

The Urban Design of Sydney Metro Martin Place Station Precinct

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Prepared for
Macquarie Corporate Holdings Pty Limited
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The Urban Design of Sydney Metro
Martin Place Station Precinct

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Acknowledgements

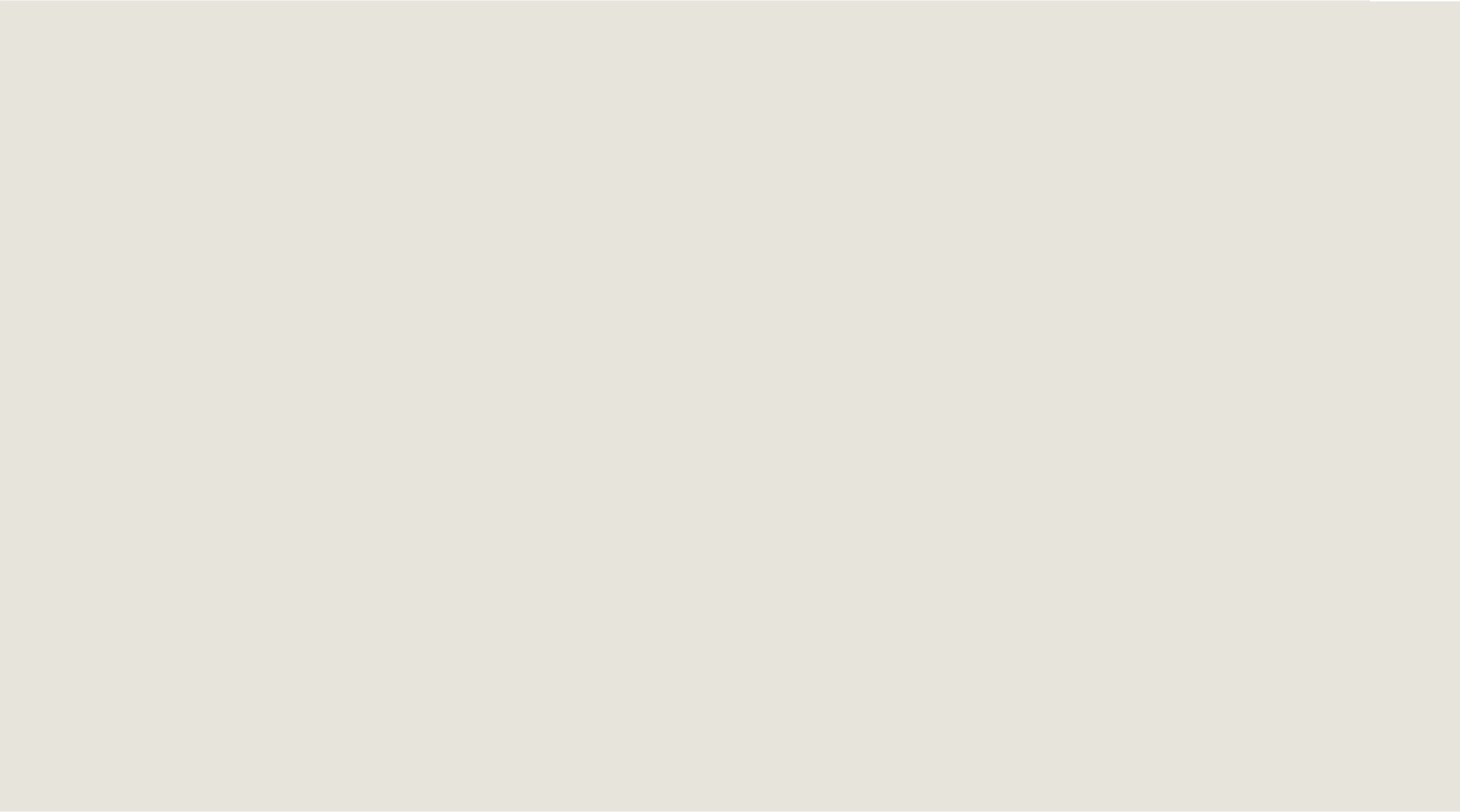
Grimshaw and JPW (Architects) have provided drawings and advice to assist in the preparation of this report.

Attributes

This report was prepared in collaboration with Howard Tanner who provided Heritage advice. The Historical Context (3.1) was prepared by TKD Architects and the heritage principles were prepared by Howard Tanner and TKD Architects.

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Executive Summary



1 Executive Summary

The NSW Government has committed to the redevelopment of Martin Place Station precinct to significantly improve public transport infrastructure including a new Metro line integrated with all existing major rail services. The scope of the development is significant with the new Martin Place Metro Station envisioned as one of the busiest within the CBD servicing an anticipated 40,000 people/hour in each direction and 30 trains/hour through the CBD in peak periods. (EIS) Martin Place and Central will be the key interchange points between the new Metro and existing network.

Macquarie Corporate Holdings Pty Limited (Macquarie) is proposing to create a world class integrated transport and commercial precinct centred on Martin Place and connecting through to Chifley and Richard Johnson Squares to the north.

This proposal has unique public benefits only available through the opportunity to design and deliver simultaneously, the proposed Martin Place Metro Station and two new 'over station' commercial towers. One of these commercial towers is on Martin Place. The other is on Hunter Street connected to the rear of 50 Martin Place with the objective of consolidating Macquarie's presence in Sydney and enhance its existing global headquarters at 50 Martin Place.

The public benefits attributable to the integration of and associated 'over station' redevelopment include: the significantly enhanced Metro station public concourses, station boxes and connections to an extended area of the city to the north; the opportunity for improved station access and amenity above and below grade through the design of the two towers; the development of 9-19 Elizabeth St; the reduction in redevelopment time and negative impacts of construction through the synchronous delivery of the station and towers; and the proven capacity to ensure the achievement of design excellence through Macquarie in collaboration with the NSW Government, Transport for NSW, the Department of Planning & Environment, the City of Sydney and other stakeholders.

This report establishes the urban framework, objectives and design principles for the design of the Martin Place Metro Station and associated 'over station' development. The intent of this report is to support current development standards established for the City of Sydney and refine these standards in the public interest to reflect current, new and emerging urban conditions as well as the increasingly important role of the precinct in the commercial life of the city.

These emerging conditions include: the closure of George Street to vehicles and the new pedestrian link to Martin Place; the anticipated increase in commercial development capacity envisaged by the City of Sydney particularly to the north of Martin Place; the continued increase in residential uses within the CBD; and the recognition of Sydney's growing significance in the national economy and its role as a global centre with a specific focus on the region of East-Asia.

The Macquarie proposal recognises, conserves and enhances the historic character and elements within Martin Place, Elizabeth, Castlereagh and Hunter Streets, and Chifley and Richard Johnson Squares. All historic attributes of these important places in Sydney are respected and supported by the proposal. The proposal enhances the historic attributes of these parts of Sydney by removing unsympathetic buildings and infrastructure including the railway station entrance within Martin Place, and subjecting new buildings and infrastructure proposals to the new standards of design reflected by contemporary City of Sydney requirements and befitting of Australia's most important global city.

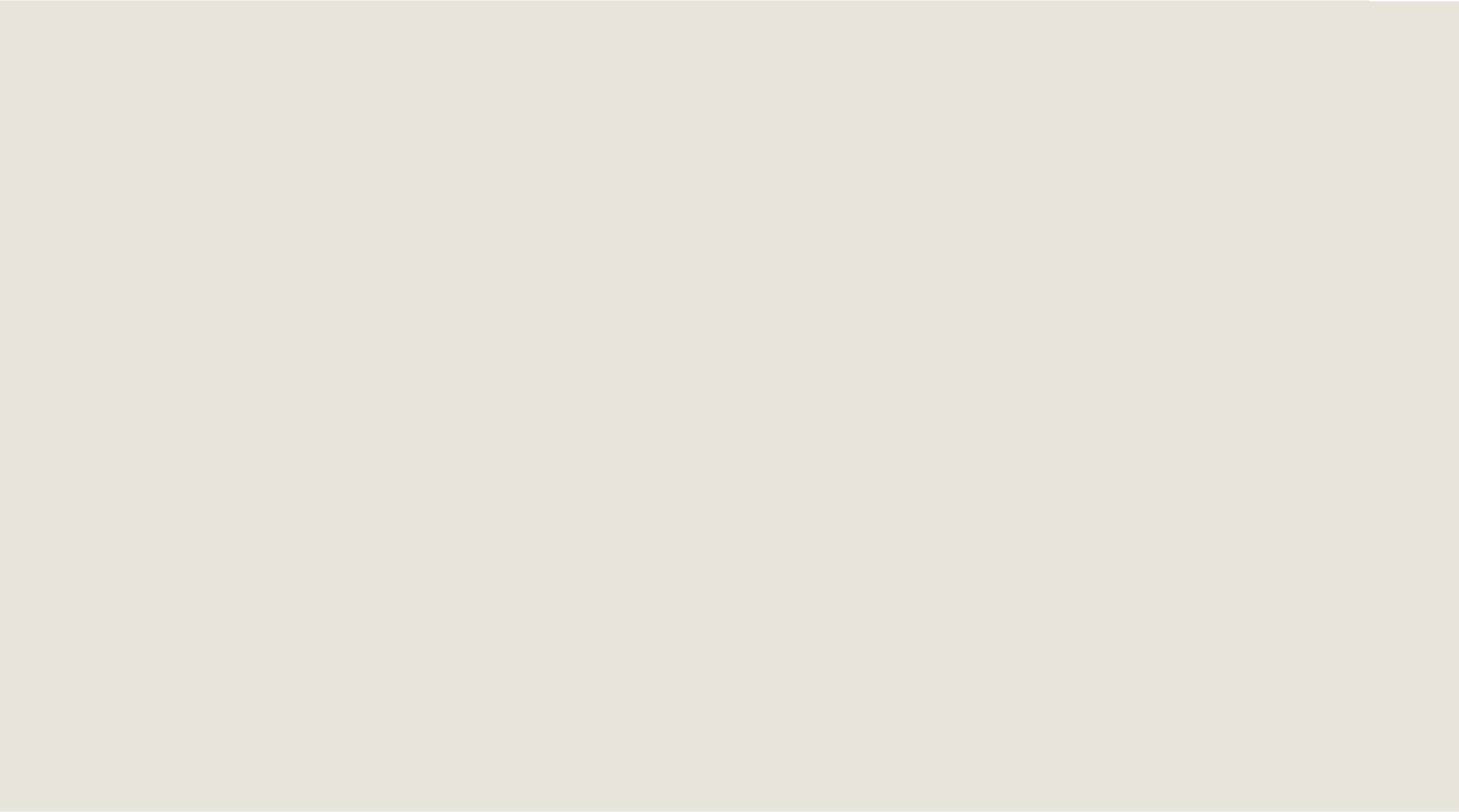
The proposed Martin Place Station redevelopment improves the legibility of the historic character of the precinct by removing unsympathetic elements within the public domain and changing the existing built form to enhance relationships between historic and new architecture. The interplay of historic and contemporary design undertaken to standards not previously achieved characterises the transformation of the precinct. As the level of investment is of state significance, it gives greater opportunity for the historic role of Martin Place to be restored as a representation, in physical form, of Sydney's most important interface between government and corporate enterprise.

The proposed Martin Place Station precinct also improves public access and amenity above and below grade to a level only achievable through the integrated approach of the development concept. The new station infrastructure extends a public concourse linking through to Hunter Street with the capacity to introduce enhanced levels of daylight at the major station egress points. The synchronicity of the design and construction of the elements of the proposal ensures the maximisation of design opportunity and minimisation of negative impacts associated with construction.

Connected to the new pedestrian orientated George Street and linking through to Macquarie Street and beyond to the north of the city at Chifley and Richard Johnson Squares, the redevelopment of Martin Place station and the 'over station' towers will establish at the heart of Sydney, a well-designed, pedestrian and public transport orientated new precinct.

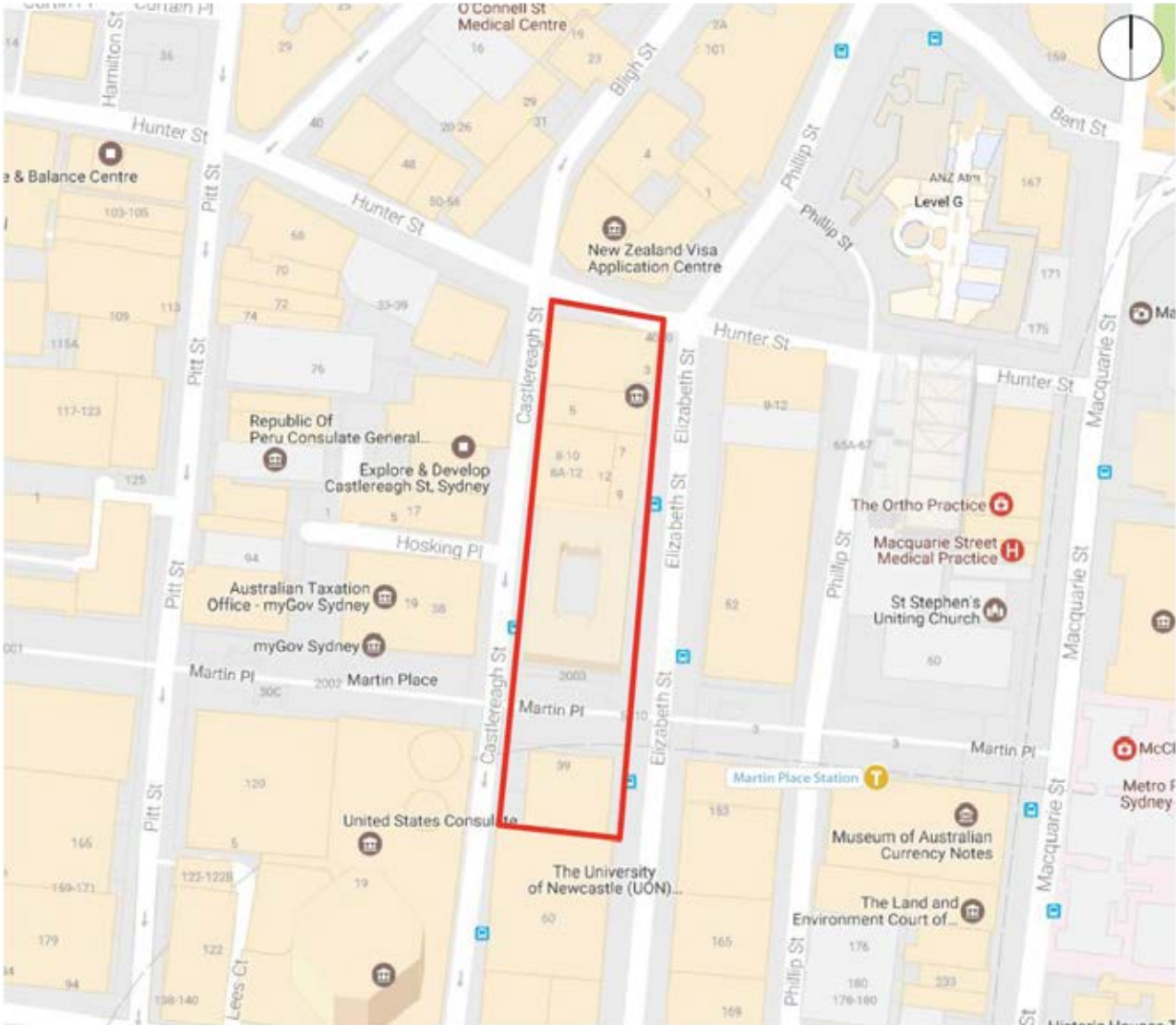
Importantly, this level of transport integrated commercial development relieves pressure on other areas within Sydney with more sensitive environmental conditions in the public domain and without opportunity for excellent access to public transport. The proposal aligns greater levels of density with public transport infrastructure and excellent standards of public amenity at Sydney's historic heart.

The Macquarie vision reflected in the urban design framework for the Martin Place Station precinct significantly enhances public amenity for residents, the workforce and visitors. The scale of the urban renewal is designed to re-establish Martin Place as the heart of the city. The urban framework of the proposal is conceived to be of strategic significance to the future of the City of Sydney and more broadly, Australia in the Asia-Pacific region by guiding major new infrastructure to a higher standard of public amenity than the already ambitious intent of the NSW Government and improving the capacity of Sydney as a location for commercial enterprise of global relevance.



Martin Place Station as a New Precinct in Sydney

01



 The Precinct

Figure 1 Location map of the Precinct
(Source: Google maps and Ethos Urban)



 The Sites

Figure 2 Aerial photo of the North and South Site
(Source: Nearmap and Ethos Urban)

1 Martin Place Station as a New Precinct in Sydney

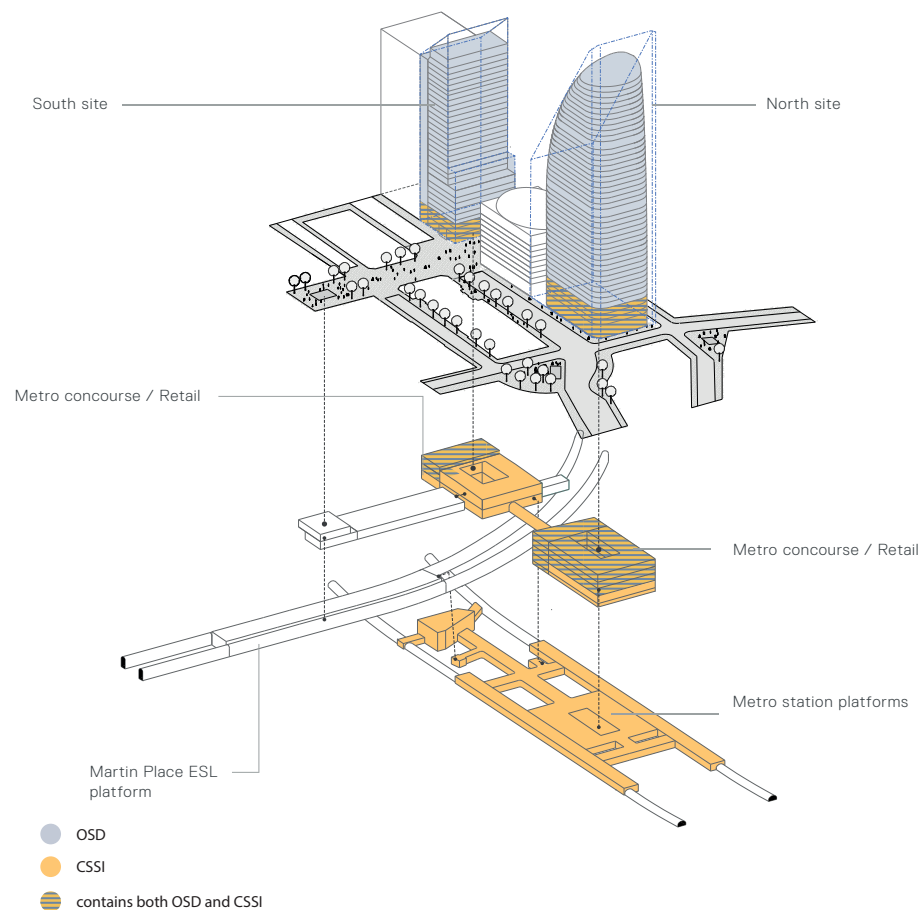


Figure 3 3d massing diagram describing the various components of the proposal

1.1 Background

The New South Wales (NSW) Government is implementing Sydney's Rail Future (Transport for NSW, 2012), a plan to transform and modernise Sydney's rail network so that it can grow with the city's population and meet the needs of customers in the future.

Sydney Metro is a new standalone rail network identified in Sydney's Rail Future. The Sydney Metro network consists of Sydney Metro Northwest (Stage 1) and Sydney Metro City & Southwest (Stage 2).

Stage 2 of the Metro entails the construction and operation of a new Metro rail line from Chatswood, under Sydney Harbour through Sydney's CBD to Sydenham and eventually onto to Bankstown through the conversion of the existing line to Metro standards. The project also involves the delivery of seven (7) new Metro stations, including Martin Place.

This step-change piece of public transport infrastructure once complete will have the capacity for 30 trains an hour (one every two minutes) through the CBD in each direction catering for an extra 100,000 customers per hour across the Sydney CBD rail lines.

On 9 January 2017, the Minister for Planning approved the Stage 2 (Chatswood to Sydenham) Metro application lodged by Transport for NSW (TfNSW) as a Critical State Significant Infrastructure (CSSI) project (reference SSI 15_7400).

TfNSW is also making provision for future Over Station Development (OSD) on the land it has acquired for the Stage 2 Sydney Metro project, including land acquired for the purposes of delivering Martin Place Station. The OSD development is subject to separate applications to be lodged under the relevant provisions of the EP&A Act.

An Unsolicited Proposal submission has been lodged by Macquarie to the NSW Government for the delivery of a single fully integrated station/OSD solution for the new Sydney Metro Martin Place Station Precinct.

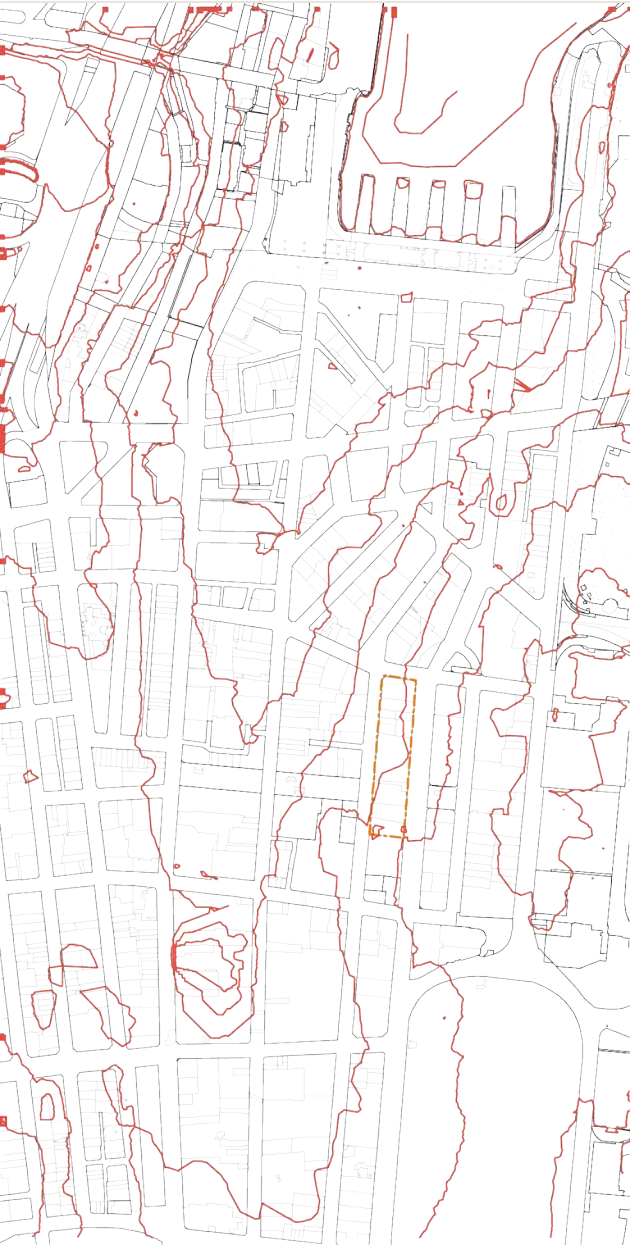
1.2 Site Description

The Sydney Metro Martin Place Station Precinct (the Precinct) project relates to the following properties (refer to Figure 1):

- 50 Martin Place, 9 – 19 Elizabeth Street, 8 – 12 Castlereagh Street, 7 Elizabeth Street, 5 Elizabeth Street, and 55 Hunter Street (North Site);
- 39 – 49 Martin Place (South Site); and
- Martin Place (that part bound by Elizabeth Street and Castlereagh Street).

The urban design study relates only to the North and South sites, (refer to figure 2) but the report also provides objectives for Martin Place. The land acquired for the Sydney Metro Martin Place Station is the same as for the Macquarie proposal, except that the Macquarie proposal includes the two properties north of Martin Place owned by Macquarie, namely 50 Martin Place and 9-19 Elizabeth Street.

Located close to the centre of the Sydney CBD, the Precinct comprises of the entire City block bounded by Hunter Street, Elizabeth Street, Martin Place and Castlereagh Street; that portion of Martin Place located between Elizabeth Street and Castlereagh Street and the northern most property in the block bounded by Martin Place, Elizabeth Street, Castlereagh Street, and King Street. Together it constitutes an above ground site area of approximately 9,400 square metres, with a dimension from north to south of approximately 210 metres and from east to west of approximately 45 metres. It incorporates a significant portion of one of Sydney's most revered public spaces – Martin Place.



_1 Topography
The precinct at four critical datums



_2 Below ground



_3 Pedestrian street level



_4 Tower level

- Topography Contours
- Proposed Metro Rail
- Existing Major Rail
- Buildings / Parks
- Towers
- Existing Built Form

1 Martin Place Station as a New Precinct in Sydney

1.3 Sydney Context

The City of Sydney is evolving at a rapid rate. Major public and private investment is driving projects such as the light rail, Sydney Metro, the repurposing of George Street as a pedestrian orientated street, Barangaroo, Darling Quarter, Quay Quarter, and the redevelopment of Darling Harbour, to transform the future character and amenity of the urban environment for its citizens and visitors.

The objective of the New South Wales government led new Metro at Martin Place Sydney is to deliver new world class railway infrastructure from Martin Place to Hunter Street. The proposal has created a unique opportunity to integrate Macquarie owned property assets and public property to deliver new civic infrastructure with enhanced public benefits. The potential of the proposed scope of development is to create a distinctive new precinct that extends from Martin Place to Chifley and Richard Johnson Squares to the north, with exceptional levels of amenity for visitors, workers and residents of Sydney.

Importantly, the proposal for the new commercial building on Hunter Street is to link it with the existing and historic building at 50 Martin Place. It will augment Macquarie's existing global headquarters, and consolidate some of the current Sydney offices in one location.

Macquarie proposes to undertake the design and delivery of this project in close collaboration with Transport for NSW and guided by NSW Planning and Environment, the Council of the City of Sydney and other stakeholders. To this end it has augmented in-house expertise with global leaders in specialised disciplines to establish a team reliably able to design and deliver to world standards, a project of this consequence, scale and complexity. The distinct advantage inherent in this proposal is the integration of the design and delivery of the station with the new buildings above (the OSD), enabling public domain improvements that would be otherwise more difficult or impossible to implement as well as the completion of the redevelopment in a shorter time frame.

The Macquarie vision for the Martin Place Station precinct is of strategic significance to the future of the City of Sydney and more broadly, Australia in the Asia-Pacific region. The urban outcomes set out in this proposal are distinctive from economic, social and environmental perspectives. The project is best understood as urban renewal at a scale that will positively influence Sydney's future as a destination for investment in a global context and its desirability as a place to live as well as work for its residents. Linking all major rail networks, the transformation of the Martin Place Station is positioned as a catalyst for the enhancement of Sydney's most important historic location for global enterprises.

This proposal revitalises the historic role of Martin Place and ensures its distinctive character is conserved with all new work designed to improve the public domain. An important transport node is the Martin Place station and associated development that delivers a new urban environment for Sydney referred to in this report as the Martin Place Station precinct. With the transformation of George Street as a pedestrian orientated experience integrating light rail public transport, the role of Martin Place as a special pedestrian experience is also enhanced. George Street connected to Macquarie Street will become a continuous pedestrian experience to redefine the pedestrian heart of Sydney coincident with Sydney's most important historic places.

1.4 Purpose of Report

The purpose of this report is to guide the new Metro at Martin Place Sydney as a precinct including its buildings, associated public open space and publicly accessible private land. Specifically, the urban analysis takes into account Sydney as it has evolved today and the major urban changes underway to establish the rationale for site specific design controls that directly address the proposed Martin Place Station infrastructure and opportunities that arise through the integration of associated development.

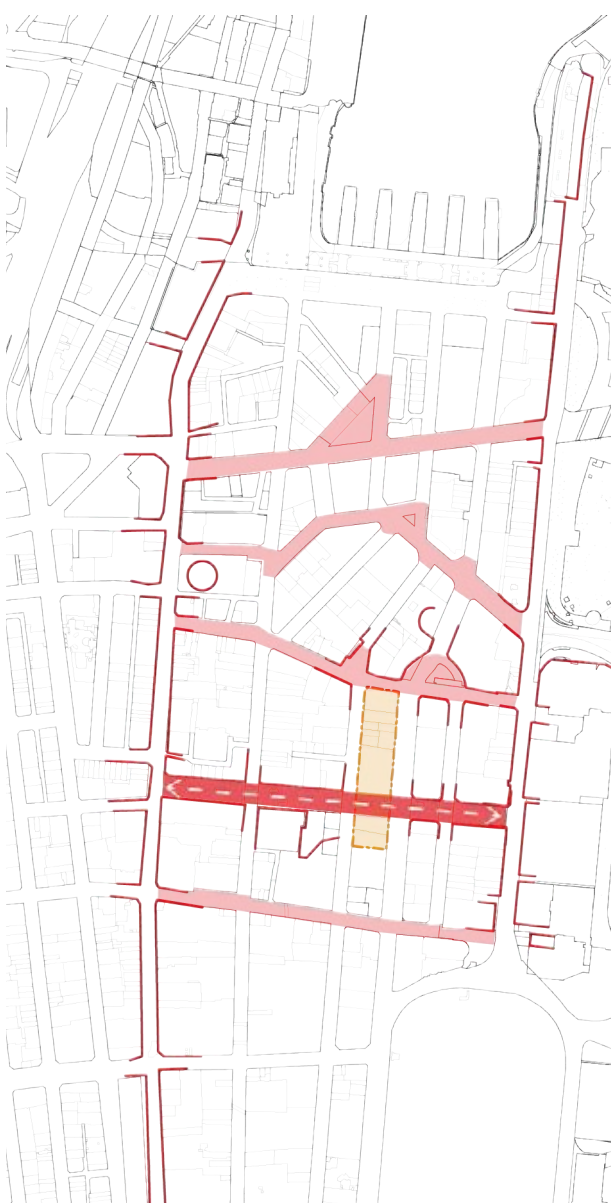
This report outlines an urban framework with objectives and principles based on new analytical material. This framework acknowledges and supports established development controls within the City of Sydney. Variance from these controls is a direct response to the specific conditions of this part of the city and of the unforeseeable design opportunity reflected by the scale of the proposed urban renewal including the integration of the station and above ground development in a contiguous design and delivery process. Any variance to existing development controls maintains the underlying objectives of the controls. Where new controls have been introduced the intent is to complement existing objectives and shape the urban morphology that eventuates from this development to enhance the distinctive attributes of Sydney.



The precinct connects three major public spaces in the city - Martin Place, Chifley and Richard Johnson Square



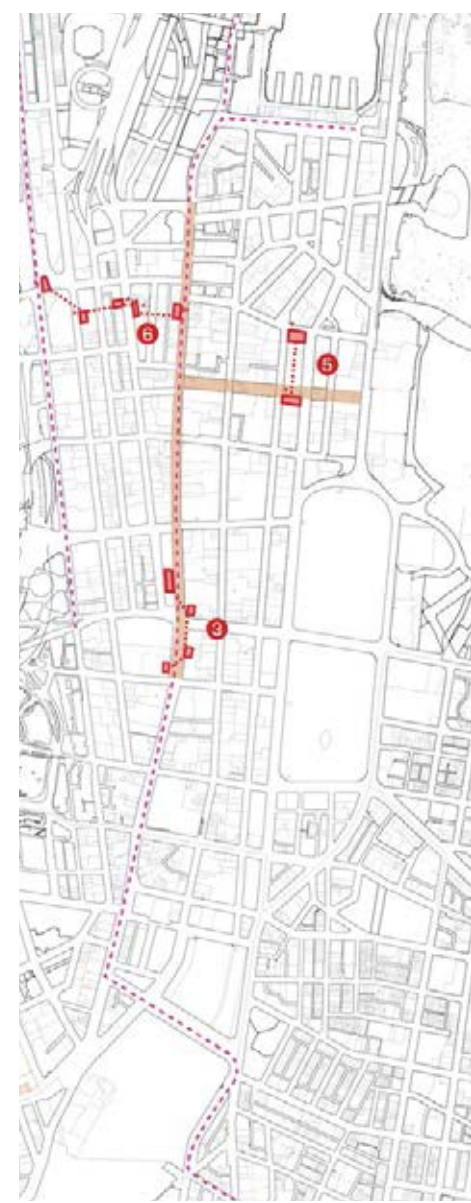
The specific quality and relationship of the public open space of Martin Place station provides a distinct identity when compared to the other city stations



Martin Place forms the only pedestrian connection between the major civic streets of the city (Macquarie Street) and the commercial street (George Street)



Hunter Street forms the junction between two historic street grids - the orthogonal versus the topographic



The future pedestrianisation of George Street creates an extended pedestrian public domain in the city, connecting 3 of the major city stations; Martin Place, Wynyard and Town Hall.

1.5 The Martin Place Station Precinct in Context

The Martin Place Station precinct will play an important new urban role within the city. The scale of new investment and the significance of the railway infrastructure reinforces the historic primacy of this precinct in Sydney. The characteristics of the urban morphology that results from the potential changes to this part of Sydney will need to reflect and reinforce its historic significance and the distinctive qualities that define its character as a special place in the city.

The specific urban conditions that influence further design initiatives in the precinct are as follows.

The station creates a new transport interchange at the existing Martin Place Station. It brings together the Eastern Suburbs heavy rail line with the new Sydney Metro line. It also creates new connections to reconfigured bus, taxi, cycle and pedestrian networks within an important part of the city.

The precinct is located at the junction between the political, civic, and financial hubs of Australia's most significant global city. At the heart of the historic city, it is comparable in area to the new commercial/financial precinct at Barangaroo South that together reinforce Sydney's prominent role as Australia's most important city in a global context.

The station can connect three of the most important public open spaces of the city; Martin Place, Chifley Square and Richard Johnson Square. This relationship between built form, use and major civic space is unmatched within the City of Sydney.

These public space intersections and relationships establish a distinctive character to the new railway station when compared to all other central Sydney railway stations.

Martin Place is the most significant connection between the Sydney's major civic street (Macquarie) and commercial street (George). It is also distinctive through its width, straightness, pedestrian character and history as Sydney's most important civic, ceremonial and symbolic space.

Martin Place and George Street will be a substantial new pedestrian experience connecting three of the major city rail stations, Town Hall, Wynyard and Martin Place as well as the new light rail network. These connections and the urban spaces in which they occur, are likely to become a defining urban characteristic of Sydney in the future.

The pedestrianisation of George Street, contiguous with Martin Place, ensures higher availability of solar access and sky views in the heart of the city and delivers a significant new level of urban amenity in Sydney.

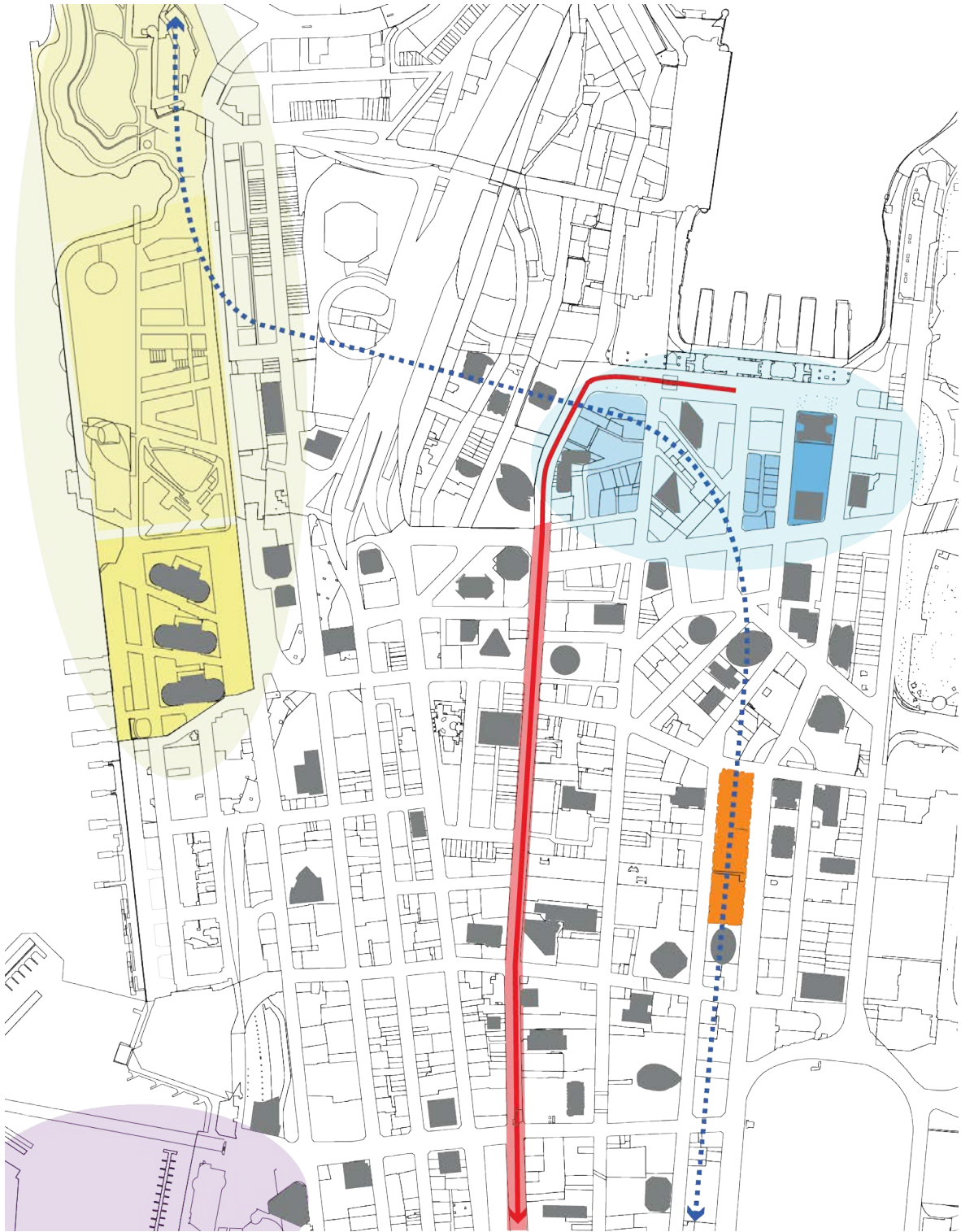
Hunter Street forms an important street in the public domain of the city and in the city's skyline. It is at the intersection of two historic road networks - the approximately orthogonal southern grid of the city and the largely topographic, more organic layout of the original core of the city to the north.

This urban analysis provides the justification for and underpins the proposed built form controls that are a specific response to the particular requirements of this important new infrastructure project in Sydney. The specific design principles aim to ensure that the full value of this new transport interchange and associated development is captured for the benefit of the public domain of Sydney.

Legend of stations

- 1. Central Station
- 2. Museum Station
- 3. Town Hall Station
- 4. St. James Station
- 5. Martin Place Station
- 6. Wynyard Station
- 7. Circular Quay Station

The City of Sydney showing current and future major development sites



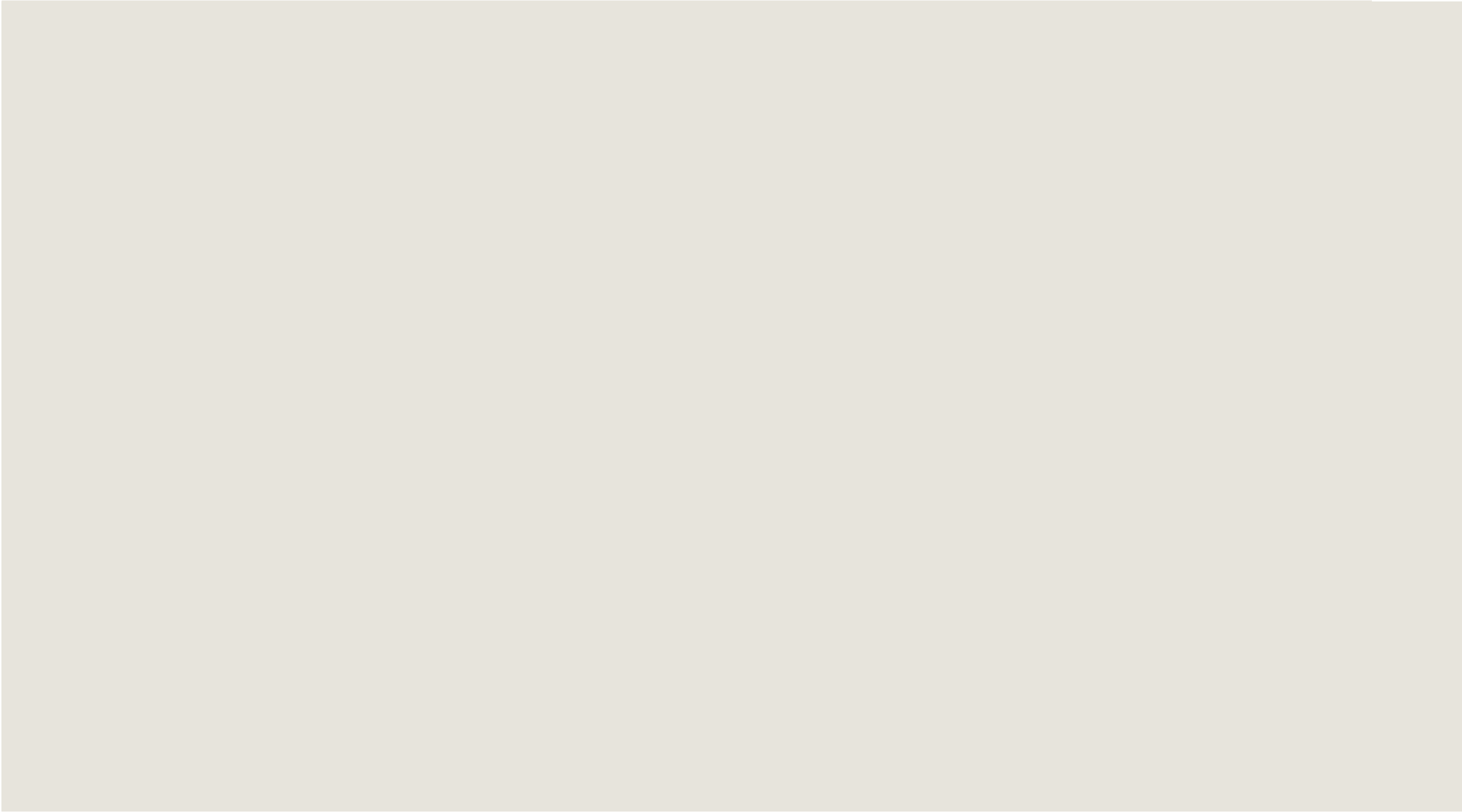
- Site / Martin Place Precinct
- Barrangaroo
- Circular Quay
- Darling Harbour
- Major Streets
- Major Rail (Metro)
- Light Rail

1.6 The Urban Analysis of the Martin Place Station Precinct

The urban analysis summarised in this report is focussed on the proposed redevelopment acknowledging the historic importance of Martin Place, Chifley Square and Hunter Street. The impact of the proposed growth in capacity of the railway station itself and the opportunity to significantly improve connectivity between the historic squares, streets and precincts of Sydney is recognised as a major potential urban asset underpinning improved urban amenity and sustainability with social, economic and environmental benefits.

The urban analysis concentrates on the impact on historic elements of the precinct in the context of proposed changes to existing movement systems, open space systems, built form, and their inter-relationships. The analysis takes into account committed future urban projects to establish a more realistic urban framework for the assessment of the Martin Place Station proposal. The intent is to deliver through up to date mapping and related data, an understanding of the characteristics of the proposed Martin Place Station precinct in a contemporary context.

The outcome of this study is to establish an urban framework and design principles to protect and enhance the amenity and character of the public domain. Design considerations include questions of connectivity, accessibility, safety, solar access, wind effects, daylight, reflectivity, material character, built form relationships, activity and use, urban history and related attributes that together articulate the distinctive qualities of Sydney's urban environment. The purpose of undertaking a review of contemporary urban planning and design controls and establishing where relevant, appropriate interpretations of these controls, modifications or new controls is to ensure unanticipated development initiatives and changed urban conditions deliver in full, long term public benefits reflecting the scale and vision of the public infrastructure investment. The impact of this scale of urban renewal is potentially transformative for the City of Sydney and is consequently of state significance.



Precinct Design Objectives

02

2 Precinct Design Objectives

2.1 Movement Objectives

The objectives for the Martin Place Station precinct have been formed from a consideration of City of Sydney planning controls, environmental and amenity requirements, heritage assessments and Tf NSW station and urban design requirements. These objectives provide guidance for the development of urban design principles to guide the design of the precinct and in due course, the evaluation of the proposal in detail. This document should be read in conjunction with Sydney Metro's project vision and design objectives.

2.1.1 Enhance the relationship of George Street and Martin Place through to Macquarie Street as a unique pedestrian orientated experience.

Martin Place is Sydney's most important civic space linking Macquarie Street to George Street and defined by a high standard of civic architecture, both contemporary and historic. The western boundary of Martin Place on George Street will be the only place in the city where two major pedestrianised streets intersect when the current construction of the light rail and closure of George Street to general vehicular access is completed by 2020. The Martin Place Station precinct is to improve pedestrian amenity in the block between Castlereagh and Elizabeth Streets on Martin Place including access to the station employing high standards of design to enhance rail user experience.

2.1.2 Create an integrated transport exchange

The new Metro Station will be connected to the existing network of all major rail lines in Sydney. The rail user experience is to ensure an easily navigated, seamless and integrated transport interchange.

2.1.3 Maximise connectivity to the street grid for egress at corners.

Rail egress/ingress areas at the ground plane are to connect to streets and open spaces directly with ease of wayfinding and orientation. Corner locations for rail egress/ingress points are favoured to maximise connectivity and the integration of the ground plane with the subterranean station.

2.1.4 Ensure below grade wayfinding aligned with on grade orientation.

The subterranean access routes for the Martin Place Station are to align with the geometry and orientation of the street and block above to enhance wayfinding and orientation for rail users. At each major station destination, daylight access to subterranean publically accessible spaces is to be incorporated into the station design.

2.1.5 Ensure universal access in the precinct

Access from the station to Martin Place, Hunter, Elizabeth and Castlereagh Streets is required to be direct, easy, non-discriminatory and well designed with appropriate civic scale and architectural quality. Martin Place must have primacy as the ingress/egress point when compared to connections to other streets. Access at the Hunter Street end of the station is to be at the corners opposite Chifley and Richard Johnson Squares.

2.1.6 Provide adequate pedestrian amenity at grade

Pedestrian amenity at grade must include adequate solar, rain, wind, flood and overland flow protection, be direct, easy to navigate, non-discriminatory and well designed with appropriate civic scale and architectural quality.

2.1.7 Provide exceptional rail user amenity below grade

The station design and public concourses must be delivered to the highest standard of civic architecture to enhance the rail user experience and to create a memorable new place for Sydney, recognizable as a special station throughout the world.

2.1.8 Transport led 24 hour precinct

The station design is to be integrated with a wide range of facilities and services to ensure activity throughout the day and on weekends.

2 Precinct Design Objectives

2.2 Open Space Objectives

2.2.1 Conform to the City of Sydney Sun Access Plane for Hyde Park and Martin Place

The redevelopment of the Martin Place Station precinct and associated commercial buildings must conform to the requirements of the City of Sydney solar access plane for Hyde Park.

2.2.2 Improve ground plane amenity on Martin Place, Elizabeth, Castlereagh and Hunter Streets

The redevelopment of the Martin Place precinct requires improved covered access at grade without the use of awnings on Martin Place. The architecture is to provide the required amount of publically accessible open space at grade to accommodate increased rail patronage. Wind conditions at grade are to be equal to or improved when compared to current conditions. Solar access, sky view, reflected light and daylight at grade and on the elevations of built form, is to be assessed as an integrated experience from a pedestrian perspective and across the whole precinct ensuring a balanced analysis of negative and positive impacts.

2.2.3 Ameliorate flood conditions and overland flow on Hunter Street

The pedestrian environment on and around Hunter Street is subject to flooding and significant overland flow events. Flood and overland flow conditions are to be ameliorated at station ingress/egress points to minimise negative impacts on pedestrian flow.

2.2.4 Integrate interiors, public access on private land and the topography of the public domain.

Martin Place and Hunter Street slope from east to west. The developments on the North and South Sites are required to integrate the levels of adjacent public open space to provide seamless, non-discriminatory access and improved open space amenity at grade.

2.2.5 Enhance Hunter Street landscape

Hunter Street is to retain and enhance its landscape character between Chifley and Richard Johnson Squares. The existing copse of trees is to be maintained or, if replaced, improved to continue the landscape orientated character of this block of Hunter Street at grade.

2.2.6 Connect Martin Place with Chifley and Richard Johnson Squares

The proposal has the capacity to increase public activity on, and the connectivity between Martin Place, Chifley and Richard Johnson Squares, three important civic spaces at the centre of Sydney's commercial district. The design of potential subterranean connection between these three civic spaces must ensure it becomes a desirable destination, underpinning the importance of the precinct as a new special place in Sydney.

2.2.7 Public Art

The Tom Bass sculpture is to be reinstated or relocated within the public domain of the precinct. Opportunities for the integration of public art in the precinct as a whole are encouraged and a public art strategy included in future detailed planning applications.

2 Precinct Design Objectives

2.3 Built Form Objective

2.3.1 Reinforce the distinctive attributes of each block on Martin Place

Each block on Martin Place is distinctive within an overall well defined civic character dominated by fine architecture made from stone and terra cotta materials. The conservation of the character, urban form and amenity of Martin Place is a primary responsibility of any design proposal. The improvement of the South Site in the block bounded by Elizabeth and Castlereagh Streets requires the establishment an appropriate architectural form and expression that reflects the distinctive attributes of the built form in this block including the distinctive attributes of historic buildings to the east up to Macquarie Street. New height and setback controls that vary from current City of Sydney development controls are required to reinforce the distinctive attributes of Martin Place from Castlereagh Street to Macquarie Street.

2.3.2 Require the commercial and station address of the South Site to be on Martin Place

The conservation of the character, urban form and amenity of Martin Place is a primary responsibility of any design proposal. The improvement of the block bounded by Elizabeth and Castlereagh Streets requires the establishment of the primary address of the commercial building and station to be on Martin Place.

2.3.3 Enhance built form relationships on Hunter Street

Hunter Street between Chifley and Richard Johnson Squares is formed by the intersection of changing street grid patterns. The sloping topography between the two squares is enhanced by landscape and made memorable by important historic buildings at corners. It is a street that connects the two squares. The setback of the built form on Hunter Street is to generally align with the predominant set back of adjoining conditions to the east to establish a consistent street wall and to maintain the character of Hunter Street as a connecting element between Chifley and Richard Johnson Squares.

2.3.4 Maintain and enhance the character of Elizabeth Street

Elizabeth and Castlereagh Streets provide unusually long vistas between Martin Place, Chifley and Richard Johnson Squares. The height of the built form of the former Qantas House on Chifley Square approximately corresponds to the height of 50 Martin Place, both visible from a southerly aspect. The improvement of the block bounded by Elizabeth and Castlereagh Streets requires the recognition of the aligned height between 50 Martin Place and the former Qantas House on Chifley Square to reinforce the distinctive characteristics of this block within the City of Sydney.

2.3.5 Maintain and enhance built form relationships on Castlereagh Street

Castlereagh Street is less prominent as a continuous vista. The relationship of the built form between the redeveloped North Site and 50 Martin Place is of primary importance requiring the scale, proportion and height of the historic structure to be acknowledged in the design of the new building.

2 Precinct Design Objectives

2.3 Built Form Objective

2.3.6 Establish a defining threshold to the Martin Place Station precinct

Elizabeth and Castlereagh Streets leading to Martin Place from the south and north play an important role in establishing the primacy of this precinct in the hierarchy of streets and blocks in the city. The reduced setbacks for the proposed towers for both sites create distinctive thresholds to the space as envisaged by Jahn Gehl in his 2015 design proposals for Martin Place with the City of Sydney. In addition to this, no tower can be built to the south of the South Site due to the solar access requirements of Hyde Park. This assists in establishing a unique development framework to articulate, in built form, the primacy of Martin Place as an urban space, from this direction.

This strategy is supported by the equivalent setbacks to the North Site building. The relationship between these two towers establishes the identity of the station precinct within the overall urban morphology of the city.

The North Site's tower also responds to the zero setbacks to 8 Chifley Square and the Deutsche Bank building. As a group these buildings define both Chifley and Richard Johnson Squares as well as the changing street grid at Hunter Street.

It is appropriate that the built form of the North Site's tower on Elizabeth and Castlereagh Streets also has distinctive attributes to establish the primacy of Martin Place Station precinct in the city and the location of the main egress/ingress points of the station.

The built form of the North and South Sites on Elizabeth and Castlereagh Street can vary the predominant set back requirements established within City of Sydney development controls to zero in order to establish a distinctive character at threshold locations of the Martin Place Station precinct.

2.3.7 Maximise development potential and density

The amount and standard of urban amenity and public open space within the Martin Place Station precinct is very high compared to many other precincts in Sydney. The expansion of an integrated new rail station linking established civic spaces with new pedestrian connections that lead to George Street,

Chifley and Richard Johnson Squares delivers exceptional access to public transport. These changes re-establish Martin Place as the heart of the city. The extent and significance of the transport orientated pedestrian environment underpins the importance of maximising development potential on the South and North Sites and the importance of maintaining acceptable levels of amenity within the public domain. It is imperative that high levels of density on property above and adjacent to civic spaces and public transport of this standard is achieved in alignment with more sustainable and livable urban futures.

2.3.8 Create distinctive architectural design on the North Site

At Hunter Street, the built form is to take into account the unusual intersection of different street grids, topography, the importance of corner access to the railway station, the role of the architecture as a global symbol of the Macquarie headquarters, and the relationship to the historic building at 50 Martin Place. The architecture is to reflect the unique urban qualities of the precinct and the symbolic role as the headquarters of a major corporation.

2.3.9 Minimise cores and services at the boundaries of the public domain

Required core and service zones are to be minimised to ensure active uses on street frontages are maximised.

2.3.10 Respond to the distinct built form of the 60-66 Hunter Street, otherwise known as the City Mutual Building and the former Qantas House

At the corner of Castlereagh Street and Hunter Street the built form of the new building must sympathetically respond to the distinct built form of the historic CML Building and former Qantas House opposite.

2 Precinct Design Objectives

2.3 Built Form Objective

2.3.11 Enhance street activation

The anticipated increase in public transport use and expected population of development on the North and South Sites demands a balance of retail and community uses. These uses are to be located and designed to activate the existing streets with high levels of on grade pedestrian amenity and quality shop front designs, signage and wayfinding.

2.3.12 Create a world class working environment

The new buildings will become the working environment for more than 10,000 people. The architecture is to deliver premium levels of amenity including exceptional end of journey facilities and publically accessible private space above grade to enhance Sydney's reputation as a world class financial hub in the Asia Pacific region and as a destination for tourists.

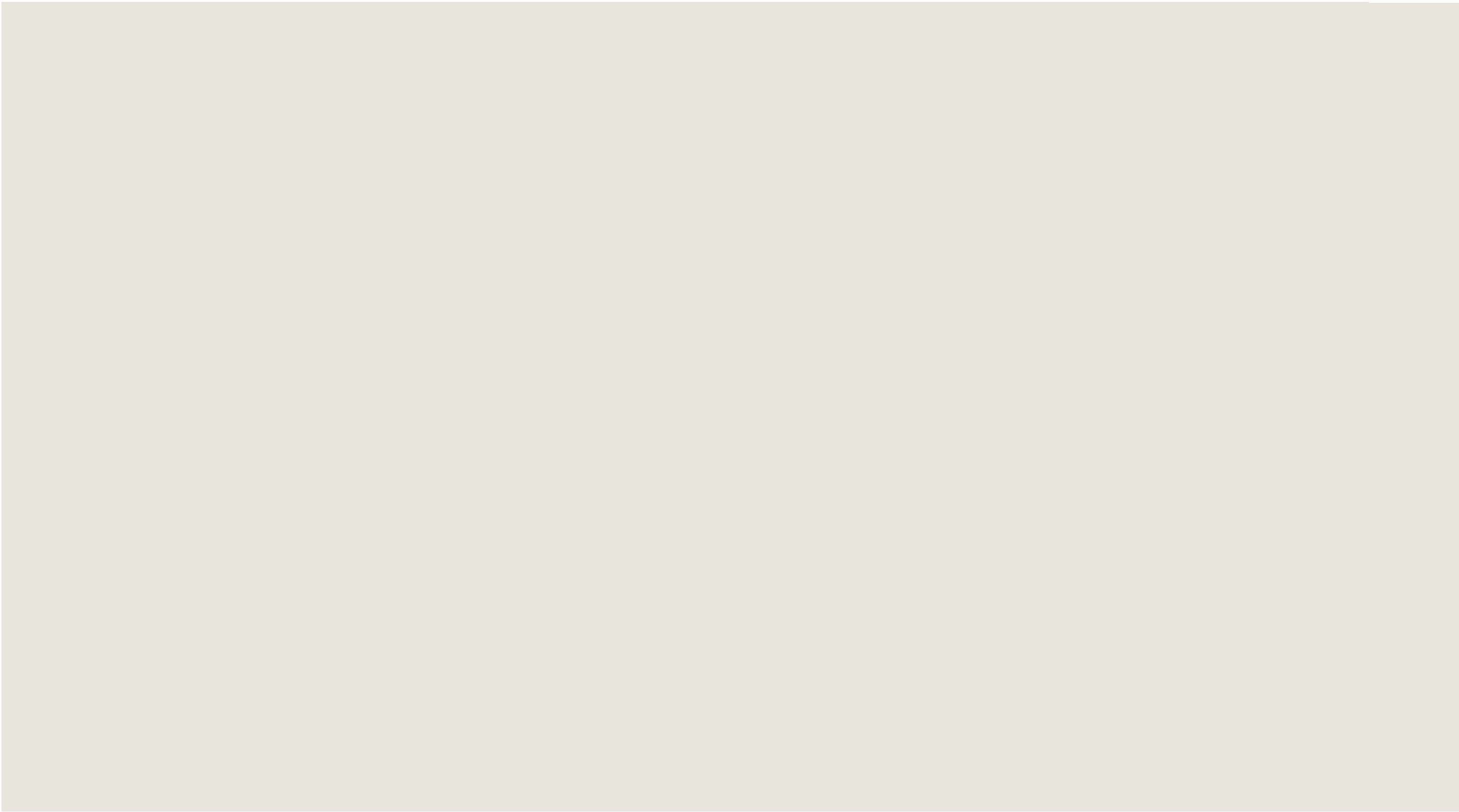
2.3.13 Deliver a low carbon future through urban and building design

The development of the Martin Place Station precinct is to demonstrate high standards of environmental design. Design initiatives identified for consideration are noted as follows.

- _ Shade through the equinox to summer period is to be maximised.
- _ Heat island negative effects are to be minimised through façade design and material selections.
- _ Potential for reflected light onto public open space is to be maintained or increased.
- _ The energy supply including to the station design is to integrate lower carbon technology. The development will exceed minimum regulated performance standards.

_ Materials selections and construction detailing are to be designed for best practice design life using a lifecycle assessment approach. Top ten materials will meet specific best practice guideline performance requirements. As examples, the station structure is to be a 100 year life and double/triple glazed elements, a 25 year life.

- _ Materials with a low embodied energy are preferred.
- _ Construction is to be designed to minimise risk of damage to adjoining property, pollution and disruption to adjacent existing uses.



Urban Framework & Design Principles

03



3Urban Framework & Design Principles

3.1Historical Context

Martin Place comprises the physical, functional and symbolic focus of the proposed Sydney Metro and Martin Place Station Precinct.

The creation of Martin Place represents one of the major civic improvement schemes undertaken in Sydney in the nineteenth century. While the impetus for the street came with proposals to rebuild the city's main post office in the 1860s, its completion required both state and local government action to effect the transformation of the nineteenth century townscape into a grand thoroughfare for the city and a desirable address for the city's professional and financial elites.

Establishment of the street – originally named Moore Street – was enabled in 1887 through the resumption of private property to the north of Colonial Architect James Barnet's General Post Office building. Additional resumption of properties in 1890 enabled its extension to Castlereagh Street. At 100-foot wide it was the city's widest street, and it soon became the setting for civic activities. In 1916, completion of the Head Office of the Commonwealth Bank to the east of the GPO established the street as a financial centre. Construction of the Government Savings Bank of NSW Building in 1928 – extending the full width of the block between Castlereagh and Elizabeth Streets – underscored the significance of Martin Place as a highly-valued address for major financial institutions.

Extension of Martin Place through to Macquarie Street was envisaged from the early twentieth century but not realised until 1935. This eastern extension represented a purposeful attempt by Council to encourage a precinct of high-status commercial buildings, and town planning design principles to be developed and to encourage uniformity of building heights and setbacks. The Art Deco style Prudential Building at No. 39, completed in 1939 to the design of Hennessy, Hennessy & Co, was typical of the buildings erected in Martin Place during the late inter-war period.

The pedestrianisation of the street which took place progressively in the 1970s formalised Martin Place as the city's principal urban space.

Located at the north end of the Precinct are Chifley Square and Richard Johnson Square, two small but historically significant urban spaces.

Chifley Square has its origins in 1916, when the city council first proposed to extend Elizabeth Street from Hunter Street to the intersection of Phillip and Bent Streets. A similar proposal was proposed again in 1937 as a means of relieving traffic congestion and endorsed by Council two years later, but not implemented until 1947. Qantas House, completed in 1957, realised the western quadrant of the semi-circular intersection, and in 1961 the public space was named in honour of a former Prime Minister. The eastern quadrant was not fulfilled until completion of the present Chifley Tower in 1992.

Located at the intersection of Castlereagh, Bligh and Hunter Streets, Richard Johnson Square was designed by Clarke Gazzard in 1974. The small pedestrian space was formed as an enlargement of the western Bligh Street footpath to encompass and integrate the island platform around the historic 1925 Richard Johnson memorial.



Artist's impression of Martin Place Station

Pages 37 from Sydney Metro Southwest Chatswood to Sydenham Summary

3 Urban Framework
3.2 Sydney Metro Urban Design Guidelines (Transport NSW)

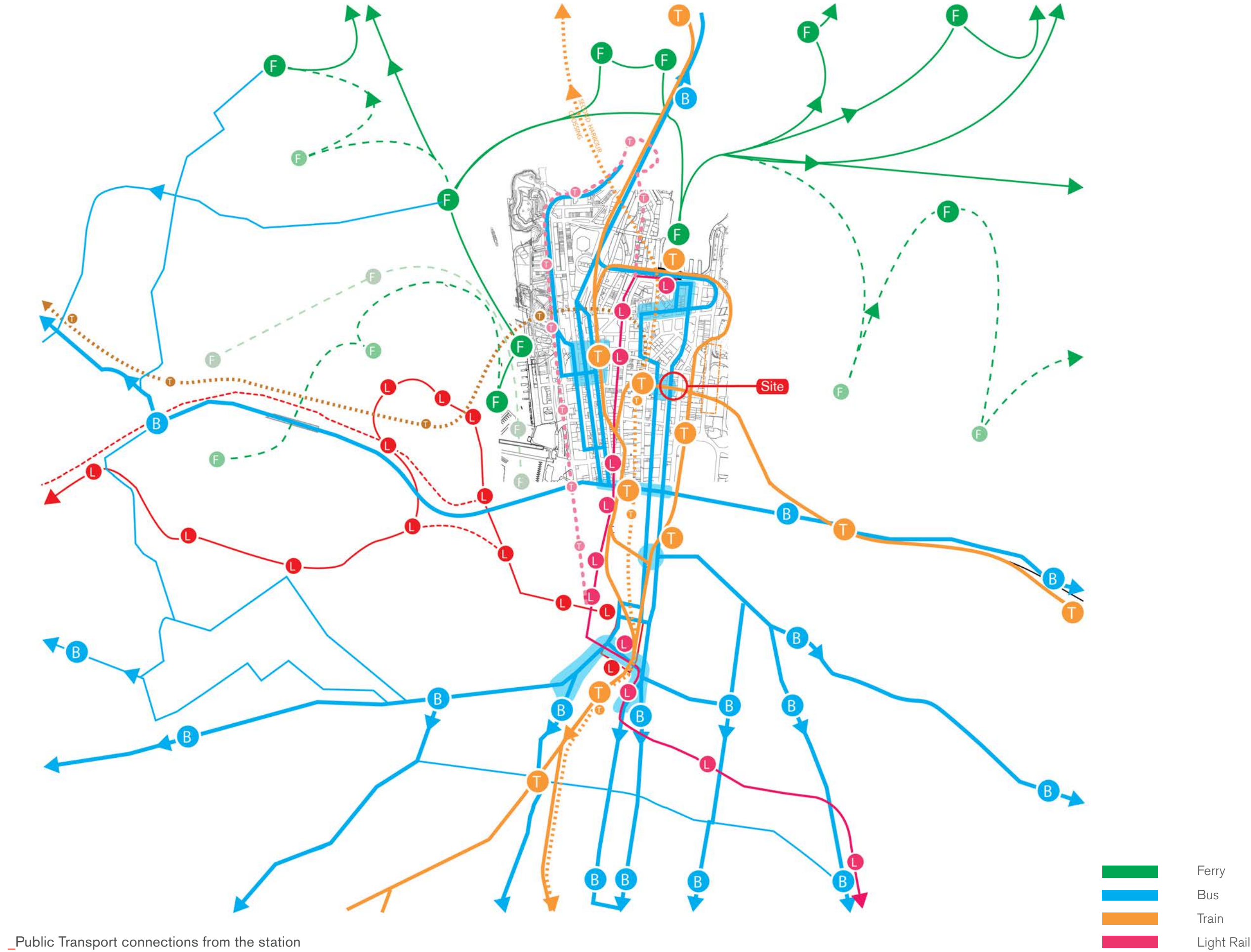
The urban and public domain design of Martin Place and Hunter Street is to be in general alignment with the Sydney Metro C2S SPIR Appendix A Design Guidelines. It should be read in conjunction with Sydney Metro's project vision and design objectives.

The following are of specific relevance to the urban design of these spaces:

- _the scaling of public spaces to meet anticipated demand for customer circulation;
- _the provision of weather protection at the entry to these stations;
- _the role of interchange connectivity;
- _the role of Crime prevention through environmental design(CPTED) in the design of these spaces;
- _the role of place making in relation to network and station identity;
- _the role of heritage in the urban design of these spaces; and
- _the role of wayfinding and signage.

The implementation of these guidelines needs to consider the historic importance of the public open spaces and neighbouring heritage buildings that are affected by this redevelopment to ensure that the special characteristics and qualities of these spaces are supported not undermined.

The proposed design guidelines will help inform the preparation of the Martin Place Station Design Precinct Plan (SDPP) that TfNSW as the proponent of the Sydney Metro must prepare under the terms of the ministerial consent for that project irrespective of any OSD project.



_Public Transport connections from the station

3 Urban Framework

3.3 Key Urban Design Issues

3.3.1 Movement

3.3.1.1 Transport Interchange

Overview

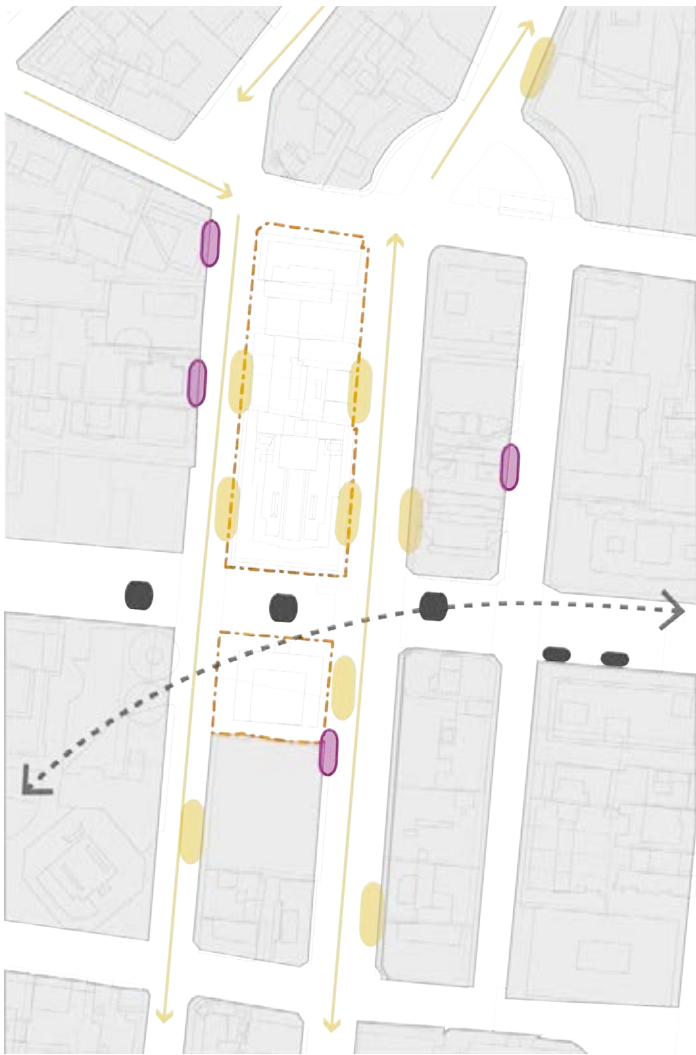
The precinct contains the existing Martin Place station on the eastern suburbs railway line. It connects Bondi Junction in the east to Cronulla and Waterfall in the south and the North Shore, Northern & Western Line at Town Hall, Central and Redfern Stations. It also connects to the Airport, Inner West & South Line at Town Hall, Central, Redfern and Wolli Creek Stations. Finally it connects to the Bankstown Line at Town Hall, Central, Redfern and Sydenham Stations. The proposed new Sydney Metro line will connect Rouse Hill to Bankstown.

The surrounding streets, particularly Elizabeth, Castlereagh and Hunter Streets contain bus routes heading towards Victoria Road, the Eastern Suburbs along Oxford Street, the south via Crown Street and the inner west via Parramatta Road.

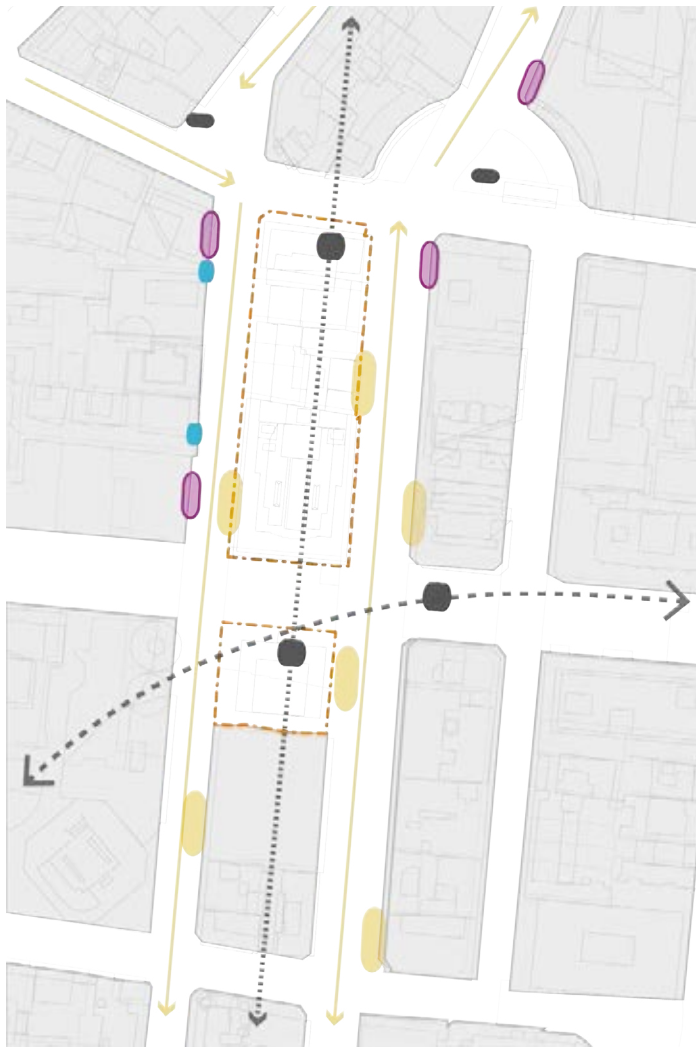
Taxi Ranks are located at Elizabeth, Castlereagh, Hunter and Phillip Streets in close proximity to the precinct.

The precinct forms an important part of the local pedestrian network including as a transport interchange, shopping and employment destination and as a thoroughfare.

It is anticipated that the intensification of use resulting from the new metro station with enhanced rail interchange and OSD will significantly increase the importance of and pressure on the precinct as a node within these networks.



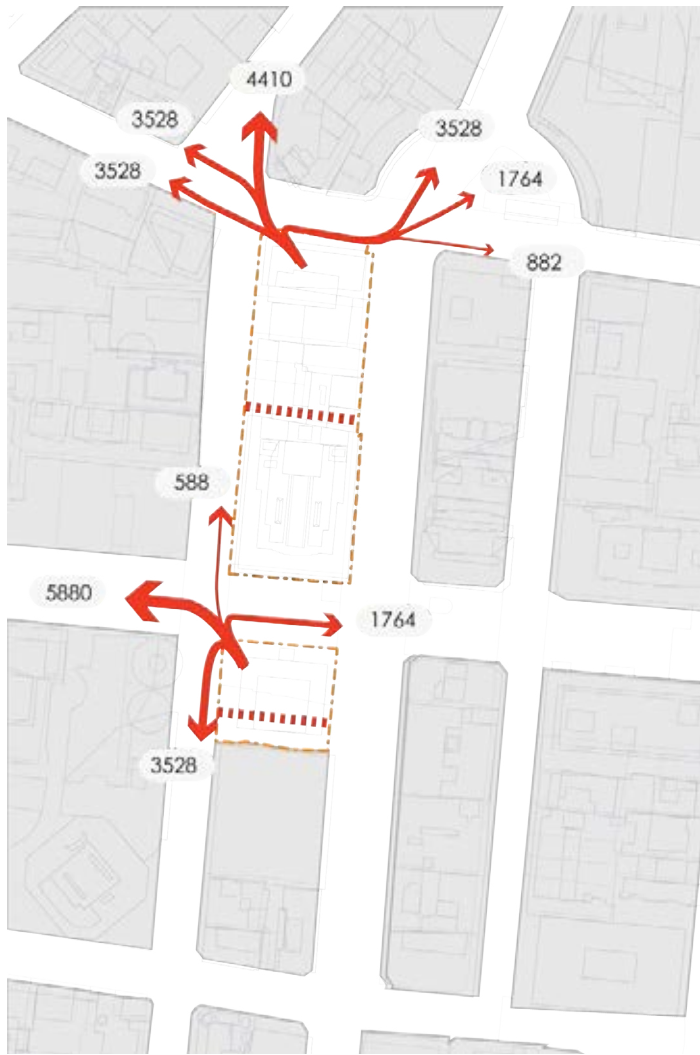
Transport interchange in current format



Proposed transport interchange



Proposed pedestrian traffic to the precinct (morning peak hour) (Pedestrian Planning Report , p19, Macquarie Capital)



Proposed pedestrian traffic from the precinct (morning peak hour) (Pedestrian Planning Report , p19, Macquarie Capital)

- Bus routes / Stops
- Taxi Ranks
- Railway Station Entries
- Kiss & Ride Zone
- Pedestrian Traffic Flow

3 Urban Framework

3.3 Key Urban Design Issues

3.3.1 Movement

3.3.1.1 Transport Interchange

Analysis

The 2011 census data reveals that the immediate locality including the precinct has approximately 8500 employees of which approximately 50% commute by train, with a further 24% travelling by bus and only 17% of trips being by car (ARUP Traffic and Parking Report, page 9)

The proposed upgrades to this transport interchange will significantly increase the demands on the surrounding public domain network through increased use and capacity.

The OSD will also increase these pedestrian movements.

This increased pedestrian flow gives opportunity for increased vibrancy and activity for public spaces that form this important part of the city. It also creates opportunity to support a greater amount of commercial and retail activity in the area, particularly within the context of the interchange itself.

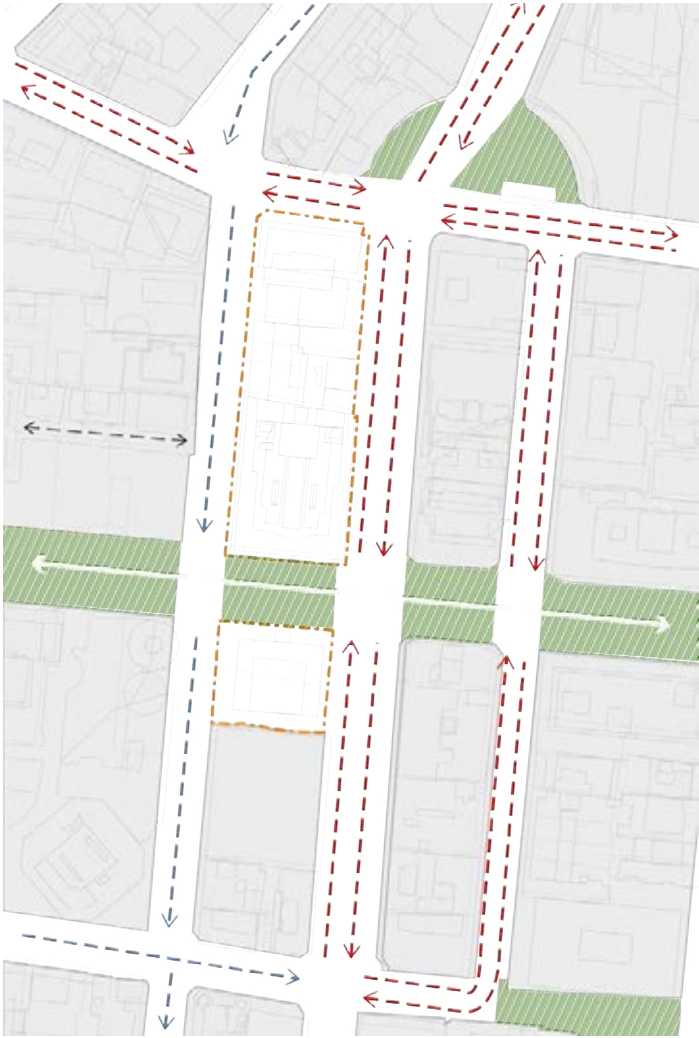
Station entries when located on the corners of streets offer maximum flexibility of movement between the station and the public domain beyond.

Arup's Transport Integration Strategy notes that the level of customer interchange between various modes of public transport to be small as the majority of users will be arriving at their destination when they alight from the relevant modes of public transport (Transport Integration Strategy, p11, ARUP).

Nevertheless, the location of bus stops and taxi stands need to be incorporated in the design of the ground floor plan of the proposal, particularly near station entries.

Principles

- _ Station entries are to be located at the corners of streets.
- _ Station entries are to be scaled to suit the anticipated user movements.
- _ Station entries are not to form the predominant architectural character of the buildings in which they are located. They are to be civic buildings in which railway stations are located.
- _ Where part of the project, the public domain (footpaths and squares) is to be scaled and designed to facilitate anticipated pedestrian movements.
- _ Simple and direct movement between modes of transport are to be facilitated by the design of the ground floor of the proposal and in the proposed positioning of bus and taxi stands.
- _ The North Site is to incorporate an east west through site link open to the public from 6am to 10pm at the junction of 50 Martin Place and the new building.
- _ The transport interchange is to provide appropriate publically available intermodal transport facilities.





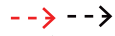

Current road network



Current service vehicle, requirements for site and surrounding buildings



Proposed service vehicle, requirements for site and surrounding buildings (TFNSW Scheme)

-  Pedestrian Zone
-  Oneway Traffic
-  2 way Traffic / Laneway
-  Service Entries

3 Urban Framework

3.3 Key Urban Design Issues

3.3.1 Movement

3.3.1.2 Motor Vehicle Movement

Overview

The precinct forms an important part of the city's vehicular network a significant proportion of which is designated for one way traffic. Castlereagh, Pitt and O'Connell Streets are designated as south bound only streets. King Street is east bound only.

These streets accommodate service vehicles to support the largely commercial, civic and retail uses of the surrounding areas.

Analysis

Arup note in their analysis of the existing traffic conditions that,

“Elizabeth Street northbound experiences heavy traffic volumes during both peak periods. There is a strong movement from Macquarie Street (southbound) in the east to Castlereagh Street (southbound) via Hunter Street, which contributes to relatively heavy westbound traffic on Hunter Street.

Currently, the Macquarie Street / Bent Street / Eastern Distributor ramps intersection is extremely congested during the AM and PM peaks with the intersection performing above its theoretical capacity at level of service F. Long delays are caused by conflict between high volumes of traffic on the Eastern Distributor ramps (westbound) and Macquarie Street (southbound).

All other intersections near the Martin Place Station construction sites currently operate at level of service B or better. However, at the Elizabeth Street / Phillip Street / Hunter Street intersection, signal coordination along Elizabeth Street causes delays for conflicting right turn movements and vehicles on side-streets.”

(Table 1 of Sydney Metro (Chatswood to Sydney) EIS- referenced in ARUP Traffic and Parking Report)

The design of vehicle access to the precinct as well as servicing has significant potential to impact the availability of the building to activate the public domain. Vehicular traffic entering the precinct will be limited to service vehicles using the loading docks as there is currently no new on site car parking although this will be subject to design development.

Principles

- _Service vehicle frontage to the building is to be limited to maximise the capacity to activate public domain.
- _Any carpark and service vehicle access is to be located to the middle of the block of the North Site to minimise potential impact on active frontages to Elizabeth and Castlereagh Streets with access denied to Hunter Street.
- _Any carpark and service vehicle access is to be located to the southern extent of the South Site block to minimise potential impact on active frontages to Elizabeth and Castlereagh Streets and most importantly Martin Place. It is noted that the City of Sydney DCP aims to provide active frontages to Castlereagh Street over Elizabeth Street.



Active edges

City of Sydney ambition for active uses in the precinct as shown on the Active Frontages Sheet 014 map within the City of Sydney DCP 2012



Memorial in front of the GPO



50 Martin Place

Current context showing general absence of street activation due to heritage architecture and commercial office use



5 Martin Place



Fountain between 5 and 20 Martin Place

3 Urban Framework

3.3 Key Urban Design Issues

3.3.2 Open Space

3.3.2.1 Public Domain Activation

Overview

The precinct addresses and connects three of the major public spaces of the city - Martin Place, Chifley and Richard Johnson Squares.

Generally the large scale commercial buildings occupied by banks, legal and financial service businesses provide limited activation of this public domain. What activation there is is generally confined to building entries, some of which may have small café concessions.

The majority of the public space activation is provided by retail, food and beverage concessions as well as organised event overlays in Martin Place.

The reconfiguration of Martin Place station as well as the over station development provides opportunity to increase the vibrancy of this important part of the city.

Planning Context

The City of Sydney DCP 2012 describes its preferences for façade activation in Part 3.2.3 Active Frontages and on its associated map. This proposal requires active frontages to Hunter Street, Martin Place and Castlereagh Street South of Martin Place.



_Current Active edges and public entries

_Proposed active edges

_Impact of underground station services coming to ground in the context of existing active edges (TfNSW) scheme

- Active Edges
- Proposed Active Edges
- Non- Active Edges / Services
- Active Entries / Service Entries

3 Urban Framework

3.3 Key Urban Design Issues

3.3.2 Open Space

3.3.2.1 Public Domain Activation

Analysis

The significant increase in pedestrian traffic resulting from the Martin Place upgrade provides opportunity to increase the activation of the public domain of the precinct and its surrounds.

Opportunities for active frontages are limited for the extent of the heritage listed 50 Martin Place building due to its existing fabric, internal floor levels and use.

The proposed development of the South Site can significantly improve its capacity to activate the public domain with active frontages through the improved relationship of levels between the interior of the building and the public domain.

The amount of services required to support the new station has the potential to detrimentally affect the amount of active frontage of the proposed redevelopment.

Principles

Active frontages are to be maximised and to be located as a minimum in the locations noted in the City of Sydney DCP part 3.2.3. In general they should comply with the objectives and principles described in this document.

The railway station entries are to be designed and positioned to maximise their capacity for pedestrian movement and public domain activation.

Above ground services strategy for the new railway station is to ensure its impact on the public domain is minimised. Where possible services are to be located away from frontages indicated as active frontages in the CoS DCP.

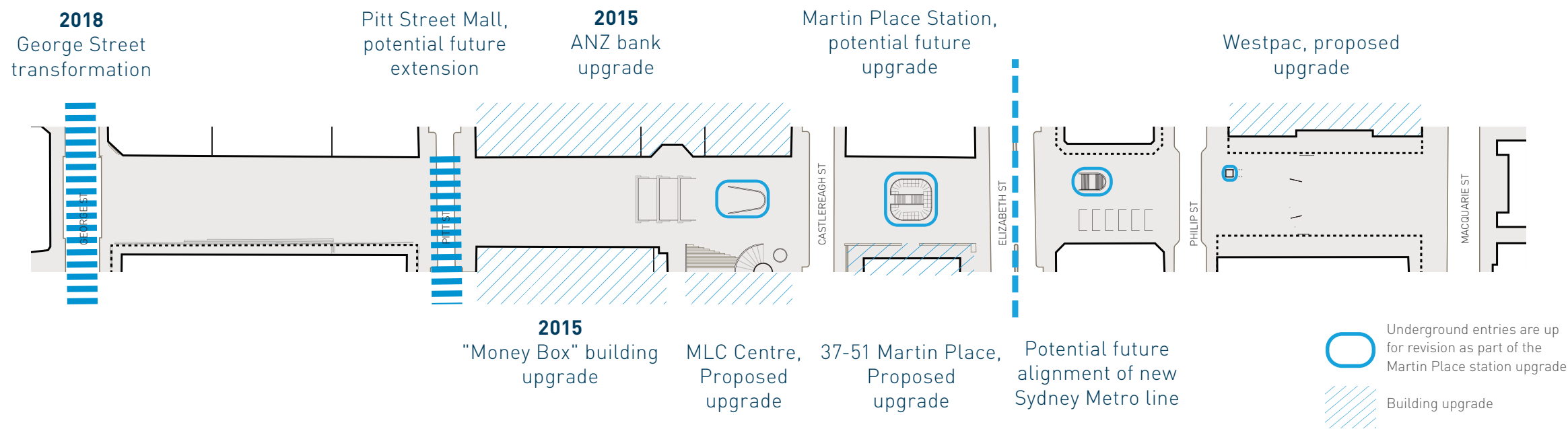
The ground level impact of the services of the OSD are to be considered in the design and are to ensure its impact on the public domain is minimised. Where possible services are to be located away from frontages indicated as active frontages in the CoS DCP.

Service vehicle entries are to be located as noted in part 3.3.1.2 of this report.

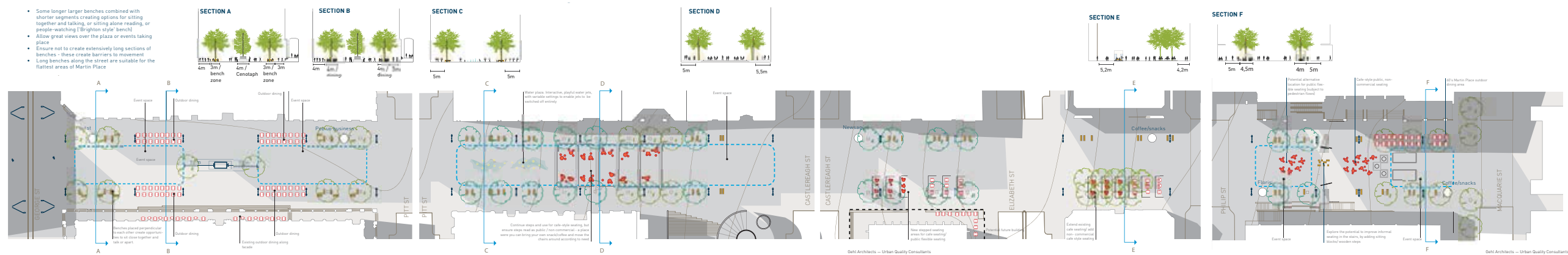
The Bank at 50 Martin Place is to maintain the historic Martin Place, Castlereagh Street and Elizabeth Street principal entrances to the building to activate these streets and to ensure the independent identity and heritage significance as a bank on Martin Place are retained.

It is critical that the Martin Place entrance to 50 Martin Place continues to have a public role providing access to the building.

The Tom Bass sculpture is to be reinstated or relocated within the public domain of the precinct. Opportunities for the integration of public art in the precinct as a whole are encouraged and a public art strategy included in future detailed planning applications.



Current ground plane situation by Jahn Gehl mapped and analysed in the City of Sydney Martin Place Urban Design Study 2015



Proposed design for Martin Place by Jahn Gehl in the City of Sydney Martin Place Urban Design Study 2015

3 Urban Framework

3.3 Key Urban Design Issues

3.3.2 Open Space

3.3.2.2 Ground Plane of Martin Place

Overview

The South Site will form the street wall definition of Martin Place between Castlereagh and Elizabeth streets. The northern façade of the public space will be formed by the existing façade of the heritage listed building at 50 Martin Place. The new building on the South Site will form the street wall to this space and has an important role in maintaining and enhancing the spatial character and heritage attributes of Martin Place.

The proposed redevelopment offers the opportunity of improving the entry to the existing below ground train station at Martin Place, including the removal of the entry in the centre of Martin Place, allowing its integration with the proposed southern building.

There are challenging levels across the precinct with grades typically being greater than 1:10 falling from east to west across Martin Place.

There has been a significant number of urban and landscape design proposals for Martin Place with Jan Gehl's proposals of 2015 being the most recent. This design proposed that the part of Martin Place included in the precinct be a 'quiet zone' with two rows of street trees from east to west, some seating under these trees to the north and terraces under the southern row of trees that could accommodate more casual and café seating. It should be noted that this design did not anticipate the metro station and may require amendment as a consequence.

The current solar access to the precinct is protected by the requirements of the LEP Solar access planes. a The South Site's OSD does offer opportunities to improve daylight levels through the use of controlled reflected light from the northern façade in Martin Place.

The future wind levels are at a level similar with existing levels. (Refer to Wind Tunnel Test for: MARTIN PLACE OVERSTATION, Sydney, Australia. prepared by CPP)

Planning Context

The City of Sydney DCP 2012 Part 2.1.7 Locality Statement for Martin Place describes some general ambitions for Martin Place. They are designed to activate these spaces and to conserve and enhance the significance of Martin Place as one of Central Sydney's grand civic and ceremonial spaces, and as a valued business location, and to protect and extend sun access and reflected sunlight to Martin Place during lunchtime hours from mid-April to the end of August. The solar access protection to Martin Place is further defined in the City of Sydney LEP 2012 Part 6.17