Report to the Future Melbourne (Planning) Committee

Agenda item 6.2

Planning Scheme Amendment C221 West Melbourne Waterfront

1 December 2015

Presenter: Leanne Hodyl, Acting Manager Urban Strategy

Purpose and background

1. The purpose of this report is to seek the Future Melbourne Committee's endorsement to request the Minister for Planning's authorisation to prepare and exhibit Amendment C221 (refer Attachment 2).

2. The Amendment applies to land adjoining the Maribyrnong River at 160-232 Kensington Road, West Melbourne. The site is identified as a 'Potential Urban Renewal Area' in the Municipal Strategic Statement (MSS). The owners of the land have requested the Amendment to facilitate a mixed use, residential, commercial and retail development. The site is currently zoned Commercial 2 Zone which prohibits dwellings.

3. Amendment C221 implements Action 1.1.6 in the 2015-16 Annual Plan, 'run an exhibition and panel hearing for the West Melbourne Waterfront Planning Scheme Amendment'.

Key issues

4. The Amendment proposes to:

   4.1. rezone the land from Commercial 2 Zone to the Mixed Use Zone

   4.2. apply a Development Plan Overlay (DPO) to the land and insert a new Schedule 12 to the Overlay (DPO12). The DPO provides for a staged, development comprising four mixed use buildings ranging in height from six to fourteen storeys, and requires that a development plan be prepared prior to the granting of a planning permit for development

   4.3. apply an Environmental Audit Overlay (EAO) to the land to ensure the land is satisfactorily remediated prior to being developed for a sensitive use.

5. Some of the other features of DPO12 are:

   5.1. 7.06 per cent, or 2001m2, of the land along the Maribyrnong River will be set aside as public open space

   5.2. 15 per cent of the gross floor area above 10 storeys is required as affordable housing

   5.3. as the land is in a flood prone area, Melbourne Water requires that the owner provide for safe pedestrian and vehicular access from the development during a 1 in 100 year flood event. The owner of the land is required to enter into a Section 173 Agreement under the *Planning and Environment Act 1987* to ensure flood mitigation and civil infrastructure works are undertaken at their own cost in accordance with plans and specifications approved by the Responsible Authority.

6. Council officers and the proponents have negotiated and agreed on DPO12 which provides an appropriate response to the site and its context. The proponents have however indicated that there are matters that they consider warrant further debate as part of the panel hearing process and advise that they reserve the right to make submissions in relation to the drafting of DPO12. Council will consider the panel report prior to its decision regarding adoption of the Amendment with or without changes.

7. Following approval of the Amendment by the Minister for Planning, the Development Plan (refer Attachment 3) will be presented to Council for endorsement. The proponent will progressively apply for planning permits for each stage of the site's development, generally in accordance with the approved Development Plan.

Recommendation from management

8. That the Future Melbourne Committee resolves to seek authorisation from the Minister for Planning for Planning Scheme Amendment C221 (refer Attachment 2).

Attachments:
1. Supporting Attachment
2. Draft Melbourne Planning Scheme Amendment C221 West Melbourne Waterfront
3. Development Plan (October 2015)

Supporting Attachment

Legal

1. The amendment will be processed under the provisions of the Victorian *Planning and Environment Act 1987.*

Finance

2. The proponent is to pay all fees for the preparation and assessment of Planning Scheme Amendment C221 and will cover costs involved with exhibition of the Amendment.
3. The proponent is responsible for the completion of civil infrastructure and other works in accordance with the Section 173 Agreement. This includes works on land owned by the City of Melbourne and others.

Conflict of interest

4. No member of Council staff, or other person engaged under a contract, involved in advising on or preparing this report has declared a direct or indirect interest in relation to the matter of the report.

Stakeholder consultation

5. Public consultation will be undertaken through the formal exhibition of Planning Scheme Amendment C221, subject to authorisation being issued by the Minister for Planning.
6. The Development Plan will be displayed alongside the Planning Scheme Amendment. This will allow the public to understand the form of the future development of the site as permitted by the Amendment.

Relation to Council policy

7. The proposal is consistent with the MSS, including:
    - 7.1. The Growth Area Framework Plan (Clause 21.04) of the MSS which identifies the site as being within 'Potential Urban Renewal Area - Dynon'. The Clause states that *'The rationalisation and modernisation of the freight functions in the precinct will open up the potential for the renewal of the northern section of this area. Any urban renewal of this area should not constrain the operations of the port freight terminal to the south. The State Government in conjunction with the City will undertake the planning for this area.'*
    - 7.2. Clause 21.05 – 2 Significant environments and landscapes – to enhance the environmental value of Melbourne's parklands, waterways and other open spaces and to improve the water quality in waterways and the bay.
    - 7.3. Clause 21.06 – 1 Urban Design – To ensure that the height and scale of development is appropriate to the identified preferred built form character of an area, to increase vitality, amenity, comfort, safety and distinctive City experience of the public realm and to improve the public realm permeability, legibility and flexibility.
    - 7.4. 21.07-1 Residential Development – in areas of proposed urban renewal, encourage housing that is consistent with an approved structure plan, or where it can be demonstrated it will not adversely impact on ongoing industry and port uses and ensure new dwellings are located and designed to protect residents from current and future off-site amenity impacts.
    - 7.5. 21.15-1 – Potential Urban Renewal Areas – Dynon – Built Environment - Ensure new development along the Maribyrnong River and Moonee Ponds Creek enhances the recreational and environmental amenity of these waterway corridors and has appropriate setbacks. Enhance open space and recreational opportunities along the Maribyrnong River and Moonee Ponds creek.

8. The proposed Amendment will support an improved public realm and enhanced access to the Maribyrnong River as well as increasing the public open space provision adjoining the Maribyrnong River, as identified in the City of Melbourne Open Space Strategy 2012.

9. The proposed amendment supports the goals of Homes for People: Housing Strategy 2014-18, by including the requirement for varied accommodation typologies, suitable for a range of household sizes and types, including the delivery of affordable housing.

10. The proposed amendment supports the Urban Forest Strategy and Kensington Urban Forest Precinct Plan 2014 by establishing tree coverage targets for the public realm.

Environmental sustainability

11. The proposed amendment will have positive environmental effects. The new Schedule to the Development Plan Overlay requires the preparation of an Environmentally Sustainable Development report identifying the environmental features to be included in the development. The future use and development of the site is also required to achieve a number of objectives and strategies pertaining to environmental sustainable design.

Planning and Environment Act 1987

MELBOURNE PLANNING SCHEME

AMENDMENT C221

EXPLANATORY REPORT

Who is the planning authority?

This amendment has been prepared by the City of Melbourne, which is the planning authority for this amendment.

The amendment has been made at the request of Contour Consultants Australia Pty Ltd. on behalf of WMW Developments.

Land affected by the amendment

The amendment applies to part 156 – 174 Kensington Road, 176 – 178 Kensington Road, 180 – 194 Kensington Road, 196 – 214 Kensington Road and 216 – 232 Kensington Road, West Melbourne, described on title as:

- Lot 1 on Title Plan 568898M (part of 156-174 Kensington Road)
- Lot 1 on Title Plan 582035S
- Lot 1 on Title Plan 842004H
- Lot 1 and Lot 2 on Plan of Subdivision 724275W

What the amendment does

The amendment proposes the following changes to the Melbourne Planning Scheme:

- Rezones the land from Commercial 2 Zone (C2Z) to the Mixed Use Zone (MUZ).
- Applies a Development Plan Overlay (DPO) to the land and insert a new Schedule 12 to the Overlay (DPO12).
- Applies an Environmental Audit Overlay (EAO) to the land.

Strategic assessment of the amendment

Why is the amendment required?

The amendment is required to facilitate a mixed use redevelopment including commercial and residential land uses in close proximity to the Footscray Metropolitan Activity Centre and Melbourne's Central Business District.

The land is currently partly vacant and partly occupied by Scalzo Foods who use the land for the manufacturing and storage of goods and associated administrative offices. Scalzo Foods is relocating the manufacturing facilities but intends to retain its administrative headquarters within the proposed development.

The proposed rezoning of the land will facilitate the future development of the site for residential and mixed use purposes as well as secure additional public open space. It is supported by the current metropolitan planning strategy, Plan Melbourne (2014), State Planning Policy and the Municipal Strategic Statement within the Melbourne Planning Scheme.

The proposed rezoning to a Mixed Use Zone is consistent with current planning practice for urban renewal areas and the application of a Development Plan Overlay (and associated Schedule) will provide the appropriate land use and urban design framework for the future mixed use development.

The application of the Environmental Audit Overlay (EAO) is consistent with *Ministerial Direction No. 1 – Potential Contaminated Land* given the previous use of the land and the proposed introduction of residential land use.

How does the amendment implement the objectives of planning in Victoria?

The amendment is consistent with the following objectives for planning in Victoria including:

- To provide for the fair, orderly, economic and sustainable use and development of land.
- To provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity.
- To secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria.
- To facilitate development in accordance with the objectives set out in the points above.
- To balance the present and future interests of all Victorians.

The amendment implements the objectives of planning in Victoria, contained in Section 4 of the *Planning and Environment Act 1987*, in the following ways:

- **Objective A**: The amendment provides for the fair, orderly, economic and sustainable use and development of land as it facilitates the provision of a mix of land uses including office, retail, recreation and residential consistent with planning policies associated with an expanded central city. The Amendment also facilitates the coordinated development of these uses through the appropriate use of the selected zone and overlay tools.
- **Objective B**: The amendment provides for the protection of the Maribyrnong River through increasing the provision of public open space along the Maribyrnong River, and the management of development.
- **Objective C**: The amendment provides a pleasant, efficient and safe working, recreational and living environment for all Victorians and visitors to Victoria through the development of a mixed use precinct providing a range of employment opportunities and high quality dwellings and the development of the waterfront, integrating public and private open space and linkages with regional movement and open space networks.
- **Objective F**: The amendment provides for a redevelopment framework in accordance with the above objectives through the application of the Development Plan Overlay. The Development Plan Overlay seeks to ensure the delivery of a sustainable and integrated mix of employment and residential uses.
- **Objective G**: The amendment seeks to balance the present and future interests of all Victorians by providing substantial capital investment, and facilitating community infrastructure outcomes including at least 7.06% of the subject land (along the waterfront) being dedicated as public open space.

How does the amendment address any environmental, social and economic effects?

Environmental Effects

The amendment will make use of a currently underutilised land resource which will achieve many objectives relating to environmental sustainability contained within the State Planning Policy Framework and Plan Melbourne.

Plan Melbourne identifies this site within the Dynon Urban Renewal Area as part of an expanded central city. In addition, the Local Planning Policy Framework within the Melbourne Planning Scheme identifies Dynon as a 'potential urban renewal area'.

The amendment responds positively to these policies by intensifying the use of currently inefficient commercial/industrial land in a location where new employment and housing will make use of, and upgrade, existing infrastructure.

The amendment will also facilitate increased access to the Maribyrnong River through the provision of public open space, and improved connections to existing movement networks.

At a local level, Schedule 12 to the Development Plan Overlay will guide the development of the site in a manner that takes into account local environmental considerations, including:

- The provision of an integrated mixed-use development of the site.
- The requirement for an Environmental Sustainable Development (ESD) report, Traffic Management Plan, Acoustic and Vibration Assessment and Stormwater Management Assessment, Heritage Assessment, Odour Assessment and Infrastructure Report to be prepared by suitably qualified consultants.
- The development of the site to incorporate ESD principles.

Social and Economic Effects

The amendment is also consistent with the Victoria Planning Provisions and will have positive economic and social effects on the area. These include:

- Creating an easily accessible precinct with a range of employment generating and residential uses.
- Providing floor space for a range of new commercial facilities in an appropriate location close to the public transport network, the Footscray Metropolitan Activity Centre and Melbourne's Central Business District.
- Enhancing the sense of place through the provision of public open-space focused on the waterfront and facilitating development that increases security, engages the landscape and creates opportunities to increase well-being.
- Locating commercial facilities within walking distance of public transport and existing and future dwellings.
- Providing a range of accommodation types in accordance with the adopted Homes for People: Housing Strategy.
- Establishing an important social and physical focus for the nearby residential neighbourhood (and future residents on the site) through development of a comprehensive public realm and movement network.
- Integrating with the existing community and neighbourhood through the provision of new connections and greater permeability through the site providing greater access to river front public open space.
- Creating significant new employment opportunities both directly and indirectly through the construction phase and the longer term uses.

Does the amendment address relevant bushfire risk?

The site is not subject to a Wildfire Management Overlay and is not located on land designated as a 'Bushfire Prone Area' under the Victorian Planning Provisions. A local policy for bushfire risk management is not required to support this amendment.

Does the amendment comply with the requirements of any Minister's Direction applicable to the amendment?

The amendment is consistent with the Ministerial Direction on the Form and Content of Planning Schemes under Section 7(5) of the *Planning and Environment Act 1987* and Ministerial Direction No.11 *Strategic Assessment of Amendments*.

The Ministerial Directions applicable to the amendment include:

Ministerial Direction No. 1 – Potentially Contaminated Land – Requires planning authorities, when preparing planning scheme amendments, to ensure that the environmental conditions of land previously used for industrial purposes and proposed to be used for a sensitive use will be suitable for that sensitive use.

Direction No.9 – Metropolitan Strategy – The amendment supports the directions of Plan Melbourne, the current Metropolitan Strategy. Plan Melbourne includes the land within an urban renewal area as part of an expanded central city.

More particularly, the amendment has been prepared having regard to the following specified matters associated within Metropolitan Planning Strategy:

- *What aspects, if any, of the Metropolitan Planning Strategy are relevant?*

  The amendment will contribute to realising an expanded central city as identified in Map 10 of Plan Melbourne as it will facilitate the development of an urban renewal project.

  The central sub-region of Plan Melbourne (Map 30) also includes the subject land within an urban renewal area.

- *How does the Metropolitan Planning Strategy affect the amendment?*

  Plan Melbourne expressly supports the amendment by identifying the land as an urban renewal area.

- *Is the amendment consistent with any directions and policies in the Metropolitan Planning Strategy?*

  The amendment is consistent with directions and policies in the Metropolitan Planning Strategy which provide for Melbourne as a global city of opportunity and choice; for the expansion of Melbourne's Central City; and for the development of urban renewal areas close to rail infrastructure.

- *Does the amendment support, give effect to or assist the implementation of the Metropolitan Planning Strategy or can it be reasonably modified to do so?*

  The amendment supports and gives effect to the Metropolitan Planning Strategy, by facilitating urban renewal in a designated urban renewal precinct.

- *Will the amendment compromise the implementation of the Metropolitan Planning Strategy?*

  No.

How does the amendment support or implement the State Planning Policy Framework and any adopted State policy?

The following objectives of the State Planning Policy Framework (SPPF) are relevant to this amendment.

Clause 11 – Settlement

The rezoning will allow any future residential development to take full advantage of existing settlement patterns and infrastructure.

Clause 11.02-1 –Supply of urban land

The proposed rezoning of underutilised land for a mix of employment generating and residential purposes meets the objective and strategies of this Clause by:

- Facilitating efficient use of underutilised land resulting in an intensification of existing urban areas;

- Providing an opportunity for urban consolidation and redevelopment within an established area of Melbourne with the necessary services and infrastructure to accommodate more people; and
- Improving the amenity and character of the area, particularly the Maribyrnong River environs.

Clause 11.03-1 – Open space planning

The proposed amendment ensures the provision of at least 7.06% of the land will be provided for public open space contributing to the existing public open space network and enhancing the existing walking and cycle trails adjacent to the Maribyrnong River.

Clause 11.04 – Metropolitan Melbourne

The proposal will facilitate a mix of commercial and accommodation land uses contributing to the opportunity and choice of Melbourne as a global city.

The proposed rezoning to facilitate residential development of the site supports the objective and strategies of this Clause due to its strategic location and co-location with commercial and employment generating land uses.

Schedule 12 to the DPO ensures that residential development will provide a diversity of housing to cater for different households.

Clause 12.04-1 – Environmentally Sensitive Areas

The proposed rezoning facilitates a revitalisation of this section of the Maribyrnong River consistent with the Maribyrnong River Valley Design Guidelines 2010 and the City of Melbourne Open Space Strategy 2012 through the planning of a waterfront public open space.

Clause 13.02-1 Floodplain management

The proposal ensures that the function of the Maribyrnong River is maintained and that future development will be appropriately protected from flood events.

Clause 13.03-1 – Use of Contaminated and Potentially Contaminated Land

The proposal accords with this clause by introducing an Environmental Audit Overlay to ensure the site is remediated prior to the development of the land for a sensitive use.

Clause 13.04 – Noise and air

The provisions of Schedule 12 to the DPO ensure the potential amenity implications of existing land use and development in the vicinity of the subject land (e.g. the rail reserve to the north) are appropriately managed.

Clause 15.01-1 – Urban Design

The implementation of the Development Plan Overlay will ensure any development of the land will respond to the surrounding context and will contribute positively to achieving a high quality, connected, walkable and safe built environment.

Clause 15.01-2 – Urban Design Principles

The proposal supports this Clause in the following ways:

- Enhancing the public realm, including the Maribyrnong River waterfront through the provision of additional public open space and enhancing public access to the waterfront;
- Enhancing views to and from the Maribyrnong River;
- Implementing a movement network that prioritises sustainable modes of transport such as walking and cycling over private cars;
- Ensuring key public realm spaces have appropriate solar access;
- Energy and resource efficiency;
- Architectural quality;

- Increasing passive surveillance through the introduction of a mix of employment and residential uses on site; and
- Activating street frontages.

Clause 15.02-1 – Energy and Resource Efficiency

The proposed amendment will:

- Consolidate underutilised urban land within the urban growth boundary; and
- Facilitate the provision of new housing at increased densities that promotes a more energy efficient use of the land.

Clause 16 – Housing

The proposed change in zoning creates opportunities to increase the diversity of available housing stock within the existing urban area.

Clause 16.01-1 – Integrated housing

The amendment supports this clause by facilitating an increase in the diversity of housing stock in an established urban area with existing infrastructure and services that can meet the needs of future residents.

Clause 16.01-2 – Location of residential development

This amendment addresses issues of urban consolidation by providing for development within an existing urban environment to help reduce sprawl in outer areas of Melbourne.

Clause 16.01-3 – Strategic redevelopment sites

The land is clearly a strategic redevelopment site given its size and strategic location.

Clause 16.01-4 – Housing diversity

The proposed amendment supports this clause by the introduction of the Development Plan Overlay that will facilitate a mix of dwelling types in order to meet the growing demand for housing in an expanded central city.

Clause 16.01-5 – Housing affordability

The Development Plan Overlay requires future residential development to be consistent with the Council's adopted Homes for People: Housing Strategy.

Clause 17 – Economic Development

The amendment will facilitate better utilisation of what is currently an underutilised land resource, for new commercial and retail floorspace, that will create employment and contribute to the economic base of the City of Melbourne.

Clause 17.01 – Commercial

The amendment meets the objectives of this Clause by providing for employment generating uses that are to be complemented by small scale retail opportunities.

How does the amendment support or implement the Local Planning Policy Framework, and specifically the Municipal Strategic Statement?

The amendment supports the following relevant clauses within the Local Planning Policy Framework:

Municipal Strategic Statement (MSS)

<u>Clause 21.02 – Municipal Profile and Clause 21.03 - Vision</u>

- Melbourne's Growth (Clause 21.02-2) – the amendment will contribute to accommodating the continued growth within the municipality, by providing for new residents and new facilities for workers and visitors. It will provide for growth as part of an expanding Central City.

- People City (Clause 21.02-3) – the amendment will facilitate a mixed use development accommodating a diverse range of housing demands.
- Creative City (Clause 21.02-4) – the amendment encourages the location of creative industries within the site.
- Prosperous City (Clause 21.02-5) – the amendment will facilitate a centre of employment in a mix of uses including office, commercial, retail and recreation.
- Eco-City (Clause 21.02-7) – in addition to the usual ESD requirements of future planning permit applications, as part of the Schedule to the DPO, future development is to explore opportunities for precinct-wide sustainable design initiatives.
- Connected City (Clause 21.02-8) – the amendment concentrates employment, new dwellings and other activities in an area with access to the public transport network, and improved pedestrian and cycling networks.

Clause 21.05 – Environment and Landscape Values

The amendment ensures the contribution of land for public open space adjacent to the Maribyrnong River securing the opportunity to enhance the river front consistent with the objectives of this Clause.

Clause 21.06 – Built Environment and Heritage

The amendment applies a Development Plan Overlay that provides for a high level of amenity for future occupants of the site and a design that responds to existing interfaces.

Clause 21.07 – Housing

The amendment will support the anticipated growth of the City of Melbourne's residential population by providing for housing without adverse amenity impacts on established areas.

Clause 21.15-1 – Dynon (Potential Urban Renewal Areas)

The amendment seeks to change the zoning of the site to a Mixed Use Zone to accommodate commercial, retail, residential and other uses as part of an integrated urban waterfront development.

The amendment supports the strategies for the Dynon area by:

- Enhancing the amenity of the Maribyrnong River through the provision of additional public open space.
- Accommodating a mix of retail, commercial, and residential uses of different scales activating Kensington Road and the river frontage.
- Increasing accessibility to services and facilities and permeability of the neighbourhood.
- Not constraining the operations of the Port of Melbourne or the Melbourne Freight Terminal.

Does the amendment make proper use of the Victoria Planning Provisions?

The amendment makes appropriate use of the Victoria Planning Provisions through the application of the Mixed Use Zone and the provision of a Development Plan Overlay and an Environmental Audit Overlay.

The Mixed Use Zone is the most appropriate Victorian Planning Provision to support a mix of residential and commercial development on the subject land. The current Commercial 2 Zoning of the land prohibits dwellings.

The application of the Development Plan Overlay ensures that development will occur in a planned and coordinated manner.

The inclusion of the land within the Environmental Audit Overlay will ensure the land is satisfactorily remediated prior to a sensitive use being developed on the site.

How does the amendment address the views of any relevant agency?

The views of prescribed public authorities and any relevant agencies will be sought during the public exhibition of the amendment.

Does the amendment address relevant requirements of the Transport Integration Act 2010?

The *Transport Integration Act 2010* establishes a framework for the provision of an integrated and sustainable transport system in Victoria. The Act provides for a system in which all transport activities and modes work together and recognises the interdependency of transport and land use.

The amendment will facilitate a development which integrates with the existing transport system.

Resource and administrative costs

What impact will the new planning provisions have on the resource and administrative costs of the responsible authority?

It is not expected that the amendment will give rise to any unreasonable resource or administrative costs for the responsible authority. The amendment will provide the appropriate planning framework for the responsible authority to efficiently plan for this site.

Where you may inspect this Amendment

The amendment is available for public inspection, free of charge, during office hours at the following places:

City of Melbourne,

Level 3, 240 Little Collins Street

MELBOURNE VIC 3000

City of Melbourne website at: www.melbourne.vic.gov.au/planningamendments.

The Amendment can also be inspected free of charge at the Department of Environment, Land, Water and Planning website at www.dtpli.vic.gov.au/publicinspection.

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SCHEDULE 12 TO THE DEVELOPMENT PLAN OVERLAY

Shown on the planning scheme map as **DPO12**

WEST MELBOURNE WATERFRONT

Site description

The site is 160 – 232 Kensington Road, West Melbourne.

1.0 Requirement before a permit is granted

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A planning permit may be granted to demolish a building or to carry out site preparation works and related activities before a development plan has been prepared to the satisfaction of the Responsible Authority - provided the Responsible Authority is satisfied that the permit will not prejudice the future use and development of the land in an integrated manner and will contribute to the vision for the site.

2.0 Conditions and requirements for permits

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Permit Application Requirements

Unless otherwise excused by the Responsible Authority in writing, an application for planning permit must include the following:

- A Cultural Heritage Management Plan prepared by a suitably qualified professional.
- A landscape plan prepared by a suitably qualified person(s) to the satisfaction of the City of Melbourne that includes proposed landscape treatments for the interface with the Maribyrnong River.
- A plan which identifies all structures and treatments, including public art, proposed in the public realm to the satisfaction of the City of Melbourne.

Except for a permit issued as provided for under Clause 1.0 of this Schedule a permit must contain the following permit conditions:

Flood mitigation

Prior to commencement of the works authorised by the permit, the owner of the land must enter into an agreement with Melbourne Water and the Responsible Authority pursuant to section 173 of the Planning and Environment Act 1987 whereby the owner covenants that:

- Prior to the occupation of the works authorised by the permit, the owner of the land is to provide for safe pedestrian and vehicular access from the development during a peak flood event (1 in 100 year flood level) to the satisfaction of Melbourne Water and the Responsible Authority.
- The finished floor level of any residential building be constructed to a minimum of 600 mm above the applicable 1 in 100 year flood level of 2.46 metres to AHD.
- No polluted and / or sediment laden runoff is to be discharged directly or indirectly into Melbourne Water's drains or watercourses.

Civil Infrastructure and Community Infrastructure Contribution

Prior to the commencement of the use or works authorised by the permit (excluding any demolition or site preparation works and related activities) on the land, the owner of the land must enter into an agreement with the Responsible Authority pursuant to

section 173 of the Planning and Environment Act 1987 whereby the owner covenants that:

- All new roads within the site or altered portions of existing roads (including the provision of footpaths, stormwater drainage, public lighting, street trees, pavement marking and signage) and works to the traffic network, including traffic lights, Kensington Road footpath and bike path, reconstruction of kerb and channels and crossing must be constructed at the owners cost prior to the occupation of the development in accordance with plans and specifications first approved by the City of Melbourne – Engineering Services.
- Provide access to other properties on Kensington Road, at the cost of the developer, in accordance with detailed plans and specifications first approved by the City of Melbourne – Engineering Services.
- All structures and civil infrastructure are to be designed and constructed in accordance with detailed plans and specifications first approved by the City of Melbourne to the City of Melbourne's standards.
- Payment to the City of Melbourne of a community infrastructure contribution of $1,480.46 (indexed 1 July each year according to the Building Price Index, June Quarter, Melbourne, in Rawlinsons Australian Construction Handbook) per dwelling authorised by the permit, such contribution to be paid prior to a certificate of occupancy being granted.
- The owner of the land must pay all of the Responsible Authority's reasonable legal costs and expenses of this agreement, including preparation, execution and registration on title.

Noise, odour and dust protection

- All buildings authorised by the permit must be designed to protect themselves from any odour and dust emissions from surrounding uses.
- Prior to occupation of a dwelling authorised by the permit, an acoustic report must be submitted confirming that the development achieves the following:
  For Railway noise:
  - Noise intrusion of railway and associated infrastructure noise sources to noise sensitive receivers shall not exceed:
    - 55 dBLAmax (bedrooms)
    - 60 dBLAmax (living room areas)

  For other noise:
  - Any new or refurbished development or any conversion of part or all of an existing building that will accommodate new residential or other noise-sensitive uses must:
    - Be designed and constructed to include noise attenuation measures. These noise attenuation measures must achieve a maximum noise level of 35dB(A)Leq in unfurnished and uncarpeted habitable rooms, with all windows and doors closed, unless there is no suitable air conditioning and/or mechanical ventilation, in which case the maximum noise level of 35dB(A)Leq in unfurnished and uncarpeted habitable rooms must be achieved with all the windows half open and the doors closed.
    - Be fitted with suitable air conditioning and /or mechanical ventilation system to the satisfaction of the responsible authority unless the maximum noise level of 35dB(A)Leq in unfurnished and uncarpeted habitable rooms can be achieved with all the windows half open and the doors closed.
    - Have walls, roof, windows, doors and external glazing and the air conditioning or ventilation system designed by a qualified acoustical consultant who must certify that the incorporation of the design features recommended by the consultant will achieve a maximum noise level in unfurnished and uncarpeted habitable rooms of 35dB(A)Leq, based on the external noise levels

measured by the consultant as part of a noise level assessment conducted to the satisfaction of the responsible authority.

Wind Assessment

Prior to endorsement of the plans, a Wind Assessment Report must be submitted to the Responsible Authority confirming that the development achieves the following:

- No detrimental change to the wind speed along the public path.
- Ensure the river front public realm and areas designated for outdoor cafes and restaurants is acceptable for short term stationary wind exposure (where peak gust speed during the hourly average with a probability of exceedence of 0.1% in any 22.5o wind direction sector not exceeding 13 ms1).
- All other areas be designed to be acceptable for walking (where peak gust speed during the hourly average with a probability of exceedence of 0.1% in any 22.5o wind direction sector not exceeding 16 ms1).

Staged Planning Permits

If a planning permit authorises a use or development for part of the overall land governed by this overlay, the permit must show (either by words or diagrammatically):

- How the use or development authorised by the permit is consistent with and will facilitate delivery of no less than 7.06% of the land governed by this overlay being set aside and ultimately zoned for public open space generally in accordance with Figure 1- Indicative Framework Plan.
- How the use or development authorised by the permit will integrate with any previously approved and with remaining stages of development of the land.

Permits which authorise a building that exceeds the preferred maximum building height

If a planning permit authorises a building that exceeds the preferred maximum building height of 10 storeys, the permit must show (either by words or diagrammatically), the equivalent of 15% of the gross floor area above ten storeys, authorised by the permit as set aside in the building (or with consent of the Responsible Authority in another part of the land governed by this overlay) for affordable housing. The housing is to be acquired at nil cost by the housing provider.

3.0 Requirements for development plan

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The Development Plan must be consistent with the following vision for the site:

An exemplary mixed use development including a number of visually integrated buildings, which enhance the Maribyrnong River frontage and provide opportunities for riverside activity consistent with the Maribyrnong River Valley Design Guidelines 2010.

The Development Plan must be generally in accordance with the Indicative Framework Plan, as shown in Figure 1, to the satisfaction of the Responsible Authority.

The Development Plan must include the following:

- An urban context and existing conditions analysis showing topography, the top of the Maribyrnong River bank, the surrounding and on site land uses, buildings, noise and odour sources, access points, adjoining roads, cycle and pedestrian paths and public transport.
- Identification of views to be protected and enhanced, including views of and from the site.
- A plan showing proposed demolition.
- A summary of the site's key land use and development opportunities and constraints.

A Concept Plan which shows:

- The provision of not less than 7.06% of the site frontage along the Maribyrnong River as public open space.
- The mix of land uses.
- Building envelopes including maximum building heights, building setbacks, and building depths.
- Conceptual elevations.
- Cross sections, indicating level changes across the site.
- Orientation and overshadowing demonstrating that the development does not cast a shadow over public open space between 9 am and 3 pm for a minimum of three hours at the solstice and a minimum of five hours at the equinox.
- Street and movement networks, including pedestrian and cycling connections.
- A Public Realm Plan that includes open space and other public realm spaces prepared by a suitably qualified person(s) to the satisfaction of the Responsible Authority.

If it is proposed to develop the land governed by this overlay in stages, a staging plan must be provided to the satisfaction of the Responsible Authority. The staging plan must, unless otherwise excused by the Responsible Authority, identify:

- The proposed sequencing of development, the indicative timing of the provision of infrastructure and services and overall integration with other development stages.
- Vehicular access points, road infrastructure works and traffic management for each stage of the development.

The development plan must also be accompanied by the following reports to the satisfaction of the Responsible Authority:

- An Integrated Transport and Access Plan which includes:
    - Expected traffic generation and the impact on the existing road network.
    - Location of vehicle egress and ingress points.
    - The provision of a movement network to, from and within the site that:
        - connects with and complements the form and structure of the surrounding network;
        - recognises the primacy of pedestrian and bicycle access within the site;
        - provides a high level of amenity and connectivity;
        - allows for appropriate levels of manoeuvrability for emergency and service vehicles; and
        - are of sufficient width to accommodate footpaths, street trees, water sensitive urban design and bicycle lanes.
- A wind analysis to the satisfaction of the Responsible Authority demonstrating that future development will meet the wind requirements in Section 2 of this Schedule.
- A heritage assessment which identifies any heritage places, prepared by a suitably qualified heritage professional.
- An Infrastructure Analysis Report which addresses the following, as appropriate: location of existing infrastructure on the site, drainage and stormwater management.
- An Environmental Sustainable Development Report identifying the environmental initiatives to be included in the development.
- An Acoustic and Vibrations Assessment prepared by a suitably qualified engineer identifying and assessing nearby acoustic emitters including the rail line to the north. The Report must identify and detail how future development will meet the acoustic requirements in Section 2 of this Schedule.
- An odour report which provides details of odour distance thresholds and odour mitigation measures.
- A Stormwater and Flood Management Plan, prepared by a suitably qualified person(s) to the satisfaction of Melbourne Water and the Responsible Authority that identifies and considers:
    - The historical flooding of the site;
    - The unique flooding characteristics of the site, in particular aspects such as flood conveyance, flood storage and accessibility during floods. A

model should be prepared demonstrating the 'base case', impacts of redevelopment on the land and mitigation options;
- The control of flows in and around the site for discharges up to and including the 1 in 100 year ARI event;
- Works required to create safe pedestrian and vehicle access and egress to and from the land;
- That residential buildings are to attain a finished floor level of a minimum of 600mm above the applicable 1 in 100 year flood level of 2.46 metres to AHD; and
- Mitigation works in the context of local conditions that do not prejudice potential future regional outcomes.

The development plan must, unless excused by the Responsible Authority, demonstrate how the future use and development of the land responds to the following principles and objectives:

Land Use

- Provide a mix of land uses, focusing commercial uses at the northern end of the site and along Kensington Road.
- Any larger format retail uses (such as a supermarket) should be sleeved with smaller tenancies.
- Activation of the first five levels of buildings at the street edge with residential or commercial uses to achieve a visual relationship between occupants of upper floors and pedestrians.
- Provide varied accommodation typologies suitable for a range of household sizes and types, including the delivery of affordable housing to support the goals of City of Melbourne Homes For People: Housing Strategy (2014).
- Provide floorspace for community services such as child care and creative industries.
- Design buildings that can be adapted to a range of uses over time.
- Ensure that the proposed use does not compromise established land uses on adjoining and nearby land, including the Port of Melbourne.

Urban Design and Public/Private Realm

- The design of the public realm must achieve design excellence and include a high quality palette of materials and finishes.
- Ensure development does not compromise bank stability or result in increased erosion of the Maribyrnong River.
- Protect ongoing public access to and along the Maribyrnong River.
- Public open space along the river should provide for a variety of spaces and experiences and biodiversity values consistent with the City of Melbourne Open Space Strategy 2012.
- Along the river front there is to be no direct access to private dwellings.
- Ensure a clear distinction between private and public realm throughout the site.
- Provide a range and variety of high quality communal and private outdoor spaces.
- Enhance the role of the Maribyrnong River as a pedestrian and cycle route.
- Enhance views and access to the Maribyrnong River from Kensington Road.
- Pedestrian links should be a minimum width of 4 metres, with high quality paving materials and lighting.
- Street interfaces are to be engaging and designed to enable passive surveillance.
- Tree canopy cover of 41% at maturity, should be achieved in the public realm, consistent with the City of Melbourne Urban Forest Strategy 2012-2032.

Built Form

- The bulk of new buildings must provide for a comfortable pedestrian environment and not overwhelm the public domain.
- Development of the site consistent with the Maribyrnong River Valley Design Guidelines 2010.

- The development plan must be consistent with the building envelope specified in Figure 1. The built form must:
    - Be setback a minimum of 15 metres and an average of 25 metres from the top of the Maribyrnong River bank.
    - Be setback at a ratio of 3:5 from the top of the Maribyrnong River bank.
    - Adopt a street edge of 3 to 6 storeys on Kensington Road. Above the street wall, upper floors should be set back within a 45 degree angle.
    - Be setback a minimum of two metres from the existing Kensington Road site boundary with the area to be set aside as a footpath included into the road reserve.
- The preferred maximum building height on the land is 10 storeys. Additional height, up to 14 storeys, may be achieved where it can be demonstrated that it meets the above objectives and will not create additional shadow to the Maribyrnong River, the public open space, the internal street network or the footpath on Kensington Road between 11am and 2pm at the equinox. This will be considered in the context of the delivery of affordable housing.
- Where ground floor residential uses abut the street they should be a maximum height of 1.2 metres above the finished level of the street.
- Minimise over shadowing within the site and on adjoining land.
- Ensure that building heights provide an appropriate transition to site interfaces and do not visually dominate the waterfront.
- Ensure that new development provides a high level of amenity for future occupants, including windows to all bedrooms which are visible from all points in the bedroom and a minimum size of 50 square metres for one bedroom dwellings and 65 square metres for two bedroom dwellings.
- Floorplates are to be designed to maximise opportunities for direct sunlight, natural cross ventilation and passive heating and cooling.
- All habitable rooms must have good natural light.
- All building frontages to Kensington Road, internal streets and to the Maribyrnong River should be modulated and articulated in their presentation.
- The architectural composition of the individual buildings should avoid use of a tower and podium typology.
- Ensure that all development achieves design excellence and that a high quality palette of materials and finishes is selected.
- Car parking visible from the public realm should not occupy more than 20% of the length of frontages at ground level and in the first five levels of the building.
- Car parking should be designed to provide for the opportunity to enable a future change in use.

Pedestrian Permeability, Traffic Management and Bicycle and Car Parking

- Provide a network that:
    - complements and connects with the surrounding network;
    - recognises the primacy of pedestrian and bicycle access within the site and provides a high level of amenity and connectivity;
    - provides safe access for pedestrians and bike users at all times of the day and night;
    - allows for manoeuvrability of emergency and service vehicles; and
    - is of sufficient width to accommodate footpaths, street trees, and water sensitive urban design.
- Manage traffic impacts associated with the new development to ensure safe access to, and egress from the site and to minimise disruption to movement along Kensington Road.
- Ensure the pedestrian network allows for ease of movement within the site:
    - Street or laneway blocks should not exceed 100 metres on any side and secondary streets or laneways included in blocks over 70 metres.
    - The provision of convenient and direct pedestrian movement north south through the site (in addition to Kensington Road and the shared path along the River) is encouraged.

- Ensure direct pedestrian and cycle access is provided from Kensington Road to the Maribyrnong River shared path at intervals of at least every 100 metres.
- Ensure that the 'shared zone' as illustrated on the Indicative Framework Plan (Figure 1) is designed so that it is a low speed environment and that priority is afforded to pedestrian movements.
- Ensure service entries, where required, are provided along the northern boundary of the site.

Environmentally Sustainable Design

- Explore opportunities for innovative precinct scale environmentally sustainable initiatives.

3.0 Decision Guidelines

--/--/20--
C221

Before deciding on a request to approve or amend a Development Plan, the Responsible Authority must consider as appropriate:

- Any written comments received in response to the display of the Development Plan.
- The views of Melbourne Water, Environmental Protection Authority, Department of Environment, Land, Water and Planning, Port of Melbourne, VicTrack and the City of Maribyrnong.

Figure 1 – Indicative Framework Plan

4.0 Reference Documents

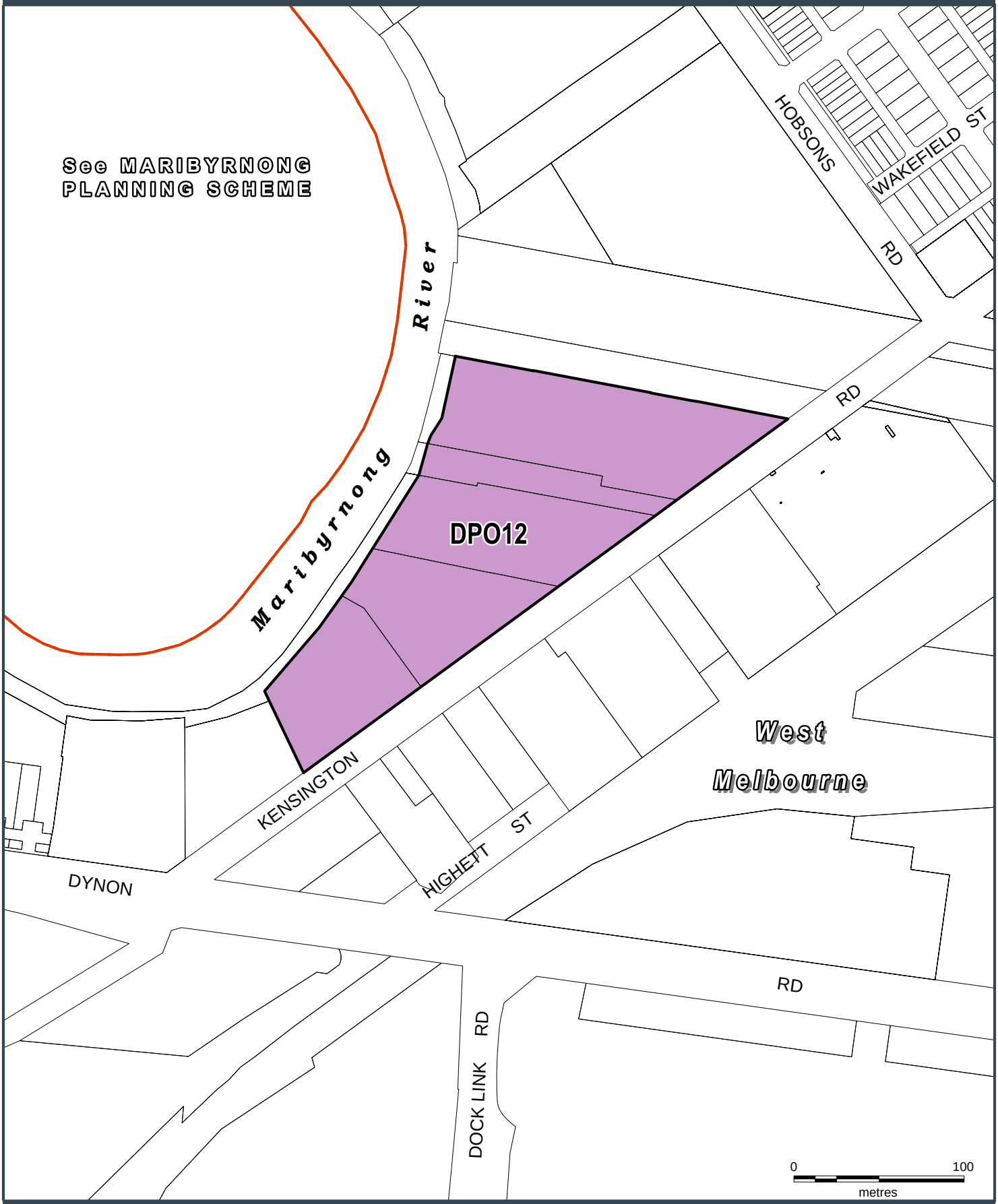
--/--/20--
C221

Homes for People: Housing Strategy 2014-18

City of Melbourne Open Space Strategy 2012

Urban Forest Strategy 2012-2032

Kensington Urban Forest Precinct Plan 2014

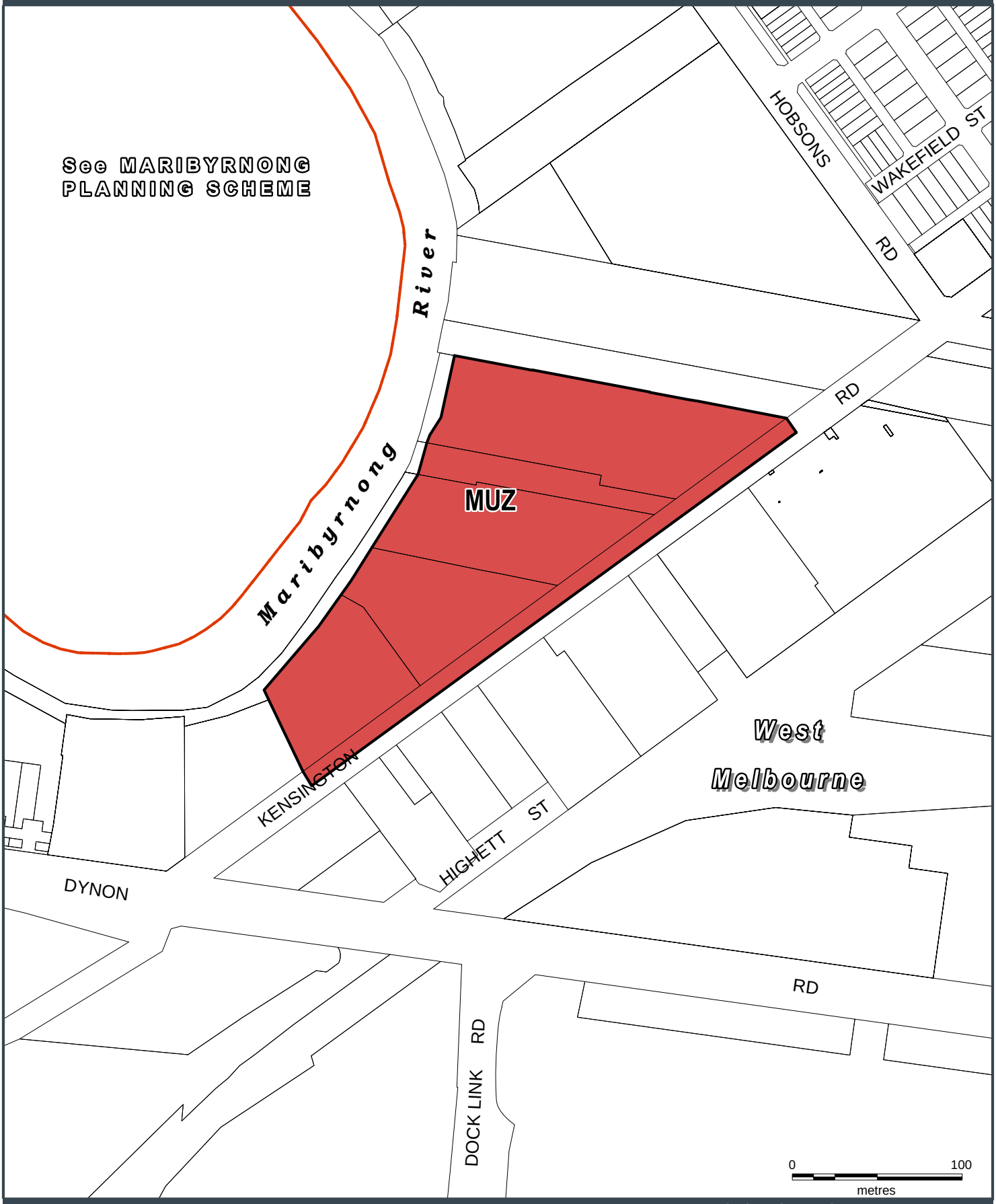


LEGEND

DPO12 Development Plan Overlay - Schedule 12

Part of Planning Scheme Map 4DPO

AMENDMENT C221

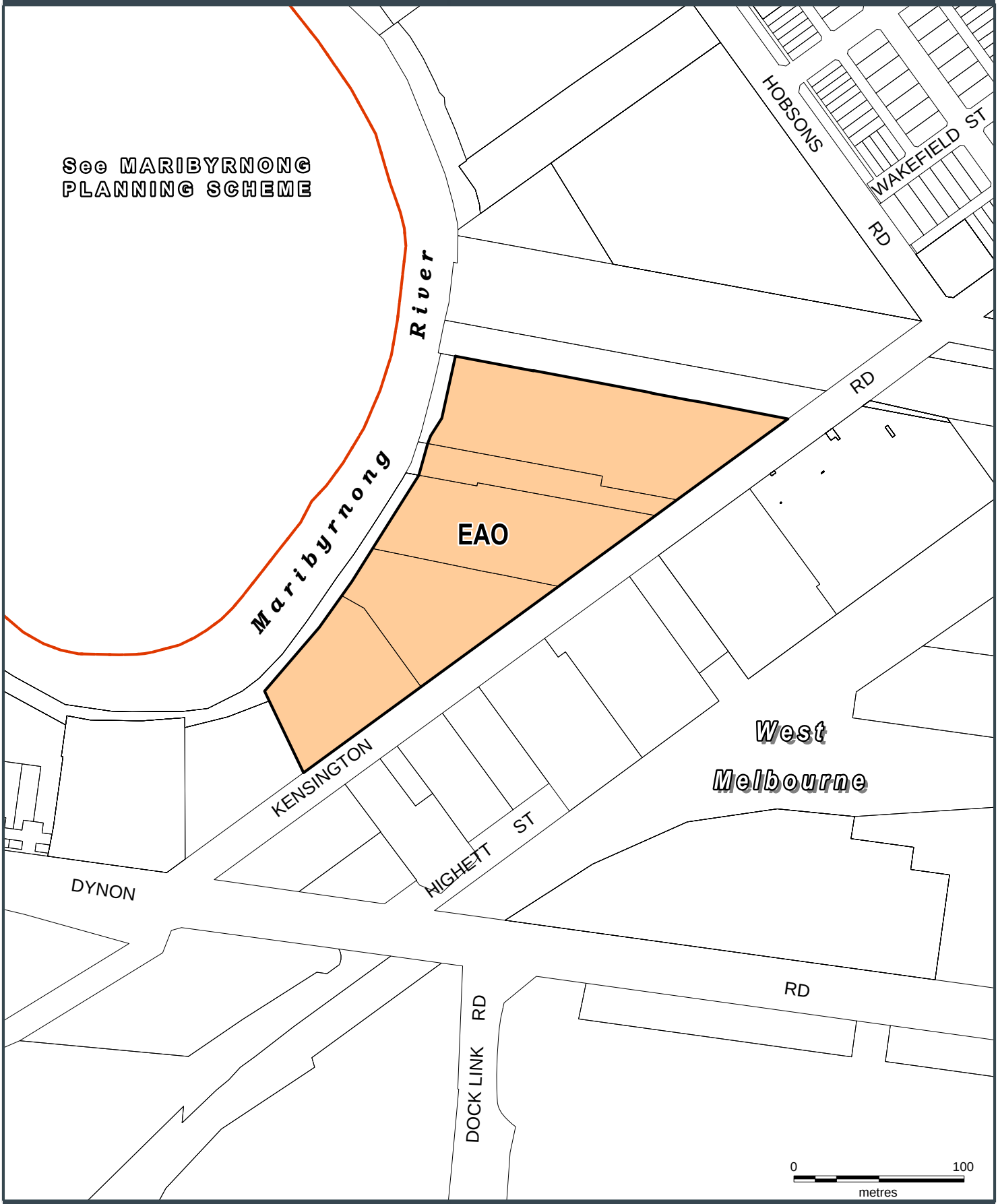


LEGEND

MUZ Mixed Use Zone

Part of Planning Scheme Map 4

AMENDMENT C221



LEGEND

EAO Environmental Audit Overlay

Part of Planning Scheme Map 4EAO

AMENDMENT C211

Planning and Environment Act 1987

MELBOURNE PLANNING SCHEME

AMENDMENT C221

INSTRUCTION SHEET

The planning authority for this amendment is the City of Melbourne.

The Melbourne Planning Scheme is amended as follows:

Planning Scheme Maps

The Planning Scheme Maps are amended by a total of three attached maps.

Zoning Maps

1. Amend Planning Scheme Map No. 4 in the manner shown on the attached map marked "Melbourne Planning Scheme, Amendment C221".

Overlay Maps

2. Amend Planning Scheme Map No 4.EAO in the manner shown on the attached map marked "Melbourne Planning Scheme, Amendment C221".

3. Amend Planning Scheme Map No 4.DPO in the manner shown on the attached map marked "Melbourne Planning Scheme, Amendment C221".

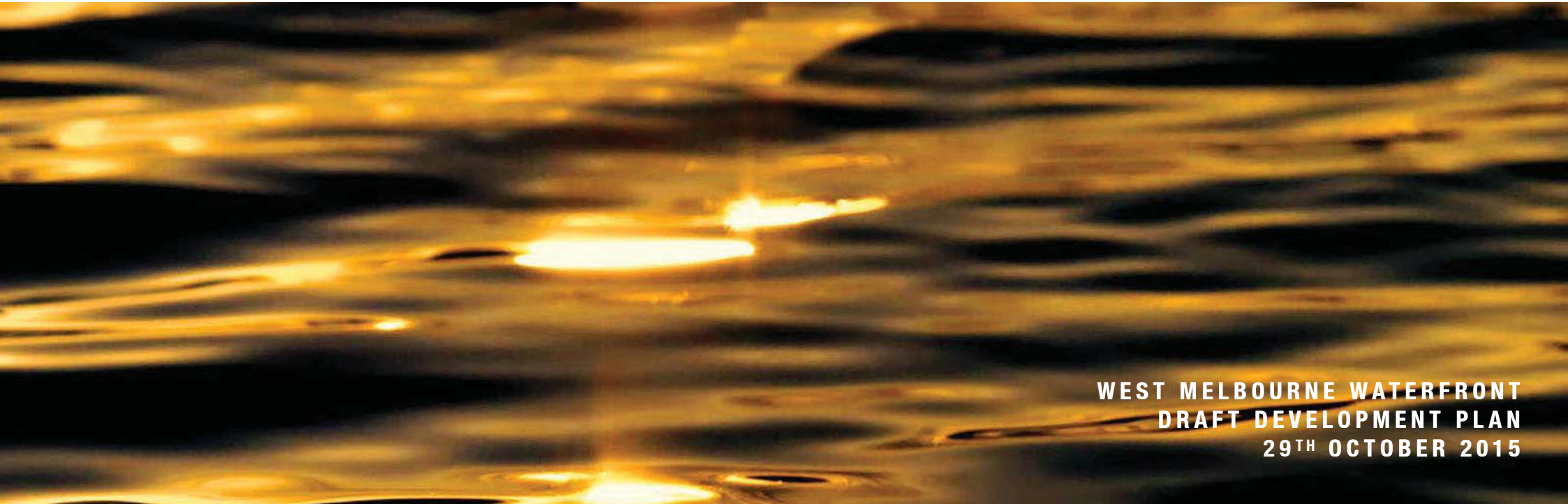
Planning Scheme Ordinance

The Planning Scheme Ordinance is amended as follows:

4. In Overlays – Clause 43.04, insert a new Schedule 12 in the form of the attached document.

End of document

WMW



WEST MELBOURNE WATERFRONT
DRAFT DEVELOPMENT PLAN
29TH OCTOBER 2015

W M W

CONTENTS

1.0 INTRODUCTION

The West Melbourne Waterfront site is approximately 2.8 hectares, with a frontage to Maribyrnong River of approximately 230 meters. It is approximately 3.5 kilometers west of Melbourne's Central Business District.

The draft Development Plan includes a mix of commercial office floor space, retail/hospitality floor space and a mix of new residential activity. A vibrant public realm experience on the Maribyrnong River is central to the proposal.

In summary, the key planning outcomes delivered by the proposal are:

- Regeneration of a large section of the Maribyrnong River frontage consistent with the City of Melbourne Open Space Strategy (2012) and the Maribyrnong River Valley Design Guidelines (2010) in order to create an exemplar urban waterfront urban design outcome.
- Transfer of at least 7.06% of the overall site area as public open space to the City of Melbourne, which will increase the riparian zone and the diversity of recreational opportunities.
- A mix of land uses including employment and a diversity of housing typologies.
- A development outcome that incorporates opportunities for innovative precinct scale sustainability initiatives.
- Significant support for existing infrastructure, and contributions to new and improved local infrastructure.

The proposal is consistent with State and local planning policies given it is within the Dynon Urban Renewal Area in the Central Sub-Region of Plan Melbourne, and Kensington Road, West Melbourne is identified as a potential Urban Renewal Area in the Municipal Strategic Statement in the Melbourne Planning Scheme.

The draft Development Plan has been informed by specialist consultant input. The consultant reports do not form part of the Development Plan.

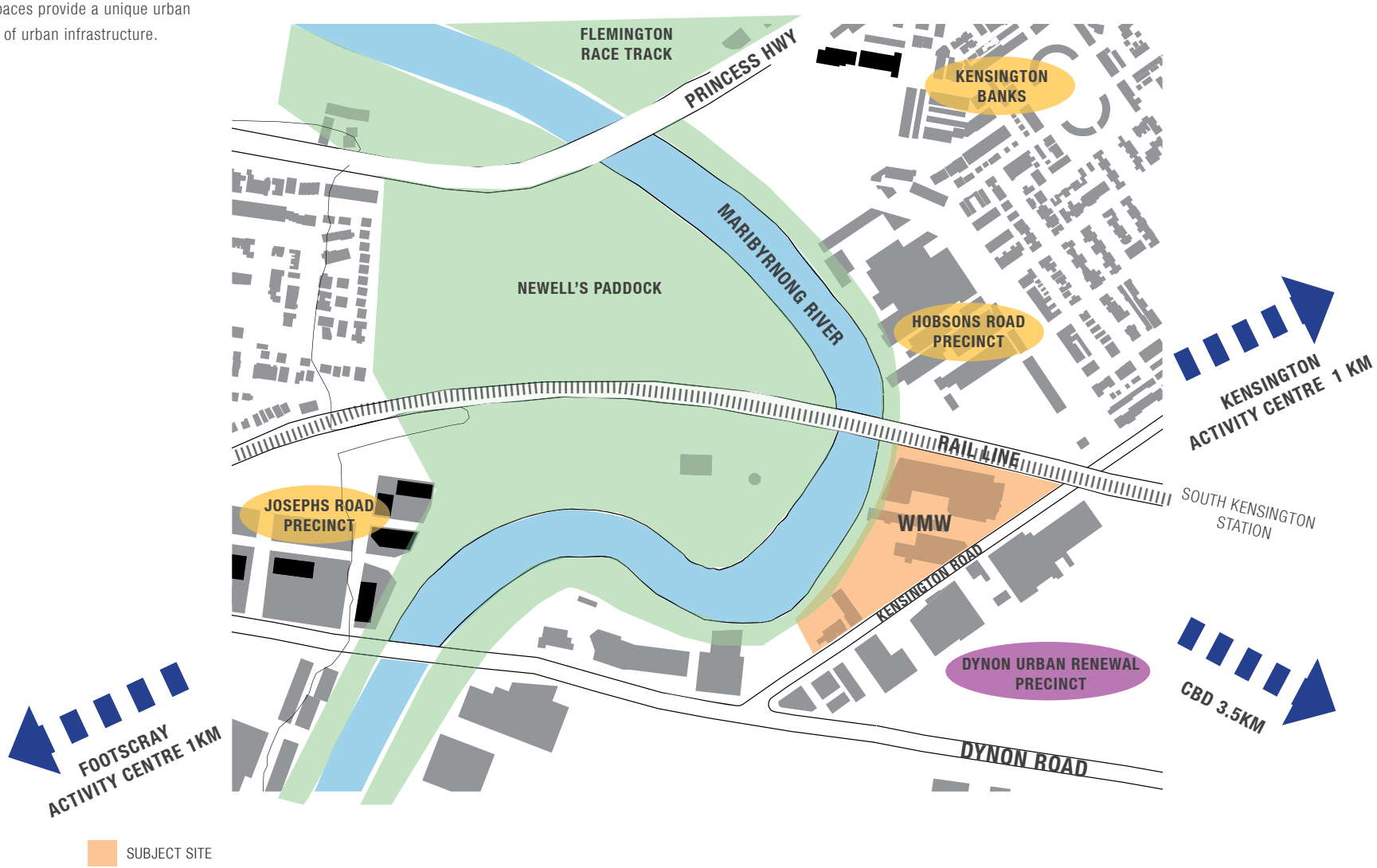
- Urban Design and Town Planning – Woods Bagot, Oculus, Contour Consultants and NH Architecture
- Architecture - Woods Bagot and NH Architecture
- Landscape Architecture and Public Realm – Oculus
- Stormwater and Flood Management – GHD
- Acoustic and Vibration Analysis - ARUP
- Integrated Transport– GTA Consultants
- Service Infrastructure Analysis – GHD
- Wind Engineering - Windtech
- Odour Assessment - GHD
- Heritage Assessment - Anthemion Group
- Environmental Sustainability Assessment - Cundall
- Economic and Market Analysis – KPMG and Resolution Research Strategists

2.0 URBAN CONTEXT AND EXISTING CONDITIONS ANALYSIS

2.1 URBAN CONTEXT PLAN

The subject land is within an urban renewal corridor that extends between the city and Footscray.

The Maribyrnong River and surrounding open spaces provide a unique urban setting and the area is well serviced by a range of urban infrastructure.

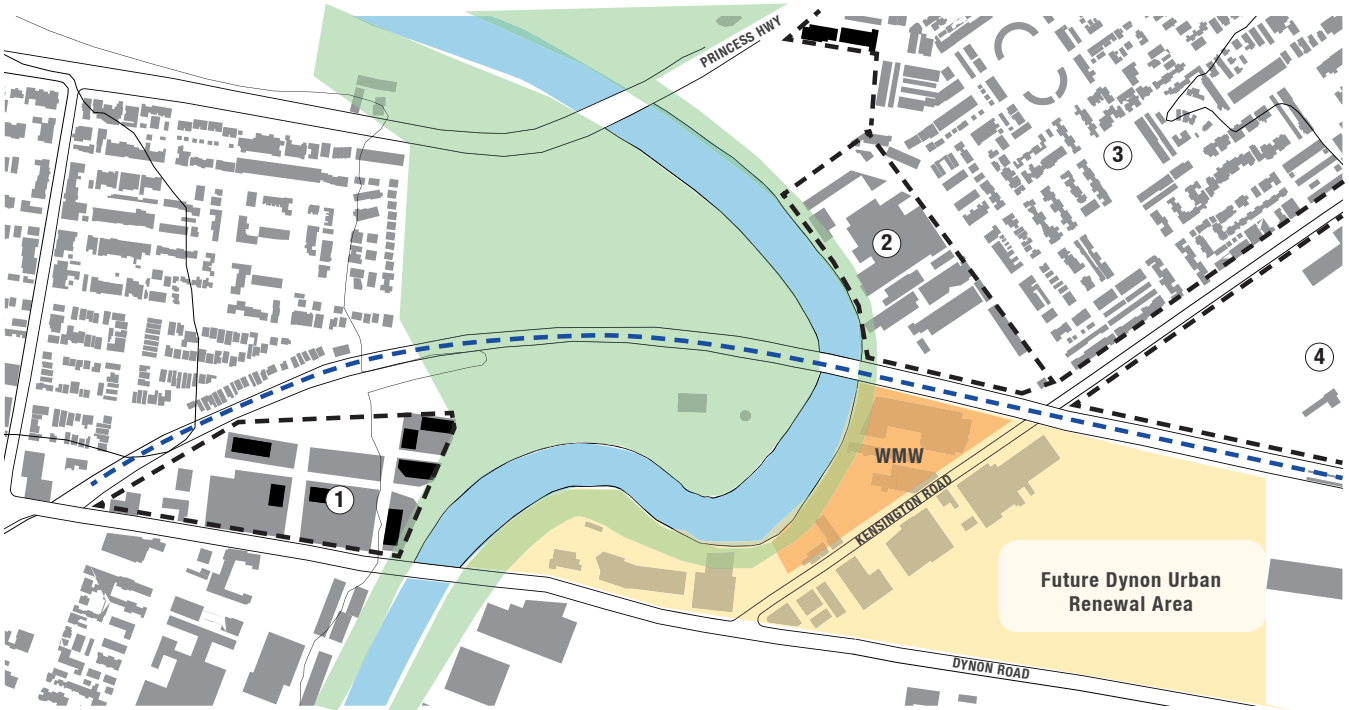


2.2 BUILT FORM CONTEXT

The built form character of the area is mixed.

Nearby existing and proposed urban infill projects include Joseph Road Footscray, Hobsons Road Kensington, Kensington Banks Kensington and the Department of Housing complex in Altona Street Kensington.

Within these precincts, building heights range from single storey (parts of Kensington Banks) up to 32 storey apartment and mixed use developments (evident within Joseph Road Footscray). The immediate built form context is represented in the Built Form Context Diagram.



1

APPROVED DEVELOPMENT
AT HOPKINS ST, JOSEPH RD PRECINCT

JOSEPH ROAD PRECINCT
15-32 storeys (average 22 storeys)

SOURCE:
"Information Memorandum - 2 Hopkins St Footscray", Savills, 2014, p. 11.

2

APPROVED DEVELOPMENT
AT HOBSONS ROAD

HOBSONS ROAD PRECINCT
Up to 6 storeys

SOURCE:
http://www.kensingtonriverwalk.com.au

3

EXISTING DEVELOPMENT IN WESTERN KENSINGTON BANKS

KENSINGTON BANKS
single storey dwellings up to 11 storeys

4

EXISTING "KENSINGTON ESTATE" DEVELOPMENT

KENSINGTON ESTATE
Single Storey dwellings up to 13 storeys

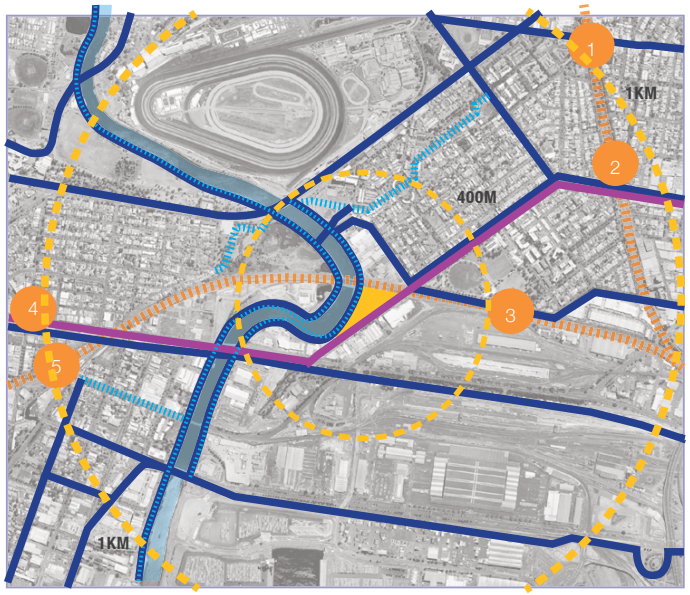
2.3 CONNECTIVITY AND SERVICES

An overview of the surrounding urban infrastructure, the general connectivity to services and the network of nearby urban spaces is illustrated in the following diagrams.

PUBLIC TRANSPORT, PEDESTRIAN & CYCLE LINKS < 20 MINUTES (WALKING):

1. Newmarket Train Station
2. Kensington Train Station
3. South Kensington Train Station
4. Hopkins/Leed Tram Stop
5. Footscray Train Station

Cycle & Pedestrian Link
Principle Bicycle Network
Rail Line
Bus Route



PUBLIC OPEN SPACE < 20 MINUTES (WALKING):

1. Henry Turner Memorial Reserve
2. Lynch's Bridge
3. Newell's Paddock
4. J J Holland Park

Existing Public Open Space

2.4 SITE SURVEY PLAN

The subject land is described as 160 – 232 Kensington Road, West Melbourne and it comprises five lots formally known as:

- Lot 1 on Title Plan 568898 M *(part 156-174 Kensington Road.)*
- Lot 1 on Title Plan 582035 S
- Lot 1 on Title Plan 842004 H
- Lot 1 and Lot 2 on Plan of Subdivision 724275 W

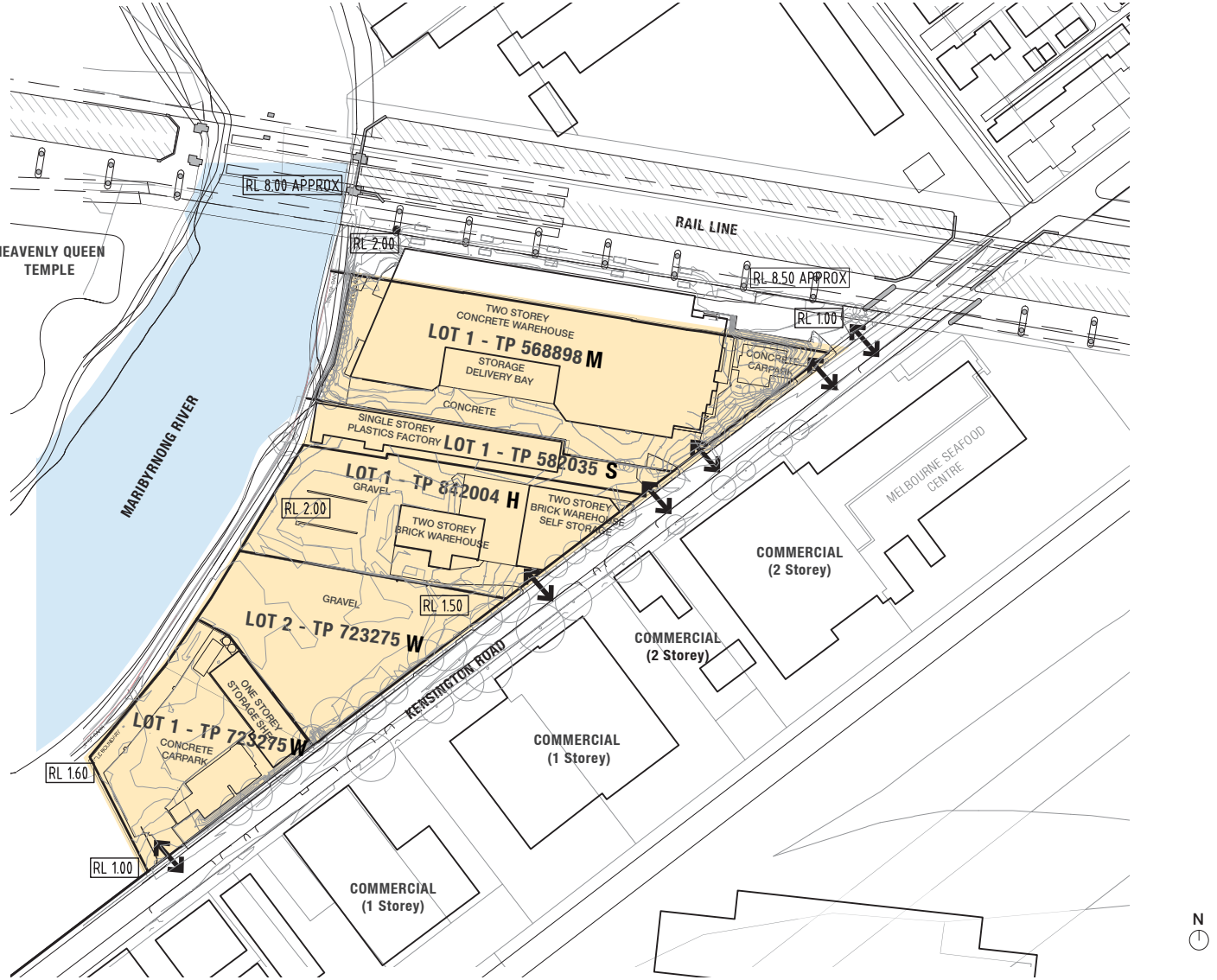
The subject land is irregular in shape, it is partly vacant, partly occupied by commercial buildings and it has a total area of approximately 2.8 hectares.

The subject land is generally bound by land managed by VicTrack to the north inclusive of the elevated railway line that services both passenger and freight services, Kensington Road to the east (20 meters wide), a commercial property to the south and the Maribyrnong River to the west surrounding industrial land.

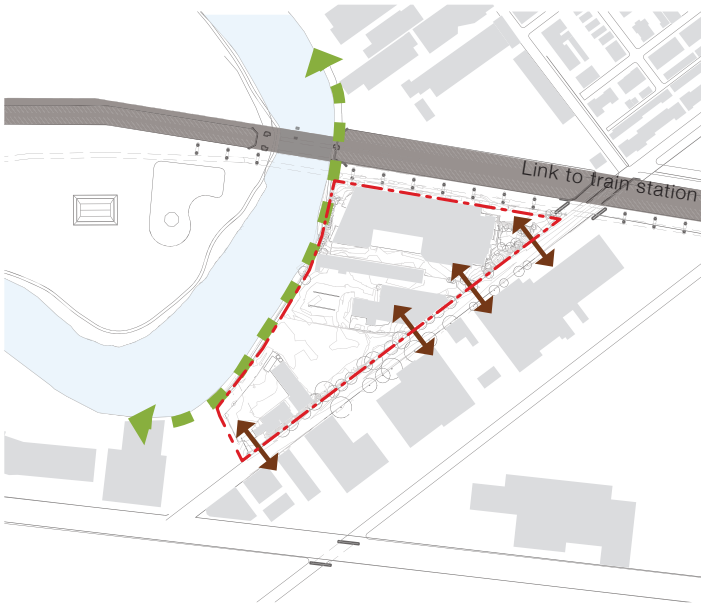
The longest edges are Kensington Road and the Maribyrnong River. The land has been variously used for industrial and commercial purposes. It is proposed to demolish all buildings on the land.

The diagrams on the following page illustrate:

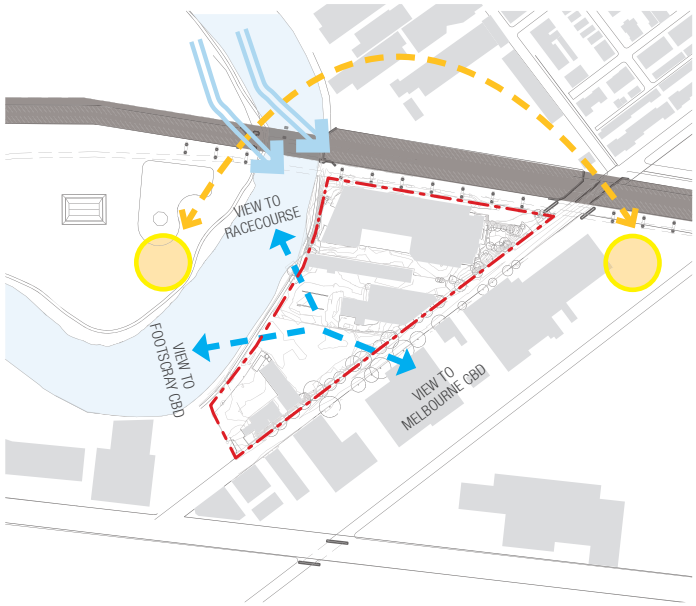
- Site Edges and Interfaces
- Existing Site Access
- Environmental Considerations



EXISTING CONDITION DIAGRAM - EDGES AND INTERFACES



EXISTING CONDITION DIAGRAM - EXISTING SITE ACCESS



EXISTING CONDITION DIAGRAM - ENVIRONMENTAL CONSIDERATIONS

Site Area
River interface
Impermeable rail interface
Kensington road interface

Existing Car Access
Shared Path
Bus Stop

Solar Path
Northerly Wind
Views

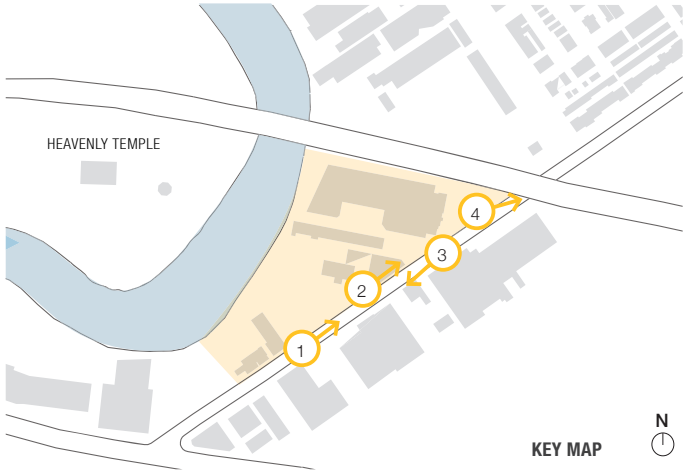
2.5 EXISTING CONDITIONS KENSINGTON ROAD

The subject land has a frontage to Kensington Road of approximately 350 metres inclusive of 5 vehicle crossovers, street trees and footpaths. The Kensington Road reserve is approximately 20 meters wide and currently accommodates a single vehicle carriageway in each direction, bicycle lanes and on-street parking.

There are two bus stops located in front of the subject land on the west side of Kensington Road.

On the east side of Kensington Road are commercial properties including warehouses. Built form on the east side of Kensington Road is generally 2 – 3 storeys in height with varied setbacks.

The railway overpass at the north-east corner of the site is a significant feature and constraint.



1

2

3

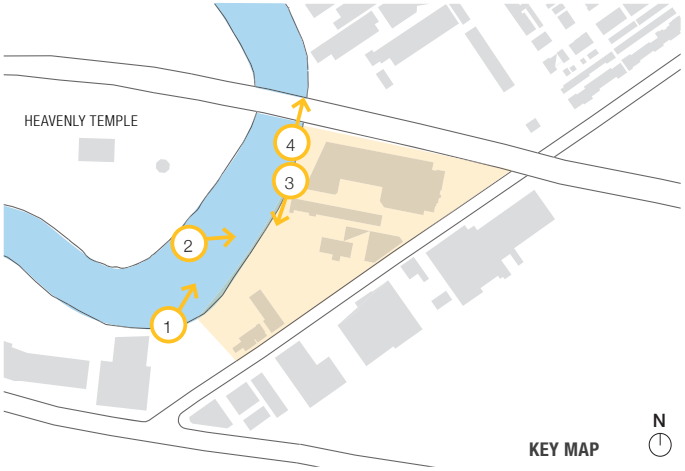
4

2.6 EXISTING CONDITIONS MARIBYRNONG RIVER

The subject land has a frontage of approximately 230 metres to the Maribyrnong River. This section of the Maribyrnong River includes a shared path that runs north-south along the east bank.

Beyond the river to the west is the Heavenly Queen Temple.

This length of the Maribyrnong River is characterised by a mix of land uses and built form.




1


2


3


4

3.0 OPPORTUNITIES AND CONSTRAINTS ANALYSIS

There are a number of opportunities and constraints that have influenced the site planning strategy and built form response.

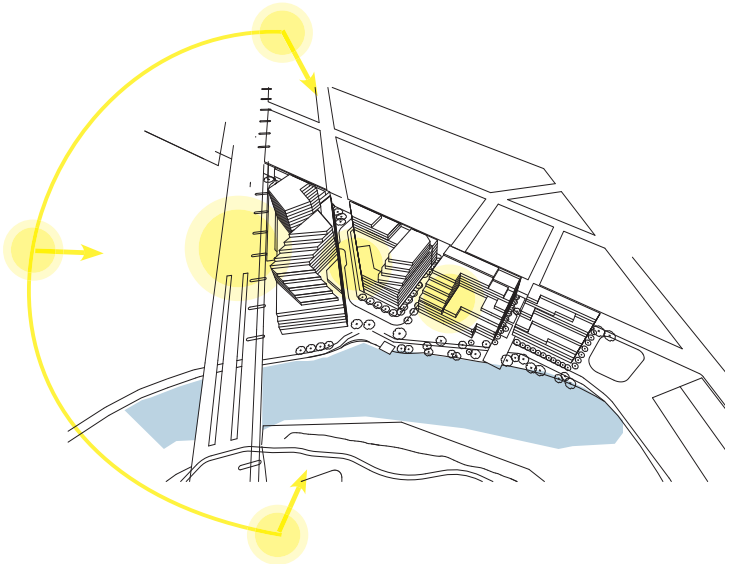
The key opportunities include:

- Respond positively to the Maribyrnong River and contribute additional public open space that enhances accessibility to the river.
- Improve public views to and from the Maribyrnong River.
- Achieve the 'urban waterfront objective' associated with the Maribyrnong River Valley Design Guidelines 2010.
- Creation of a new waterfront civic space that takes advantage of the northerly orientation.
- Deliver innovative and precinct-wide sustainable initiatives.
- Creation of a permeable movement network that has regard to potential future connections to the balance of the Dynon precinct.

In addition to these opportunities, the following constraints are acknowledged:

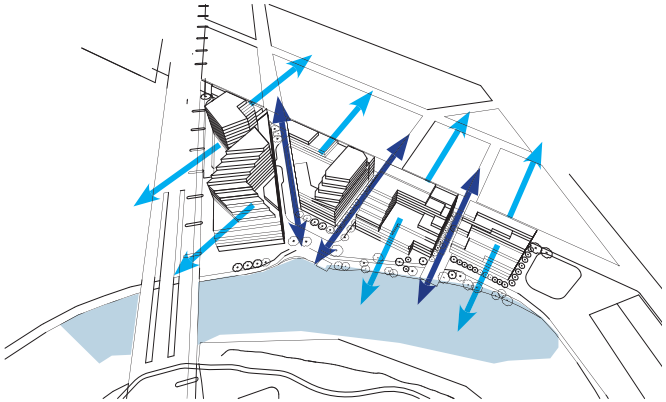
- The need to manage hydrology, including potential inundation associated with storm events.
- The need to manage acoustic and vibration implications of the rail line to the north through the site planning strategy.
- Manage traffic generation in proximity to the Maribyrnong River.
- Management of the staging of the development, and the infrastructure / services delivery for each stage.
- Consideration of established uses on nearby land.

How these opportunities and constraints have been managed within the site planning strategy and the built form response is illustrated in the diagrams on the following page.



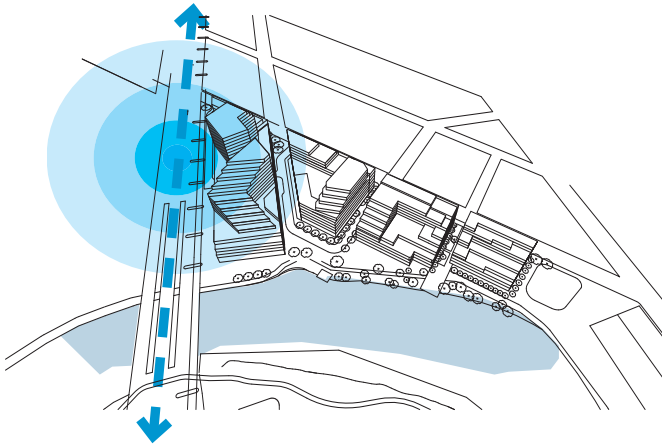
SOLAR ACCESS

Solar access to dwellings has been maximised by the orientation of the built form and by an appropriate building depth for dwellings. By also shaping built edges we have increased separation of internal spaces for improved solar access.



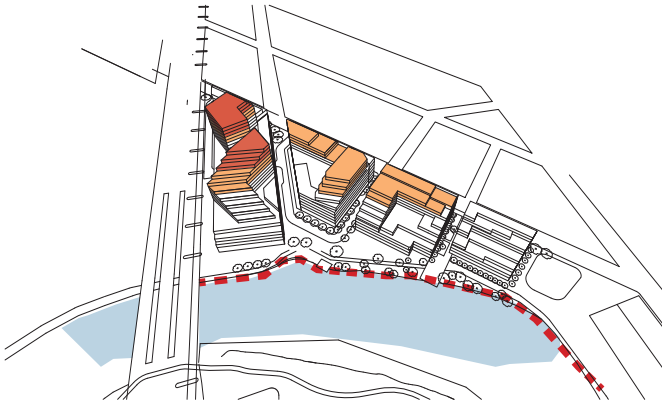
VIEWS

The proposed street network provides views through the site from Kensington Road to the water front. By altering the built shape of the upper levels views out of the site have been maximised.
Terracing the built form also provides opportunities for one building to see across another.



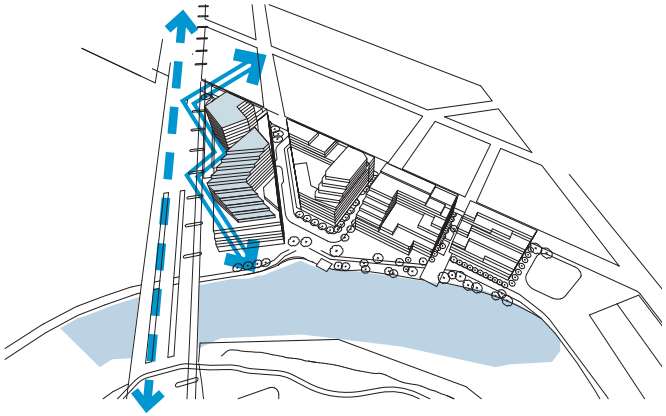
ACOUSTIC MANAGEMENT

Dwellings abutting the rail line edge and those that are exposed to noise sources have been minimised.



HEIGHT & MASSING

The building height has been sensitively located away from the River edge and is focused to the central spine of the site.



RAIL INTERFACE

The built massing along the rail edge is responsive to this edge condition and minimises building that is directly on the rail line for improved acoustic performance.

OPEN SPACE

Public open space along with communal and private green space has been provided through out the development and has also introduced a new residential typology higher up into the development.

4.0 CONCEPT MASTER PLAN

4.1 FRAMEWORK PLAN

PUBLIC REALM NODE

SUBJECT LAND

PUBLIC OPEN SPACE
Subject to Agreement with
City of Melbourne

PEDESTRIAN LINK

BICYCLE LINK

SHARED PATH ALONG RIVER
Subject to Agreement with
City of Melbourne

PUBLIC ROAD NETWORK

SHARED LOW SPEED
PUBLIC ROAD NETWORK

VEHICLE ACCESS TO BUILDINGS

AVERAGE SETBACK **25 meters**
FROM TOP OF BANK

MINIMUM SETBACK **15 meters**
FROM TOP OF BANK

*PREFERRED MAXIMUM 10 STOREYS, UP TO A MAXIMUM OF 14 STOREYS, SUBJECT TO MEETING THE REQUIREMENTS OF THE DPO

4.2 MOVEMENT NETWORK

The proposed movement network prioritises pedestrian and cycle movement over vehicle use. It incorporates a shared path along the waterfront and widened Kensington Road reserve.

The network is of sufficient width to accommodate footpaths, street trees and water sensitive urban design treatments.

Future applications must demonstrate pedestrian links at a minimum width of 4 metres with high quality paving, materials and lighting.

The Internal road creates a neighbourhood street network, adding a level of activation to the internal street environments while minimising any traffic impact to Kensington Road.

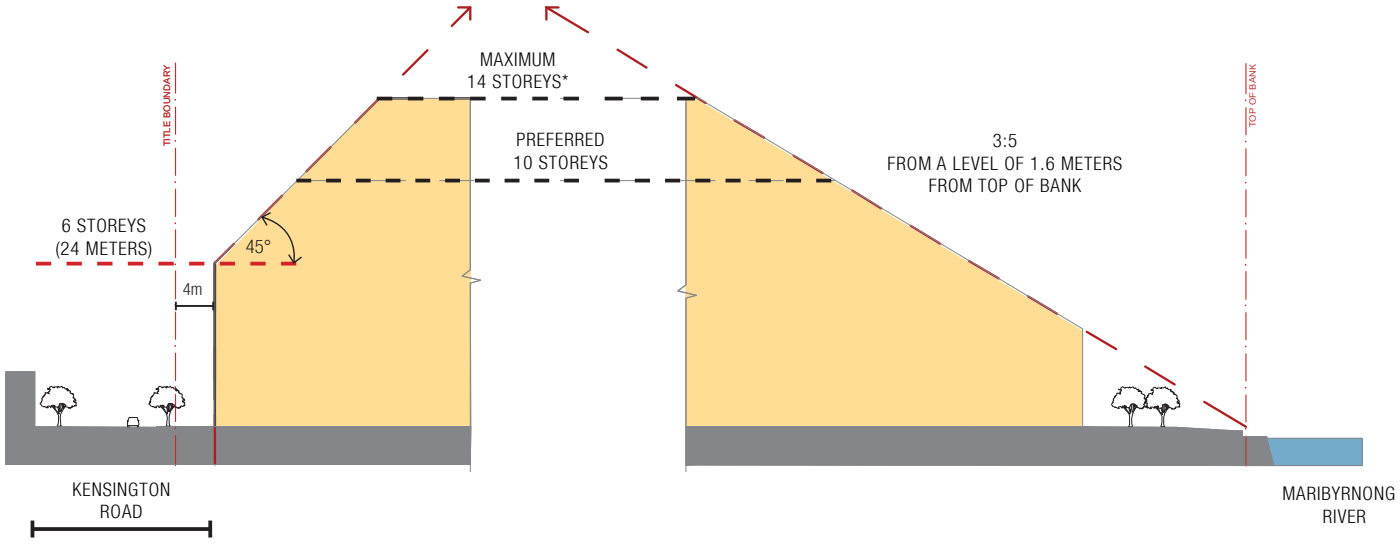
Traffic is diverted away from the neighbourhood street network into internal parking areas before reaching the low speed waterfront environment. This ensures vehicle numbers are minimised giving the internal streets a pedestrian and bicycle focus along the northern boundary of the site.

The low speed public road will utilise a different material to emphasise the low speed shared environment. Loading and unloading access is located away from private/ visitor vehicle entries along the northern boundary of the site.

4.3 BUILT FORM ENVELOPE

The Development Plan Overlay Schedule articulates the following built form outcomes:

- Setback at a ratio of 3:5 from the top of the Maribyrnong River Bank.
- Adopt a street edge of 3-6 storeys from Kensington Road. Above 6 storeys upper floors should be setback within a 45 degree angle.
- The preferred maximum building height on the land is 10 storeys.
- Additional Height, up to a maximum of 14 storeys may be achieved subject to meeting the requirements of the Development Plan Overlay - Schedule 12.



BUILT FORM RATIO ENVELOPE
SECTION VIEW

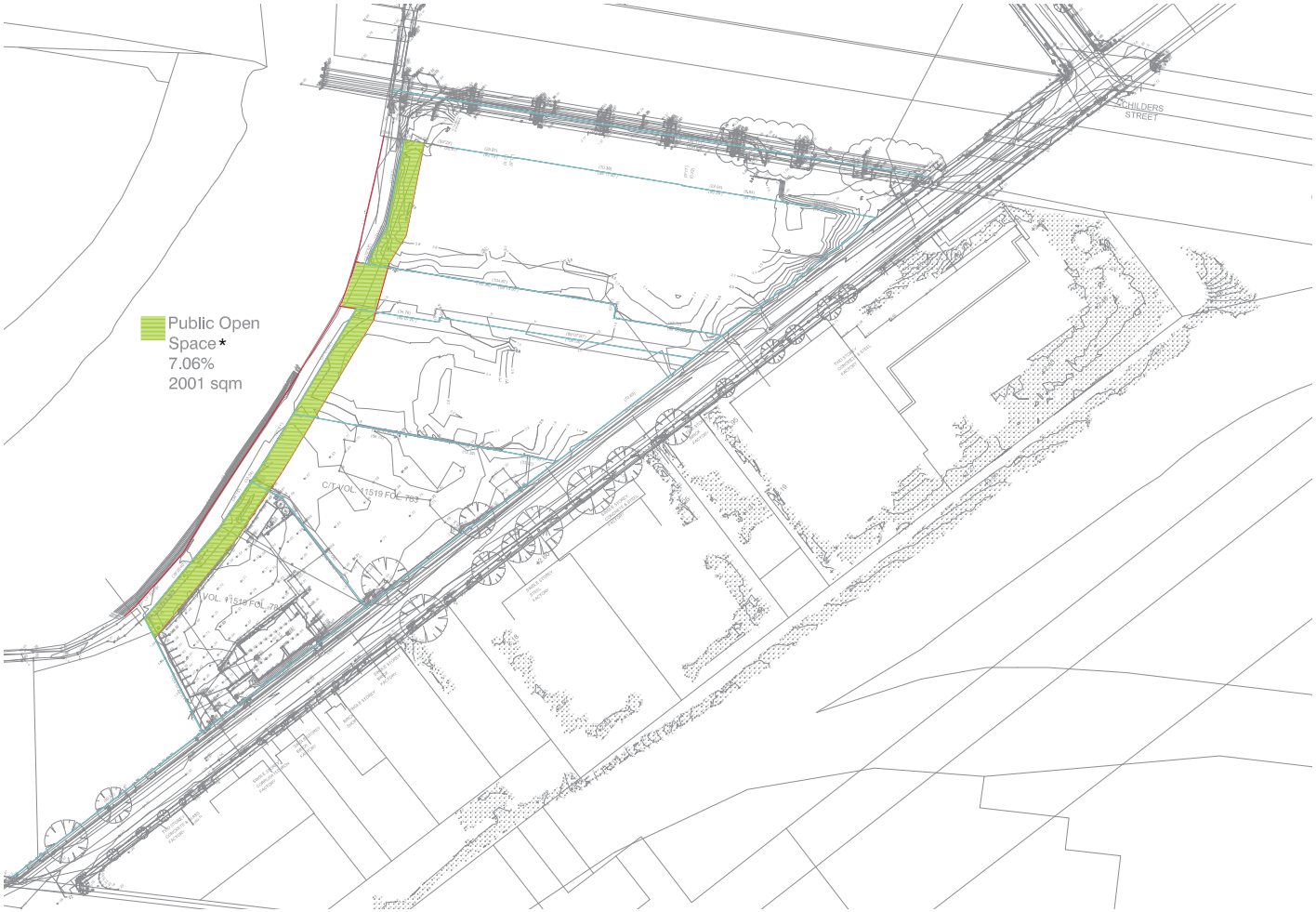
* SUBJECT TO MEETING THE REQUIREMENTS OF DPO - SCHEDULE 12.

4.4 OPEN SPACE

A key component of the Development Plan is the public realm outcome, including the transfer of at least 7.06% of the site area to public open space.

SITE AREA	**28 337 sqm**
REQUIRED PUBLIC OPEN SPACE 7.06%	**2 001 sqm**

*SUBJECT TO AGREEMENT WITH CITY OF MELBOURNE ON SUITABLE PUBLIC OPEN SPACE.



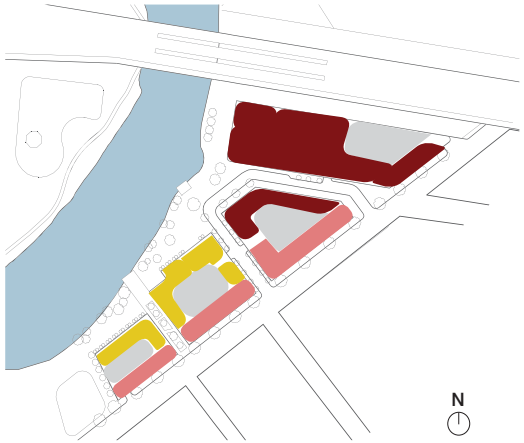
4.5 LAND USE

The land use arrangement within the Development Plan seeks to:

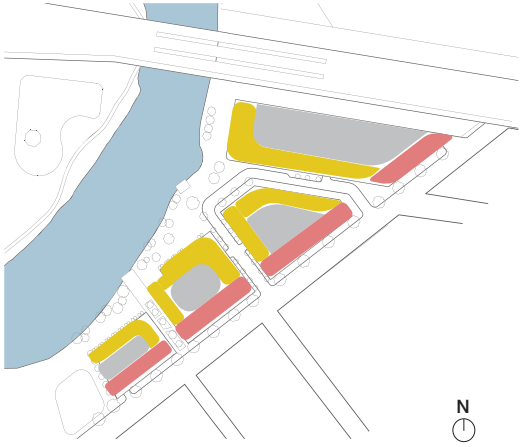
- Increase public and publicly accessible spaces along the Maribyrnong River frontage.
- Provide for recreation uses along the Maribyrnong River frontage.
- Create a new urban plaza fronting the Maribyrnong River.
- Provide a movement network that prioritises walking and cycling as preferred modes of transportation.
- Support a mix of uses at the ground level to activate the street network and enable passive surveillance.
- Activate the first five levels of buildings at the street edge.
- Generally locate employment generating uses fronting Kensington Road at the ground and upper levels. Commercial uses may include opportunities for Small Office/ Home Office (SoHo) dwellings and creative spaces.
- Encourage retail, hospitality, tourism and other commercial uses in the northern end of the site.
- Encourage residential and active land uses to front the Maribyrnong River.
- Buildings and car parking are adaptable to support a range of future uses.
- Provide one signalised intersection on Kensington Road while minimising the number of vehicle crossings to Kensington Road, ensuring safe access to, and egress from the site.
- Ensure any large format retail land uses (eg. Supermarket) are sleeved by smaller tenancies and do not have a direct interface to the Maribyrnong River.
- Provide opportunity for collective artist spaces within the commercial zone of the development or provide other similar community uses.
- Provide varied accommodation typologies suitable for a range of household sizes and types, consistent with the goals of 'City of Melbourne Homes for People: Housing Strategy (2014).

The key land use elements proposed by the Development Plan are summarised in the table below:

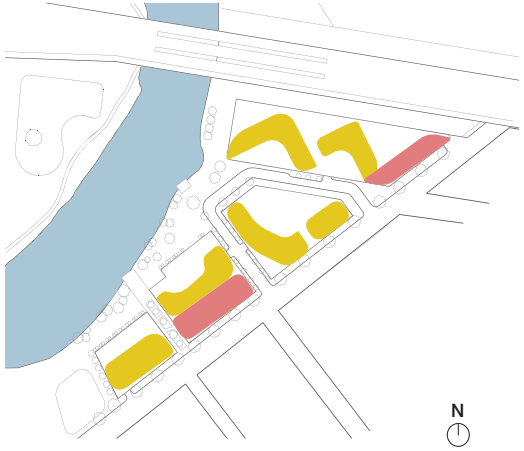
RESIDENTIAL
COMMERCIAL
RETAIL
CAR PARKING



GROUND PLAN



LOWER LEVELS



UPPER LEVELS

4.6 BUILT FORM

The proposed built form and building scale for the precinct illustrated within the Development Plan represents the preferred building envelope within which future buildings are to be designed.

The proposed site levels and building envelopes account for:

- Provision of varied built form typologies.
- Provision of a mix of heights within the overall composition which do not visually dominate the waterfront and provide an appropriate transition to site interfaces.
- Achieve varied and appropriate setbacks to the site edges.
- Management of hydrology considerations.
- Management of acoustic considerations.
- Minimise overshadowing of the public open space, within the site and on adjoining land.
- Ensure spatial relationships between buildings and do not undermine amenity of occupants.
- Ensure internal amenity standards for employees, visitors and residents as appropriate.

Future applications must demonstrate:

- No direct access to private dwellings along the river front.
- Ground floor residential uses a maximum of 1.2metres above the finished level of the street (where they abut the street).
- A high level of amenity for occupants by:

  - Including windows to all bedrooms, which are visible from all points in the bedroom.

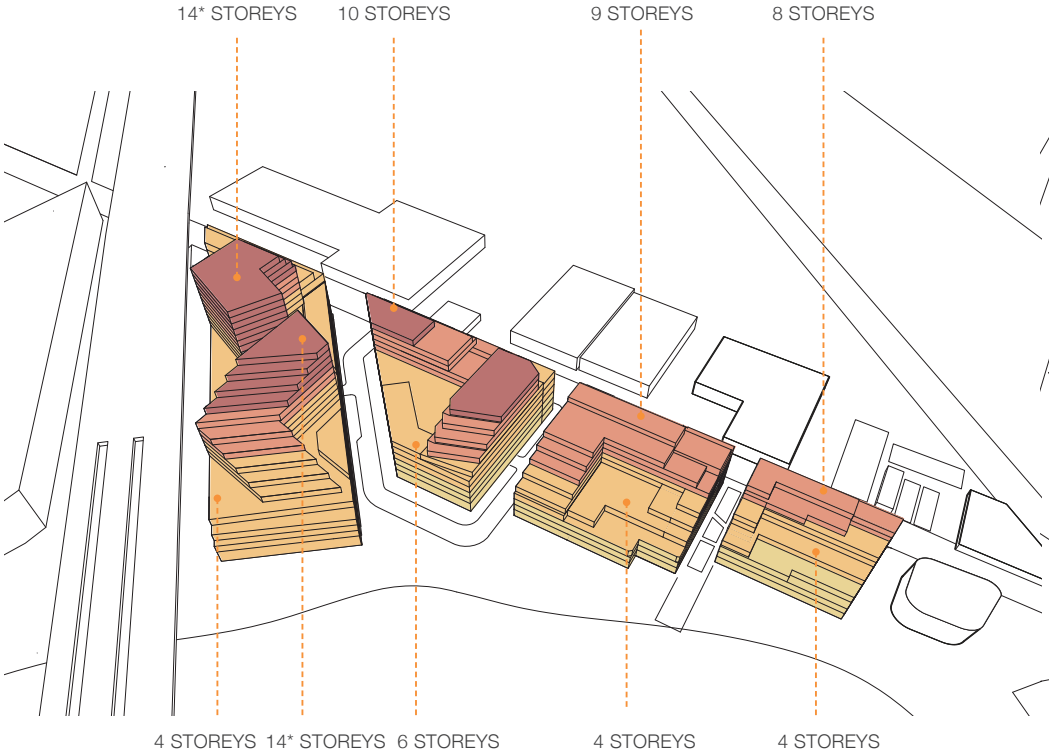
  - Providing a minimum size of 50 square metres for one bedroom dwellings and 65 square metres for two bedroom dwellings.

  - All habitable rooms receiving good natural light.

NOTE: DIMENSIONS SHOWN RELATE TO THIS EXAMPLE OF POTENTIAL BUILT FORM AND ARE APPROXIMATE ONLY TO INDICATIVELY SHOW PROPOSED SEPARATION AND SETBACK PARAMETERS.

DIAGRAM OF BUILT FORM HEIGHTS

*PREFERRED MAXIMUM 10 STOREYS, UP TO A MAXIMUM OF 14 STOREYS, SUBJECT TO MEETING THE REQUIREMENTS OF THE DPO



MASSING DIAGRAM: FROM MARIBYRNONG RIVER

MASSING DIAGRAM: FROM KENSINGTON ROAD

*PREFERRED MAXIMUM 10 STOREYS, UP TO A MAXIMUM OF 14 STOREYS, SUBJECT TO MEETING THE REQUIREMENTS OF THE DPO

4.7 BUILT FORM SECTIONS

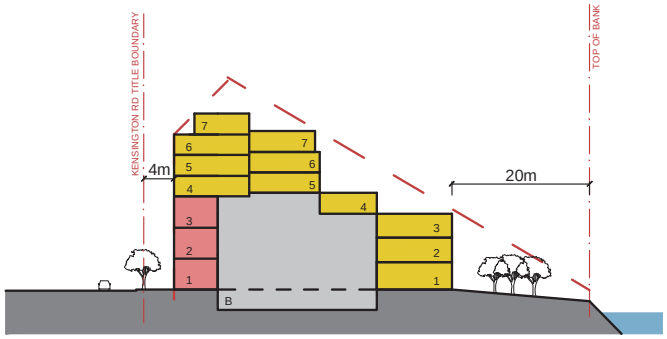
The height of each street edge condition will be varied to create unique and diverse spaces within the precinct.

By varying the street wall datum opportunities are created for varying conditions at street level (to support a range of retail and also at higher levels which will influence the residential or commercial tenancy types.

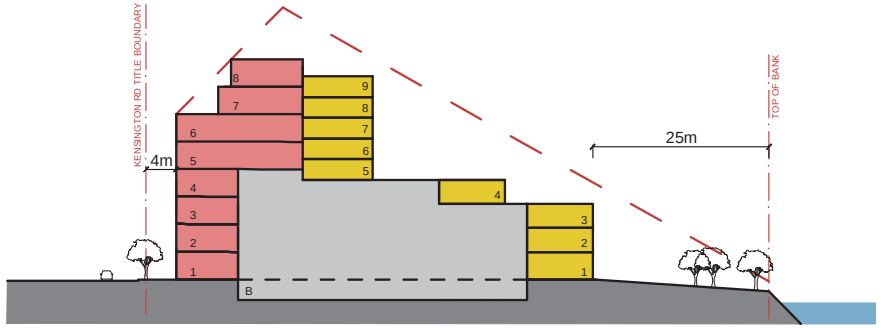
Car parking has been concealed within the core of each site (with carparking occupying no more than 20% of the length of frontages at ground level and the first five levels) and veneered with the various building uses. To ensure that the building uses which surround the car parks have appropriate levels of amenity the depth of habitable space to dwellings has been set to optimise light penetration.

NOTE: SECTIONS SHOW AN EXAMPLE OF POTENTIAL BUILT FORM AND ARE INDICATIVE ONLY.

KEY MAP N



SECTION A



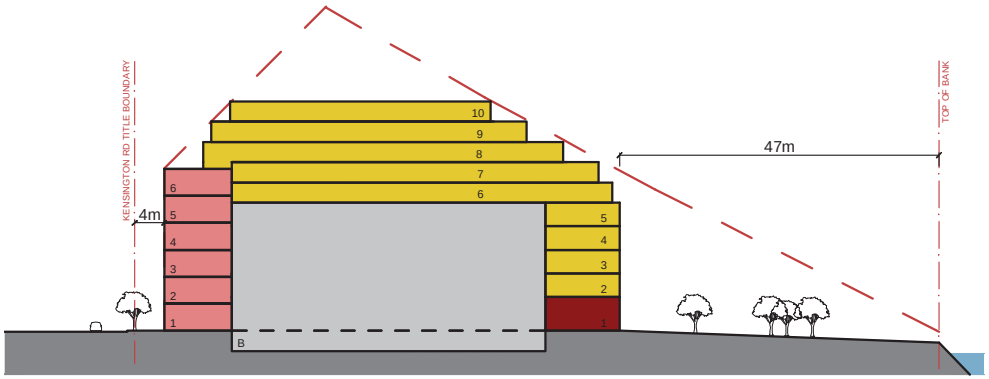
SECTION B

RESIDENTIAL
COMMERCIAL
RETAIL
CAR PARKING

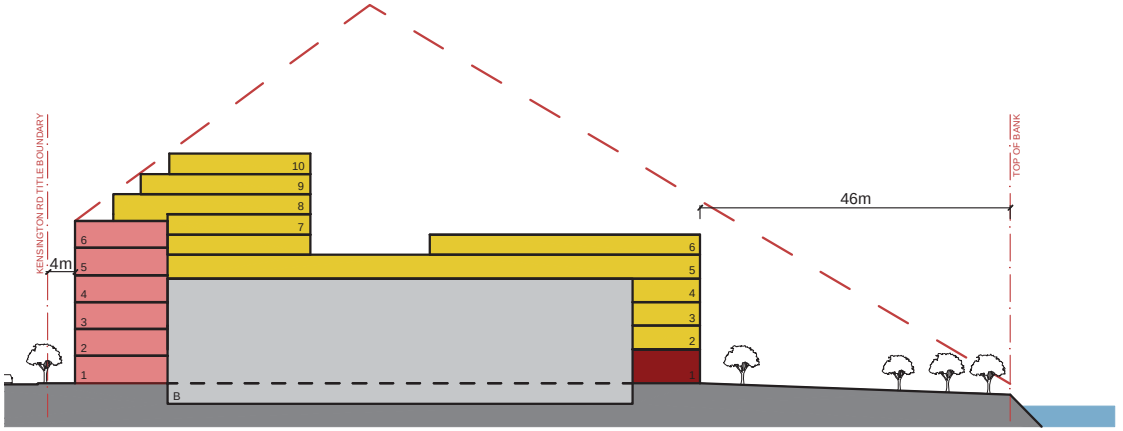
NOTE: SECTIONS SHOW AN EXAMPLE OF POTENTIAL BUILT FORM AND ARE INDICATIVE ONLY.

KEY MAP

N

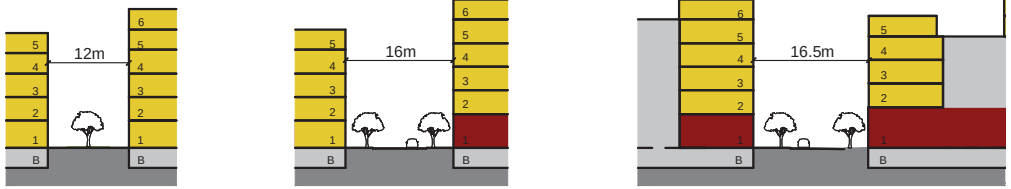


SECTION C



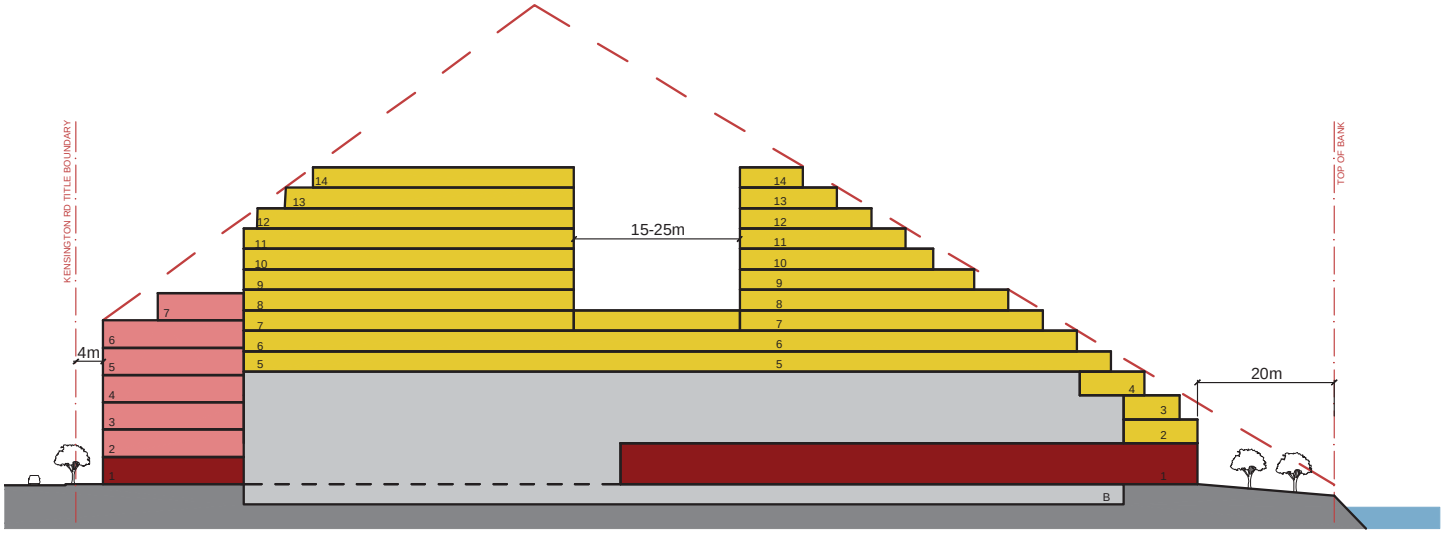
SECTION D

NOTE: SECTIONS SHOW AN EXAMPLE OF POTENTIAL BUILT FORM AND ARE INDICATIVE ONLY.



SECTION F SECTION G SECTION H

KEY MAP N



SECTION E

RESIDENTIAL
COMMERCIAL
RETAIL
CAR PARKING

*PREFERRED MAXIMUM 10 STOREYS, UP TO A MAXIMUM OF 14 STOREYS, SUBJECT TO MEETING THE REQUIREMENTS OF THE DPO

4.8 URBAN DESIGN AND PUBLIC REALM

The public realm and incorporated recreation spaces proposed occupy approximately 30% of the subject land. The above proportion, includes public open space fronting the river (minimum 7.06% of the subject land).

Within the public realm and open space master plan, the key principles are:

MATERIALITY

The edge condition of the Maribyrnong River will consist of a mix of material treatments, including hard edge surfaces and paving, as well as softscape treatments including a mix of tree plantings, grasses and understory plants. The edge will be designed to ensure the development does not compromise bank stability or result in increased erosion of the Maribyrnong River. It will also be designed to be easily maintained, yet provide a setting for people to enjoy that is both immersive and compelling. A mix of landscape structures and plantings will provide biodiversity and relief from the elements. In the setting of an increased riparian zone many visitors will enjoy this varied river environment.

URBAN CHARACTER

The existing pathway will be improved and reinforced with new plantings that will help to define a new, linear urban park condition that typifies the river interface along the proposed development. The built form would reinforce the urban character of the riverfront and provide activation and passive surveillance along its length.

VEGETATION

The vegetation will be a mix of native, indigenous and exotic species fit for purpose that protects and enhances and the bio-diversity of the corridor. The species selection will privilege plantings that are hardy, tolerant to the conditions of the brackish river and have a cultural or historical relationship to the site.

Through considered tree planting, the design seeks to create a waterfront that is enjoyable year round; providing deep shade in the warmer months, solar access in winter and protection from prevailing winds. Plantings will achieve a tree canopy cover of 41% of the public realm (at maturity).

PUBLIC WATERFRONT

Enable the betterment of the river edge adjoining the development. The design seeks to create a unified, publicly accessible river, as per the City of Melbourne Open Space Strategy; yet possess a verdant character that ensures the river bank remains a 'living' edge. The final detailed design of the waterfront will be subject to City of Melbourne approval. Throughout the site there is to be a clear distinction between the private and public realm.

ENGAGE WITH WATER

Include water's edge landscaping enabling people to actively engage with the waterway and reinforcing the importance of the river to the broader community.

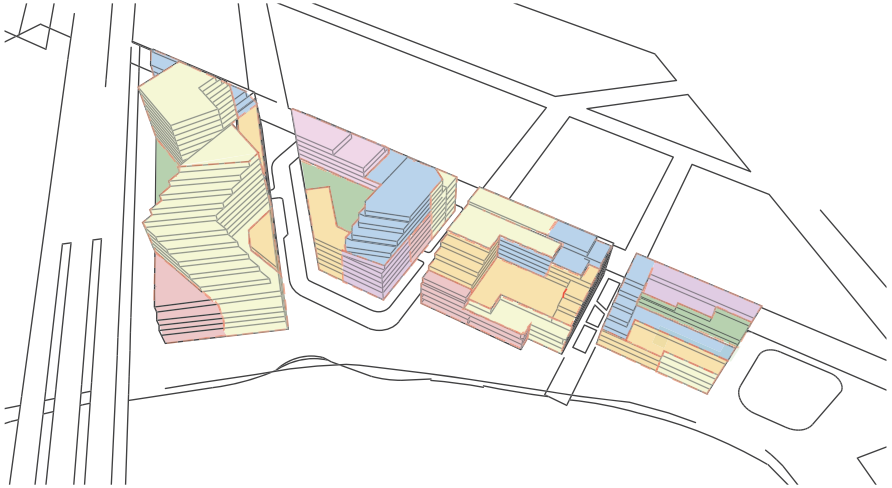
REFERENCE IMAGE OF BERGES DU RHONE, LYON

4.9 ARCHITECTURE AND DESIGN

The site will be a mixture of building forms and typologies that will be distributed not only horizontally but also vertically. Strategically these variations further support diversity, not only across the site but also in each building. In the curation of the built form internal amenity of dwellings and commercial spaces will be a key driver.

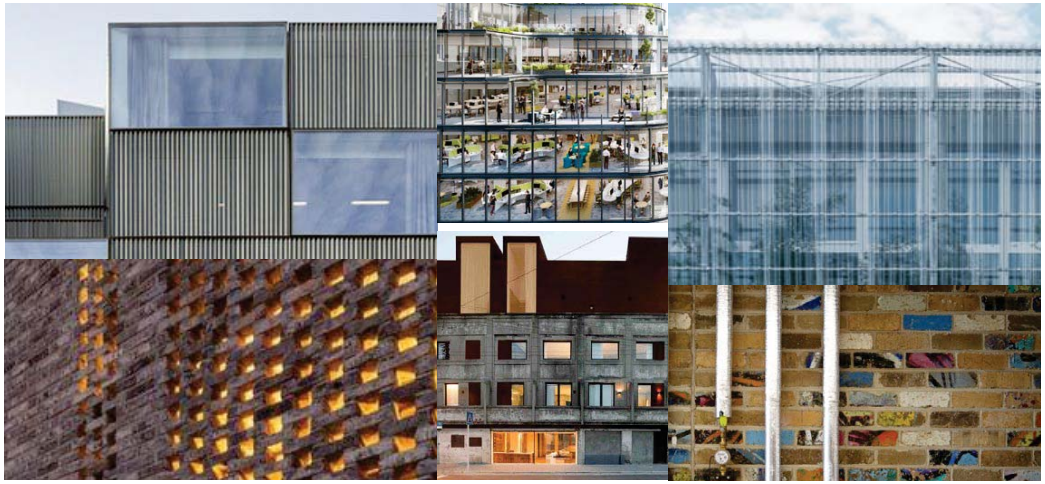
Fragmenting the architecture of the site promotes design diversity and it will also in effect break up the site experience. Across the precinct the architecture will support the creation of micro-precincts or small neighbourhoods that support a range of building typologies. These will be defined by an architecture that responds to the urban and landscape design for the public realm.

The materiality of the site is also derived from its context. As a proposition a material pallet could be one that references the industrial heritage of the sites history and context. Masonry, glass, concrete and steel can be employed to create a unique offering and experience for the public and also those that will live within the precinct. These materials are robust, timeless, will age gracefully and stand the test of time.



ARCHITECTURE AND DESIGN MIX DIAGRAM

KEY



INDICATIVE MATERIAL PALETTE

INDICATIVE ARCHITECTURE AND DESIGN MIX

4.10 INTERNAL AMENITY

The internal amenity will meet objectives for natural ventilation and daylight penetration with each dwelling designed to ensure all bedrooms have windows and access to natural light. The residential offering across the site will also offer varying floor to floor heights. This will help to achieve a high level of internal amenity for occupants. The built form and material selection is intended provide opportunities for natural cross ventilation and passive heating and cooling.

Commercial spaces will also be designed to ensure natural light penetration to work spaces is achieved. Office floor plates vary in depth to also provide a range of working environments for prospective tenants.

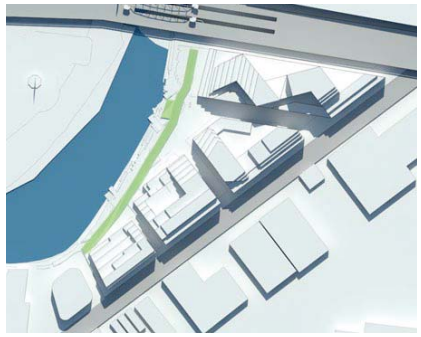
4.11 BUILT FORM SHADOWS

Shadow diagrams have been prepared for 10am, 11pm, 12pm, 1pm and 2pm on September 22nd and for 11am, 12 pm, 1pm, 2pm and 3pm on June 22nd in order to ensure that the site planning strategy and built form response does not overshadow the proposed public open space areas along the Maribyrnong River.

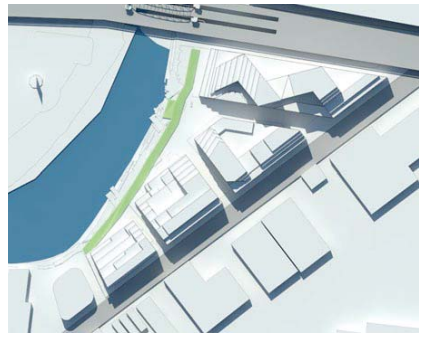
SHADOW DIAGRAM: EQUINOX (SEPTEMBER 22ND) AT 10AM

SHADOW DIAGRAM: EQUINOX (SEPTEMBER 22ND) AT 11AM

SHADOW DIAGRAM: EQUINOX (SEPTEMBER 22ND) AT 12PM



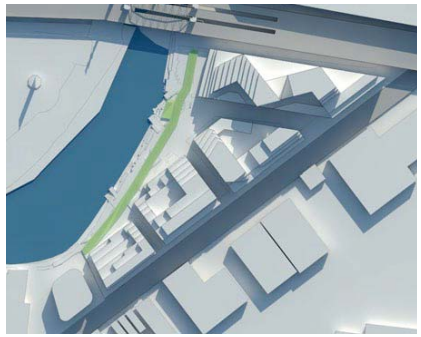
SHADOW DIAGRAM: EQUINOX (SEPTEMBER 22ND) AT 1PM



SHADOW DIAGRAM: EQUINOX (SEPTEMBER 22ND) AT 2PM

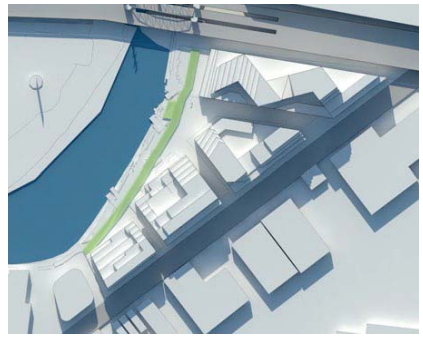
SHADOW DIAGRAM: SOLSTICE (JUNE 22ND) AT 11AM

SHADOW DIAGRAM: SOLSTICE (JUNE 22ND) AT 12PM



SHADOW DIAGRAM: SOLSTICE (JUNE 22ND) AT 1PM

SHADOW DIAGRAM: SOLSTICE (JUNE 22ND) AT 2PM



SHADOW DIAGRAM: EQUINOX (SEPTEMBER 22ND) AT 3PM

N

PROPOSED PUBLIC OPEN SPACE

5.0 STAGING

The redevelopment of the subject land is proposed to occur in four stages generally occurring from North to South.

The key road network improvements proposed as part of the access strategy for the development include four main vehicular access points as illustrated in the Framework Plan. The general delivery timing of these are outlined below:

Stage 1

- Site Access 1: Unsignalised direct access point to Kensington Road
- Site Access 2: Signalised intersection, and full construction of the internal loop road up to the Maribyrnong River*

Stage 2

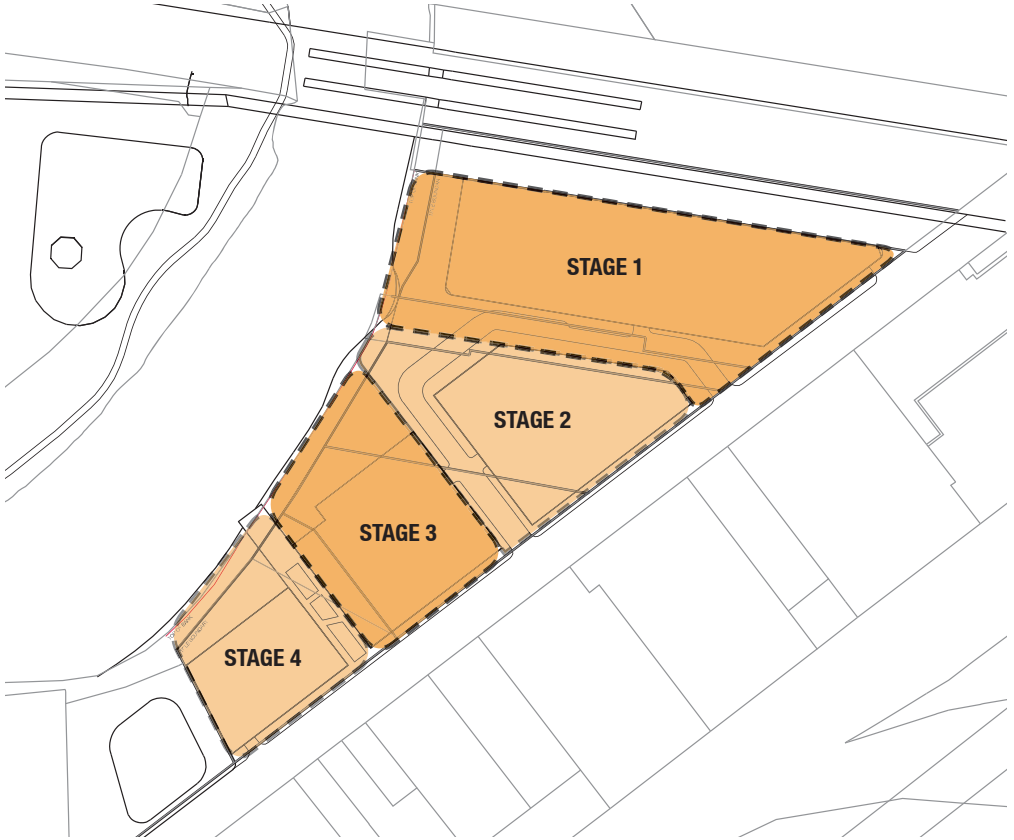
- Site Access 3: Unsignalised Kensington Road/Internal Road Southwest intersection (this will also provide for vehicular access to Stage 3)

Stage 4

- Site Access 4: Unsignalised access direct from Kensington Road to site 4 via a new crossover

*Signalisation of Site access 2 will be triggered as traffic generation rates warrant their need.

It is noted that any traffic or infrastructure related treatments including flood mitigation works along Kensington Road will generally be sequenced in line with the above staging and in accordance with plans and specifications approved by the City of Melbourne Engineering Services.



APPENDIX A CONSULTANT REPORT SUMMARY

A.1 TRAFFIC

GTA has undertaken an Integrated Transport and Access Plan of the West Melbourne Waterfront Precinct Project (WMW). West Melbourne Waterfront aims to provide a well-integrated pedestrian realm with improved connections to nearby parks and facilities promoting the usability of public transport and 'liveability' for future occupants. Key public transport and pedestrian/cycling network improvements proposed as part of the development include:

- Upgrades of existing bus facilities.
- Pedestrian footpaths on both sides of all internal roads.
- A signalised pedestrian crossing at the primary site intersection to Kensington Road.
- Resident/employee bicycle parking in secure locations and visitor bicycle parking in publicly accessible locations
- A shared path on the north-west side of Kensington Road under the rail overpass (north of the site) to improve connectivity and improve existing safety and amenity.
- 'Shared area' to encourage low vehicle speeds and safe interaction between users.

Analysis of the anticipated car parking demand for the various uses indicates that the parking provision has the capacity to exceed the demand by more than 100 spaces at all times across a typical week.

The key road network improvements proposed as part of the access strategy for the development include (from the north to south along Kensington Road):

- Site Access 1: Unsignalised direct access point to Kensington Road for the proposed office car park and loading areas at the north-east corner of the site.
- Site Access 2: Signalised intersection provided south of Site Access 1, and full construction of the north-east section of the internal loop road toward the Maribyrnong River.
- Site Access 3: Unsignalised Kensington Road/Internal Road Southwest intersection south of Site Access 2, including dedicated left and right turn deceleration lanes and left and right exit stand-up lanes.
- Site Access 4: Unsignalised access direct from Kensington Road to the southernmost development site, via a new crossover.

The Development Plan has been informed by the Transport Impact Assessment which was completed using the intersection traffic modelling program SIDRA, indicating that the proposed site access points will be expected to operate satisfactorily at full development.

Overall, the recommended works package for the development is suitably underpinned by engineering best practice and is expected to deliver a well-balanced transport outcome which builds on the existing accessibility, safety and amenity of the area and promotes sustainable travel choice.

A.2 SUSTAINABLE DESIGN

Cundall has undertaken an Environmental Sustainable Assessment of the West Melbourne Waterfront Precinct Project (WMW). This outlined the recommended sustainability commitments and sought to reflect the mixed use and staged nature of the project.

In addition to meeting all relevant local, state and federal governments' legislative requirements, the proposed public realm and staged development will also meet the sustainability objectives and requirements set out in Clause 22.19 Energy, Water and Waste Efficiency and Clause 22.23 Stormwater Management (Water Sensitive Urban Design) of the Melbourne Planning Scheme for the City of Melbourne. Development is to:

- Minimise the production of greenhouse gas emissions and maximise energy efficiency.
- Minimise mains potable water use and encourage the use of alternative water sources.
- Minimise waste going to landfill, maximise the reuse and recycling of materials and lead to improved waste collection efficiency
- Achieve the best practice water quality performance objectives set out in the Urban Stormwater Best Practice Environmental Management Guidelines, CSIRO 1999 (or as amended).

For ease of direction the recommended project objectives and commitments have been broken down into the four different functional and land use types, and the following tables provide a summary of the potential precinct commitments that can be made to meet in part the sustainability requirements for the individual residential components within each stage of the overall development.

PUBIC REALM, COMMUNITY AND SITE INFRASTRUCTURE

- Interconnection of existing cycling trail along Maribyrnong River with the site.
- Fitness stations will be provided adjacent to walking / cycling trails.
- Directional signage for public transport, cycling / walking trails and other community facilities will be provided around the precinct.
- A site-wide approach to storm water re-use and treatment will be followed to ensure the development achieves the water quality performance objectives as set out in the Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO 1999).
- Water Sensitive Urban Design elements will be incorporated to prevent overland flow and river's edge will be enhanced and protected.
- Pavilion and river front to be designed to mitigate flooding impacts.
- Sustainability information to be provided to tenants via an online platform similar to, for example, the Building Link system.
- Reduced heat island effect through the use of landscaped terraces and green roofs.
- A diversity of apartment sizes to be provided to support housing diversity.
- Opportunities to incorporate the following community assets will be maximised:
    - Public Art;
    - Playgrounds; and / or
    - Bicycle Repair Station.


Promote sense of Community and Interaction


Minimise energy use and associated greenhouse gas emissions


Provide occupants with a comfortable internal space whilst reducing potentially detrimental health impacts


Reduce use of potable water and increase drought resilience


Minimise the environmental impact of materials selection


Minimise impacts to or improve the local ecology


Improve sustainable transport use


Minimise environmental impact of building emissions


Minimise impacts during construction and maximise operational potential

RESIDENTIAL DEVELOPMENTS

The following provides a summary of the Precinct commitments being made to meet in part the sustainability requirements for the individual residential components within each stage of the overall development.

Energy and Greenhouse Gas Emissions

- Commitment to attain a minimum average energy rating of 7.0-Star and aspiration of 7.5-Star rating to minimise apartment energy use, peak electricity demand and enable development reach its 5-Star performance potential against the Green Star – Multi Unit Residential (v1) rating tool.
- All clothes dryers, dishwashers, refrigerators, and / or clothes washers provided as part of base building will be within one star of highest available 'Energy Rating'.
- LED lighting will be generally used within apartments and common areas with controls to limit unnecessary use of lighting in common areas.
- Lighting power densities within car park will be at least 20% less than BCA maximum illumination power density allowances.
- All car park ventilation systems will be CO controlled and have variable speed drive (VSD) fans.
- Efficient domestic hot water systems will be used (e.g. solar boosted centralised gas).

Indoor Environmental Management

- Design to achieve daylight factors (DF) of ≥1.5% for 60% of living areas.
- An aspirational average heating & cooling loads of ≤68 MJ/m2 (i.e. 7.5-Star) will be targeted in order to reach the 5-Star performance potential against the Green Star – Multi Unit Residential (v1) rating tool.
- Require at least 95% of all internal applied adhesives, sealants & paints specified to be low VOC based on relevant industry best practice standards (e.g. Green Star).
- Maximise the use of low formaldehyde engineered wood products internally as per the international E1 standard or recognised equivalent.
- Design to maintain internal noise levels at best practice levels between bounding apartments and separating floors above habitable rooms.
- Internal lighting will be designed so that ≥300 Lux is achieved on the surface of the kitchen sink, cooktop or stove and vanity basins.
- Dedicated and separate extract fans will be provided to ≥90% of kitchens.

Promote sense of Community and Interaction

Minimise energy use and associated greenhouse gas emissions

Provide occupants with a comfortable internal space whilst reducing potentially detrimental health impacts

Reduce use of potable water and increase drought resilience

Minimise the environmental impact of materials selection

Minimise impacts to or improve the local ecology

Improve sustainable transport use

Minimise environmental impact of building emissions

Minimise impacts during construction and maximise operational potential

Potable Water Conservation

- The following minimum WELS ratings for fixtures & fittings will be met:
  - Showerheads 7.5L/s
  - WC's 4-Star
  - Taps 5 Star
- Temporary storage for at least 80% of routine fire protection system test water / maintenance drain downs will be provided for re-use within precinct.
- On-site collection and re-use of rainwater for landscape irrigation and / or toilet flushing within common area amenities.
- Support the overall precinct response to meeting the water quality performance objectives as set out in the Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO 1999).

Materials

- Provide areas for storage for the separation of general waste and recycling within all apartment buildings.
- Maximise opportunities for the use of materials with recycled content.
- At least 30% of all PVC used for pipe, conduit and cabling will be sourced from a manufacturer with an accredited ISO14001 EMS.
- 95% of all timber products will be sourced from re-used timber, post- consumer recycled timber, FSC or AFCS certified.
- A guide to residents informing on sustainable materials selection as part of an overall sustainability information package will be provided.
- Where waste chutes are provided for general waste, the design team will investigate the potential to also provide a separate chute for recycling.

Land Use and Ecology

- Significant vegetation on the precinct will be retained and there will be a net gain in number of trees in site.
- Provision of landscaped roof gardens for use by residents for social engagement and / or market gardening.

Transport

- Best practice provisions of cyclist facilities for residents and visitors.
- Spaces to be allocated to a recognised car share scheme.

Reduction of Emissions

- All refrigerants will have an Ozone Depleting Potential (ODP) of zero.
- All insulants will be ODP free.
- Support the overall precinct response to meeting the water quality performance objectives as set out in the Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO 1999).
- External lighting will be designed so that it is directed at the building and not directed to the sky or towards other properties.

Management

- A Construction Management Plan will be required to address public access, sediment control & drainage, demolition & excavation, noise and pollution.
- A Waste Management Plan (WMP) will be required with a commitment for recycling of a minimum of 80% of non-contaminated construction waste.
- A suitably qualified independent ESD Consultant will be required to provide sustainability advice throughout all design stages and during construction.
- A Resident User Guide (RUG) will be provided to tenants.
- Sustainability information will be provided to residents via an online platform similar to, for example, the Building Link system.

COMMERCIAL DEVELOPMENTS

The following provides a summary of the Precinct commitments being made to meet in part the sustainability requirements for the individual commercial office spaces within each stage of the overall development.

Energy and Greenhouse Gas Emissions

- Offices >5000m^2 to be designed to achieve a potential 5-Star NABERS Energy Base Building Rating, with strata title or offices less than 5,000m2 to be designed to achieve a potential 4-Star rating.
- Building Energy Sub-Metering to be provided for each tenant and any building services load over 100kVA.
- General use of LED lighting with lighting controls to limit unnecessary use of lighting (common areas, toilets, corridors, meeting rooms).
- Lighting power densities within car park will be at least 20% less than BCA maximum illumination power density allowances.
- All car park ventilation systems will be CO controlled and have variable speed drive (VSD) fans.
- Solar boosted centralised gas domestic hot water systems will be used.

Indoor Environmental Management (IEQ)

- Minimum outside air ventilation rates will be increased 50%.
- CO2 monitoring to be provided at all return points on each floor to control outdoor air ventilation rates.
- Require at least 95% of all internal applied adhesives, sealants & paints specified to be low VOC based on relevant industry best practice standards (e.g. Green Star).
- Maximise the use of low formaldehyde engineered wood products internally as per the international E1 standard or recognised equivalent.
- Design to achieve a Predicted Mean Vote (PMV) of between -1 and +1 for 98% of the year.
- Design to achieve a daylight factor of >2% in at least 30% of NLA.
- Design of internal lighting so that <400 Lux is maintained at desk level.

Potable Water Conservation

- The following minimum WELS ratings for fixtures & fittings will be met:
  - Showerheads 7.5L/s
  - WC's 4-Star
  - Taps 5 Star
- Temporary storage for at least 80% of routine fire protection system test water / maintenance drain downs will be provided for re-use within precinct.
- Collection and re-use of rainwater for landscape irrigation and toilet flushing
- Support the overall precinct response to meeting the water quality performance objectives as set out in the Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO 1999).

Promote sense of Community and Interaction

Minimise energy use and associated greenhouse gas emissions

Provide occupants with a comfortable internal space whilst reducing potentially detrimental health impacts

Reduce use of potable water and increase drought resilience

Minimise the environmental impact of materials selection

Minimise impacts to or improve the local ecology

Improve sustainable transport use

Minimise environmental impact of building emissions

Minimise impacts during construction and maximise operational potential

Materials

- Provide areas for storage for the separation of general waste and recycling.
- Maximise opportunities for the use of materials with recycled content.
- At least 30% of all PVC used for pipe, conduit and cabling will be sourced from a manufacturer with an accredited ISO14001 EMS.
- 95% of all timber products will be sourced from re-used timber, post-consumer recycled timber, FSC or AFCS certified.
- A guide to tenants informing on sustainable materials selection as part of an overall sustainability information package will be provided.
- Demolition brick and concrete to be crushed and re-used on site. Where this is not practical, at least 80% of material will be recycled or reused offsite.

Land Use and Ecology

- Significant vegetation to be retained and there will be a net gain in number of trees in site.
- Provision of landscaped terraces and podiums for social interaction and mitigation of heat island effect.

Transport

- Minimum of bicycle parking for 5% of the building staff will be provided, with aspiration for 10% provisions.
- Showers (1 for each 10 bicycle spaces) as well as lockers and changing facilities will also be provided.

Reduction of Emissions

- All refrigerants will have an Ozone Depleting Potential (ODP) of zero.
- All insulants will be ODP free.
- Support the overall precinct response to meeting the water quality performance objectives as set out in the Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO 1999).
- External lighting will be designed so that it is directed at the building and not directed to the sky or towards other properties.

Management

- A Construction Management Plan will be required to address public access, sediment control & drainage, demolition & excavation, noise and pollution.
- A Waste Management Plan (WMP) will be required with a commitment for recycling of a minimum of 80% of non-contaminated construction waste.
- A suitably qualified independent ESD Consultant will be required to provide sustainability advice throughout all design stages and during construction.
- A Building User Guide (BUG) will be provided to tenants.

RETAIL DEVELOPMENTS

As part of meeting the sustainability requirements, the retail components in the development will adhere to the commitments related to the base building outlined in this section of the report. Additionally, a Tenant Fitout Guide will be developed to ensure there is no compromise in the overall sustainability performance of the development. A set of minimum commitments to be included in the fitout guide have been defined in this section.

Energy and Greenhouse Gas Emissions

- Subject to regulatory approval the opportunity of using the Maribyrnong River for heat rejection as part of a water-based geothermal heat rejection component for the HVAC system will be investigated.
- General use of LED lighting with lighting controls to limit unnecessary use of lighting in common areas.
- All car park ventilation systems will be CO controlled and have variable speed drive (VSD) fans.
- Lighting power density within car park will be at least 20% less than BCA maximum illumination power density allowances.
- Building Energy Sub-Metering to be provided for each tenant and any building services load over 100kVA.

Indoor Environmental Management (IEQ)

- Require at least 95% of all internal applied adhesives, sealants & paints specified to be low VOC based on relevant industry best practice standards (e.g. Green Star).
- Maximise the use of low formaldehyde engineered wood products internally as per the international E1 standard or recognised equivalent.

Potable Water Conservation

- Temporary storage for at least 80% of routine fire protection system test water / maintenance drain downs will be provided for re-use within precinct.
- On-site collection and re-use of rainwater for landscape irrigation and toilet flushing.
- Support the overall precinct response to meeting the water quality performance objectives as set out in the Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO 1999).

Materials

- Provide areas for the storage and separation of general waste and recycling in accordance to best practice guidelines.
- At least 30% of all PVC used for pipe, conduit and cabling to be sourced from a manufacturer with an accredited ISO14001 EMS.
- 95% of all timber products to be sourced from re-used timber, post-consumer recycled timber or FSC / AFS certified.
- Provide a guide to tenants informing of sustainable materials selection as part of an overall sustainability information package.
- Brick and concrete to be crushed and re-used on the site. Where this is not practical, at least 80% of this material to be recycled or reused offsite.

Land Use and Ecology

- Significant vegetation to be retained and there will be a net gain in number of trees in site.
- Provision of landscaped areas for staff and patrons to use for social engagement.

Transport

- Bicycle parking for 5% of the building staff to be provided.
- Showers (1 for each 10 bicycle spaces) as well as lockers and changing facilities will also be provided.
- Secure visitor bicycle parking will be provided.

Reduction of Emissions

- All refrigerants will have an Ozone Depleting Potential (ODP) of zero.
- All insulants will be ODP free.
- Support the overall precinct response to meeting the water quality performance objectives as set out in the Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO 1999).
- External lighting will be designed so that it is directed at the building and not directed to the sky or towards other properties.

Management

- A Construction Management Plan will be required to address public access, sediment control & drainage, demolition & excavation, noise and pollution.
- A Waste Management Plan (WMP) will be required with a commitment for recycling of a minimum of 80% of non-contaminated construction waste.
- A suitably qualified independent ESD Consultant will be required to provide sustainability advice throughout all design stages and during construction.
- A Building User Guide (BUG) will be provided to retail tenants.

A.3 ACOUSTIC

Overview

Arup has undertaken a noise and vibration assessment of the West Melbourne Waterfront Precinct Project (WMW). Based on noise measurement surveys and preliminary noise modelling results, it has been shown that the WMW site can be protected from transportation noise by appropriate design and use of acoustic and architectural treatments and building materials. The form of the buildings is expected to adequately shield the open areas of the development. The rail transportation corridor is the dominate noise source in the vicinity of the subject site. Train noise predominately impacts the northern end however other areas of the site are also affected by rail noise. The integration of noise mitigation into the design of the development will assist in controlling rail noise to meet the project noise limits. To assist with understanding the requirements of acoustic treatment three (3) categories of acoustic treatment have been nominated. It is suggested that a site wide acoustic management plan be considered for commercial noise sources such as mechanical services noise and music and the impact on future residential areas.

Internal Rail Noise Levels

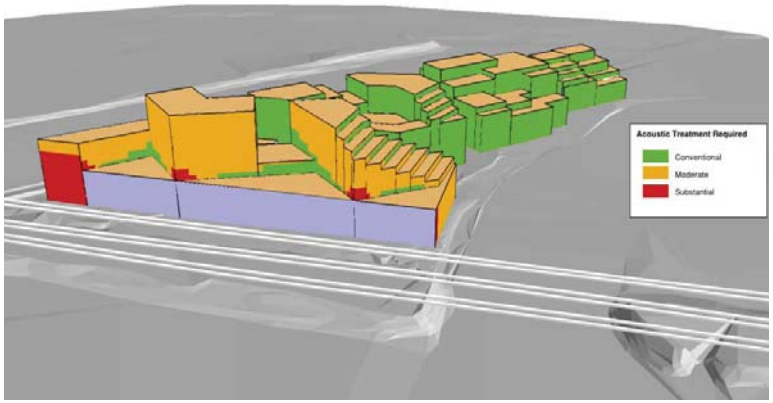
As noted above, the rail transportation corridor is the dominate noise source in the vicinity of West Melbourne Waterfront. Train noise predominately impacts the northern end of the subject site however other areas of the site are also affected by rail noise. The integration of noise mitigation into the design of the development will assist in controlling rail noise to meet the project noise limits. To assist with understanding the requirements of acoustic treatment three (3) levels of acoustic treatment have been provided.

The table describes the required levels of acoustic treatment based on predicted noise levels resulting from operational passenger rail.

Proposed constructions to achieve Lmax 55 dB(A) internal.

Predicted External Noise Levels (L_{max})	Noise Control Required	Glazed Construction (operable)*	Glazed Construction (non-operable)	Masonry/ Drywall Construction
≤ 80 dB(A)	Conventional	6/12/6 double glazed unit or 10 mm laminated glazing	-	100 mm concrete panel or lightweight drywall construction
≤ 90 dB(A)	Moderate	Double sliding door system with 100mm minimum gap between panes.	Deep cavity (~100mm) double glazed unit.	100 mm concrete panel or 140 mm hollow core blockwork or substantial drywall construction
> 90 dB(A)	Substantial	Wintergarden – two operable glazed facades, separated by a room.	Deep cavity (~100mm) double glazing with additional glazed layer	150mm concrete panel or 140mm core-filled blockwork

A contour map showing the coverage areas where each of the three (conventional, moderate or substantial) types of acoustic treatment are required to achieve internal noise levels of Lmax 55 dB(A) is provided below.



Predicted levels of acoustic treatment to achieve Lmax 55 dB(A) internal

Road Noise

The acoustic requirements of the façade of the proposed developments along the western interface adjacent to Kensington Road (major road) have been informed by unattended noise monitoring results.

To achieve the recommended internal noise levels, the building envelope elements (glazing including framing and all cladding elements) must achieve the following minimum sound reduction index:

- Rw + Ctr = 32.

This can be achieved by the “conventional” construction described in the previous table.

A.4 HYDRAULICS

Key Hydraulic Modelling Results

Changes to Flood Levels and Flow Distribution.

Modelling of a number of scenarios indicates that changes to flood levels are likely to be small, typically less than a few centimetres and depending on the development scenario may be positive or negative. Of perhaps more significance is that there exists the potential to improve safety and reduce flood damage by reducing and or removing the flows down Kensington Road. Under existing conditions only a small portion of the flow takes the relatively restricted path down Kensington Road beneath the rail bridge. Sending this flow back through the main river crossing has almost no significant impact on the flow in the Maribyrnong River but makes a significant difference to the safety and usability along much of Kensington Road.

Loss of flood plain storage

Given the extensive fill currently on the development site the potential loss of floodplain storage was never expected to be significant. Having modelled a number of development scenarios it is clear that the proposed development will not have any significant effect on available floodplain storage and subsequently downstream flows. Modelling of a larger reduction in floodplain storage created by the raising of Hobsons Road and Kensington Road confirms that a reduction in flood plain storage greater than required for this development still results in no significant change in downstream flood flows.

Effect of reduced setback

Modelling confirms the significant shielding effect of the railway embankment immediately upstream of the WMW site. Although care will still be required to appropriately detail the edge treatments to achieve a hydraulically smooth design the modelling of 10 and 30 m setback options indicates that increasing setback beyond 10m is not beneficial.

Egress

Egress remains an important consideration for which there are a number of options, rather than relying on a high standard flood refuge.

The Kensington Road Egress Concept detailed was analysed to provide an indication of the potential effects of undertaking a high standard local mitigation approach to reducing flood risk and damage to a local area and providing this area with a high quality means of egress. This concept involves the construction of elevated sections in Hobsons and Kensington Road which will also protect other properties.

PROJECT TEAM

The Project team includes a mix of local and global knowledge of design best practice. The design team are industry leaders in thought leadership and the delivery of large scale mixed use projects in Australia and abroad.

The consultant team includes:

WOODS BAGOT
AUSTRALIA
ASIA
MIDDLE EAST
EUROPE
NORTH AMERICA

OCULUS

Contour
Town Planners

GTAconsultants

NHArchitecture

CUNDALL

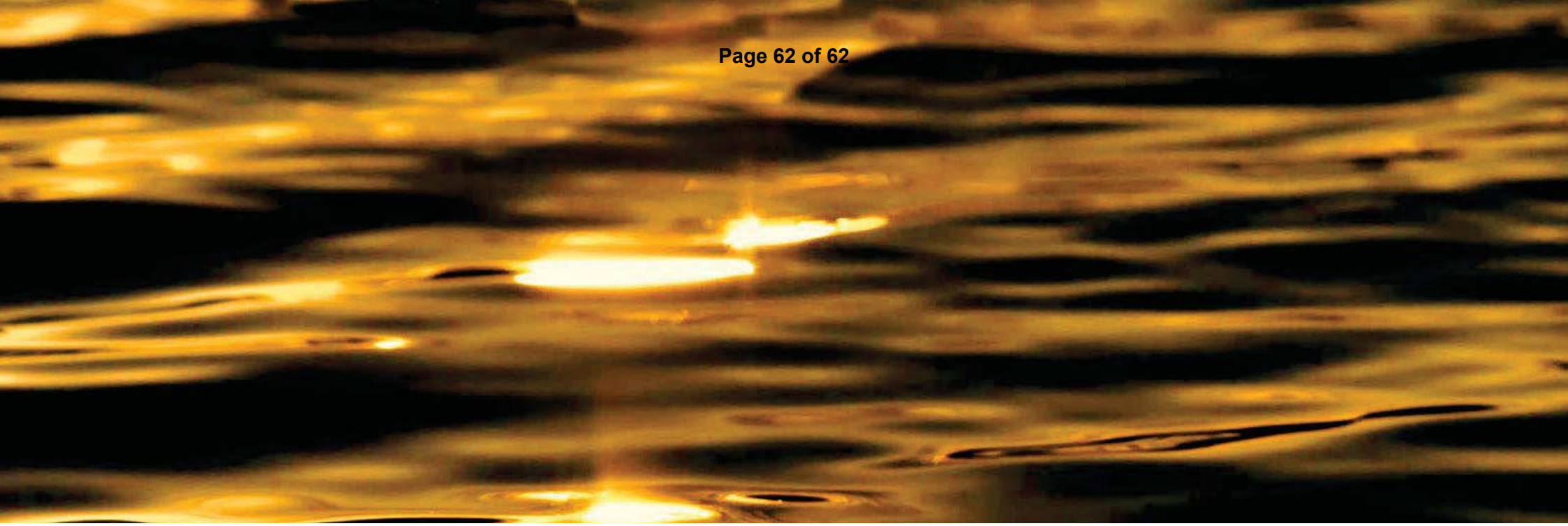
GHD

LOCATIQN

resolution
research strategists

ARUP

KPMG
cutting through complexity



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