floors of the building. Two of the lifts are fire fighting lifts and another is a shared passenger/goods lift. The goods lift is tall rather than deep to limit impact on the areas.
- A W.C zone has been created at the rear of the core . WC provision is based on the use of 'superloos' serving the whole floor plate, but could be split male/female should the tenant so desire.



Core arrangement for 3 Angel Square

4.10
Accommodation schedule

The development will consist of :

2 Angel Square, a 14 storey building (excluding roof top plant) to form a mixed use office development (Use Class Egi) with two flexible commercial units at Upper Ground floor Level (Use Classes Ea, b, c, e, f, and / or Use Class Sui Generis (p) and (q)), and with a flexible office (Use Class Egi) and/or restaurant (Use Class Eb) space at Level 12, along with Lower Ground Level car and cycle parking, hard and soft landscaping and other associated works

3 Angel Square, a 13 storey building (excluding roof top plant) to form a mixed use office development (Use Class Egi) with two flexible commercial units provided over Lower and Upper Ground Floor Levels (Use Classes Ea, b, c, e, f, and / or Use Class Sui Generis (p) and (q)), a further flexible commercial unit at Upper Ground Floor Level only allowing for ancillary seminar space and / or Sui Generis Use Class (t) Cinema space, together with an ancillary gym space at Upper Ground Floor, as well as Lower Ground Level car and cycle parking, hard and soft landscaping and other associated works.

The total areas are shown in the table opposite.

Building heights will be:

- 2 Angel Square – 14 storeys (LG + UG + 12); and
- 3 Angel Square – 13 storeys (LG + UG + 11).

947_ 2 & 3 Angel Square_DRAFT — **Date** **Rev**

Area Schedule

SQ FT Converstion Factor 10.7639

Please note these areas are approximate at this time and based on the current sketch proposals.

2 Angel Square CP PROPOSAL

Level	Use	GIA(Sqm)	GIA(Sqft)	Ancillary Spaces	Area (Sqm)	NIA (Sqm)	NIA(Sqft)	NIA Breakdown	Area (Sqm)	Efficiency	Shared terrace (Sqm)	Private terrace (Sqm)
Lower ground	Entrance/Ancillary/Plant	1855	19967			560	6028	Entrace	560	30%		
				Carpark	484							
				Plant	192							
				Refuse	60							
				Changing & Bikes	326							
				Circulation	129							
Upper Ground	Office/Commercial /Ancillary	1408	15156			1078	11603			77%	437	0
								Commecial Unit P2_UG_A	344			
								Commercial Unit P2_UG_B	222			
First	Office	1944	20925			1618	17416			83%		0
Second	Office	1900	20451			1576	16964			83%		41
Third	Office	1900	20451			1576	16964			83%		41
Fourth	Office	1900	20451			1576	16964			83%		41
Fifth	Office	1856	19978			1534	16512			83%		82
Sixth	Office	1856	19978			1534	16512			83%		82
Seventh	Office	1856	19978			1534	16512			83%		82
Eighth	Office	1900	20451			1577	16975			83%		40
Ninth	Office	1900	20451			1577	16975			83%		40
Tenth	Office	1900	20451			1577	16975			83%		40
Eleventh	Office	1944	20925			1618	17416			83%		0
Twelfth	Office	1456	15672			1129	12152			78%		475
Roof	Plant	228	2454			0	0			0%		0
Sub totals		**25803**	**277741**			**20064**	**215967**			**78%**	**437**	**964**

Car parking	15
Cycle storage	122
Lockers	122
Showers	13
Eurobins	20

3 Angel Square CP PROPOSAL

Level	Use	GIA(Sqm)	GIA(Sqft)	Ancillary Spaces	Area (Sqm)	NIA (Sqm)	NIA(Sqft)	NIA Breakdown	Area (Sqm)	Efficiency	Shared terrace (Sqm)	Private terrace (Sqm)
Lower ground	Commercial/Ancillary/Plant	2423	26081			855	9203			35%		
				Carpark	476							
				Plant	174							
				Refuse	92							
				Changing & Bikes	418							
				Circulation	280							
								Entrance	263			
								Commercial Unit P3_LG_A	233			
								Commercial Unit P3_LG_B	359			
Upper Ground	Office/Commercial /Ancillary	1769	19041			1273	13702			72%	564	0
								Commercial Unit P3_UG_A	227			
								Commercial Unit P3_UG_B	278			
								Commercial Unit P3_UG_C	176			
								Commercial Unit P3_UG_D	592			
First	Office	2481	26705			2117	22787			85%		0
Second	Office	2414	25984			2052	22088			85%		63
Third	Office	2414	25984			2052	22088			85%		63
Fourth	Office	2414	25984			2052	22088			85%		63
Fifth	Office	2387	25693			2027	21818			85%		88
Sixth	Office	2387	25693			2027	21818			85%		87
Seventh	Office	2387	25693			2027	21818			85%		88
Eighth	Office	2414	25984			2052	22088			85%		63
Ninth	Office	2414	25984			2052	22088			85%		63
Tenth	Office	2414	25984			2052	22088			85%		63
Eleventh	Office	2182	23487			1823	19623			84%		299
Roof	Plant	438	4715			0	0			0%		0
Sub totals		**30938**	**333014**			**24461**	**263296**			**79%**	**564**	**940**

TOTALS		**56741**	**610755**			**44525**	**479263**				**1001**	**1904**

Car parking	15
Cycle storage	148
Lockers	148
Showers	17
Eurobins	30

Areas are subject to further design development and are draft only based on sketch proposals

5.0 **Design** Facade

5.1
Facades

These elevations illustrate the variation in window openings and the changing widths of terracotta panels which create an asymmetry and visual interest to the facade.

These proportions of solid to glass vary across each facade and are based on appropriate solid to glass ratios that optimise natural daylight levels and thermal performance whilst minimising solar gain dependent on solar aspect.

Whilst the two buildings are to be seen as a 'pair' the proposals show variation between them so as not to be identical in facade composition.

Further visual interest is to be gained when viewing the buildings from different angles and vistas where the elevations will appear more solid or open .

The terracotta bays are established on a 1.5m planning grid and are standardised to 3 panel widths. They are also broken down vertically into 3 colour tones from dark to mid to light to allow the façades to lighten the higher up they are.

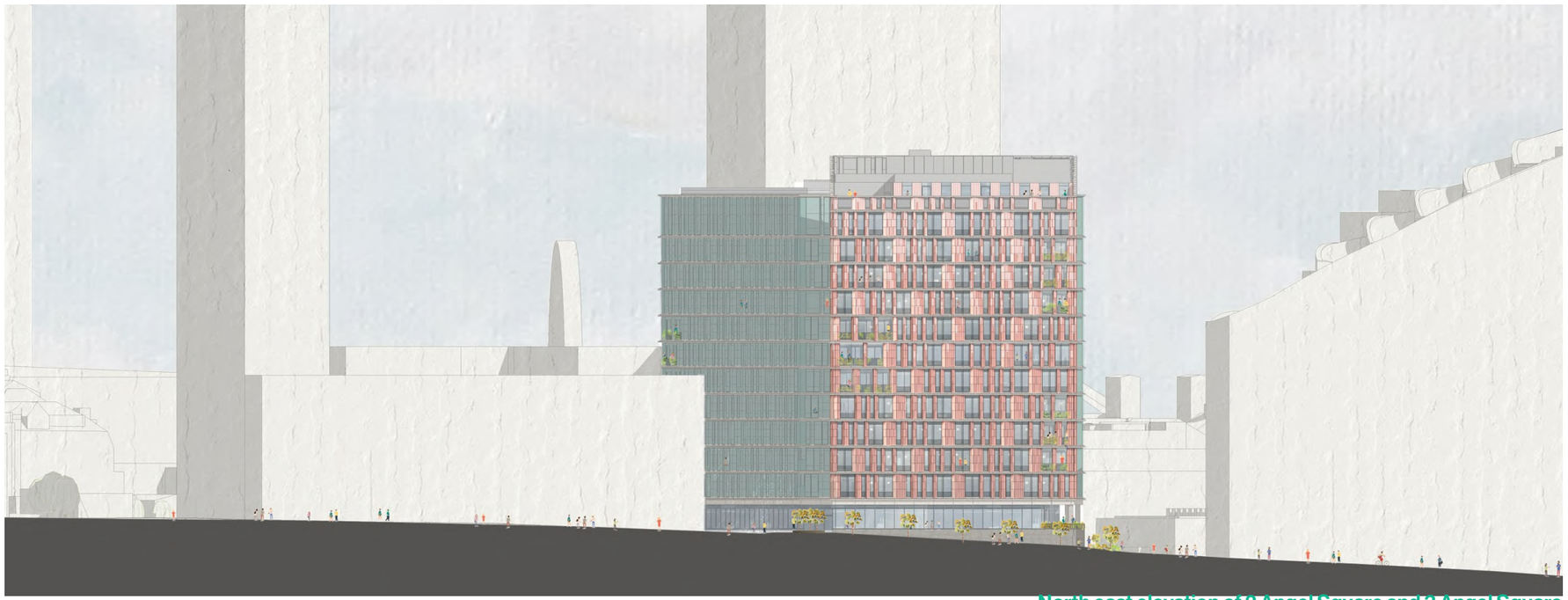
The following pages describe in more detail the principals of our facade strategy.



North west elevation of 2 Angel Square and 3 Angel Square



South west elevation of 2 Angel Square and 3 Angel Square



North east elevation of 2 Angel Square and 3 Angel Square



South east elevation of 2 Angel Square and 3 Angel Square

Whilst the buildings are to be seen as a pair they are to both have their own identify.

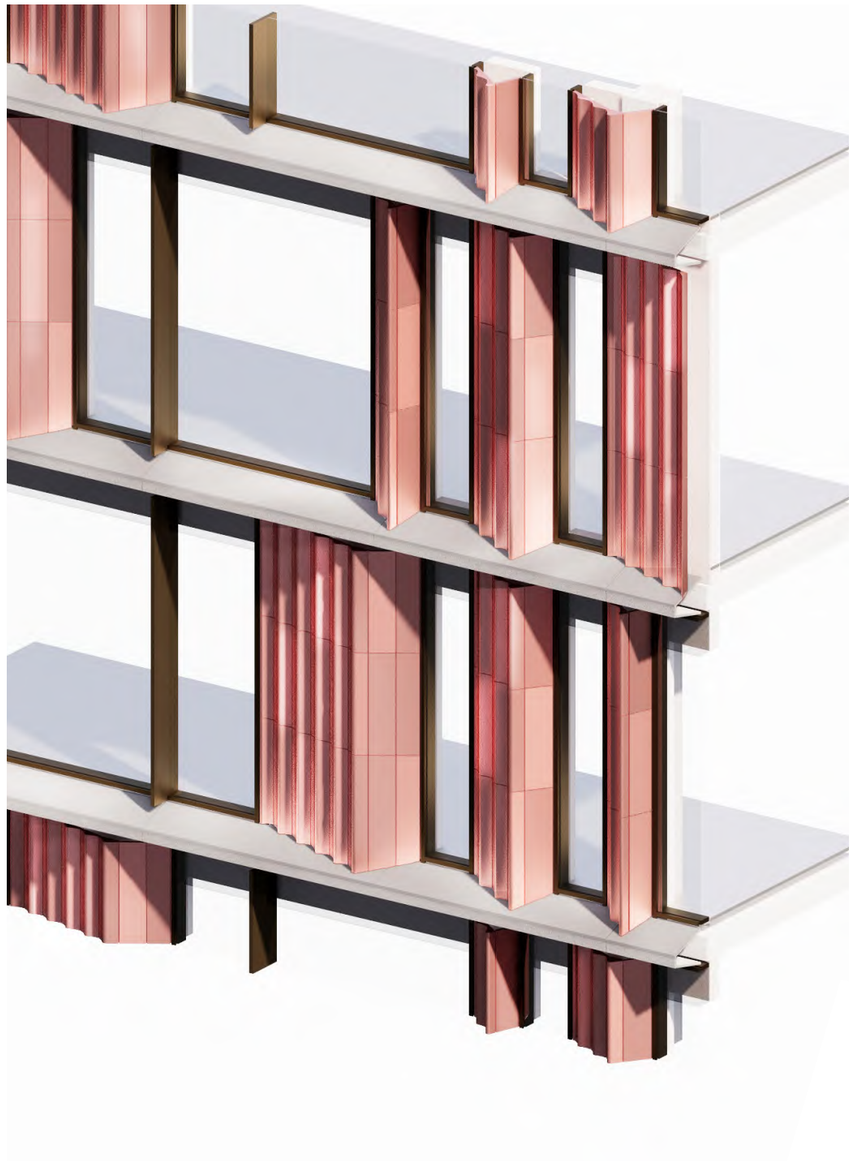
Colour tones, developed from cultural and contextual references that reflect the Victorian architecture of Angel Meadows on one hand and the more civic and recent architecture of the neighbouring city and the Shudehill conservation area in particular on the other, differentiate the 2 buildings significantly.

The facades of both buildings are made up of the same basic components but differ in their arrangement across all the facades, providing a significant amount of variation in the proportions of the solid and glazed elements. These also differ due to their environmental performance requirements dependent on solar aspect.

The terracotta elements are made up of 3 different modules. Each module has a differing profile and depth of reveal, again creating significant variation in shadow and reflectance across the glazed finish.

Rather than a formal ordering of facades the solid to glass proportions are driven by aspect and environmental requirements. Whilst individual components are repeated, the floors of each building have a different composition of these consistent elements. Light will reflect off each building and respective facade compositions in different ways as they are viewed from differing angles.

Variation in the facade is designed to prompt the viewer to stop and explore the facade further. It creates an appropriate level of interest and delight. Large windows are afforded onto Angel Square due to its north west aspect and to create greater connection from inside to out, greater variation internally to vary internal spatial arrangements and break up overly repetitive window patterns.



2 Angel Square typical facade isometric study



3 Angel Square typical facade isometric study



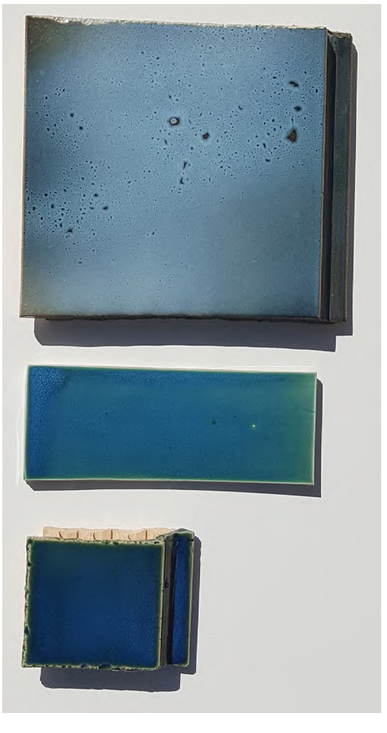
2 Angel Square_Terracotta colour tones



Initial ceramic samples



3 Angel Square_Terracotta colour tones



Initial ceramic samples

Terracotta cladding _colour tones

The exact tone of the terracotta for both building's is currently being explored. The bespoke, crafted colour to the tiles is an iterative process and relies on a number of samples being produced that best match the design intent highlighted within this design and access statement.

Colour tones vary based on clay used, colour mix, profile of tile and mix of base and top glazes. As such the final exact colour for each building is to be confirmed and the 3 tones of the selected colour that will create the graduation from level 01 upwards on each building will then be established.

Samples will be produced for consideration by the team and MCC before a full scale mock up is produced for consideration by MCC prior to commencement on site.



Plinth



Cill (underside)



Cill (top surface)



General metal-work

Co ordinating colour tones of the other facade materials.

In order to respond to the comments raised by MCC during the consultation period on the proposed cill profile we have taken the following key steps:

1. Reduce the visual prominence of the cill by reducing the depth of the leading edge and reducing the depth of the top surface of the profile, and adding an angle to the underside of the soffit, thereby increasing the prominence of the vertical terracotta element to the underside and reducing the overall visual prominence of the cill.

2. More oblique angle to top surface of cill reduces ability to view extent of contrasting material.

3. The angled soffit reduces strength of shadow created by the cill and increases light levels onto the facade. Reducing visual 'solidity' of cill.

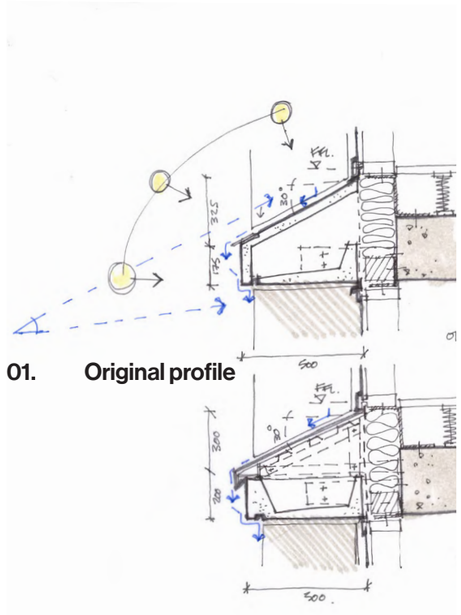
4. Replacing GRC from the top surface of the cill with a more conventional Anodic finish aluminium cill to increase controlled water run off with extended lengths and lapped joints.

5. Aluminium top cill will increase light levels and increase more reflectance of terracotta colour, thereby reducing cill as a visual component within facade.

6. Exposed GRC is reduced to a proportion of the vertical leading edge and the soffit of the cill.

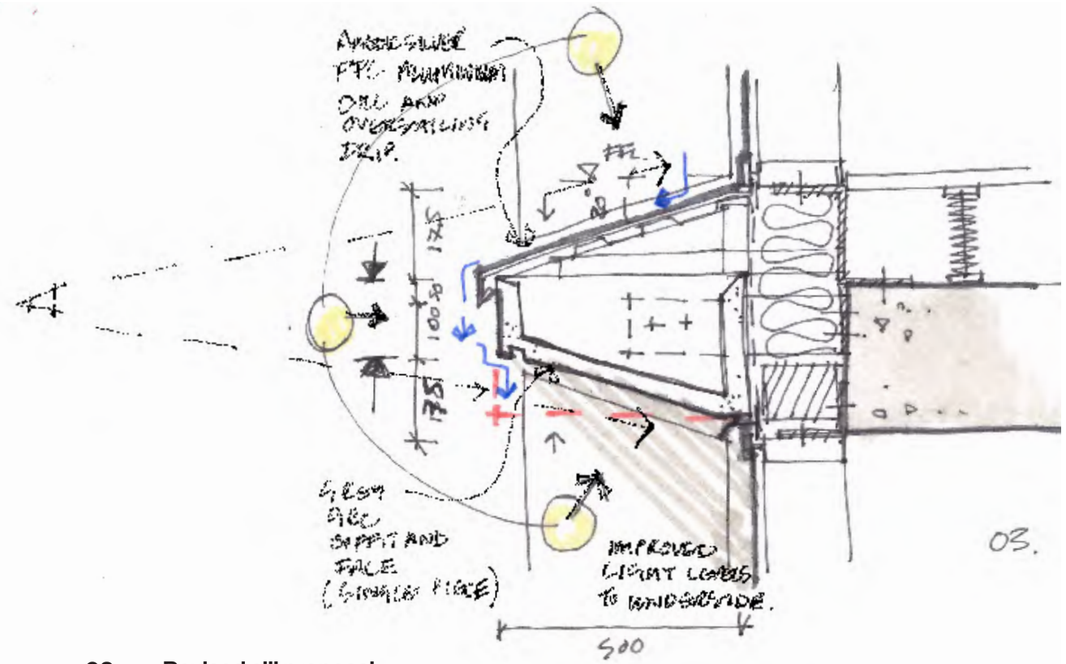
7. The GRC where retained is to have a darker colour tone and receive hydrophobic coating to minimise any staining.

8. Aluminium cill drip to shed water from vertical face. Continuous drip detail to leading edge of soffit stops water running down underside of soffit.

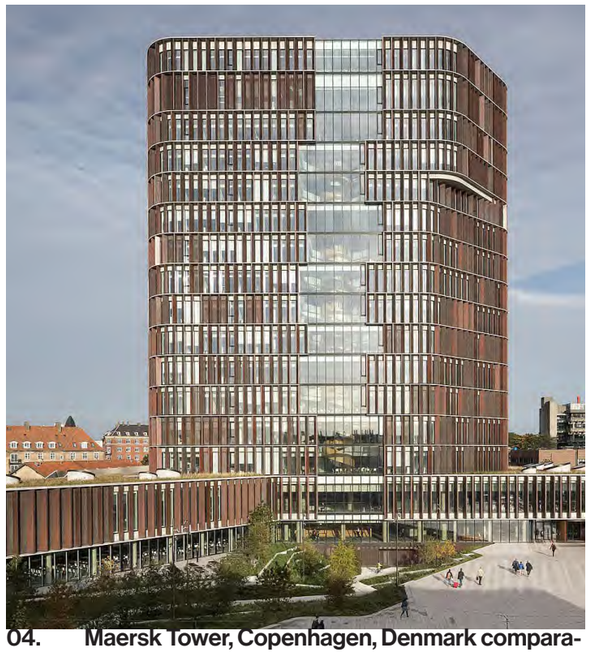


01. Original profile

02. Alternative aluminium top surface



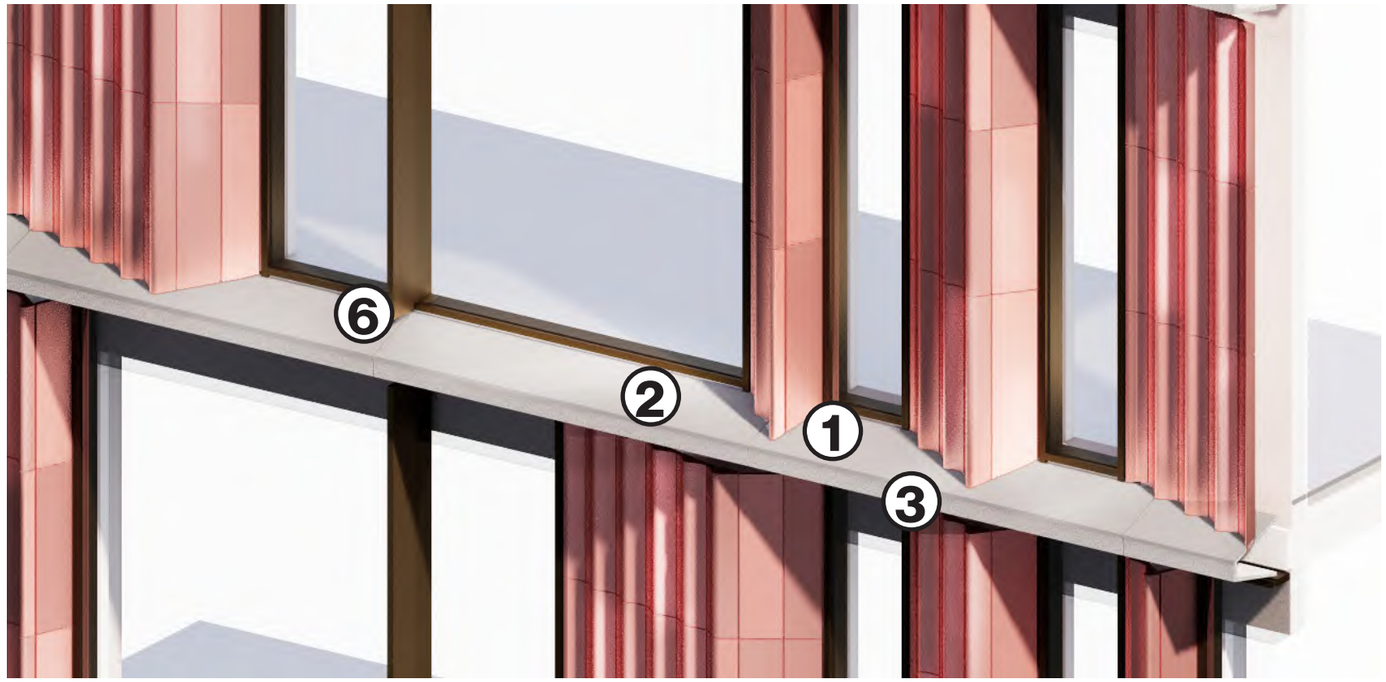
03 Revised cill proposal



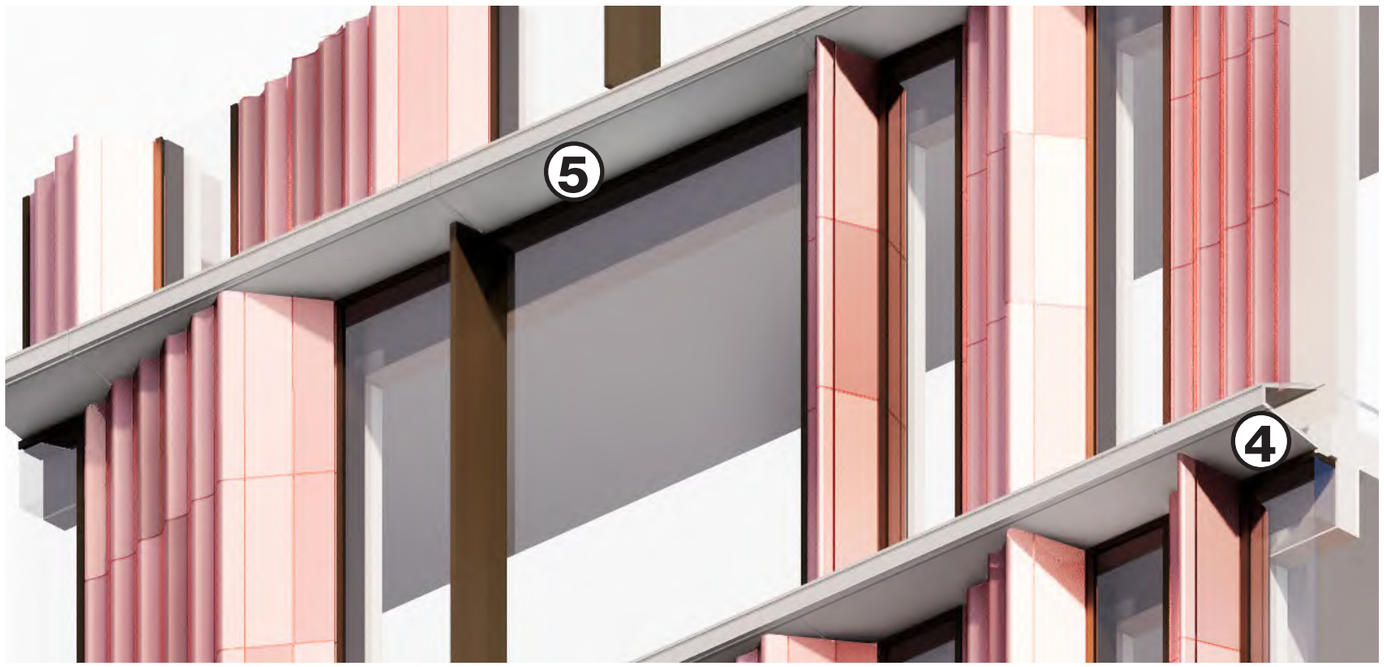
04. Maersk Tower, Copenhagen, Denmark comparable facade precedent



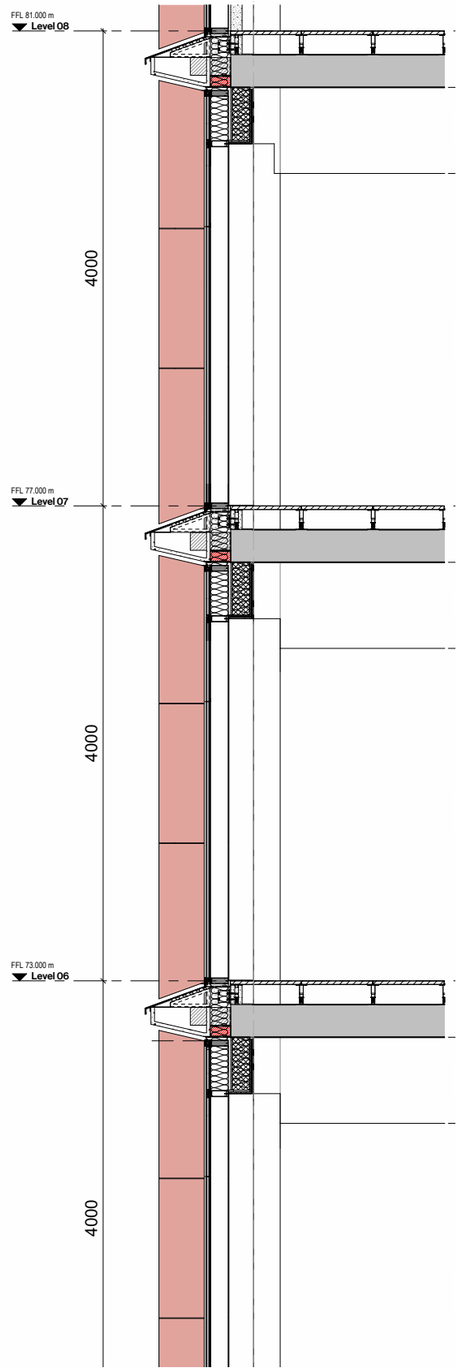
05. Maersk Tower GRC extended cill detail, Copenhagen, : Slim GRC cill profile



Sill detail from above



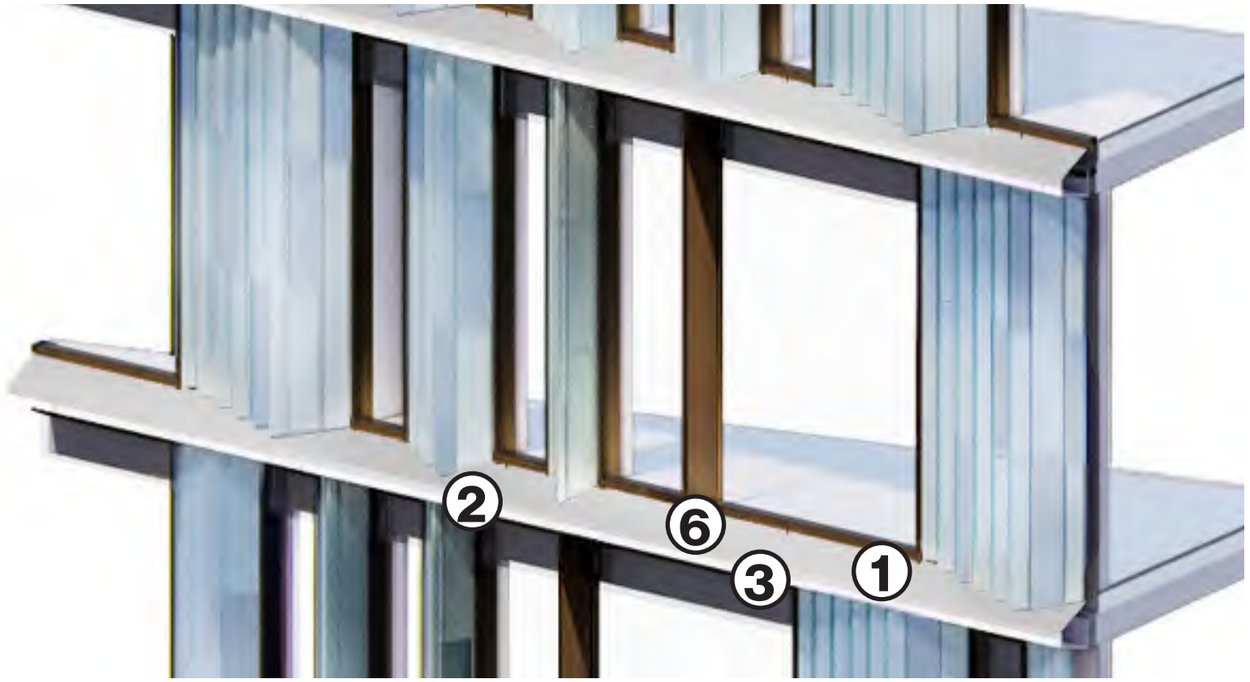
Sill detail from below



Section study

KEY

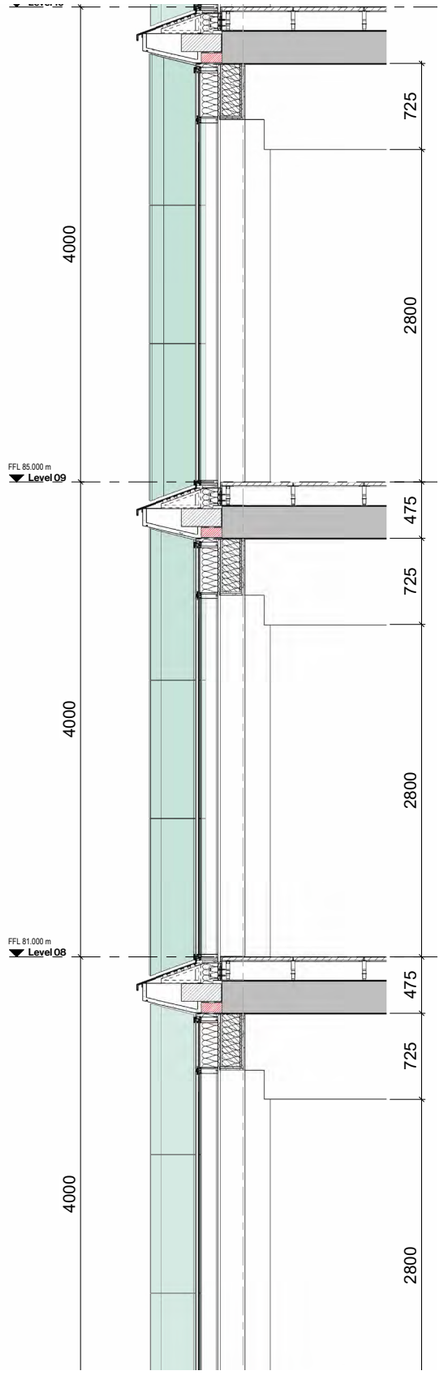
1. 20 degree pitch to top surface of cill to throw off rainwater.
2. Over sailing PPC anodic silver aluminium cill to top surface of cill.
3. Reduced extent of GRC to vertical face of cill.
4. Continuous recessed drip detail to underside of soffit.
5. Angled, mid grey flecked GRC underside to cill.
6. Lapped joint to PPC anodic silver aluminium cill



Sill detail from above



Sill detail from below



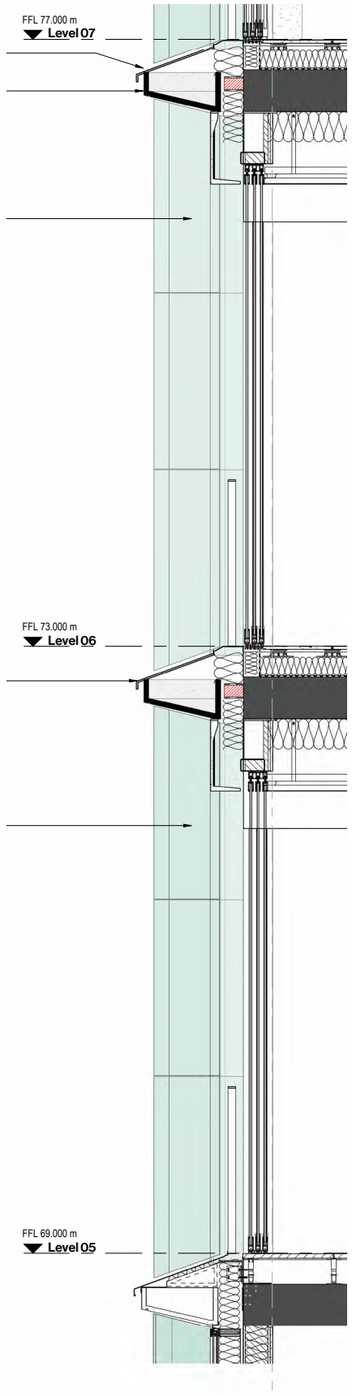
Section study

KEY

1. 20 degree pitch to top surface of cill to throw off rainwater.
2. Over sailing PPC anodic silver aluminium cill to top surface of cill.
3. Reduced extent of GRC to vertical face of cill.
4. Continuous recessed drip detail to underside of soffit.
5. Angled, mid grey flecked GRC underside to cill.
6. Lapped joint to PPC anodic silver aluminium cill



Isometric study of winter garden



Indicative section



Winter garden precedent

Winter gardens are located on key corners to promote further connections from inside to out, engage with the surrounding street scape, make use of key vistas and provide appropriate breakout amenity for tenants.

These are treated as external spaces but are enclosed with the use of single glazed screens that slide pass each other to ensure use for the majority of the year and protection from the elements.

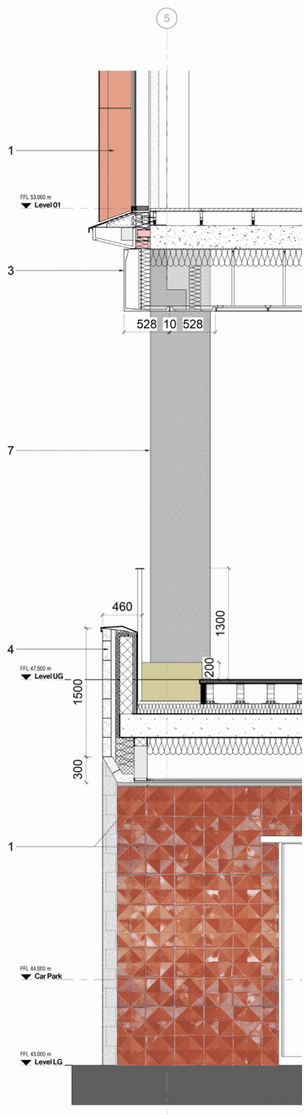
KEY

1. 20 degree pitch to top surface of cill to throw off rainwater.
2. Over sailing PPC anodic silver aluminium cill to top surface of cill.
3. Reduced extent of GRC to vertical face of cill.
4. Single glazed sliding screen in stainless steel track.
5. PPC Anodic aluminium balustrade.

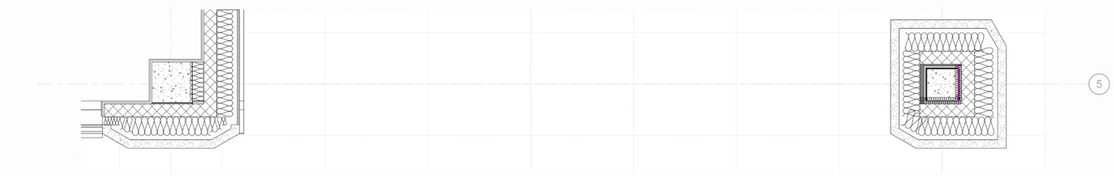
5.2
2 Angel Square - Base



1 Lower Ground Bay Study



2 Lower Ground Bay Study - Section

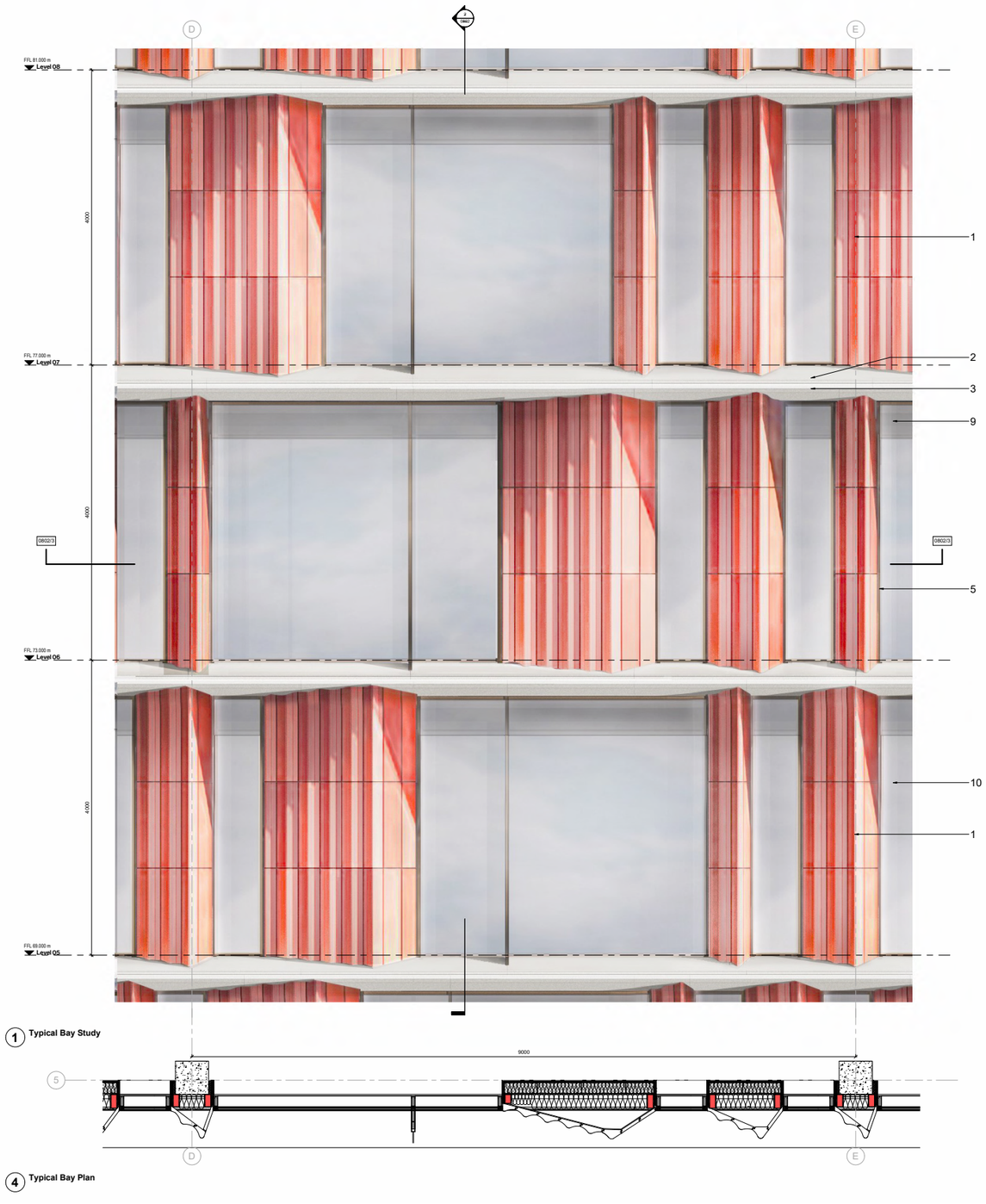


3 Lower Ground Floor Bay Study - Plan

MATERIAL KEY

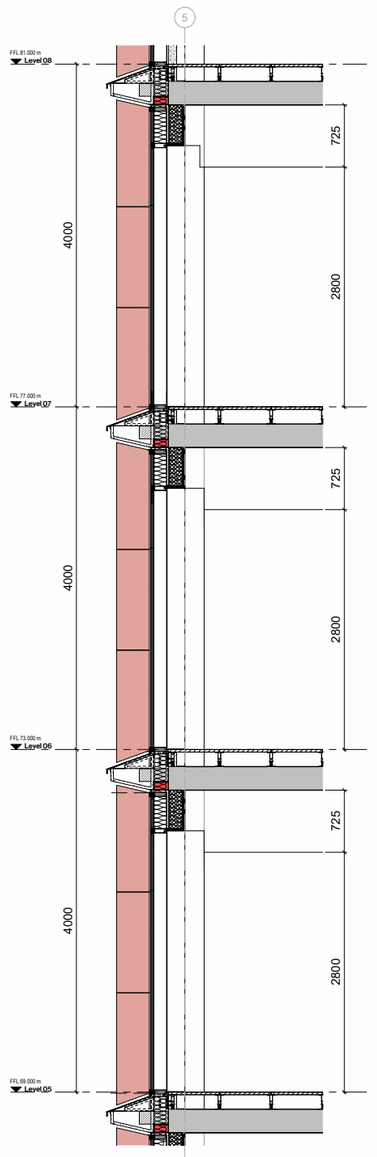
1		Glazed Terracotta
2		Anodic PPC soft silver matt metallic aluminium cill.
3		GRC
4		Yorkstone
5		Anodic powder coating - ie: Interpon Super Durable Polyester TGIC Free
6		Anodic Powder Coated - Louvre Panel
7		Exposed Concrete
8		Silver PPC louvres
9		Back Painted Glass panel
10		Glazed panel

5.3
2 Angel Square - Middle



1 Typical Bay Study

4 Typical Bay Plan

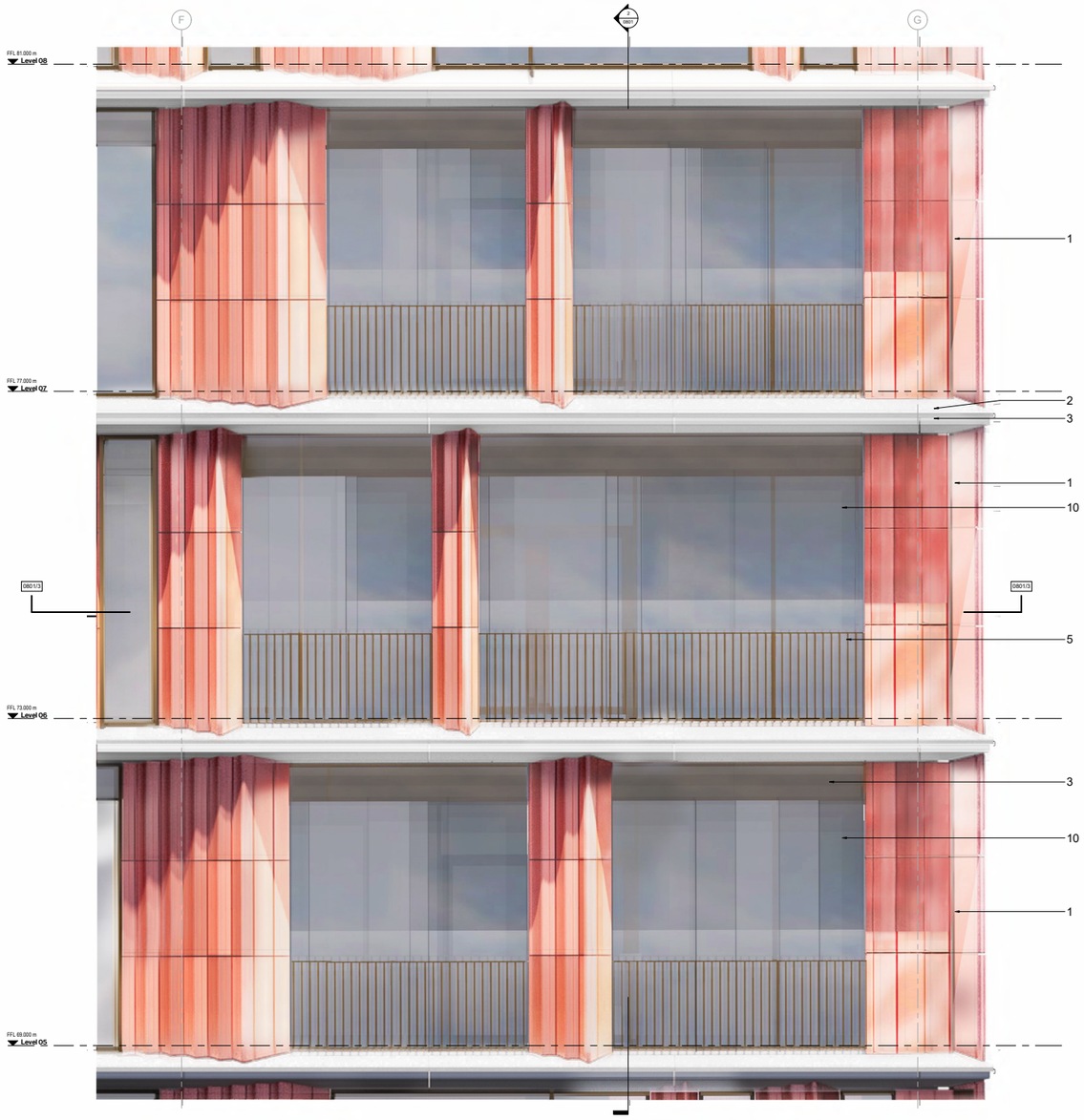


2 Typical Bay - Section - Alt Sill Profile

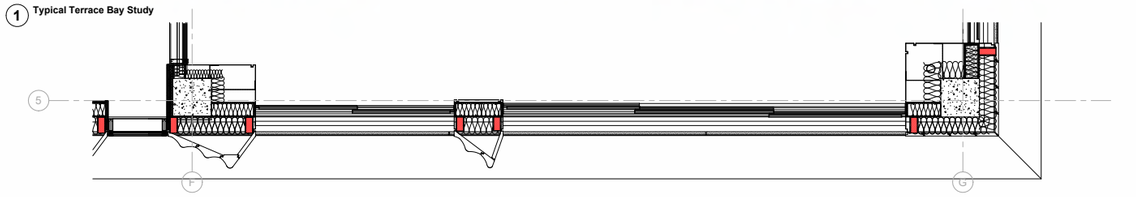
MATERIAL KEY

1	Glazed Terracotta
2	Anodic PPC soft silver matt metallic aluminium cill.
3	GRC
4	Yorkstone
5	Anodic powder coating - ie: Interpon Super Durable Polyester TGIC Free
6	Anodic Powder Coated - Louvre Panel
7	Exposed Concrete
8	Silver PPC louvres
9	Back Painted Glass panel
10	Glazed panel

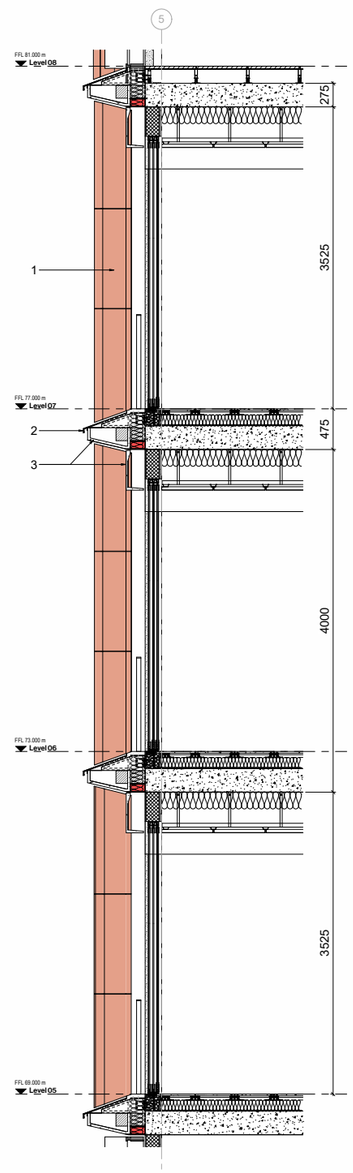
5.4
2 Angel Square - Winter garden



1 Typical Terrace Bay Study



3 Typical Terrace Bay Study - Plan

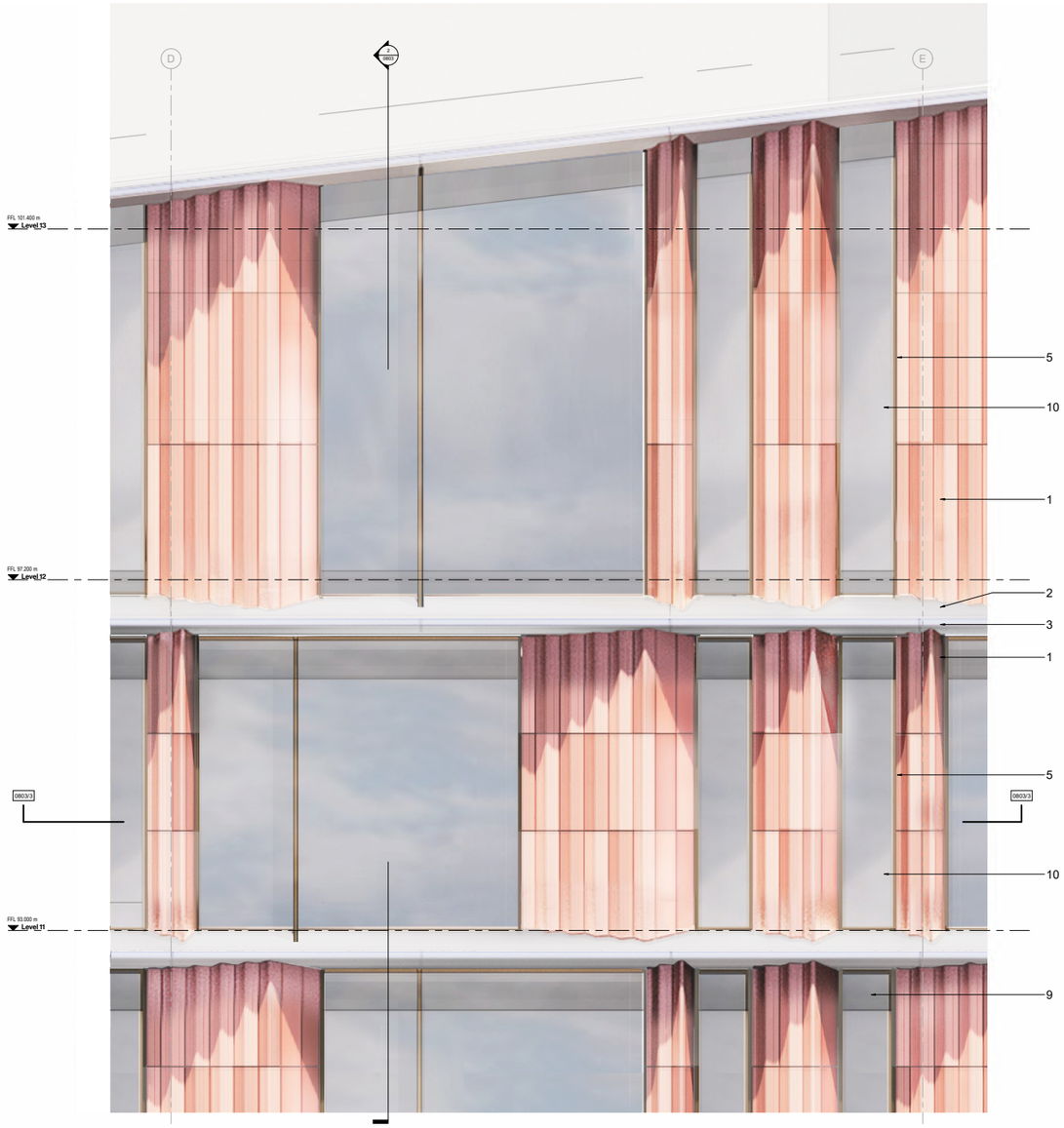


2 Typical Terrace Bay Study - Section

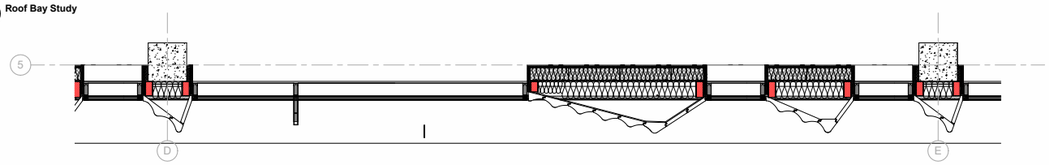
MATERIAL KEY

1		Glazed Terracotta
2		Anodic PPC soft silver matt metallic aluminium cill.
3		GRC
4		Yorkstone
5		Anodic powder coating - ie: Interpon Super Durable Polyester TGIC Free
6		Anodic Powder Coated - Louvre Panel
7		Exposed Concrete
8		Silver PPC louvres
9		Back Painted Glass panel
10		Glazed panel

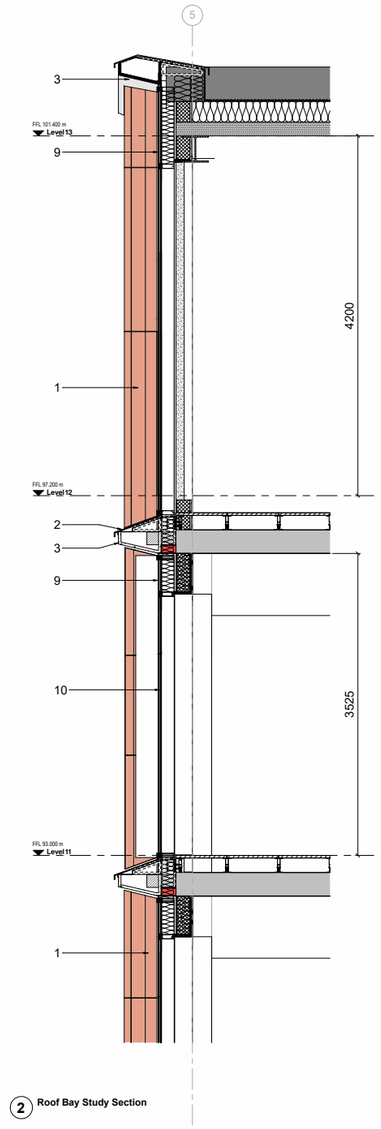
5.5
2 Angel Square - Top



1 Roof Bay Study



3 Roof Bay Plan



2 Roof Bay Study Section

MATERIAL KEY

1 Glazed Terracotta

2 Anodic PPC soft silver matt metallic aluminium cill.

3 GRC

4 Yorkstone

5 Anodic powder coating - ie: Interpon Super Durable Polyester TGIC Free

6 Anodic Powder Coated - Louvre Panel

7 Exposed Concrete

8 Silver PPC louvres

9 Back Painted Glass panel

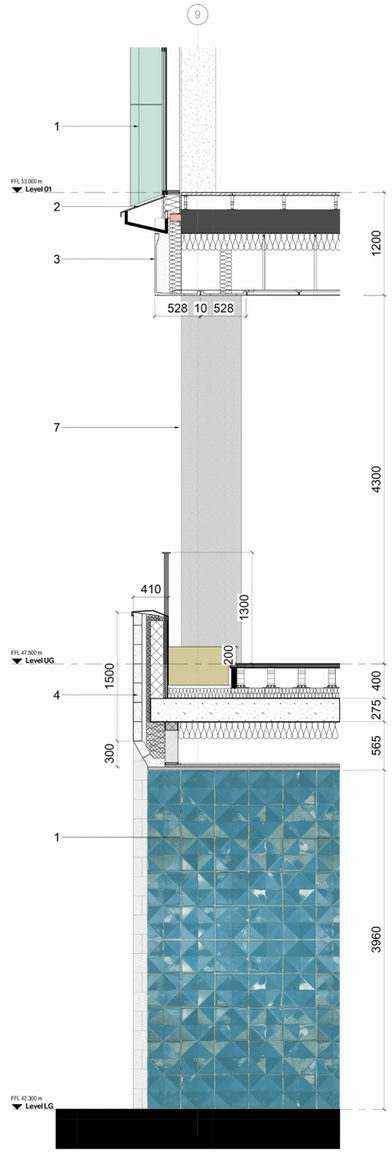
10 Glazed panel

5.6
3 Angel Square - Base



1 Lower Ground Bay Study

3 20_PLAN_LLG_GA.



2 Lower Ground Bay Section.

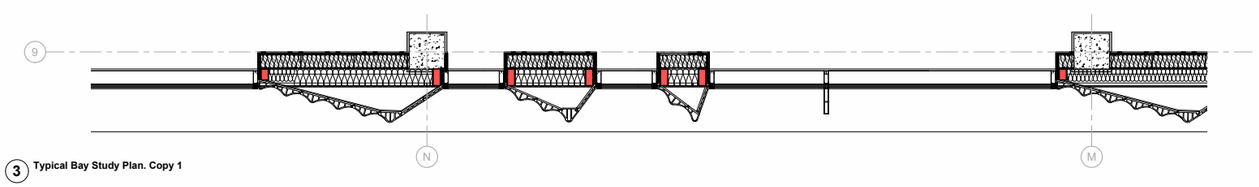
MATERIAL KEY

1		Glazed Terracotta
2		Anodic PPC soft silver matt metallic aluminium cill.
3		GRC
4		Yorkstone
5		Anodic powder coating - ie: Interpon Super Durable Polyester TGIC Free
6		Anodic Powder Coated - Louvre Panel
7		Exposed Concrete
8		Silver PPC louvres
9		Back Painted Glass panel
10		Glazed panel

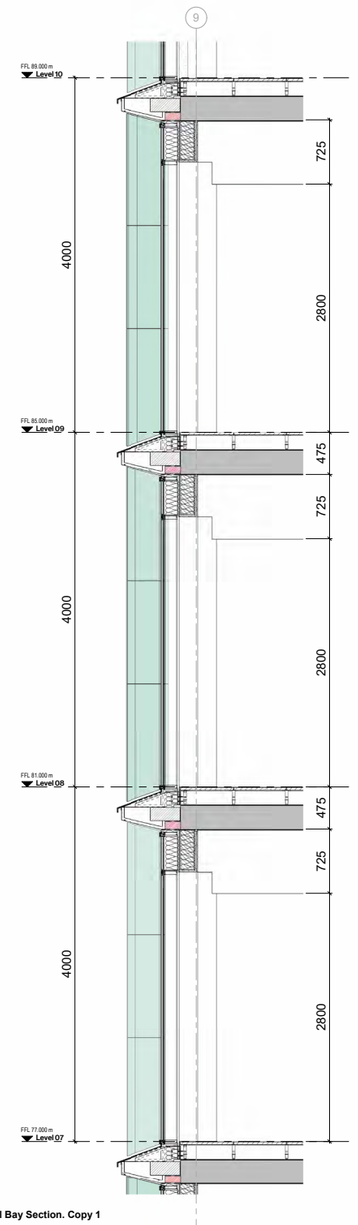
5.7
3 Angel Square - Middle



1 Typical Bay Study. Copy 1



3 Typical Bay Study Plan. Copy 1



2 Typical Bay Section. Copy 1

MATERIAL KEY

1 Glazed Terracotta

2 Anodic PPC soft silver matt metallic aluminium cill.

3 GRC

4 Yorkstone

5 Anodic powder coating - ie: Interpon Super Durable Polyester TGIC Free

6 Anodic Powder Coated - Louvre Panel

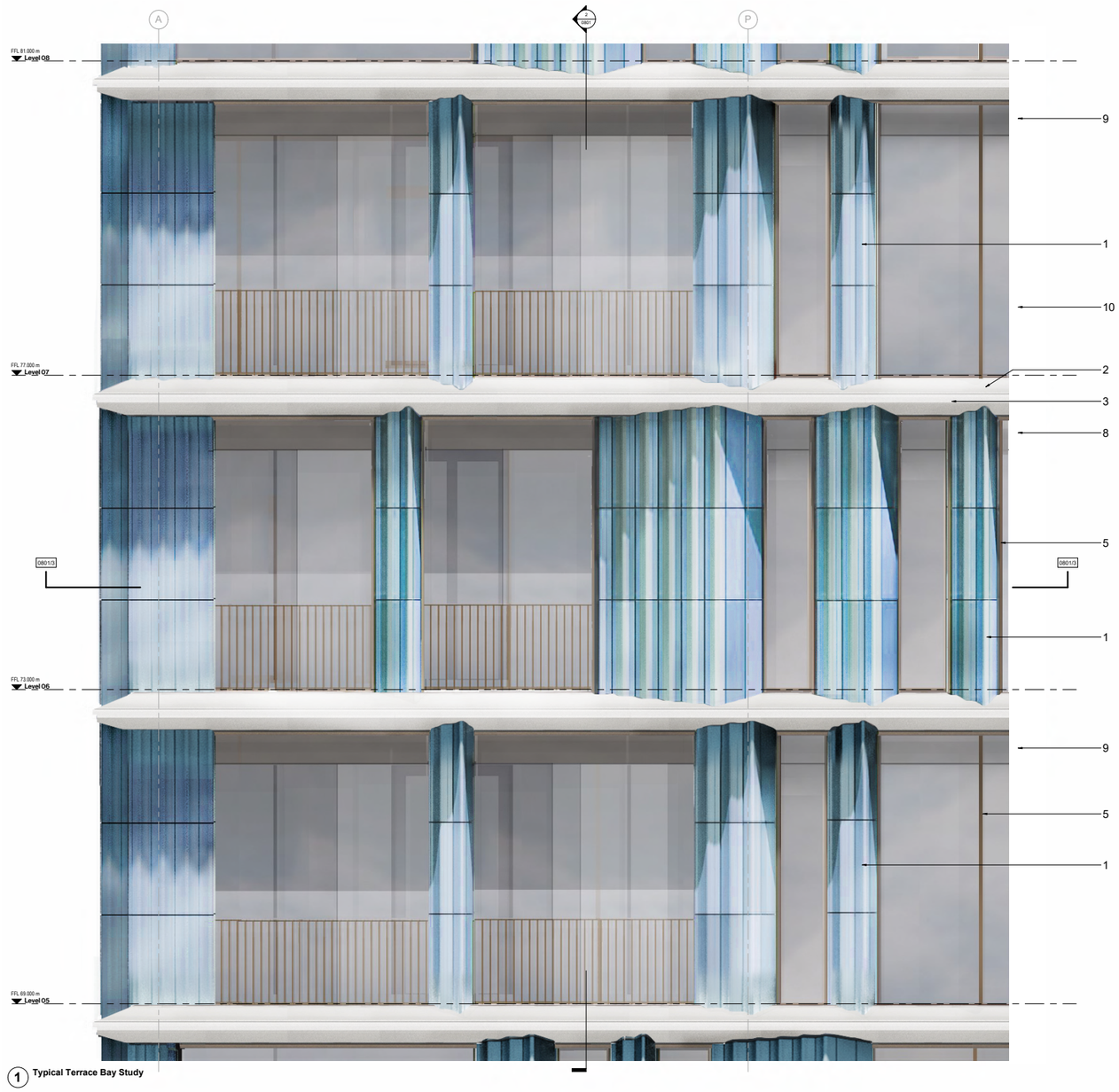
7 Exposed Concrete

8 Silver PPC louvres

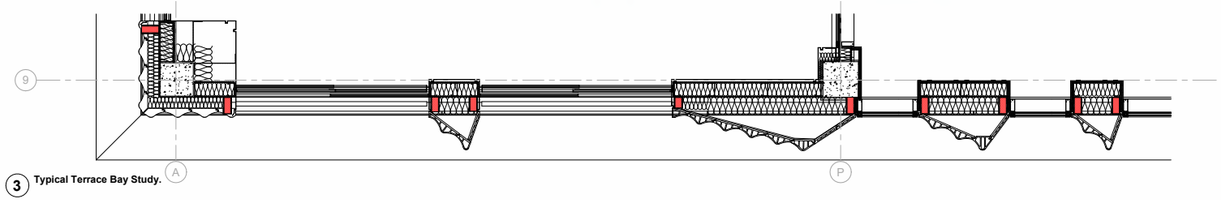
9 Back Painted Glass panel

10 Glazed panel

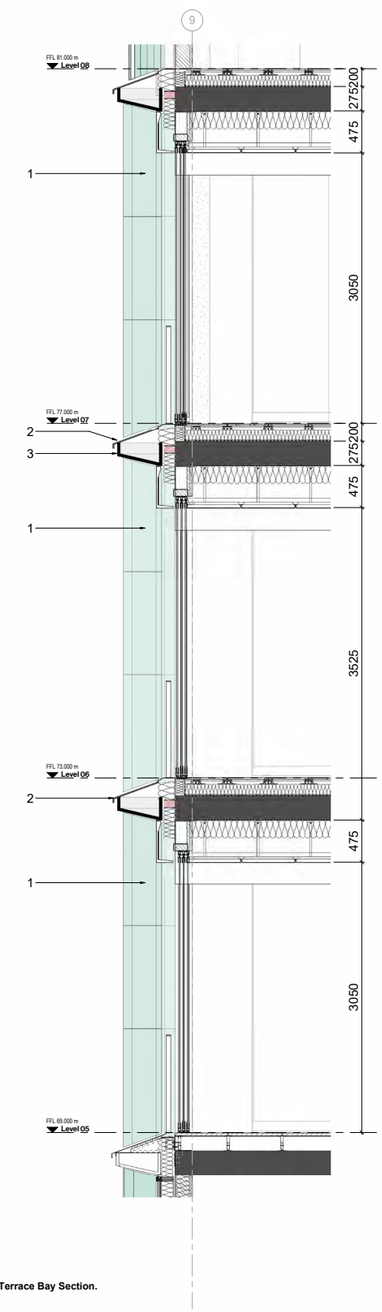
5.8
3 Angel Square - Winter garden



1 Typical Terrace Bay Study



3 Typical Terrace Bay Study.



2 Typical Terrace Bay Section.

MATERIAL KEY

1 Glazed Terracotta

2 Anodic PPC soft silver matt metallic aluminium cill.

3 GRC

4 Yorkstone

5 Anodic powder coating - ie: Interpon Super Durable Polyester TGIC Free

6 Anodic Powder Coated - Louvre Panel

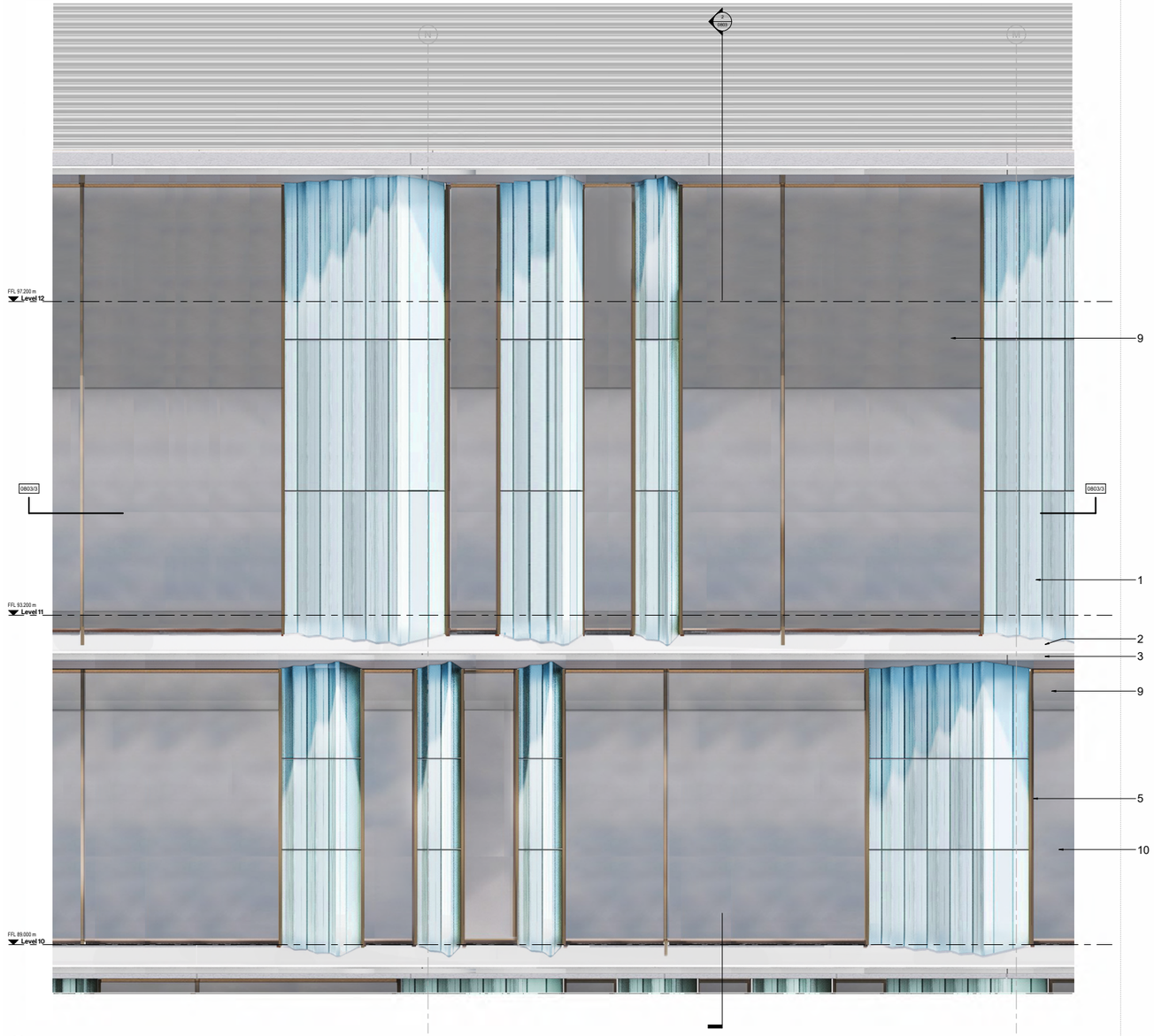
7 Exposed Concrete

8 Silver PPC louvres

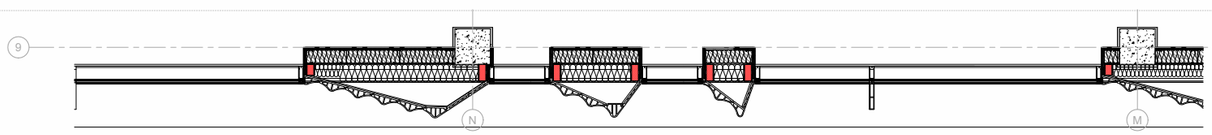
9 Back Painted Glass panel

10 Glazed panel

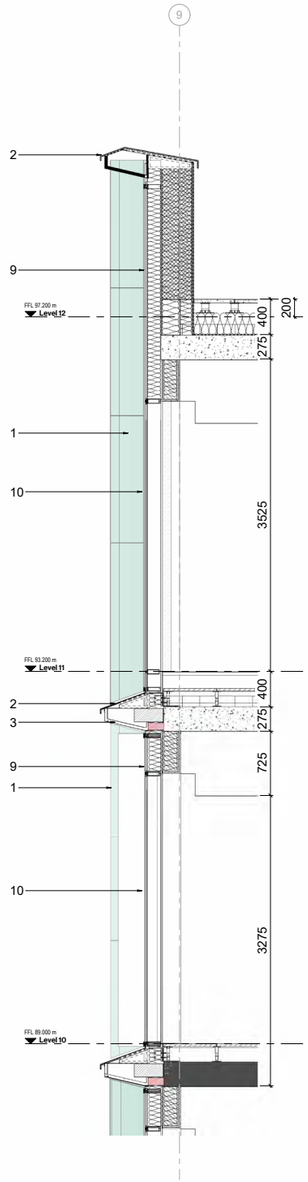
5.9
3 Angel Square - Top



1 Typical Roof Bay Study.



3 Typical Roof Bay Plan.



2 Typical Roof Bay Section.

MATERIAL KEY

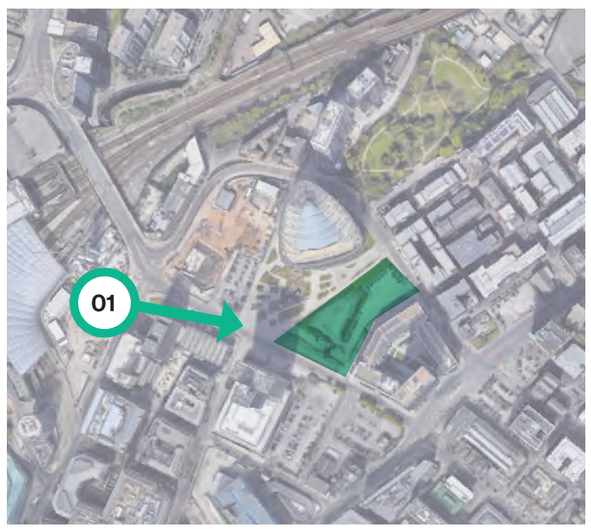
1		Glazed Terracotta
2		Anodic PPC soft silver matt metallic aluminium cill.
3		GRC
4		Yorkstone
5		Anodic powder coating - ie: Interpon Super Durable Polyester TGIC Free
6		Anodic Powder Coated - Louvre Panel
7		Exposed Concrete
8		Silver PPC louvres
9		Back Painted Glass panel
10		Glazed panel

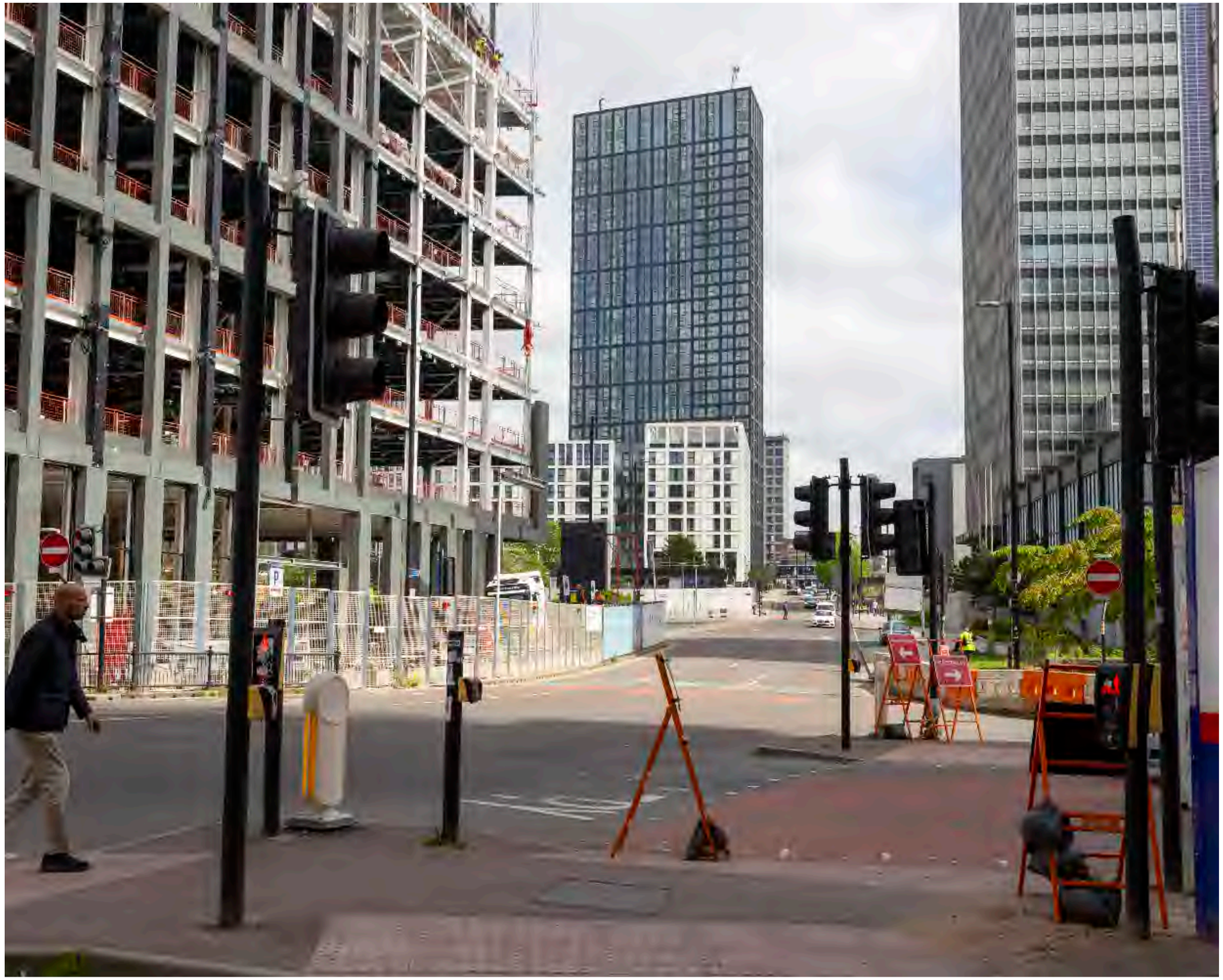
5.10
Scale - verified views

- The proposal is for a 13 storey and a 14 storey building.
- Our floor to floor heights are typically set at 4000mm. With increased heights at ground, upper ground and the top floor of 2 Angel Square.
- The commercial scale of the two proposed buildings is in keeping with the context of NOMA as a commercially led district.
- The following verified views illustrate how the proposal will be viewed from key locations agreed with MCC.
- Please refer to Heritage Architecture's full assessment for more detail.

- View taken looking North from the junction of Miller Street and Corporation Street

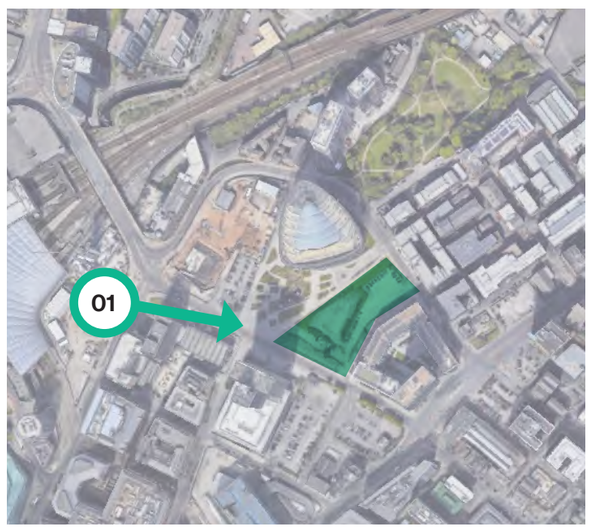
View 01 - Base line





- View taken looking North from the junction of Miller Street and Corporation Street

View 01 - 3 Angel Square

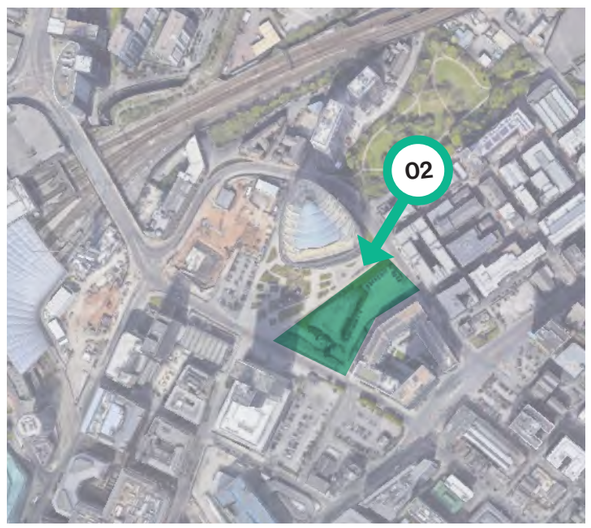






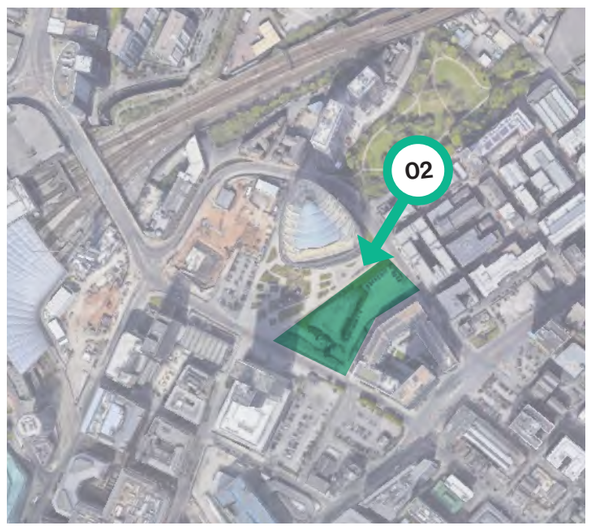
- View taken looking South from Old Mount Street towards Angel Square.

View 02 - Base line



- View taken looking South from Old Mount Street towards Angel Square.

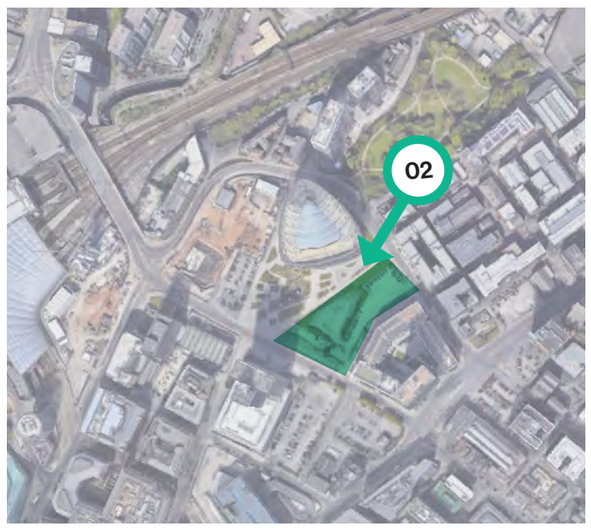
View 02 - 2 Angel Square





- View taken looking South from Old Mount Street towards Angel Square.

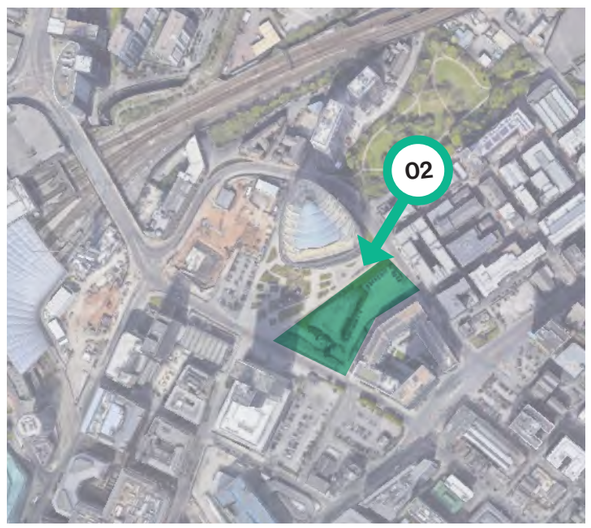
View 02 - 3 Angel Square





- View taken looking South from Old Mount Street towards Angel Square.

View 02 - 2 + 3 Angel Square





- View taken looking South west from Rochdale Road towards MODA Angel Gardens.

View 03 - Base line



- View taken looking South west from Rochdale Road towards MODA Angel Gardens.

View 03 - 2 Angel Square





- View taken looking South west from Rochdale Road towards MODA Angel Gardens.

View 03 - 3 Angel Square





- View taken looking South west from Rochdale Road towards MODA Angel Gardens.

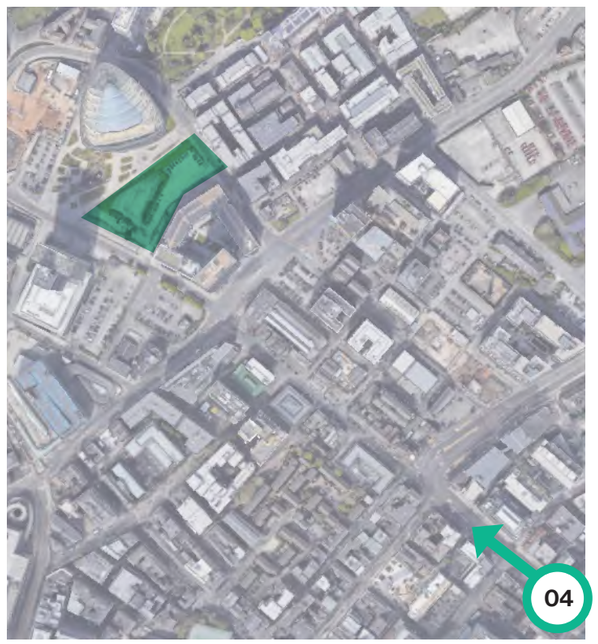
View 03 - 2 + 3 Angel Square





- View taken looking North west from Great Ancoats Street towards Angel Square

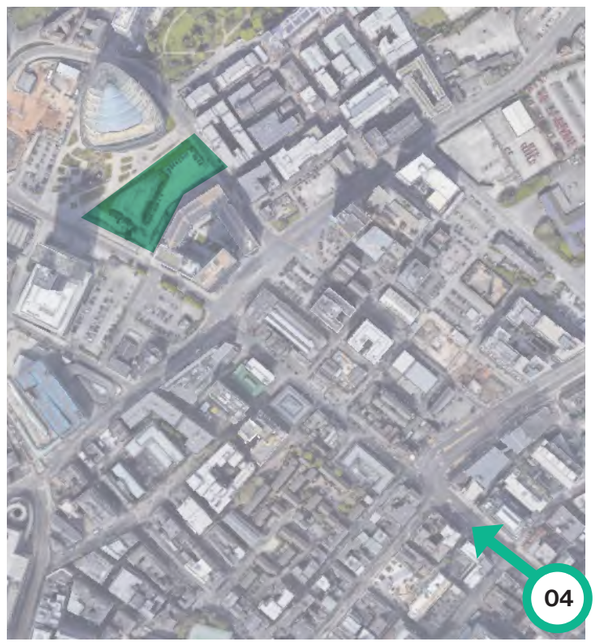
View 04 - Base line





- View taken looking North west from Great Ancoats Street towards Angel Square

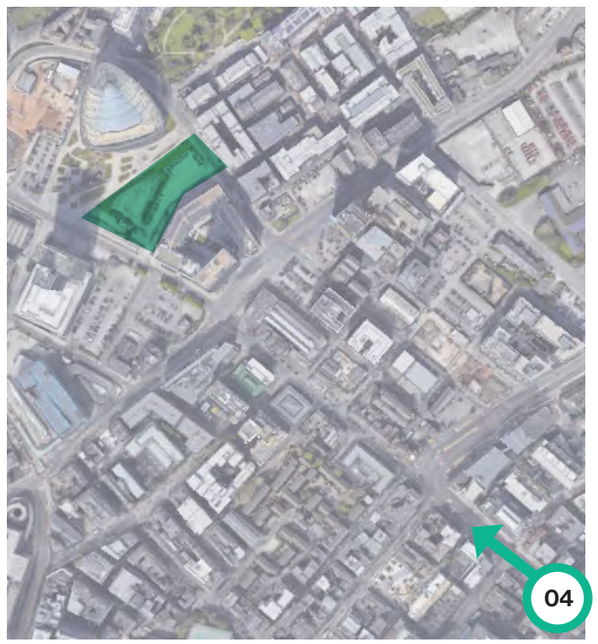
View 04 - 2 Angel Square





- View taken looking North west from Great Ancoats Street towards Angel Square

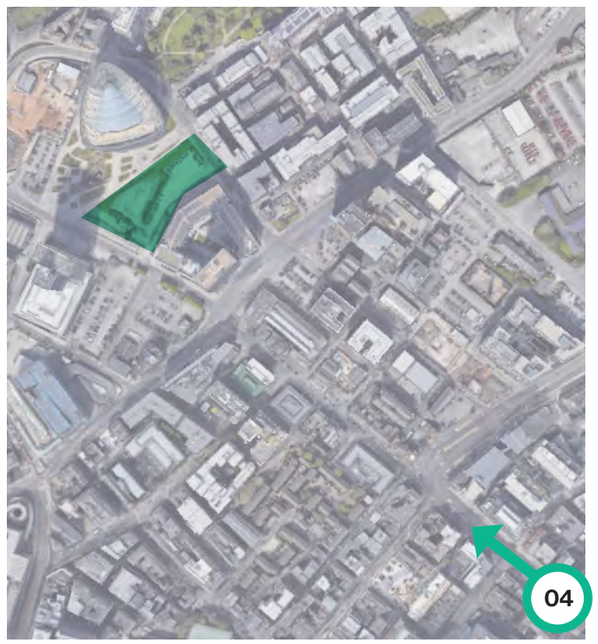
View 04 - 3 Angel Square





- View taken looking North west from Great Ancoats Street towards Angel Square

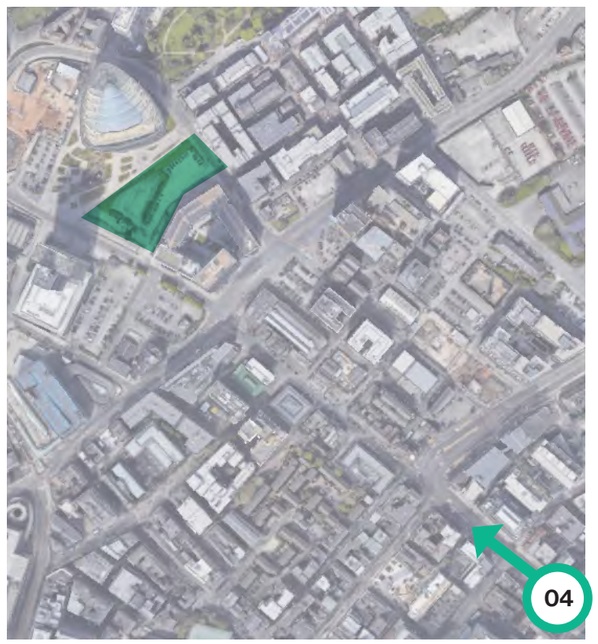
View 04 - 2 + 3 Angel Square





- View taken looking North west from Great Ancoats Street towards Angel Square

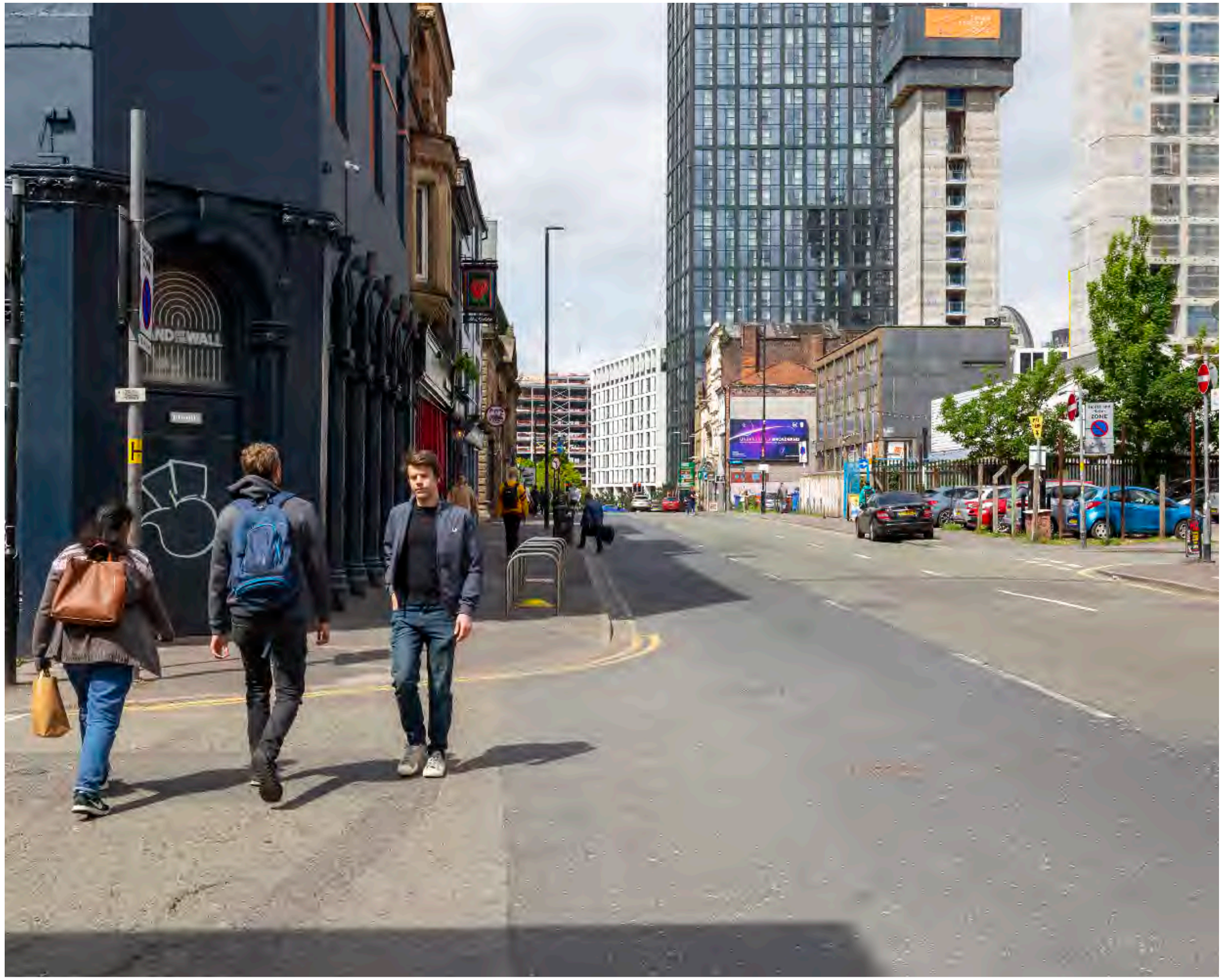
View 04 - 2 + 3 Angel Square with future development



- View taken looking North west from Swan Street towards Angel Square

View 05 - Base line





- View taken looking North west from Swan Street towards Angel Square

View 05 - 2 Angel Square





- View taken looking North west from Swan Street towards Angel Square

View 05 - 3 Angel Square





- View taken looking North west from Swan Street towards Angel Square

View 05 - 2 + 3 Angel Square





- View taken looking North west from Swan Street towards Angel Square

View 05 - 2 + 3 Angel Square with future development





- View taken looking North west from Miller Street towards Angel Square

View 06 - Base line





- View taken looking North west from Miller Street towards Angel Square

View 06 - 3 Angel Square





5.11
Visuals

Visualisation of 2 and 3 Angel Square across Miller Street



Visualisation of 2 Angel Square from Angel Square

6.0 Public realm

29/06/22

2&3 Angel Square

Landscape Design and Access Statement

Document Control

File Name	Prepared by	Checked by		
2190.1-ID-010 Design and Access Statement	LB / EKH	MS		

This document is copyright protected and may not be reproduced in whole or part without written authority from the owner.

© 2022 Planit I.E. Limited

Contents

Introduction 4
Design Principles 5

1 Site Context 6

Wider Green Network 7
City Context 8
Existing Site Context 9
Heritage Assets and Context 10
Site Photos 11

2 Site Analysis 12

Heritage 13
Existing Site Ecology 14
Arboricultural Impact Assessment 15
Existing Movement and Connections 16
Site Constraints 17
Design Opportunities 18

3 Design Proposals 19

Landscape Masterplan 20
Axonometric Masterplan 21

4 Character Areas 22

Angel Square 23
Garden Terraces 24
Thread Street 26
Miller Street & Angel Street 28

5 Public Realm Strategies 29

Movement and Connectivity 30
Wind Mitigation Proposals 31
Ecology Strategy 32
Temporary Public Realm Proposals 33

6 Materials & Elements 34

Hardworks Materials 35
Street Furniture & Wayfinding 36
Public Realm Lighting 37
Archaeological Interpretation 38
Tree Planting Proposals 39
NOMA Tree Nursery 40
Planting Character 41
Proposed Plant Species 42

Introduction

This Design and Access Statement has been prepared by Planit-IE on behalf of MEPC and Federated Hermes to support the full planning application for 2&3 Angel Square, NOMA.

It provides an overview of the process and approach to the public realm design to 2&3 Angel Square during RIBA Stage 2, and is to be read in conjunction with the separate architectural Design and Access Statement prepared by the architect, Cartwright Pickard.

Planit-IE has worked closely with the other members of the design and client team to establish the baseline conditions, challenges and opportunities within the public realm. The result of that collaboration has directly influenced the design rationale, vision and public realm design proposals found within this report.

Design Principles

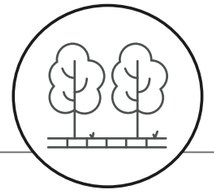
A series of design principles have been developed for the public realm to 2&3 Angel Square that are aligned to the wider vision for the NOMA neighbourhood.

Streets and Connection



Create an attractive green link through the northern part of the NOMA

Spaces



Make a very green place that is walkable, encourages active travel and grounds the new buildings within the public realm

Heritage



Celebrate the area's rich background of industrial and archaeological history

Identity



Enhance the green heart of NOMA whilst creating an area of public realm in its own right

Nurture



Create a place for participation and nurture, offering opportunities for community engagement through horticulture



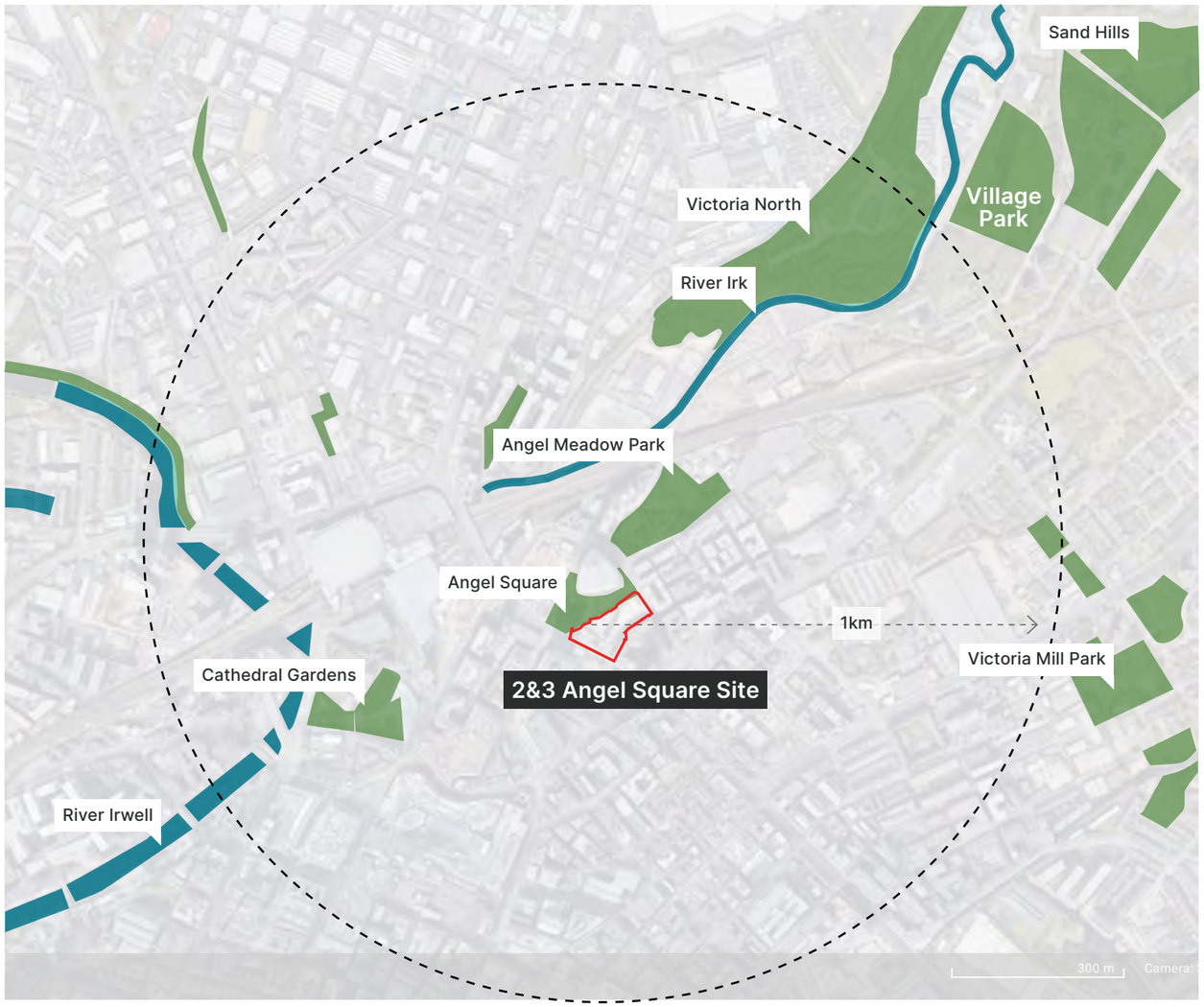
Site Context

Wider Green Network

NOMA is a gateway into the city from the north and sits adjacent to Angel Meadow Park which, combined with Angel Square, provides important greenspace to the local community. There is an opportunity for 2&3 Angel Square to create an extension of the green character in this part of the city, and to enhance connections through Angel Square to the city centre.

The site location presents a fantastic opportunity to provide better connections both physically and functionally between the city centre and the expanding neighbourhoods to the northeast along the Irk Valley and Victoria North (formerly known as the Northern Gateway).

There are also close links to nearby transport hubs, green space and heritage sites. Within a 1km radius of the site there are a series of green spaces and parks, adding to the series of interconnected greenspaces in line with Manchester City Council's Green Infrastructure Policy EN 9.

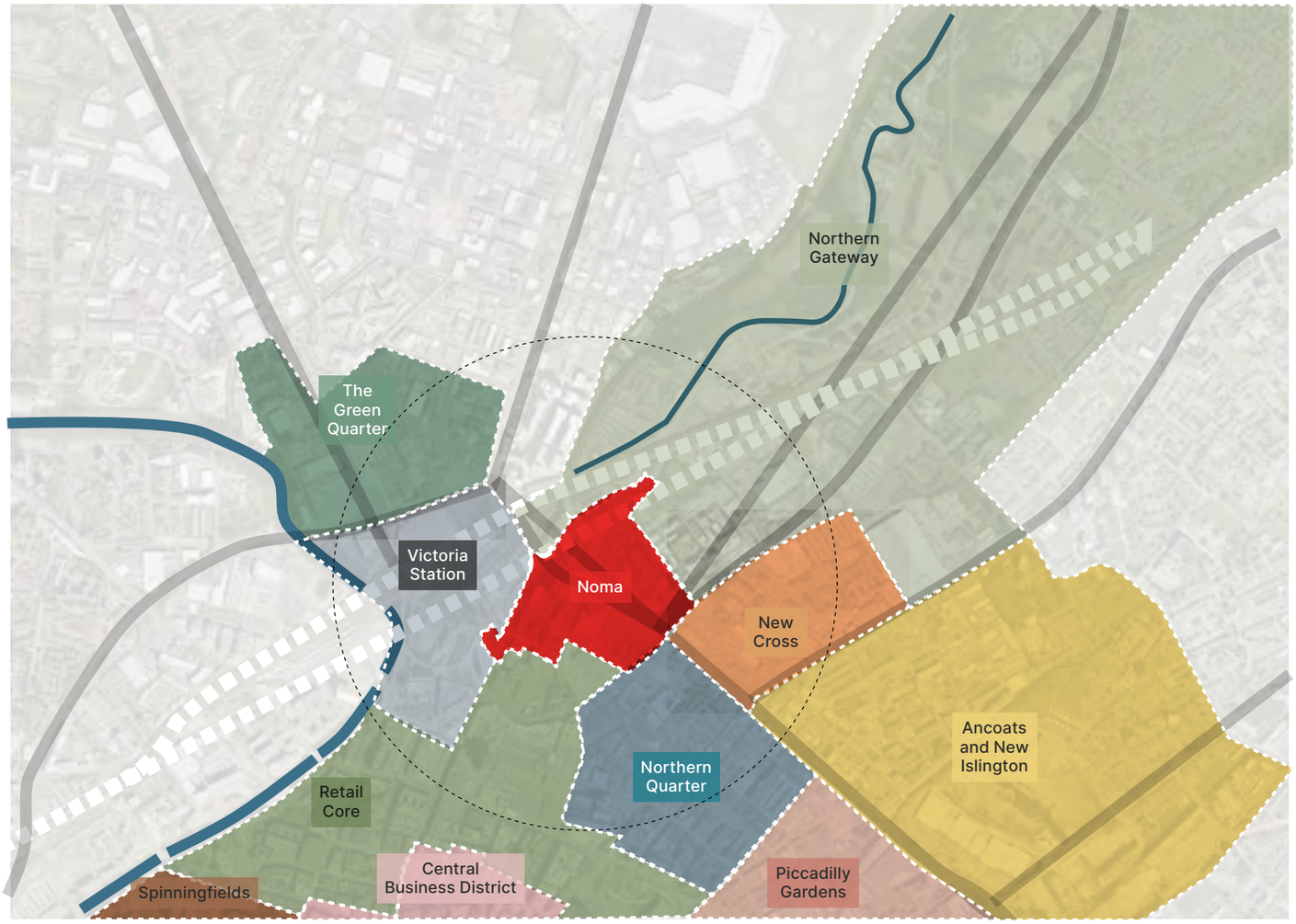


Wider Green Network Diagram

City Context

NOMA sits at a strategically important position in Manchester and the approach to the city centre from the Irk Valley, close to the rapidly regenerating northern city centre districts and the proposed Northern Gateway masterplan, now renamed Victoria North.

There are high quality residential-led developments currently on site close by, at Victoria Riverside and Meadowside, as well as future proposed development sites to the north and east.



City Context Diagram

Existing Site Context

The adjacent aerial image shows the current site as it appears today. The site is brownfield in nature, and the majority of the area within the boundary is hardstanding and currently used as surface car parking set on two different levels, separated by areas of planting and existing trees. The temporary NOMA Pavillion Marketing Suite is located within the site boundary to the south adjacent to Miller Street.

The perimeter of the site is bound by a low level timber post and rail fence, and steep embankments, meaning the site has limited access and permeability for pedestrian movement.

To the west, the site is bounded by Angel Square and to the east by the MODA Living Angel Gardens scheme. Miller Street and Angel Street, two major arterial roads bound the northern and southern edges of the site.

Immediately to the north is Angel Meadow park and the Meadowside development plots that surround it. The park has undergone a series of improvement works over the last ten years.



Key

1. 2&3 Angel Gardens site
2. Hotel Indigo Manchester
3. WeWork The Hanover Building
4. Victoria Station
5. The Printworks
6. Angel Gardens
7. Victoria North site
8. New Century Hall
9. The Tower (CIS)
10. 1 Angel Square
11. National Football Museum
12. Angel Meadow Park

Heritage Assets and Context

The 2&3 Angel Square Site itself is not located within a conservation area, nor are there listed buildings within the red line boundary. However, the Site is located within close proximity to several conservation areas including Shudehill, Cathedral, Smithfield and Ancoats Conservation Areas, and is located close to a number of listed buildings, principally associated with the NOMA historic estate.

The location of the listed buildings within 300m of the Site are shown on the diagram on this page. These listed buildings include:

Key

- Grade II Listed Building
- Cathedral Conservation Area
- Shudehill Conservation Area
- Smithfield Conservation Area
- Site Boundary

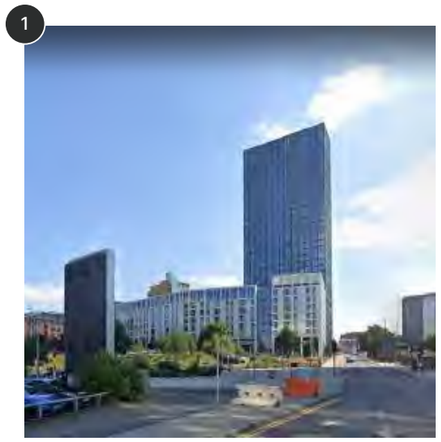
1. New Century House
2. Old Bank
3. New Century Hall
4. Redfern
5. The Tower (CIS)
6. Hanover
7. Dantzic
8. Federation
9. Cooperative Wholesale Society, Corporation Street
10. Smithfield Market Hall, Grade II listed
11. Holyoake House, Grade II listed
12. 29 Swan Street, Grade II listed



Site Photos



Location Plan

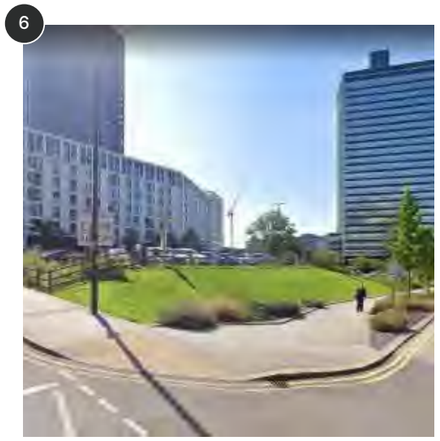
















Site Analysis

Heritage

NOMA is a place with an incredible history and direct links to Manchester's role in the Industrial Revolution. 2&3 Angel Square has particular archaeological significance as the site of the former Shudehill Mill.

In 2014 and 2015 an archaeological excavation and assessment was undertaken prior to development of the Angel Gardens site. As part of the MODA Living Angel Gardens project, a scheme of archaeological interpretation was developed including a strategy and proposals for both Angel Gardens and 2&3 Angel Square, as the footprint of the historic mill straddled both sites.

As part of the 2&3 Angel Square public realm proposals, there is a commitment to deliver the interpretation elements of the scheme developed as part of the earlier strategy. Further details of these proposals are provided later within this document under the Archaeological Interpretation section.



Aerial view of the Shudehill Mill archaeological excavations undertaken in 2014-2015

Existing Site Ecology

The Ecological Survey and Assessment undertaken by ERAP provides the following summary of the existing site:

- the site is largely composed of hard standing used as car parking, with areas of vegetation colonising hard standing, trees and shrubs, ornamental planting, amenity grassland and taller, semi-improved neutral grassland.
- The proposals will have no adverse effect on statutory or non-statutory designated sites for nature conservation.
- Only common and widespread plant species were found. None of the habitats present are representative of semi-natural habitat. The NVC communities present are typical of the geographical area and conditions present. No Priority Habitats are present within the site.
- In terms of each habitat's importance in a geographical context, the trees, grassland and ornamental planting are of 'site' value only.
- No invasive plant species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were detected within the site.
- The trees and shrubs are suitable nesting habitat for passerine (perching) species of birds.
- It is not considered that the proposals are likely to impact upon any other protected or notable species during the construction phase of the proposals.
- The proposals will secure an opportunity to implement beneficial measures such as habitat creation that will safeguard habitats for wildlife such as birds and bats, with the aim of providing a net gain in biodiversity in accordance with the principles of the NPPF.
- It is concluded that the proposals are feasible and acceptable in accordance with ecological considerations and relevant planning policy. Development at the site will provide an opportunity to secure ecological enhancement for wildlife associated with urban areas.

The ERAP report includes recommendations on measures and enhancements that can be provided within the new design proposals; details of these are included within the Ecology Strategy section of this document.



Phase 1 Vegetation and Habitat Map, extracted from Ecological Survey and Assessment produced by ERAP

Arboricultural Impact Assessment

An Arboricultural Impact Assessment has been undertaken by Bowland Tree Consultancy and has identified 4no Category 'B' Trees of 'Moderate Quality'. The remainder of the existing trees (18no) have been designated as Category 'C' Trees of 'Low Quality'.



Tree Constraints Plan, produced by Bowland Tree Consultancy Ltd (June, 2022)

Existing Movement and Connections

The adjacent diagram highlights the existing movement and connections in and around the 2&3 Angel Square site including:

- Primary vehicle routes to Miller Street and Angel Street.
- The key pedestrian routes through NOMA connecting to the city retail core, including routes through Angel Square and along Thread Street.
- Site is highly accessible on foot and by public transport, and in close proximity of Manchester Victoria Station and Shudehill Interchange.
- Connections to the north through Angel Meadow Park and the adjacent residential neighbourhood.

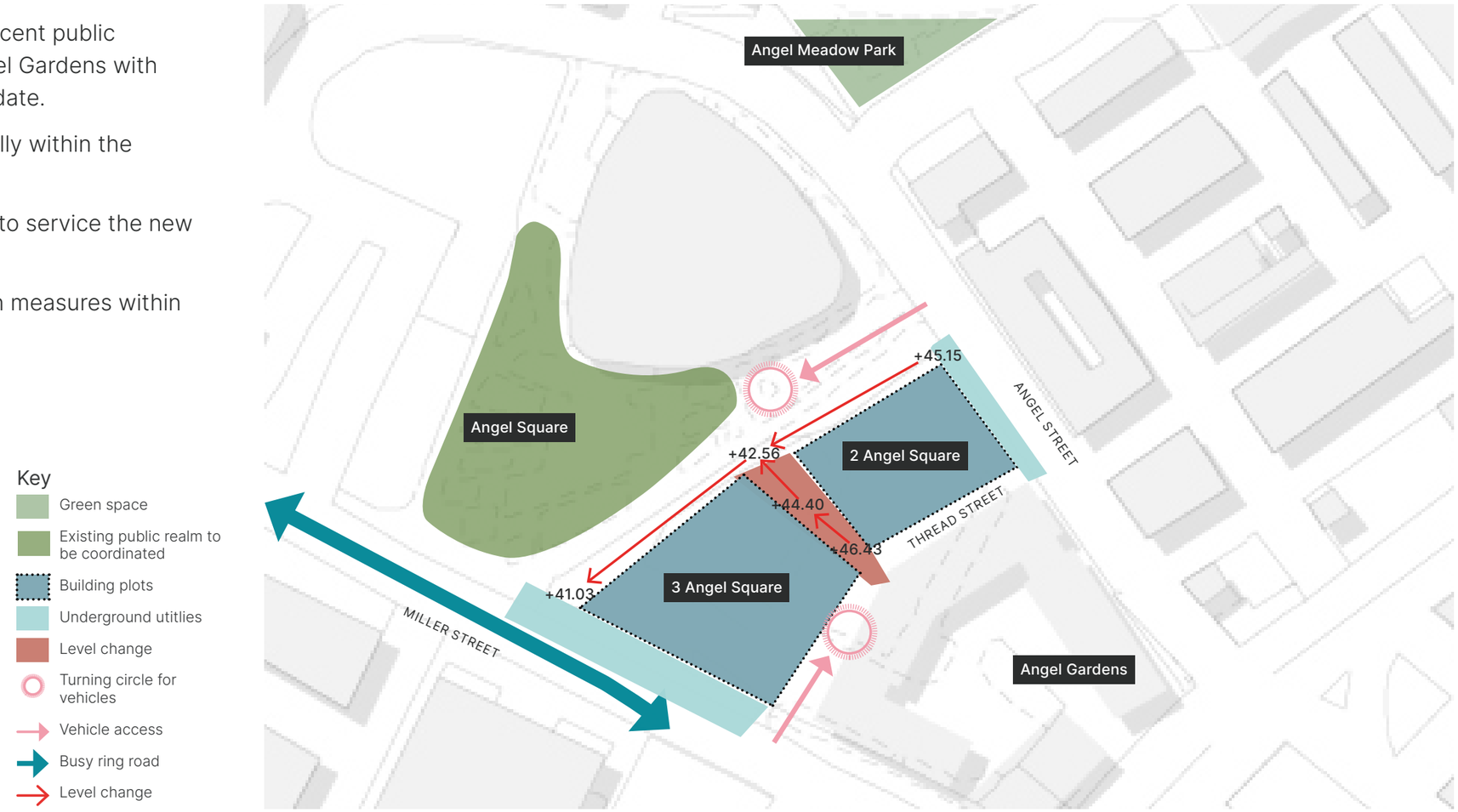


Map of exisitng movement and connections

Site Constraints

The adjacent diagram highlights the key site constraints to the public realm design:

- Significant level changes of approximately 5m across the site.
- Coordination required with adjacent public realm at Angel Square and Angel Gardens with challenging levels to accommodate.
- Existing buried utilities, especially within the Miller Street corridor.
- Vehicle access routes required to service the new and existing buildings.
- Requirement for wind mitigation measures within the public realm.



Constraints diagram

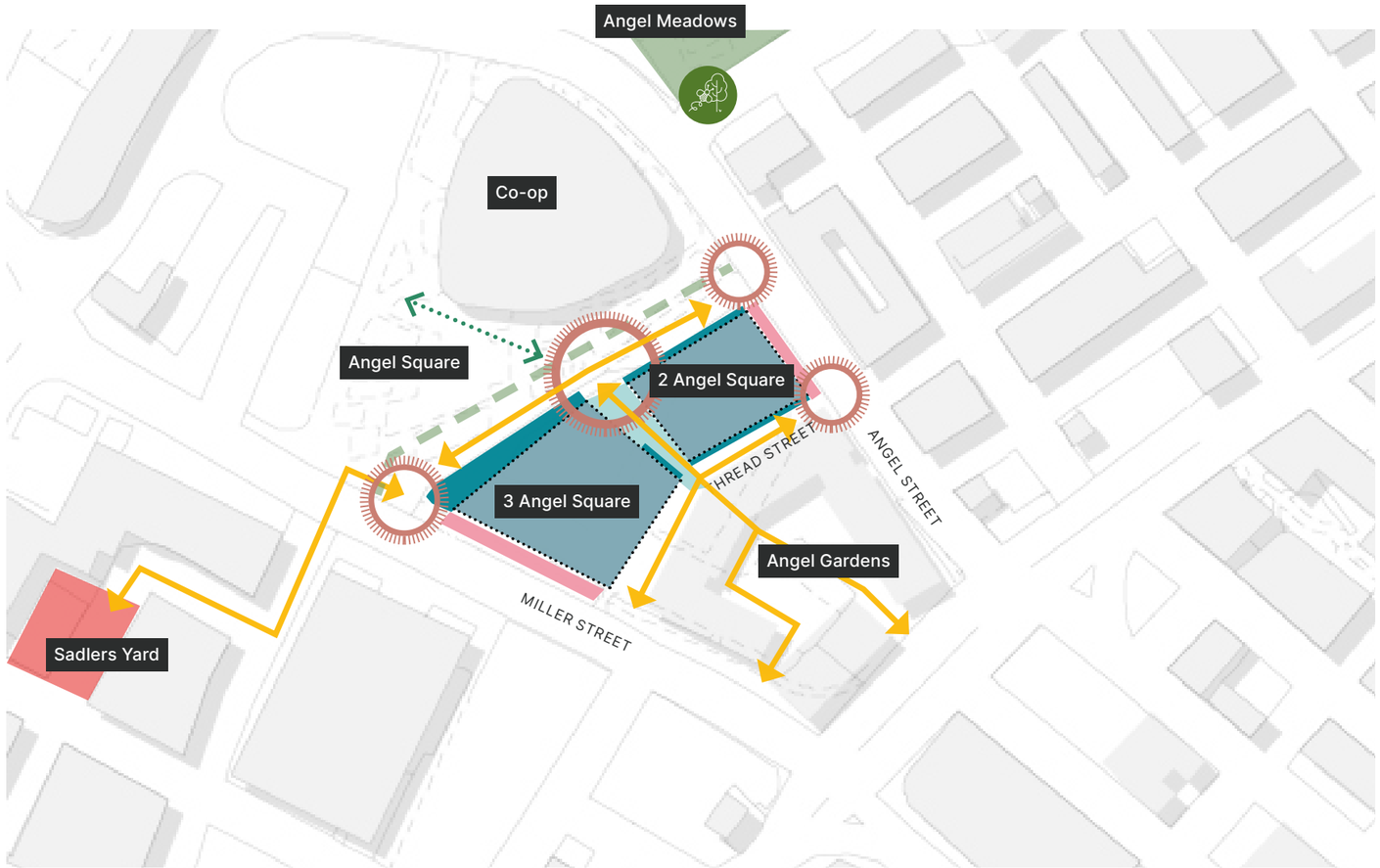
Design Opportunities

The adjacent diagram highlights the opportunities for the public realm design:

- Extend the high quality NOMA public realm to create a coherent and connected public realm.
- Enhance connectivity through the site and across Angel Square and the NOMA neighbourhood.
- Improve the Miller Street public realm creating a more pedestrian and cycle friendly neighbourhood.
- Deliver new public spaces adding to the diversity of public realm with more opportunities to dwell and spend time.
- Enhancement and creation of new gateways will create sense of arrival and help establish strong links with surrounding communities.
- Help ground the new buildings within the public realm.

Key

- Green space link
- Building Plots
- Cycle parking provision
- Active Frontage
- Gateway
- Pedestrian linkages
- Sadlers Yard-potential link to nearby public open space
- Interest inspired by heritage and topography
- Interface between site and existing Co-op building and Angel Square
- Potential link to future developments under construction



Opportunities diagram

Design Proposals

Landscape Masterplan

The proposed Landscape Masterplan has been developed in close coordination with the architect Cartwright Pickard and wider design team to ensure a landscape design that is carefully integrated with the new buildings as well as the existing public realm to Thread Street.

In addition, the public realm will be fully coordinated with the new proposals for Angel Square, and in keeping with the wider NOMA public realm vision. In line with this vision, it will create a well-connected, vibrant and green environment, with streets and spaces where people want to spend time. A number of key elements have been established as part of the proposals including the following:

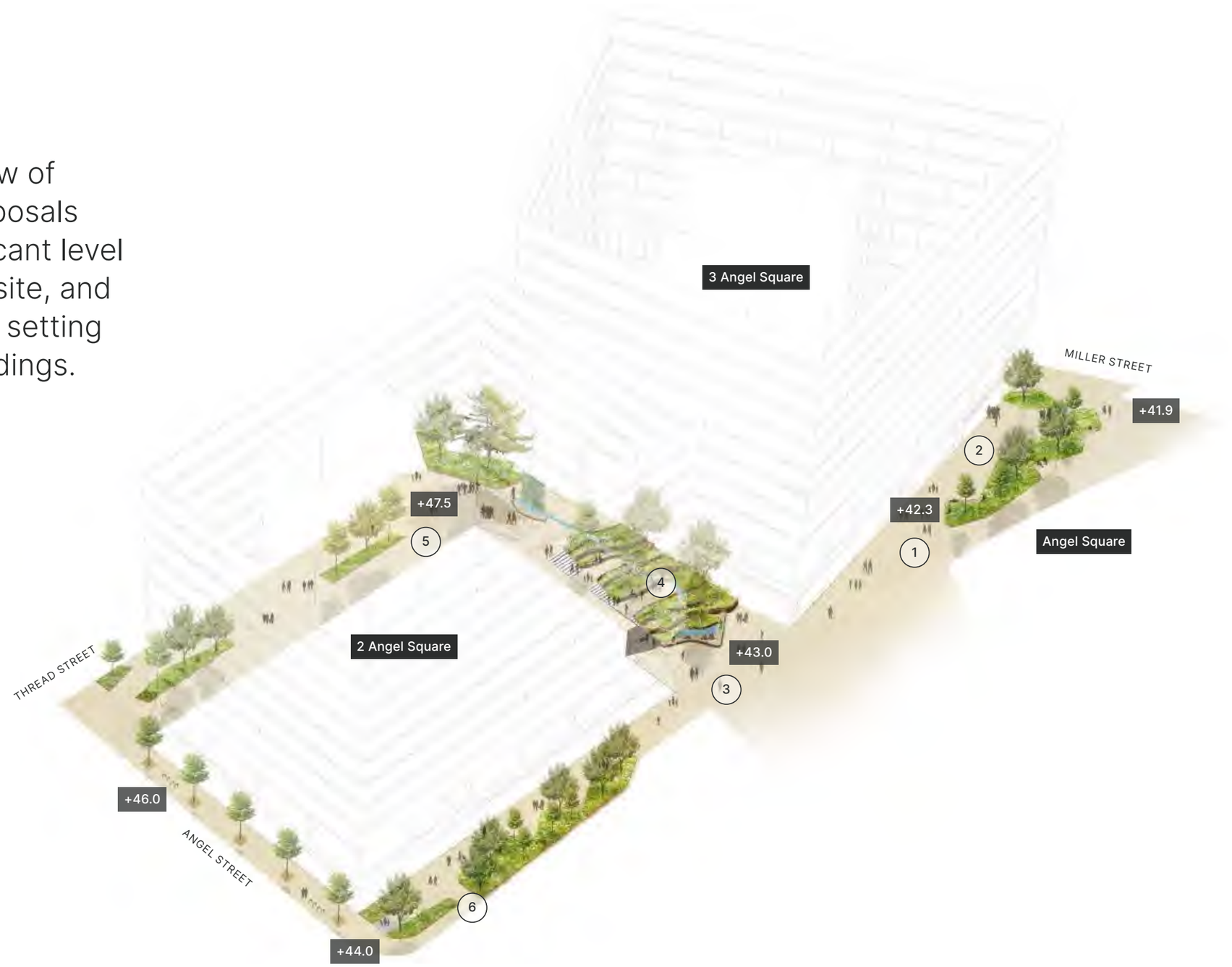
- Utilisation of site topography to create dynamic terraced green space between the buildings including water feature
- Buildings grounded within the public realm creating connectivity and animation / active building edges
- Trees and planting to provide attractive seasonal change, opportunities for wildlife and wind mitigation
- Consideration of hard and soft materials and street furniture that are cohesive with wider NOMA public realm and with a focus on low embodied carbon.



Stage 2 Masterplan

Axonometric Masterplan

The axonometric view of the public realm proposals highlights the significant level changes across the site, and the integrated green setting provided for the buildings.



Key

1. 3 Angel Square entrance space
2. External seating/dwell space
3. 2 Angel Square entrance space
4. Garden Terraces
5. Thread Street and water feature
6. 2 Angel Square Vehicle Access



Character Areas

Angel Square

At Angel Square the proposed design will provide a seamless interface with the new public realm proposals being developed for Angel Square. A generous and fully accessible pedestrian route will be provided that connects both buildings and the Miller Street and Angel Street adopted footpaths.

In addition, pockets of flexible outdoor seating and integrated seating to planting edges opportunities for people to dwell and spill out, providing a strong active edge to the buildings and animation of Angel Square. A lush planting palette with semi mature trees will create a verdant and welcoming atmosphere and extending the green character of Angel Square.

At 2 Angel Square, provision has been made for vehicle access to the car park and servicing from the existing taxi drop off road and turning area.



Axonometric view of proposed public realm to Miller Street



Detail Plan of entrance area and spill out space to 3 Angel Square,



Timber seating integrated to planter edges



Garden Terraces

The significant level change between Angel Square and Thread Street provides the opportunity to create a dynamic series of steps and planted terraces that overlook Angel Square, creating a desirable place for people to move through and dwell in verdant surroundings.

The design embraces the fact that this space will be generally in shade due to its north-east orientation and therefore will be a predominantly green space with shade tolerant planting and trees with intimate seating areas nestled within the green terraces.

A generous stepped access will run along the edge of 2 Angel Square and a lift will be integrated within the building plinth to provide a fully accessible route between the new buildings, connecting the upper and lower ground levels.

The space will be overlooked by the upper ground floor building terraces on each side, provding a level of animation as well as surveillance of the space.

The garden terraces will create an oasis of green that not only provides a restful space for office workers, passers-by and the local community, but also an opportunity for wildlife to make a home.



Visualisation of proposed garden terraces



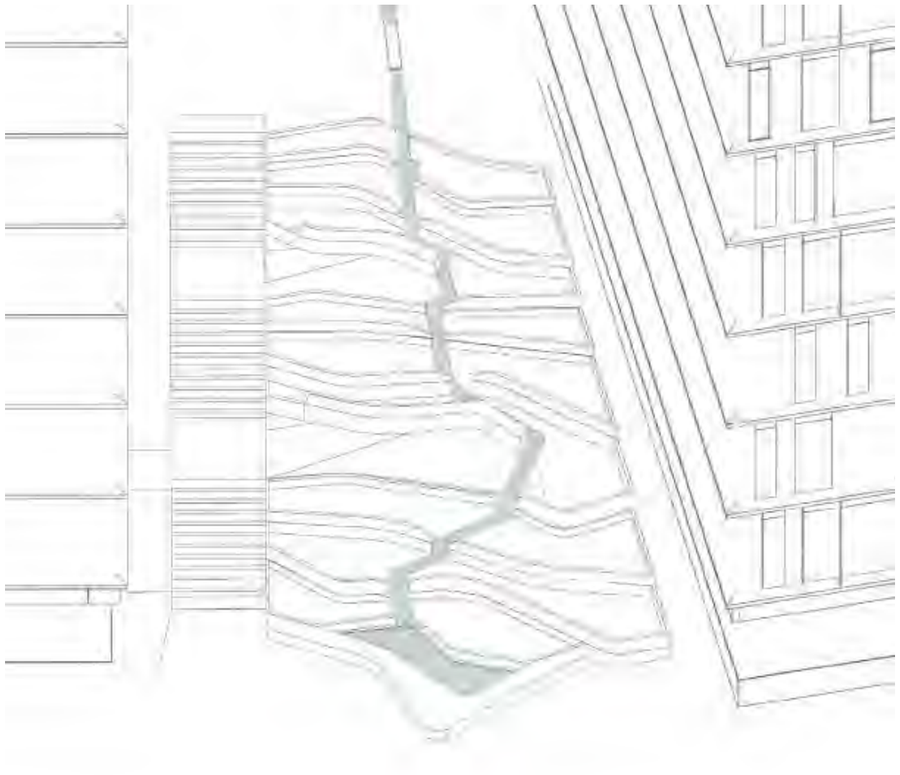
Water feature set within planting



Planted terraces with shade tolerant species

A proposed water feature will run through the terraces, taking advantage of the natural level change. This references the historic water wheel associated with Shudehill Mill, with upper and lower pools, an interpretation of the ‘balancing ponds’ that fed the water wheel that in turn powered the mill.

The plinth facades that face onto the garden terraces will have living walls that further enhance the green character of the space and provide biodiversity and habitats for wildflife.



Water feature utilises natural topography and 4.5 m level change



Section through terraces looking towards 3 Angel Square



Section through terraces looking towards 2 Angel Square



Water channel set within planting



Living walls providing habitat

Thread Street

At the upper ground level, the existing character of the Thread Street public realm delivered as part of the Angel Gardens project will be carried through, creating a seamless public realm that draws people through the garden terraces to Angel Square.

The adjacent plan illustrates the extent of the new areas to be delivered, and includes a paved route to the edge of 2 Angel Square on Thread Street along with a central space between the buildings that will accommodate movement and breakout space / table and chairs areas for the internal units. The upper 'balancing pond' of the water feature will sit centrally creating a focal point between buildings.

The existing Thread Street public realm delivered by the Angel Gardens will be retained and includes clay paving to the main pedestrian routes, and raised planters with deciduous and evergreen trees.

In addition, there is existing street furniture including: seating, cycle stands, litter bins and wayfinding that will all be retained. Some of these elements incorporate archaeological interpretation features (further detail of these is provided later within this document).

At the southern end of Thread Street, there will be a requirement for some localised remodelling and adjustment of the existing public realm in order to coordinate with the new buildings and landscape.



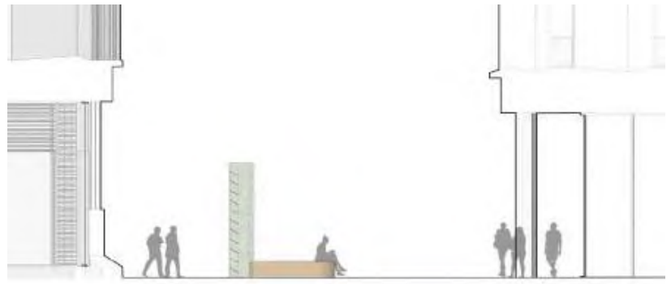
Detail Plan of Thread Street



Detail Plan showing central space at upper ground level and water feature



Concept sketch for water feature



Section A-A' through water feature



Precedent for 'balancing pond' to water feature

Miller Street & Angel Street

At Miller Street the public realm will be enhanced; existing yorkstone footways will be retained to the adopted highway, with a curtilage of clay paving denoting the private demise and providing a wider overall footway. This is in keeping with the detail further up Miller Street at Angel Gardens, and this area will accommodate a series of features including seating and cycle parking. Due to the combined underground utility corridor it is not possible to plant trees into the ground, however new tree planters will provide an evergreen tree avenue as well as functioning as wind mitigation. Along with tree planters the design will also incorporate decorative screens providing further wind mitigation.

At Angel Street the existing yorkstone footway will be widened and an avenue of trees (planted into the ground) will be provided along with new cycle parking.



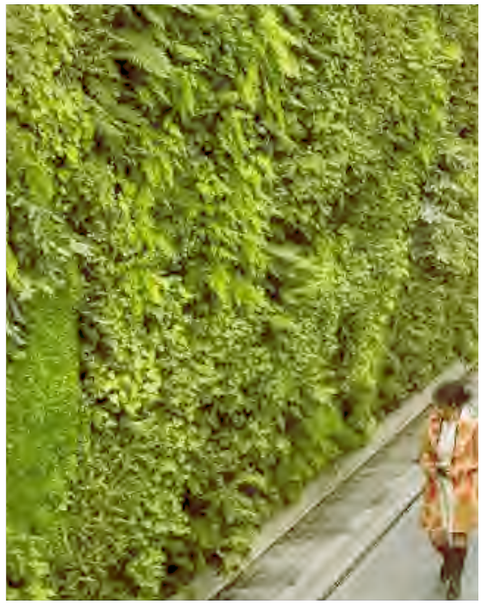
Axonometric view of proposed public realm to Angel Street



Tree planters at Angel Gardens on Miller Street with evergreen pines



Axonometric view of proposed public realm to Miller Street



Living walls connecting the building and landscape



Screens provide opportunity for artwork and interpretation

Public Realm Strategies

Movement and Connectivity

The public realm proposals will greatly enhance connectivity across the NOMA neighbourhood providing an attractive green pedestrian link between the new buildings, and resolving the significant 4.5m level change from Thread Street to Angel Square.

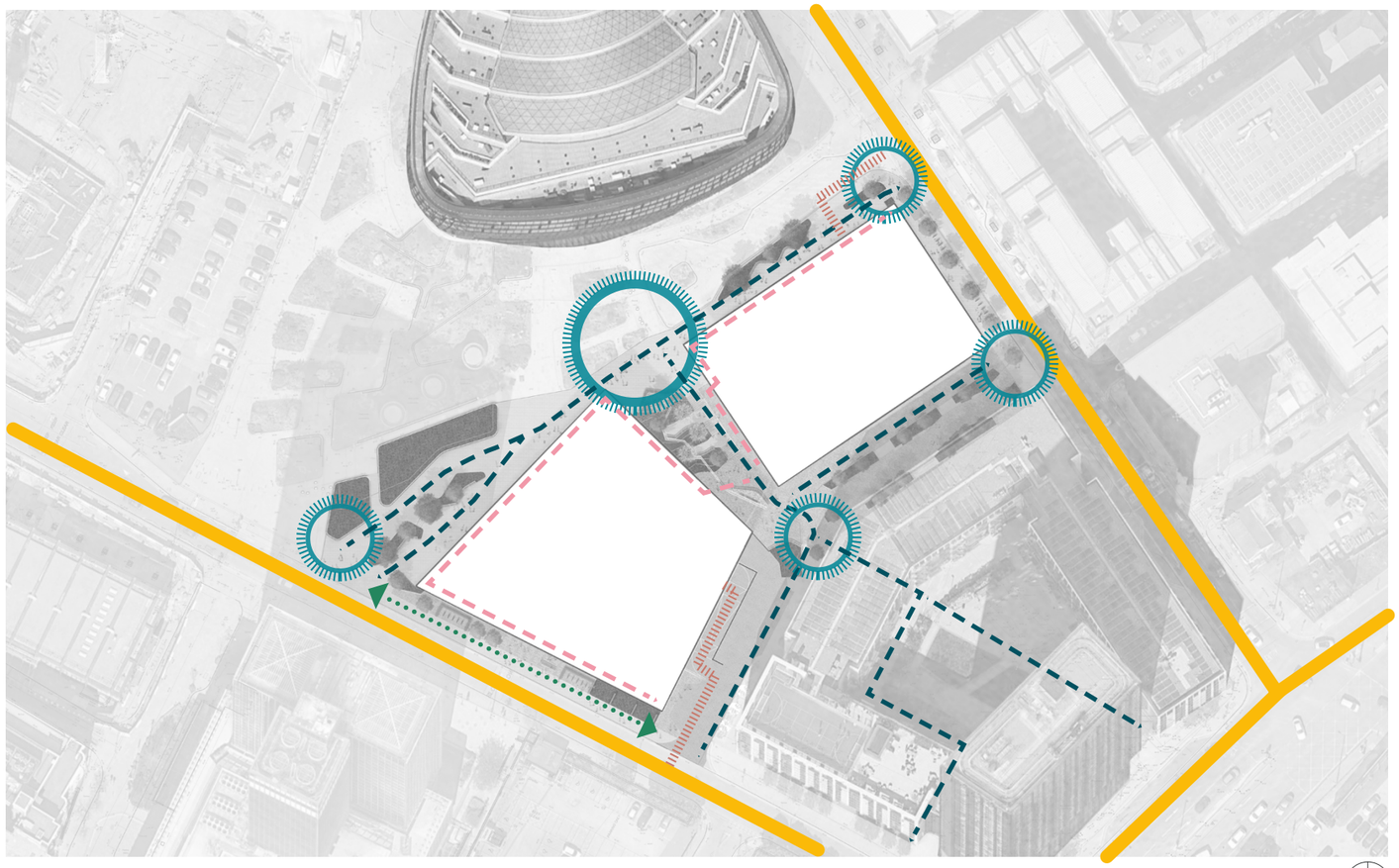
There is a strong relationship between the public realm and new buildings, at both ground level with Angel Square, and upper ground at Thread Street. At Thread Street, the upper ground terraces connect seamlessly with the public realm in order to maximise connectivity.

Cycle provision is accommodated with the existing cycleway on Miller Street, and vehicle access will be kept to a minimum with access to both buildings provided using existing routes off Angel Street (taxi drop off) and Miller Street (service yard).

In addition, the creation of new gateways will help establish strong links with surrounding communities.

Key

- Primary Routes
- Pedestrian Routes
- Upper ground terraces link to Thread Street
- Cycle Provision
- Cycle hub
- Gateways
- Vehicular access to car park



Movement and Connectivity

Wind Mitigation Proposals

The landscape proposals have been developed and informed by wind mitigation requirements and have been included in the wind modelling assessment that is being undertaken by Buro Happold. The positioning of trees and planting throughout the public realm proposals has played a key role in providing mitigation to minimise wind impact across the site. Tree species in these key areas will contain wind tolerant evergreen species.

In addition to tree planting, a series of screens will also be incorporated into the public realm design, these will be positioned primarily to Miller Street and Angel Street with a small number adjacent to the vehicle drop off adjacent to 2 Angel Square.

The garden terraces provide an opportunity for further tree planting and planting beds that will help to lessen wind speeds and create a comfortable environment for people to dwell. There are existing trees that have been planted on Thread Street as part of the Angel Gardens project that also help to buffer the impact of the prevailing winds.

Installation of a wide service trench on Miller Street as part of the wider NOMA servicing strategy has been a key constraint in a corridor where wind mitigation is required. As it is not possible to plant street trees directly into the footpath it is proposed to have bespoke tree planters along this elevation that provide required mitigation but are also moveable if access to underground services is required.



Wind Mitigation Diagram - highlighting tree planting and wind screen locations



Tree planters on Miller Street

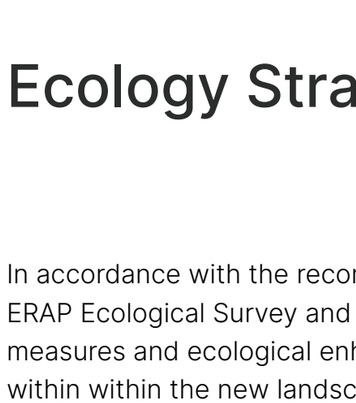


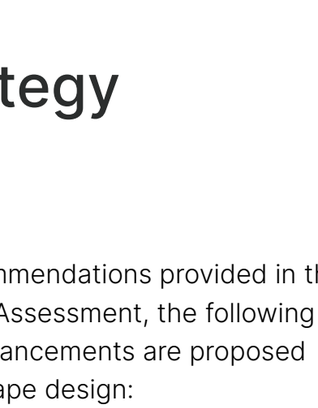
Wind sceens with artwork

Ecology Strategy

In accordance with the recommendations provided in the ERAP Ecological Survey and Assessment, the following measures and ecological enhancements are proposed within within the new landscape design:

- Provision of ornamental planting (enriched with pollinator species), living walls and new tree planting across the site.
- Features for wildlife enhancement in urban areas including: swift nest boxes, bat boxes, and bee hotels. These may be integrated within the building plinth, or attached to landscape elements such as lighting columns or semi mature trees.
- A lighting scheme that involves the use of appropriate products to ensure no excessive artificial lighting shines over the surrounding areas (refer to Lighting Strategy section within this document).





Bat Access Panel and Bee Hotel



Wildlife Enhancement Features - illustrates potential locations for features (exact locations will be developed during the detailed design stage with input from the ecological consultant, ERAP)

Temporary Public Realm Proposals

At this stage it is not yet known how the delivery of the Proposed Development might be phased; there are a number of potential scenarios that could arise dependent on the requirements of future occupiers. These scenarios are outlined below:

Scenario 1: 2 Angel Square delivered first; or, Scenario 2: 3 Angel Square delivered first; or, Scenario 3: Both buildings delivered concurrently.

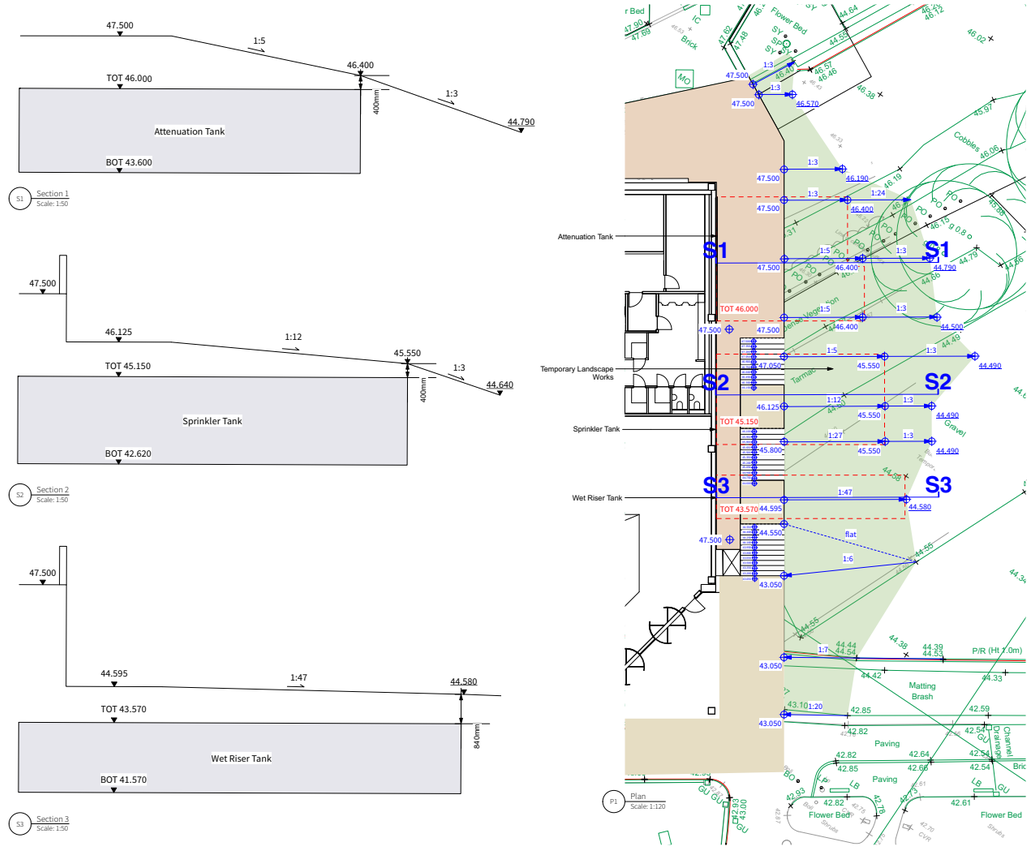
A Phasing Plan has been prepared and identifies the extent of development, including public realm, which would be delivered in Scenario 1 and 2; it has been used to form the completion of the EIA and other technical assessments.

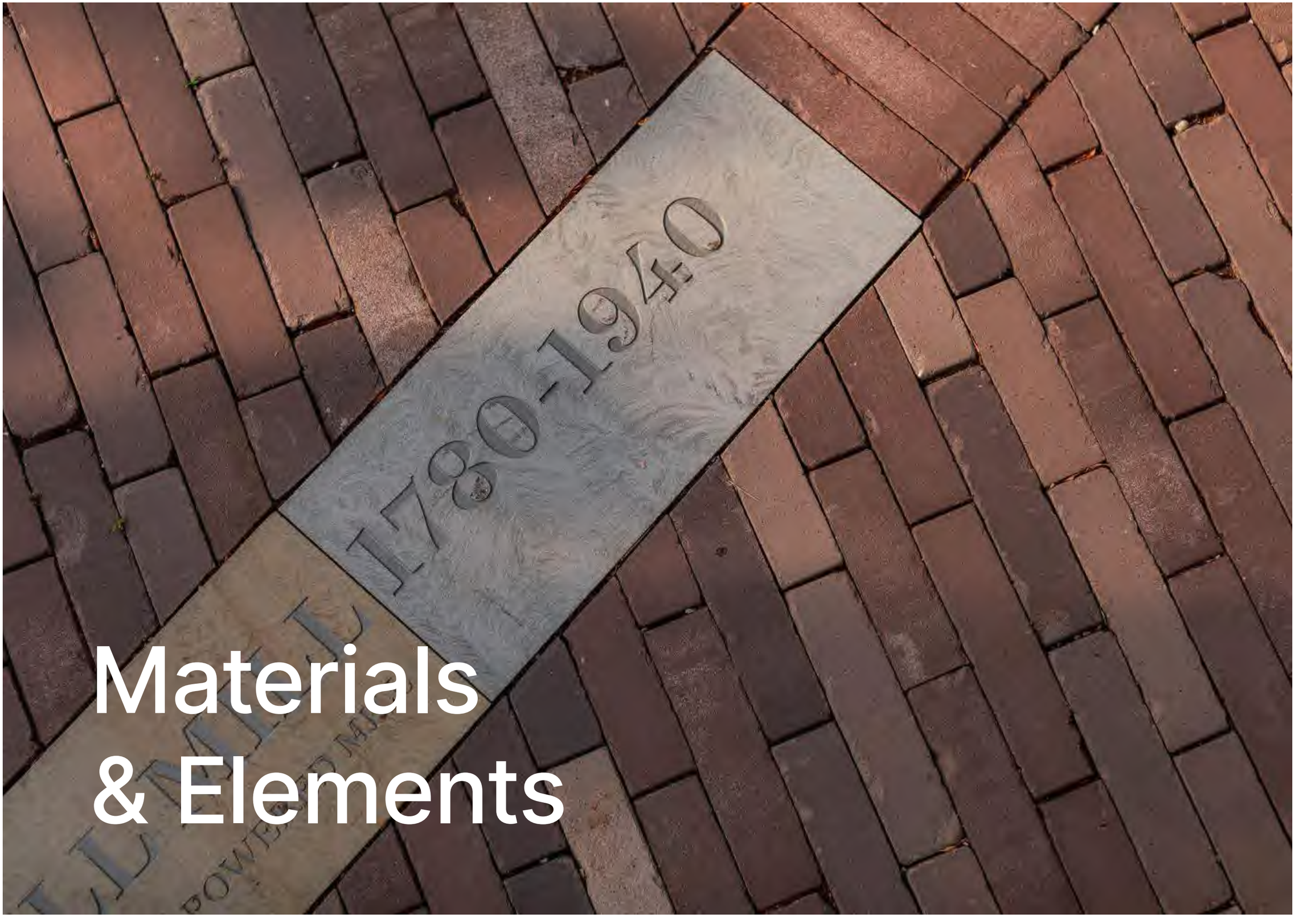
Where the construction of 2 Angel Square or 3 Angel Square is proposed to come forward in advance of the other building, it is proposed that interim arrangements will be in place to ensure the delivery of some public realm.

The most likely scenario is that 2 Angel Square would be delivered first and, in such scenario, a temporary public realm scheme has been developed that has been coordinated with the proposed underground tanks that are required as part of the Proposed Development (attenuation, sprinkler and wet riser).

The indicative interim arrangements should 2 Angel Square be delivered first are shown on this page. It is proposed that there is a planning condition attached to any Decision Notice enabling an interim public realm and boundary treatment to be agreed with the LPA in the event of 2 or 3 Angel Square being delivered in advance of the other; this may include temporary planting or hoarding.

In this scenario, it is proposed that the steps adjacent to 2 Angel Square will be delivered alongside temporary landscaping.





Materials & Elements

Hardworks Materials

The proposed hard landscape material palette takes reference from the surrounding NOMA public realm delivered as part of recent schemes including Angel Square, Angel Gardens and Sadler's Yard. The materials selected have also been considered due to their low embodied carbon.

At upper ground level, Dutch clay paving will extend and integrate the Thread Street public realm. At lower ground level a combination of locally sourced Yorkstone, Cumbrian stone and European granite will provide a coherent material that will extend through Angel Square.







Angel Square - natural stone (yorkstone)





Thread Street - Dutch clay



Salder's Yard - natural stone (granite and Burlington cumbrian stone)

Street Furniture & Wayfinding

The street furniture and wayfinding proposals include a palette that is coherent with the character and design language that has been delivered within high quality public realm schemes across the wider NOMA neighbourhood, such as the Angel Gardens and Sadler's Yard public realm schemes, and includes the following elements:

- Timber seating elements, standalone and integrated into planter edges
- Natural stone and steel edges
- Cycle stands
- Litter bins
- NOMA wayfinding totem (incorporating archaeological interpretation nodes)







Steel tree planters and planter edges



NOMA wayfinding totem



Standalone seating elements

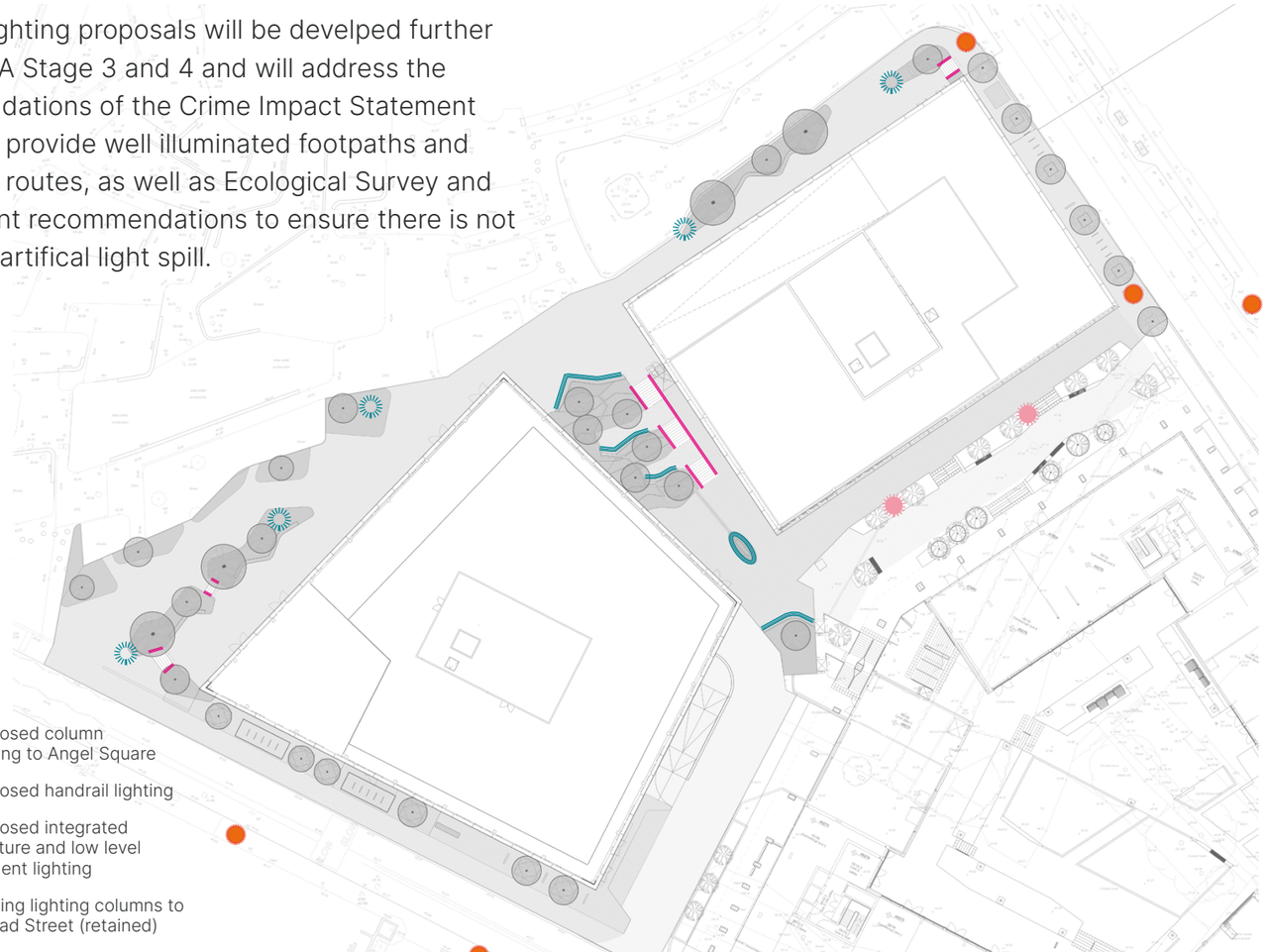


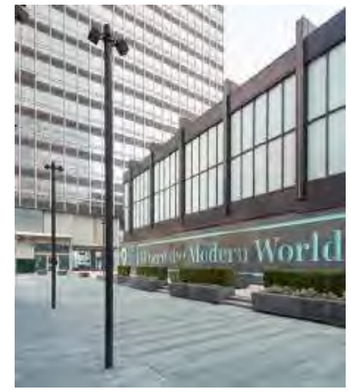
Stone planting edge with timber seating

Public Realm Lighting

A lighting concept design has been developed that incorporates various elements and lighting types in keeping with the approach taken across the wider NOMA public realm and are illustrated on the adjacent images and diagram.

Detailed lighting proposals will be develped further during RIBA Stage 3 and 4 and will address the recommendations of the Crime Impact Statement in order to provide well illuminated footpaths and circulation routes, as well as Ecological Survey and Assessment recommendations to ensure there is not excessive artifical light spill.



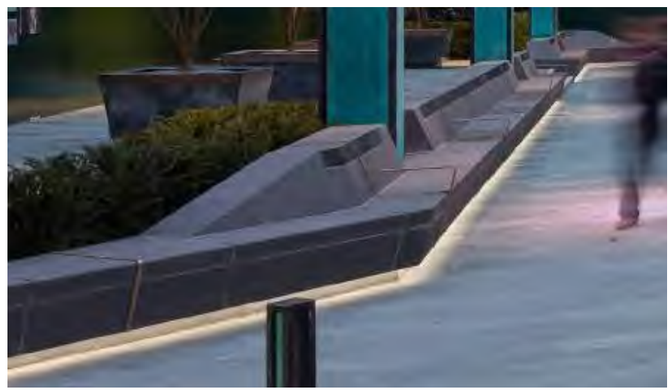




Column lighting (tying into Sadler's Yard)



Integrated handrail lighting



Integrated furniture and low level lighting

Archaeological Interpretation

It is proposed to incorporate a variety of historical interpretation features within the public realm that were developed as part of the original Shudehill Mill Interpretation Strategy. The first phase of archaeological interpretation, as set out under the Angel Gardens planning permission, has already been implemented and comprises six physical and four digital nodes which are proposed to be retained.

The original strategy set out the following elements that were to be further developed and delivered as part of the 2&3 Angel Square public realm:

- 4 nodes - 1 digital, 3 physical
- Bespoke bricks to each node (4no)
- Mill outline paving and marker stones
- Artwork to retaining walls

In addition to these elements, it is proposed to include the water feature as part of the interpretation. This will provide further opportunities for storytelling and interpretation about the history of the site and the fact that the Mill was powered by a water wheel fed by upper and lower balancing ponds. The existing and proposed new archaeological interpretation features set within the landscape are illustrated on the adjacent diagram.



Tree Planting Proposals

Tree species have been chosen which are appropriate and tolerant to the local conditions (climate resilient) and will provide a range of aesthetic and biodiversity benefits.

In particular, trees have been carefully selected to create a balanced mix of evergreen and deciduous, to provide interest throughout the changing seasons, and provide a positive impact for wildlife whilst compensating for the removal of existing trees on site.

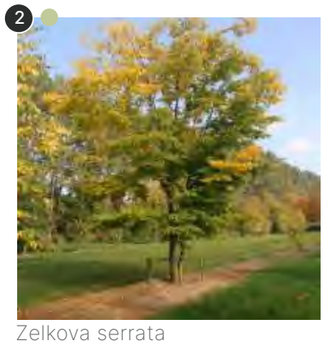
As highlighted earlier in this document, the majority of existing trees have been designated as Category C (of low quality), with 4no Category B trees (of moderate quality). Due to the constraints of the site, the number of new trees that can be planted is limited however there will be a greater number of trees planted as part of the proposals (29no) than are being removed (22no). Moreover, the proposed trees to be planted will be contract grown on site at the NOMA Tree Nursery to ensure they have a high chance of success and will be planted at large sizes to provide instant impact and benefit to the landscape.

The site will also have a high quality management and maintenance programme for the new public realm that will be delivered by the project.

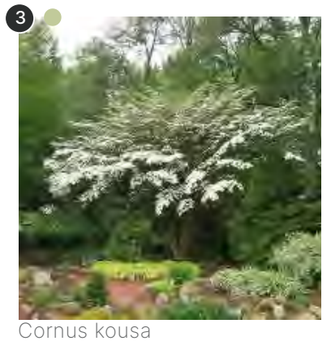




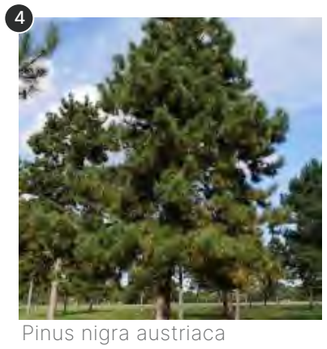
1 Amelanchier lamarckii



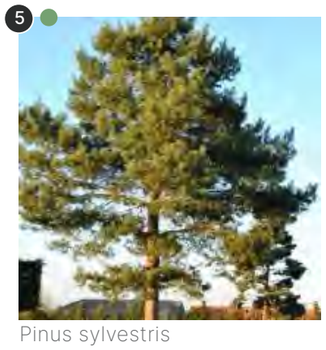
2 Zelkova serrata



3 Cornus kousa



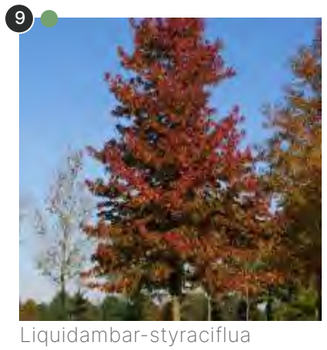
4 Pinus nigra austriaca



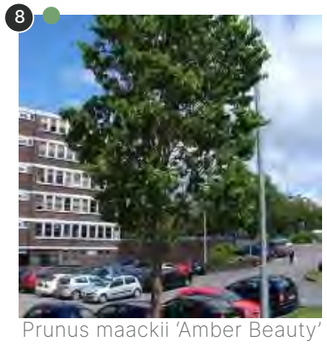
5 Pinus sylvestris



6 Liriodendron tulipifera



9 Liquidambar-styraciflua



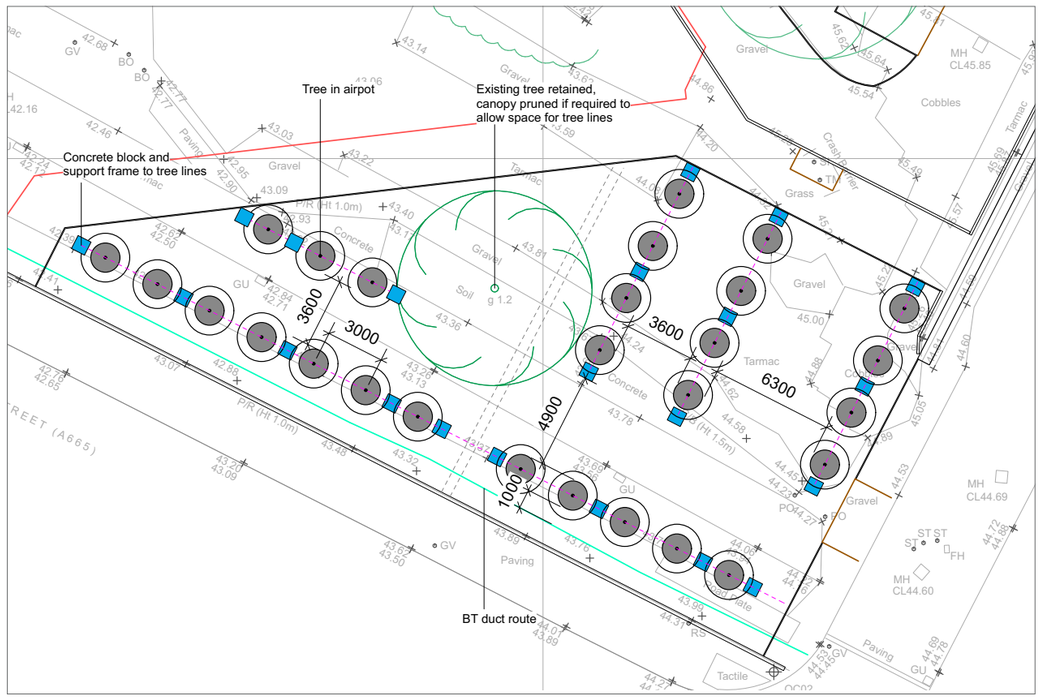
8 Prunus maackii 'Amber Beauty'

NOMA
Tree Nursery

A pioneering approach is being taken to tree procurement for 2&3 Angel Square by utilising space within the site boundary to grow trees for the project.

An area of land adjacent to the temporary NOMA Pavillion Marketing Suite will be set up as a container tree nursery to grow trees for 2&3 Angel Square. It is planned for the nursery to be relocated as 3 Angel Square is delivered, in order to provide an ongoing supply of trees and potentially other nursery stock throughout the life of the project and for future phases of the masterplan.

Along with providing much better chances of success and fast establishment for the trees when finally planted, there are the added benefits of the temporary tree nursery as part of the meanwhile use public realm and setting for the temporary NOMA Pavillion Marketing Suite.





Planting Character

Garden Terraces

The planting scheme adopts two character types that are lead by the site conditions; the Garden Terraces are shaded by the proposed building creating an interesting micro climate for shade tolerant species.









Dense, textured vegeation with shaded canopy layer.



Proposed Plant Species

Garden Terraces

Herbaceous Perennials



Alchemilla mollis



Asarum europaeum



Convallaria majalis 'Rosea'



Epimedium pubigerum



Tiarella 'spring symphony'



Helleborus argutifolius



Silene fimbriata

Pollinator Plants



Sarcococca hookeriana var. humilis



Sarcococca confusa



Acanthus mollis



Lamium maculatum

Shrubs



Geranium sanguineum 'Album'



Hydrangea quercifolia



Vinca minor f. alba

Ferns



Osmunda claytoniana



Dryopteris affinis



Osmunda regalis

Planting Character

Angel Square

At Angel Square there is a more open character, adopting a palette of more sun loving species. All areas of planting including living walls will incorporate pollinator friendly species.





Immersive seating amongst semi-shaded vegetation with pollinator plants



Living walls

Proposed Plant Species

Angel Square

Herbaceous Perennials



Alchemilla mollis



Euphorbia x martinii



Aquilegia vulgaris var. stellata 'Black Barlow'



Aquilegia vulgaris var. stellata 'White Barlow'



Aquilegia vulgaris var. stellata 'Blue Barlow



Geranium × oxonianum 'Wargrave Pink'

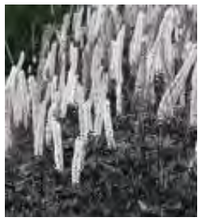
Pollinator Plants



Helleborus argutifolius



Heuchera sanguinea 'White Cloud'



Actaea simplex Atropurpurea Group



Salvia officinalis

Ferns



Dryopteris erythrosora



Asplenium trichomanes



Dryopteris affinis

Grass



Luzula nivea



Luzula sylvatica



Liriope muscari



Helictotrichon sempervirens



Sesleria autumnalis

Leeds

+44 (0)113 824 6413

Liverpool

+44 (0)151 363 1230

London

+44 (0)207 253 5678

Manchester

+44 (0)161 928 9281

Standish

+44 (0)145 360 7080

7.0 Sustainability

7.1
Working towards carbon zero

General

The proposed development of 2 and 3 Angel Square is being brought forward to deliver a more sustainable development than that consented in 2020. For the proposed development a complete analysis of the energy and sustainable aspects of the scheme is being undertaken. This includes the development of an energy strategy, implementation of sustainability best practices and a review of suitable certification methodologies. The building is targeting BREEAM Outstanding.

In support of the planning submission for the scheme an energy statement and environmental standards statement has been prepared.. This will respond to the energy and climate change requirement of Greater Manchester and Manchester City Council for all new buildings to be net zero carbon by 2038.

Overarching Strategy

The building design will seek to place 2 & 3 Angel Square ahead of the curve in terms of the roadmap to achieving net zero carbon by 2038. A whole life carbon assessment will be undertaken to demonstrate the steps taken and the predicted carbon performance of the development. This will make reference to embodied and operational carbon targets set by the UK Green Building Council and the Council's Core Strategy and building regulations part L (2013).

Structural Strategy

During the early design stages key building elements, which are known to be carbon hotspots, such as the superstructure (including the effects on substructure) and façade have been reviewed to ensure the option with the lowest embodied carbon are considered and chosen if favourable against other decision making factors.

- Superstructure frame and upper floors
- Glazing systems and frames
- Façade cladding materials and systems

Superstructure options suitable for the development were reviewed and it was found that a concrete frame with post tension slab was found to have the lowest embodied carbon.

Benefits of Post Tension Slab:

Reduces concrete and steel quantities compared to conventional concrete slabs.
Reduction in concrete and steel leads to lower embodied carbon.
42% embodied carbon reduction comparing to conventional slab.

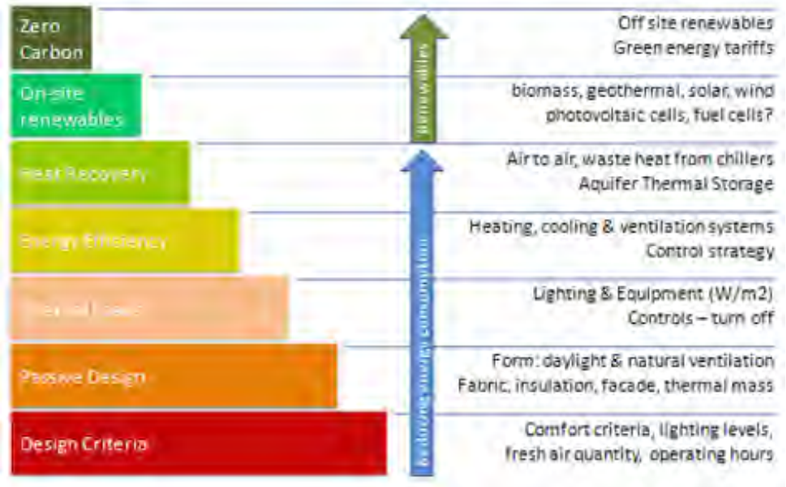
Building Regulation Part L

The works are to comply with the latest version of The Building Regulations Part L2A Conservation of Fuel and Power in New Build Non-Domestic Buildings and the associated Non-Domestic Building Services Compliance Guide. The current design and associated BRUKL report provided as part of this planning application indicates that an EPC A rating should be achieved.

Energy Strategy

In order to achieve this, a "Steps to low carbon" methodology is to be followed as the design progresses, which includes (in order of consideration):

1. The consideration and incorporation of passive design solutions, where feasible.
2. The incorporation of energy efficiency measures through the design of services and improved fabric performance.
3. Calculation of the predicted design energy consumption rates and associated annual CO2 emissions for the development in comparison with the Building Regulations.
4. Assessment of the viability of incorporating low and zero carbon energy sources



Steps to low carbon" methodology

The following bullet points outline the proposed design solutions for the proposed development that will respond to the energy requirements of the Greater Manchester Authority and the Manchester City Council requirement:

- Thermal insulation levels for all building elements to be enhanced beyond minimum Building Regulation standards, thereby substantially reducing the building's heat losses through conduction.
- Air tightness will be prioritised with low levels of permeability preventing heat loss via uncontrolled infiltration.
- Good solar control will be provided by the selection of glazing/shading to avoid overheating in summer and increase passive gains in winter.
- Natural daylighting will improve occupant comfort and reduce the requirement for artificial lighting, saving energy.
- Provision of renewable energy sources such as photo-voltaic cells.
- Fossil fuels will not be used to generate heat or hot water
- Reducing the environmental and social impact of the material used through BREEAM material, including using the Green Guide to Specification to compare the life cycle impacts of different façade options and undertaking material efficiency appraisal to explore opportunities to design out waste through the life of building.
- The results from Building Regulations Part L calculations for the proposed buildings demonstrated that the design strategy has the potential to reduce the regulated carbon emissions by 42.9% for 2 Angel Square and 44.8% for 3 Angel Square over Part L2A 2013 utilising Low and Zero Carbon (LZC) technologies and so are sufficient to meet the planning requirements. This demonstrates that the scheme will easily meet the requirements set out in Core Strategy Policies EN4 and EN6.
- The inclusion of roof-mounted photovoltaics (PV) to both 2 Angel Square and 3 Angel Square to generate electricity use for the buildings. The exact arrangement of the PV is subject to the detailed design stage, the details of which can be agreed through the condition discharge process.
- impacts on embodied carbon, with the chosen solution representing the best option for minimising embodied carbon. All elements of the design, from the building structure, mechanical and electrical equipment down to the internal finishes, have been subject to extensive analysis to strip away unnecessary materials.
- All externally exposed fabrics will be insulated to achieve U-Values surpassing the mandatory standards required by Part L. It is proposed that the building's envelope airtightness will be designed to high standards, minimising unintentional inward or outward leakage, and therefore reducing potential for excess heat losses during the winter months.
- Thermal analysis has been undertaken and has informed the glazing percentage on each façade and orientation. The elevations subjected to higher solar gains have a lower glazing percentage, which allows:
- more efficient mechanical plant;
- Less mechanical plant than comparable buildings with a larger glazing area (lower embodied carbon); and
- Provision of double-glazed windows rather than triple-glazed windows (lower embodied carbon).
- MEP systems have been selected using an options appraisal that considered embodied carbon and operational energy. Air Source Heat Pumps (ASHP) are proposed and provides heating and cooling at high efficiencies and ensures effectual delivery throughout the building distribution, minimising loss.

- Energy Efficient LED lighting to incorporate automatic controls that respond to daylight and human presence to minimise the buildings electrical lighting load.
- The buildings would be fully smart enabled through the use of new technology. The design incorporates a number of innovative features to meet the highest standards of environmental performance and sustainability.
- Minimal on-site car parking is proposed, with a net reduction in car parking on the Site because of the Proposed Development.
- The Site is highly accessible by a range of sustainable transport options. 270 cycle parking spaces are proposed to be provided on the Site, with secure spaces, showers and lockers in the building and spaces in the public realm. The proposed landscaping will also improve linkages for pedestrians and cyclists across NOMA and through to the city centre and surrounding neighbourhoods
- The Proposed Development will introduce further initiatives to promote sustainable travel choices, including through the introduction of a Travel Plan. The Framework Travel Plan sets out a package of measures to reduce the transport and traffic impact of the Proposed Development, including the provision of public transport, walking and cycling information.
- The development seeks to reduce potable water demand by 40% against a baseline building through specification of water efficient sanitaryware. Construction site impacts will be managed through a construction management plan and BREEAM Policy EN17 (Water Quality).
- An operational waste management strategy has been produced; waste streams and quantities have been estimated to ensure sufficient space for storage and collection, as well as opportunities to minimise waste and facilitate high recycling rates in line with Core Strategy Policy EN19 (Waste).
- Construction impacts will be minimised through contractor compliance with BREEAM and through the use of a detailed Construction Management Plan, required by a pre-commencement condition.
- Ecosystems play an important role in regulating climate. They currently absorb roughly half of man-made carbon emissions. Biodiversity and ecosystem services help to adapt to and mitigate climate change. The provision of green infrastructure is integral to the Proposed Development and should improve biodiversity and enhance wildlife habitats in the urban area. There are opportunities for the green infrastructure to link to established wildlife corridors forming links between recent landscaping enhancement within the NOMA Masterplan Area and Angel Meadows, in line with Core Strategy Policy EN15 (Biodiversity and Geological Conservation).
- The Site is located entirely within Flood Zone 1. The drainage strategy has been designed for a 1 in 100 year storm with 40% increase for climate change and includes sustainable drainage measures, including permeable paving and rain gardens.



Sustainability diagram showing design principles, applicable for 2 + 3 Angel Square

8.0 Access

8.1
2 Angel Square

Pedestrian access

Access for office users will be via the main entrance onto Angel Square, and will be step-free from street level.

Vehicular access

There are a limited number of car parking spaces within the lower ground floor of 2 Angel Square. There will be 15 overall, of which there will be 3 electric vehicle charging points and 2 disabled parking bays in each. Lower ground car park to 2 Angel Square will be accessed off the taxi drop off road from Angel Street.

Waste Management

A refuse and recycling room for the offices will be provided at lower ground floor with access to street level and the main core. A total of 20 no. 1100 litre Euro bins are proposed on the basis of collections three times a week.

The ground floor units will provide their own provision within their demise. Please see the Waste proforma within this application for further details.

The commercial operator would be responsible for their own waste under the terms of the lease. Food waste will be stored separately in a specific 240 litre bin. This will be emptied as a minimum every three days but depending on volume of waste can be a daily collection. A pulpable waste would be provided.

The waste operator will also carry out a waste audit at time of completion to fully ascertain occupier and building needs.

Waste will be collected 5 times a week from the taxi drop off road, accessed from Angel Street
Please refer to the Curtins Waste management assessment for further details.



Lower Ground floor

- Pedestrian entrances - commercial access
- Pedestrian entrances - office access
- Fire escapes
- Secondary entrances (plant / services / amenity)
- Secure point
- Gate access
- Car park access
- CCTV Locations

2 Angel Square - Lower ground floor

Fire strategy

2 Angel Square has 2 escape stairs with final exits onto Thread Street at upper ground level. The 2 stairs are separated by a cross corridor door which closes on the fire alarm sounding to form 2 distinct protected lobbies, each with their own riser and smoke extract.

Cyclist Facilities

To encourage green travel and reduce the reliance on cars, a cycle store is proposed at lower ground level in both buildings, which will contain extensive facilities for runners and cyclists. This will include:

1. Secure cycle storage for 122 bikes at ground floor in 2 Angel Square.
2. 4 handbike storage areas are provided.
3. Bike repair area.
4. Self-contained shower and changing cubicles, with vanity area
5. Heated drying rooms for equipment
6. Lockers for personal storage
7. Accessible WC and Shower

The cycle store in 2 Angel Square will have access through a separate door but via the car park onto the taxi drop off road.

Safety and Security

The building will be accessible during normal operating hours via the main entrance, with access controlled by reception staff and electronic pass gates.

Outside standard operating hours the building will operated with access control systems on the main entrances.

CCTV will monitor key areas such as the main entrance and back of house entrances along the service road and Miller Street.

Active frontages at ground floor provides good visual permeability into the building which will improve passive surveillance.

Cycle storage access is via the car park access in a prominent position . Access control systems will be implemented to ensure safe access.

Access to the upper terrace is from the upper office space/ unit. The terrace will be secured at end of standard operating hours via a gated access.

Outside operating hours the building will operate with access control systems on all of the main entrances. Access to the upper terrace will be from the inside only.

Access from the commercial units into the office core will be via access control systems and for tenants only.

CCTV will monitor key areas such as the upper ground terrace and Thread Street to the rear.

Active frontages at upper ground floor provides good visual permeability into the building which will improve passive surveillance.

Please refer to the Crime Impact assessment undertaken by GMPC and submitted as part of this application.



Upper Ground floor

- **Pedestrian entrances - commercial access**
- **Pedestrian entrances - office access**
- **Fire escapes**
- **Secondary entrances (plant / services / amenity)**
- **Secure point**
- **Secure point**
- **Car park access**
- **CCTV Locations**

2 Angel Square - Upper ground floor

8.2
3 Angel Square

Pedestrian access

Access for office users will be via the main entrance off Angel Square, and will be step-free from street level. Access to the flexible ground floor units will be subject to tenant fit-out but can be accessed off the main reception or from their own dedicated entrances off Angel Square- both afford level access.

Vehicular access

There are a limited number of car parking spaces within the lower ground floor of both office buildings. There will be 15 overall, of which there will be 3 electric vehicle charging points and 2 disabled parking bays in each. Access to the lower ground car park in 3 Angel Square is from the service access road off Miller Street.

Waste Management

A refuse and recycling room for the offices will be provided at lower ground floor with access to street level and the main core. A total of 30 no. 1100 litre Euro bins are proposed on the basis of collections three times a week.

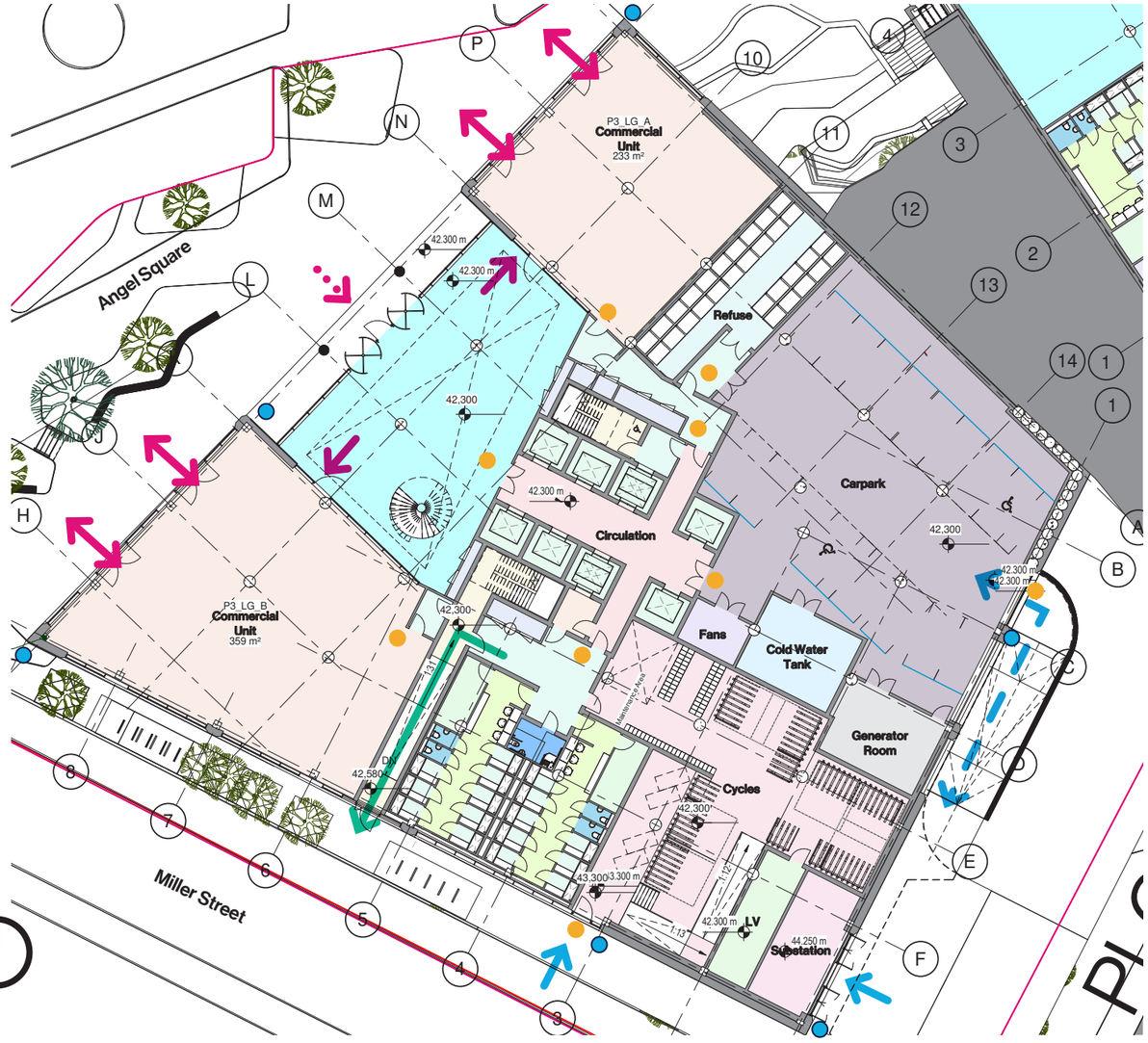
The ground floor units will provide their own provision within their demise. Please see the Waste proforma within this application for further details.

The commercial operator would be responsible for their own waste under the terms of the lease. Food waste will be stored separately in a specific 240 litre bin. This will be emptied as a minimum every three days but depending on volume of waste can be a daily collection. A pulpable waste would be provided.

The waste operator will also carry out a waste audit at time of completion to fully ascertain occupier and building needs.

Waste will be collected 5 times a week from the service access road, accessed from Angel Street

Please refer to the Curtins Waste management assessment for further details.



3 Angel Square - Lower ground floor

Fire strategy

3 Angel Square has 2 escape stairs with the north stair's final escape onto Thread Street at upper ground level. The south stair's final escape is at lower ground level onto Miller Street. The 2 stairs are separated by a cross corridor door which closes on the fire alarm sounding to form 2 distinct protected lobbies, each with their own riser and smoke extract.

Cyclist Facilities

To encourage green travel and reduce the reliance on cars, a cycle store is proposed at lower ground level in both buildings, which will contain extensive facilities for runners and cyclists. This will include:

1. 3 Angel Square will have secure storage for 144 bikes.
2. 4 handbike storage areas are provided.
3. Bike repair area.
4. Self-contained shower and changing cubicles, with vanity area
5. Heated drying rooms for equipment
6. Lockers for personal storage
7. Accessible WC and Shower

The cycle stores and changing rooms in 3 Angel Square will have direct access to Miller Street via its own stair and integrated ramp.

Safety and Security

The building will be accessible during normal operating hours via the main entrance, with access controlled by reception staff and electronic pass gates.

Commercial units will be accessed off Angel Square. Access into the office reception from these units will be limited to standard operating hours.

Outside standard operating hours the building will operate with access control systems on the main entrances.

CCTV will monitor key areas such as the main entrance and back of house entrances along the service road and Miller Street.

Active frontages at ground floor provides good visual permeability into the building which will improve passive surveillance

Cycle storage access is via Miller Street in a prominent position. Access control systems will be implemented to ensure safe access. Access to the upper ground commercial units A and B will be from the terrace or the lower level of unit A and B. The terrace access will be secured at end of usual operating hours via a gated access.

The Gym and Cinema/seminar terraces will be accessed via their respective unit.

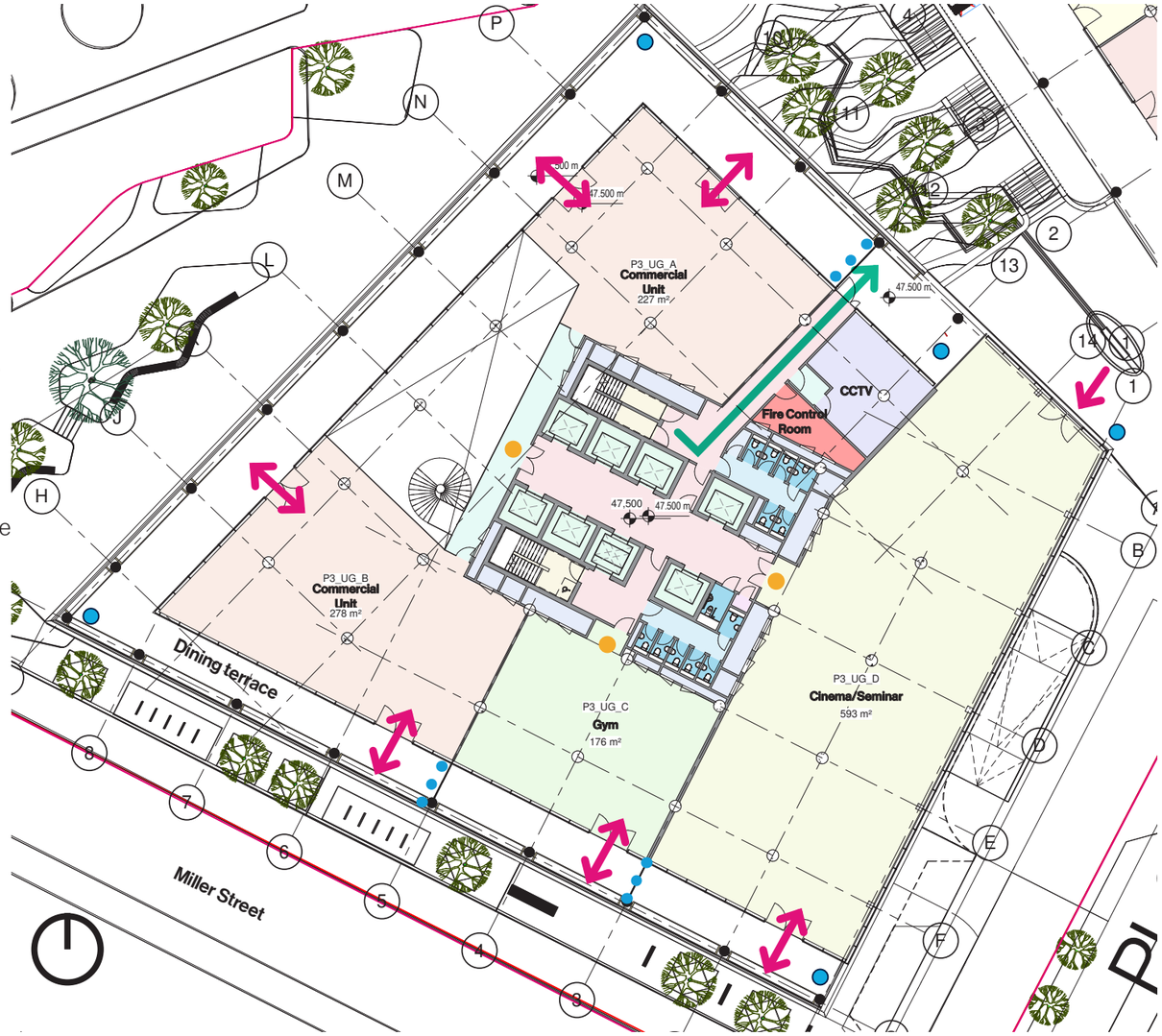
Outside operating hours the building will operate with access control systems on all of the main entrances.

Access from the commercial units into the office core will be via access control systems and for tenants only.

CCTV will monitor key areas such as the upper ground terrace and the service road to the rear.

Active frontages at upper ground floor provides good visual permeability into the building which will improve passive surveillance.

Please refer to the Crime Impact assessment undertaken by GMP and submitted as part of this application.



Upper Ground floor

- **Pedestrian entrances - commercial access**
- **Pedestrian entrances - office access**
- **Fire escapes**
- **Secondary entrances (plant / services / amenity)**
- **Secure point**
- **Gated access**
- **Car park access**
- **CCTV Locations**

3 Angel Square - Upper ground floor

8.3
Inclusive access

The Design for Access Manual was published in January 2000, it provides a practical guidance to inclusive design. It requires developments to be fully inclusive and accessible and the Council's vision is for Manchester to be recognised as the most accessible City in Europe. MCC recognises that inclusive design needs to take account of cross-impairment and community-based issues.

The aim of Design for Access 2 is to provide guidance on best practice. However, it is acknowledged that it may not always be possible to meet all the standards. Design principles that will help to achieve accessible development that are relevant to the Proposed Development include the approach taken to developing inclusive design, the key issues and difficulties of the particular scheme, and the sources of advice and guidance used.

MCC has agreed a hierarchy of road users, which prioritises the needs of pedestrians and disabled people, cyclists, public transport and finally other users. This hierarchy should be respected in the design and layout of all new developments.

Streets should be designed for local people to use. They should be attractive, accessible social spaces, which encourage use by all sections of the local community. Street furniture must be well designed, with clear function and positioned to avoid the creation of obstacles, clutter or confusion.

The Design for Access Manual provides further details and design standards for external areas and for within buildings. These have been considered and incorporated into the development, alongside more up to date statutory accessibility requirements wherever possible.

2 and 3 Angel Square have been designed to meet the requirements of Approved Document M1/M2. and wherever possible the buildings have been designed to meet the guidance in BS 8300:2001 .

Car parking and cycle storage:

10% of parking bays are accessible spaces. This equates to 2 spaces in each building.

4 Hand bike storage areas are to be provided in each building .

Where access from the car park of 2 Angel Square is required this is provided by internal amped access at a gradient which meets approved document M1/M2 and in accordance with Approved document K. Ramps are a minimum of 1500mm wide and .will have landings and barriers and handrails set at suitable levels and distances apart.

Building Access:

All pedestrian entrances and associated thresholds into the building are level. Powered pass doors are provided to access the main reception of each building. Each external access door will have a 1000mm clear width. Internal doors will have at least 850mm clear width.

Access to terraces at upper ground and roof and each of the winter gardens are level with the internal floor level.

Internal Circulation:

All doors to circulation areas and office entrances will be designed to meet Approved documents M1/M2.

Lobby areas are a minimum 1800mm or sized to enable manoeuvring of either a wheelchair or pushchair.

Where glazed screens are proposed between the reception and adjoining commercial units these will receive manifestation in accordance with Approved document K. Colour contrasts will be implemented on walls and floors where appropriate, as will floor finishes in line with Part M1/M2. Acoustic

Vertical circulation is provided by passenger lifts within the central core. All lifts are sized to exceed the minimum dimensions for manoeuvring in Part M1/M2.

A feature stair within the main reception area and 2 escape stairs are proposed within each building. These will incorporate appropriate colour and luminance contrast.

External Circulation:

Due to the significant external level changes an external covered lift is proposed to ensure the public route between the 2 buildings is fully accessible. This is designed with opposing doors to allow a wheelchair user to leave without reversing.

Sanitary accommodation:

A fully accessible wc, shower and changing facility is provided within each building as part of the cycle store and associated changing areas.

Two ambulant WCs and a fully accessible unisex WC are provided on every floor..

8.4
External building signage strategy



2 Angel Street - Northwest elevation



2 Angel Street - southwest elevation



2 Angel Street - southeast elevation



2 Angel Street - northeast elevation

All external signage to both buildings will be consistent in font and approach established for the wider NOMA estate.

Building signage

Branded building signage is proposed above the main entrance to the office and within the entrance reveal. The detail design of this is TBC however the scale of the signage and location above the main entrance door is indicated on the adjacent drawing.

Commercial unit signage

The signage is to be located behind the glazing in a zone above the doors to the commercial unit. This is indicated on the adjacent drawings. External signage to these units will be limited to a 'bus stop' style illuminated sign. This will also be in keeping with the established NOMA branding and wayfinding strategy.

KEY

Commercial signage zone.

'Bus Stop' signage location



Example of NOMA wayfinding totem



Precedent of illuminated bus stop signage



3 Angel Street - Northwest elevation



3 Angel Street - southeast elevation



3 Angel Street - northeast elevation



3 Angel Street - southwest elevation

All external signage to both buildings will be consistent in font and approach established for the wider NOMA estate.

Building signage

Branded building signage is proposed above the main entrance to the office and within the entrance reveal. The detail design of this is TBC however the scale of the signage and location above the main entrance door is indicated on the adjacent drawing.

Commercial unit signage

The signage is to be located behind the glazing in a zone above the doors to the commercial unit. This is indicated on the adjacent drawings. External signage to these units will be limited to a 'bus stop' style illuminated sign. This will also be in keeping with the established NOMA branding and wayfinding strategy.

KEY

Commercial signage zone.

'Bus Stop' signage location



Example of NOMA wayfinding totem



Precedent of illuminated bus stop signage

9.0 Conclusion

9.1
Conclusion

This proposal has been driven from the offset by its context and a drive to create the next generation in sustainable office development. Through thorough analysis of the site and regular dialogue with MCC we believe our proposal will be a positive addition to the area, working harmoniously with the historic fabric of the NOMA heritage estate area but also as a striking, contemporary intervention in the Angel Square masterplan.

We aim to create buildings of high architectural quality with a strong attention to detail - they will be carefully crafted but also robust, durable and will age gracefully - utilising the latest off site methodologies to achieve excellent standards of construction as well as reducing disruption to the city.

The office spaces will be of the highest standards, with health, well-being and sustainability at its core. An open plan ground floor and upper ground floors with a mix of complementary uses and interconnecting spaces will help create an inviting entrance to the building for tenants and the wider community.

By encouraging footfall along Thread Street and maximising the extent of active frontage around the building we believe our proposal will add real vibrancy to the surrounding streets and strengthen links between Angel Meadows to the north and the city to the south. The buildings are designed to be accessible to all.

This proposal will also play a key role within the wider vision for the area as the next phase of the already successful development of NOMA.

10.0 Drawing list

10.1
CP drawing list

1.	947-CPA-ZZ-ZZ-DR-A-0100 Existing site plan	1:500	A1
2.	947-CPA-ZZ-ZZ-DR-A-0101 Site location Block Plan	1:1250	A3
3.	947-CPA-ZZ-ZZ-DR-A-0102 Topographical Plan	1:500	A1
4.	947-CPA-ZZ-00-DR-A-0150 Phasing Plan	1:500	A1
5.	947-CPA-ZZ-ZZ-DR-A-0600 Street Scene Sections - P2 (Sheet 1 of 2)	1:100	A1
6.	947-CPA-ZZ-ZZ-DR-A-0601 Street Scene Sections - P2 (Sheet 2 of 2)	1:100	A1
7.	947-CPA-ZZ-ZZ-DR-A-0602 Street Scene Sections - P3 (Sheet 1 of 2)	1:100	A1
8.	947-CPA-ZZ-ZZ-DR-A-0603 Street Scene Sections - P3 (Sheet 2 of 2)	1:100	A1
9.	947-CPA-ZZ-ZZ-DR-A-0700 Site Sections - NW	1:500	A1
10.	947-CPA-ZZ-ZZ-DR-A-0701 Site Sections - SE	1:500	A1
11.	947-CPA-ZZ-ZZ-DR-A-0702 Site Sections - NE	1:500	A1
12.	947-CPA-ZZ-ZZ-DR-A-0703 Site Sections - SW	1:500	A1

2 Angel Square GA information (Planning purposes)

13.	Accommodation Schedule	NTS	
14.	947-CPA-P2-ZZ-DR-A-0120 NIA/GIA Area plan	1:500	A0
15.	947-CPA-P2-ZZ-SH-A-0121 GEA plan	1:500	A0
16.	947-CPA-P2-ZZ-DR-A-0200 GA plan - Level LG	1:100	A1
17.	947-CPA-P2-ZZ-DR-A-0201 GA plan - Level UG	1:100	A1
18.	947-CPA-P2-ZZ-DR-A-0202 GA plan - Level 01	1:100	A1
19.	947-CPA-P2-ZZ-DR-A-0203 GA plan - Level 02	1:100	A1
20.	947-CPA-P2-ZZ-DR-A-0204 GA plan - Level 03	1:100	A1
21.	947-CPA-P2-ZZ-DR-A-0205 GA plan - Level 04	1:100	A1
22.	947-CPA-P2-ZZ-DR-A-0206 GA plan - Level 05	1:100	A1
23.	947-CPA-P2-ZZ-DR-A-0207 GA plan - Level 06	1:100	A1
24.	947-CPA-P2-ZZ-DR-A-0208 GA plan - Level 07	1:100	A1
25.	947-CPA-P2-ZZ-DR-A-0209 GA plan - Level 08	1:100	A1
26.	947-CPA-P2-ZZ-DR-A-0210 GA plan - Level 09	1:100	A1
27.	947-CPA-P2-ZZ-DR-A-0211 GA plan - Level 10	1:100	A1
28.	947-CPA-P2-ZZ-DR-A-0212 GA plan - Level 11	1:100	A1
29.	947-CPA-P2-ZZ-DR-A-0213 GA plan - Level 12	1:100	A1
30.	947-CPA-P2-ZZ-DR-A-0214 GA plan - Level 13	1:100	A1
31.	947-CPA-P2-ZZ-DR-A-0215 GA plan - Roof	1:100	A1
32.	947-CPA-P2-ZZ-DR-A-0600 GA Elevations - NW COLOUR	1:100	A0
33.	947-CPA-P2-ZZ-DR-A-0601 GA Elevations - SW COLOUR	1:100	A0
34.	947-CPA-P2-ZZ-DR-A-0602 GA Elevations - SE COLOUR	1:100	A0
35.	947-CPA-P2-ZZ-DR-A-0603 GA Elevations - NE COLOUR	1:100	A0
36.	947-CPA-P2-ZZ-DR-A-0700 GA Sections AA	1:100	A0
37.	947-CPA-P2-ZZ-DR-A-0701 GA Sections BB	1:100	A0
38.	947-CPA-P2-ZZ-DR-A-0800 Bay Study (sheet 1 of 4) - COLOUR	1:20	A0
39.	947-CPA-P2-ZZ-DR-A-0801 Bay Study (sheet 2 of 4) - COLOUR	1:20	A0
40.	947-CPA-P2-ZZ-DR-A-0802 Bay Study (sheet 3 of 4) - COLOUR	1:20	A0
41.	947-CPA-P2-ZZ-DR-A-0803 Bay Study (sheet 4 of 4) -COLOUR	1:20	A0

3 Angel Square GA information (Planning purposes)

42.-	Accommodation Schedule	NTS	-
43.	947-CPA-P3-ZZ-DR-A-0120 NIA/GIA Area plans	1:500	A0
44.	947-CPA-P3-ZZ-SH-A-0121 GEA Area plans	1:500	A0
45.	947-CPA-P3-ZZ-DR-A-0200 GA plan - Level LG	1:100	A0
46.	947-CPA-P3-ZZ-DR-A-0201 GA plan - Level UG	1:100	A0
47.	947-CPA-P3-ZZ-DR-A-0202 GA plan - Level 01	1:100	A0
48.	947-CPA-P3-ZZ-DR-A-0203 GA plan - Level 02	1:100	A0
49.	947-CPA-P3-ZZ-DR-A-0204 GA plan - Level 03	1:100	A0
50.	947-CPA-P3-ZZ-DR-A-0205 GA plan - Level 04	1:100	A0
51.	947-CPA-P3-ZZ-DR-A-0206 GA plan - Level 05	1:100	A0
52.	947-CPA-P3-ZZ-DR-A-0207 GA plan - Level 06	1:100	A0
53.	947-CPA-P3-ZZ-DR-A-0208 GA plan - Level 07	1:100	A0
54.	947-CPA-P3-ZZ-DR-A-0209 GA plan - Level 08	1:100	A0
55.	947-CPA-P3-ZZ-DR-A-0210 GA plan - Level 09	1:100	A0
56.	947-CPA-P3-ZZ-DR-A-0211 GA plan - Level 10	1:100	A0
57.	947-CPA-P3-ZZ-DR-A-0212 GA plan - Level 11	1:100	A0
58.	947-CPA-P3-ZZ-DR-A-0213 GA plan -Plant	1:100	A0

59.947-CPA-P3-ZZ-DR-A-0214 GA plan - Roof	1:100	A0
60.947-CPA-P3-ZZ-DR-A-0600 GA Elevations - NW COLOUR	1:100	A0
61. 947-CPA-P3-ZZ-DR-A-0601 GA Elevations - NE COLOUR	1:100	A0
62.947-CPA-P3-ZZ-DR-A-0602 GA Elevations - SE COLOUR	1:100	A0
63.947-CPA-P3-ZZ-DR-A-0603 GA Elevations - SW COLOUR	1:100	A0
64.947-CPA-P3-ZZ-DR-A-0700 GA Sections AA	1:100	A0
65.947-CPA-P3-ZZ-DR-A-0701 GA Sections BB	1:100	A0
66.947-CPA-P3-ZZ-DR-A-0800 Bay Study (sheet 1 of 4) - COLOUR	1:20	A0
67. 947-CPA-P3-ZZ-DR-A-0801 Bay Study (sheet 2 of 4) - COLOUR	1:20	A0
68.947-CPA-P3-ZZ-DR-A-0802 Bay Study (sheet 3 of 4) - COLOUR	1:20	A0
69.947-CPA-P3-ZZ-DR-A-0803 Bay Study (sheet 4 of 4) -COLOUR	1:20	A0

CARTWRIGHT PICKARD

cartwrightpickard.com
@cartpickarch
@cartwrightpickard

London Studio
1 Canal Side Studios
8–14 St Pancras Way
London NW1 0QG
T 020 7554 3830

Manchester Studio
Unit 308, Ducie House
Ducie Street
Manchester M1 2JW
T 0161 914 7444

Leeds Studio
Studio 4, Cross York Street Studios
Cross York Street
Leeds LS2 7BL
T 0113 360 9444