

2.8 COMMUNITY EXPECTATIONS

The first community consultation workshop for this study, held on 10 November 2009, aimed to ascertain the community's expectations and desires for Chinatown's public domain. Approximately 120 people from the local community, including business and residents, participated in the workshop.

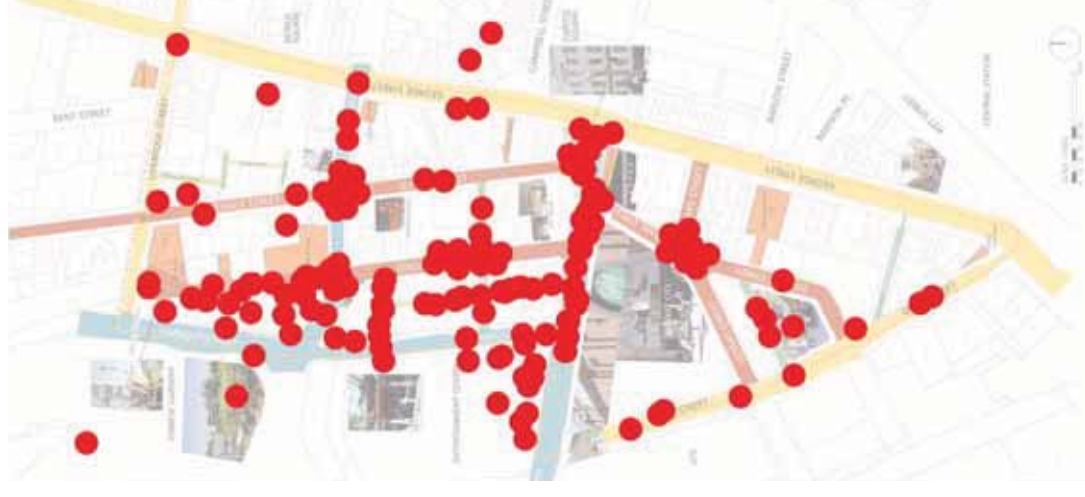
As part of the community consultation, workshop participants were asked to identify, on maps, which areas of Chinatown they currently liked and disliked. Yellow dots were used to indicate places that individuals felt were working well in Chinatown, while red dots were used to indicate areas that were felt to be in need of improvement. A summary of the responses is provided on the two maps shown on this page.

The 'dislikes' map clearly indicates that the community felt that improvement is required in the areas of greatest conflict between pedestrians and cars, namely:

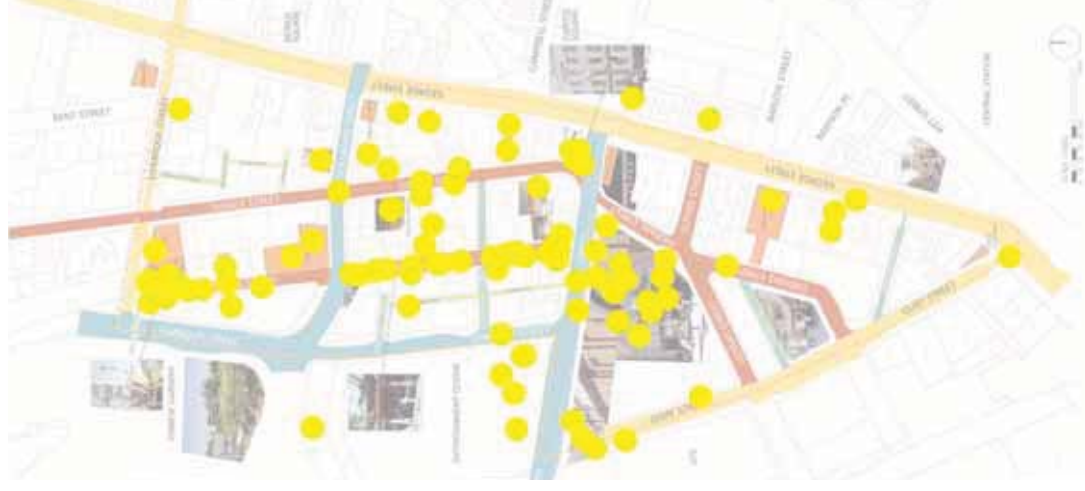
- the intersection between Sussex Street and Goulburn Street;
- the entire length of Hay Street; and
- the intersection between Thomas Street and Ultimo Road.

The section of Dixon Street north of Goulburn Street was also identified as an area that needed improvement, as many felt that it lacks the liveliness that characterises the Dixon Street mall, south of Goulburn Street. Additionally, the laneways associated with the Dixon Street mall were identified as needing improvement, particularly Kimber Lane and Factory Street, which many respondents felt were dirty and unsafe.

In conjunction with the workshop, a 'photo essay' exercise was conducted, where community members were asked to photograph things in Chinatown that they liked and disliked, using disposable cameras provided by Council, or their own cameras with photos emailed back to Council. The results of this exercise confirmed the general trends found in the mapping.



AMALGAMATED 'DISLIKES' MAP
(drawing by City of Sydney)



AMALGAMATED 'LIKES' MAP
(drawing by City of Sydney)



PHOTOGRAPHS RECEIVED FROM COMMUNITY MEMBERS AS PART OF PHOTO ESSAY EXERCISE

● 'LIKE' INDICATED

● 'DISLIKE' INDICATED

3 INITIATING CHANGE



3.1 WIN BACK SPACE: TAKING CONTROL OF TRAFFIC

Traffic data collected by Arup (2009) as part of this study indicate that Liverpool Street, Goulburn Street and George Street function as the primary traffic routes to and from Chinatown, each carrying over 20,000 vehicles per day. Ultimo Road is functions as a major through traffic route, connecting Harris Street to George Street.

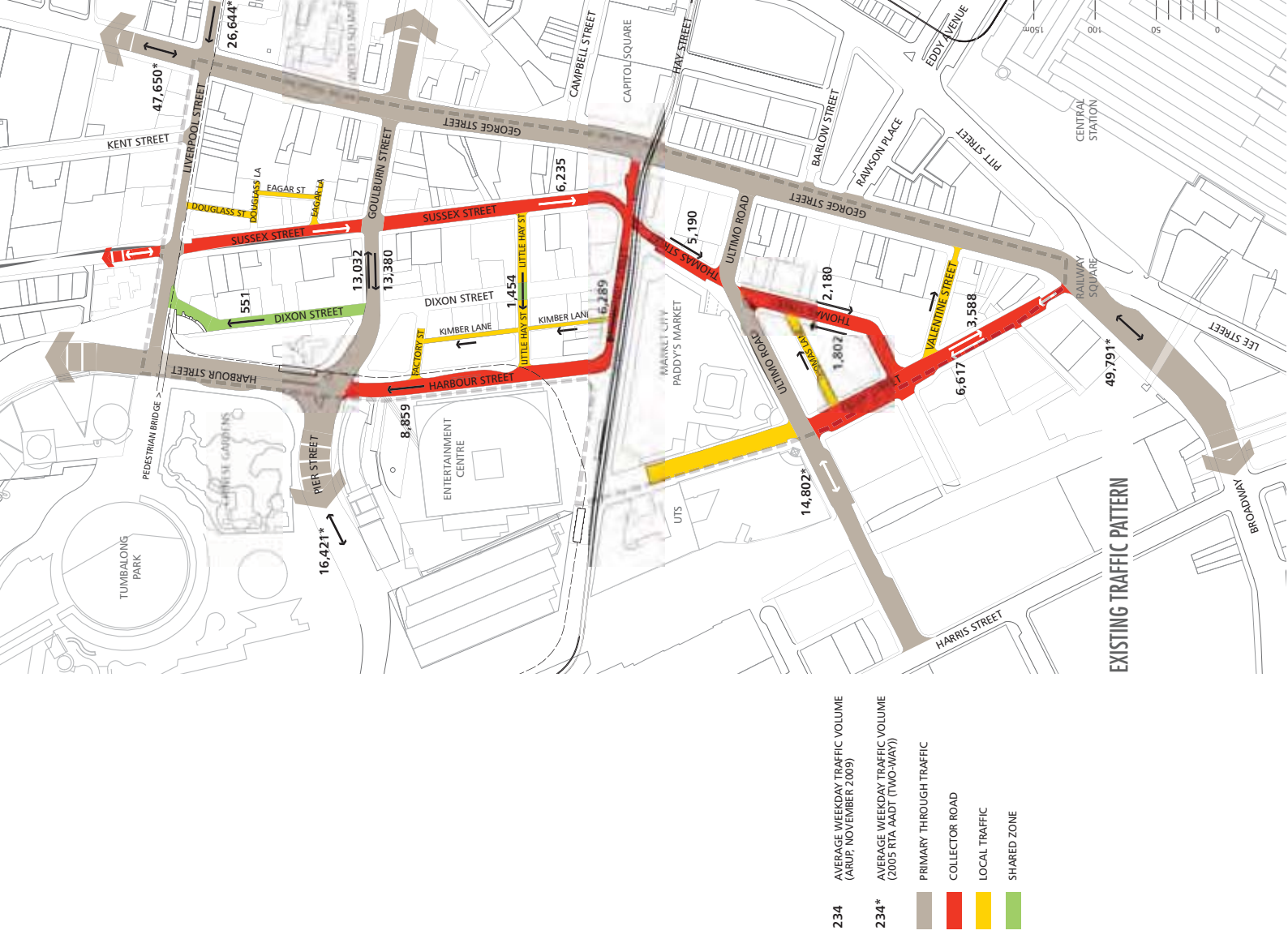
Sussex Street, Hay Street, Harbour Street, Thomas Street and Quay Street function as collector roads, servicing between 5,000 and 10,000 vehicles daily. A key feature of the Chinatown road network is the number of narrow, one way streets and laneways that play an important local function for building access and loading activity.

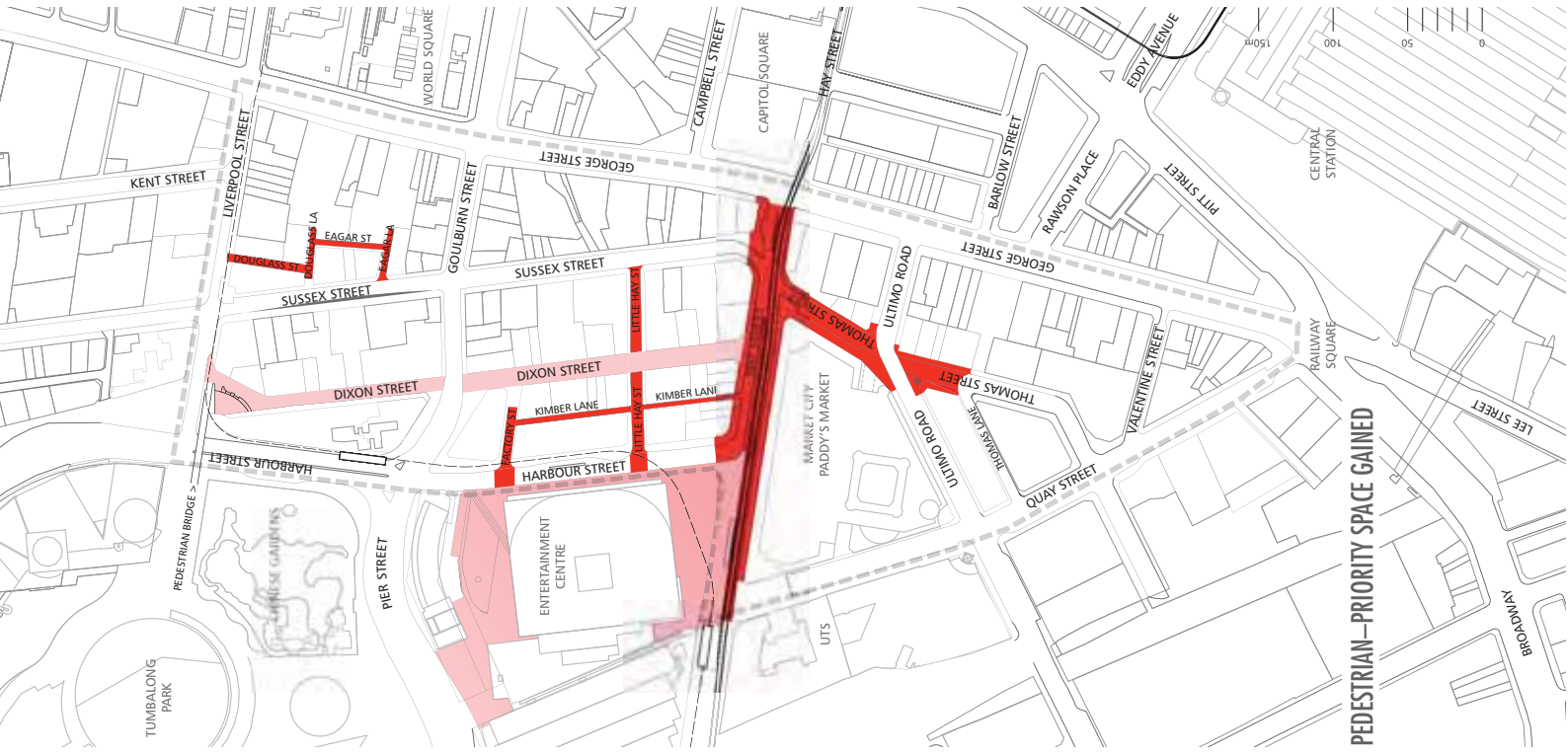
As Arup's *Existing Conditions* (2009) report notes, a key characteristic of Chinatown is that it is a highly pedestrianised precinct, albeit informally. The network of local narrow streets and laneways discourage through traffic from using many of the streets. As such, although street activity can be congested and uncontrolled at times, it is acceptable as all use is locally focussed.

In order to create more formalised pedestrian-priority space in Chinatown, the existing pattern of traffic usage must be reconfigured.

By taking through traffic out of Hay Street and much of Thomas Street, it is possible to win back a significant amount of space for pedestrians in the heart of Chinatown, where the conflict between pedestrian activity and traffic is currently at its most acute. Although there is also great contestation between pedestrian and vehicular activity on Sussex Street, vehicular access must be maintained along this street. This is because Dixon Street is already a pedestrian mall; as such, there is no feasible alternative to Sussex Street for maintaining traffic flow and business loading in Chinatown's core.

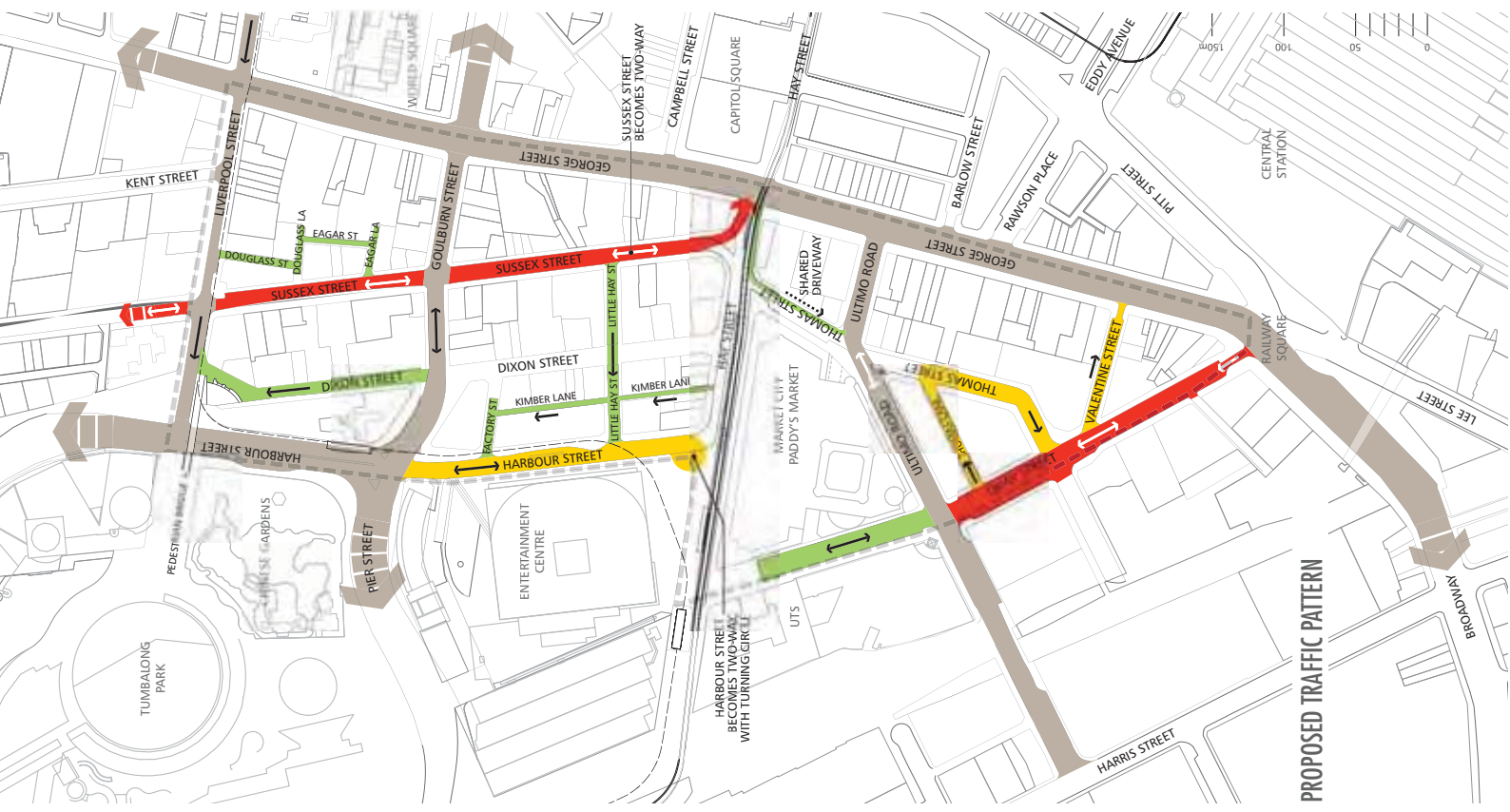
There is also a great opportunity to increase the amount of shared zones throughout Chinatown, particularly in the small streets and laneways.





EXISTING PEDESTRIAN-PRIORITY SPACES
 PROPOSED NEW PEDESTRIAN-PRIORITY SPACES

PEDESTRIAN—PRIORITY SPACE GAINED



PROPOSED TRAFFIC PATTERN

3.3 OFF-STREET PARKING

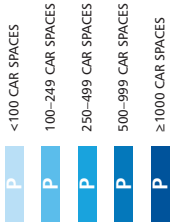
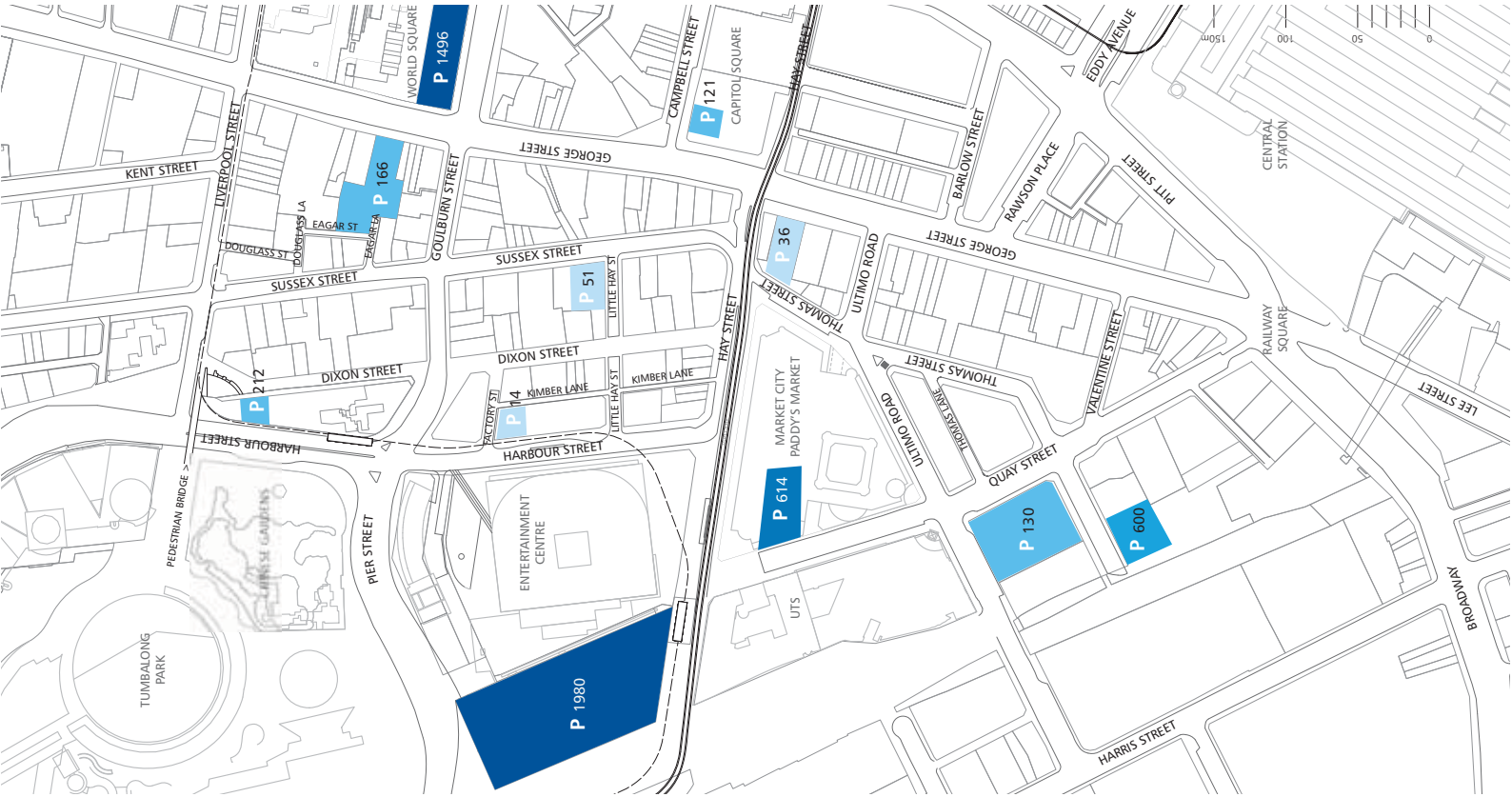
There are approximately 5,800 public parking spaces available in parking stations within Chinatown, or within viable walking distance from Chinatown. These parking stations make a significant contribution to the public car parking provisions within the study area.

Any proposed changes to traffic circulation in Chinatown will need to ensure that access to existing parking stations is maintained.

AFFECT OF PROPOSED STREET CHANGES ON CHINATOWN'S PARKING

Currently, there are about 250 on-street car parking spaces and 5,800 off-street car parking spaces in and immediately adjacent to the study area. This means that on-street car parking is approximately 5% of the total provision.

It is anticipated that up to 80 on-street cars parking spaces could be removed if all the proposed street changes are implemented. This represents a 32% reduction in on-street spaces but only a 1.5% reduction in overall parking availability when off-street car parks are included.



3.4 PUBLIC TRANSPORT DEVELOPMENT

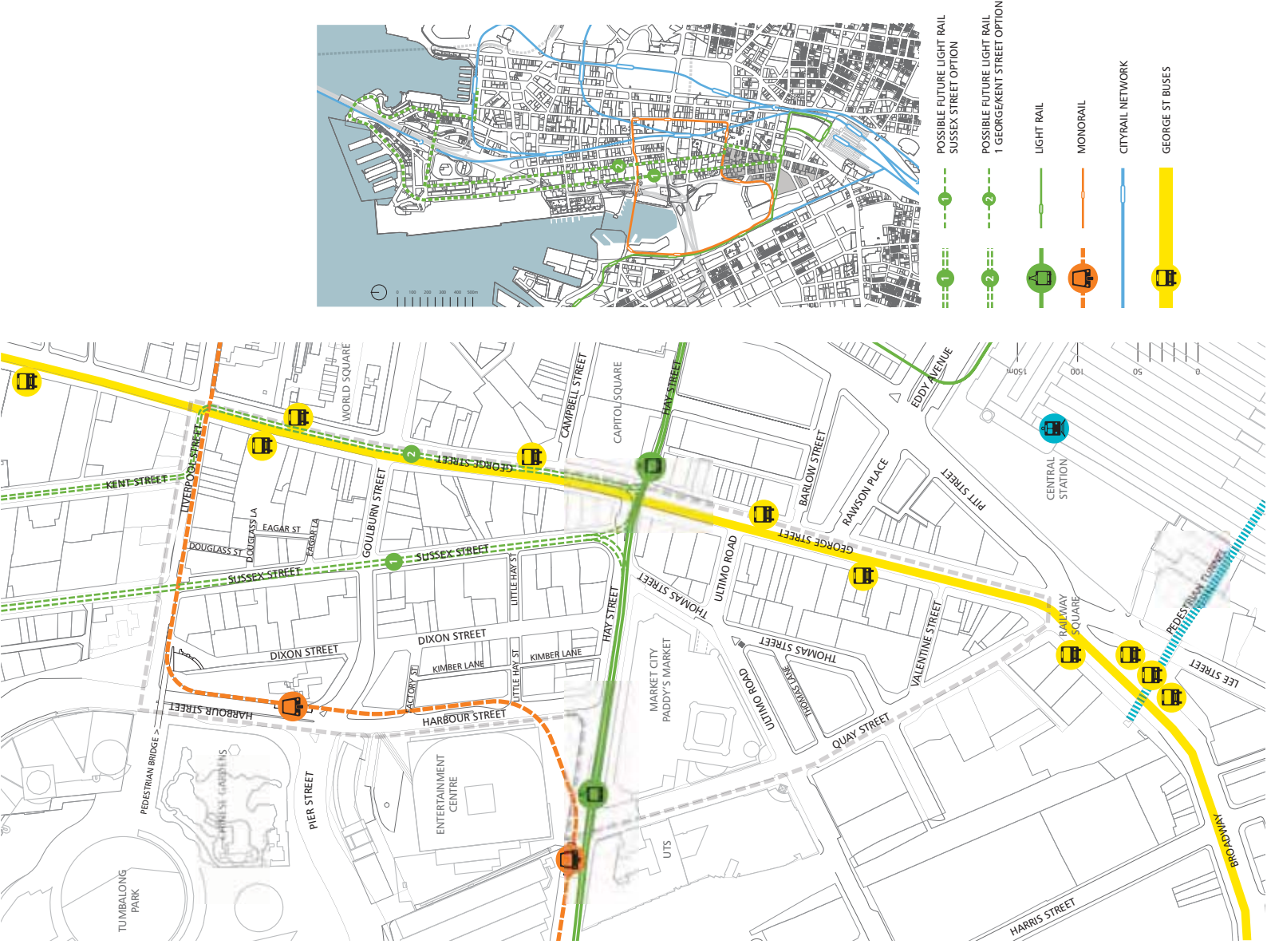
A strong and multifarious public transport network services the Chinatown study area. The key characteristics of this network are:

- Central Railway Station, located approximately 500m from the centre of Chinatown, is easily accessible for visitors;
- Town Hall Railway Station is a short five to ten minute walk for most people visiting Chinatown;
- the Metro Light Rail (tram) line has stations located in Capitol Square and near the Entertainment Centre, both on Hay Street;
- the Monorail has two stations at the edge of Chinatown, located at the Harbour Plaza and Entertainment Centre car park; and
- a large number of bus routes along George Street.

The street intercept survey conducted by Elton Consulting as part of this study revealed that a large proportion of the respondents visiting Chinatown arrived by public transport (primarily train: 24%, and bus: 17%). The greatest proportion of respondents arrived on foot (38%).

The proposed expansion of the light rail network in Sydney has the potential to significantly impact Chinatown in the future. Two of the route options currently under consideration by Transport NSW's Light Rail Feasibility Study directly affect the study area, as they propose light rail along either Sussex Street or George Street. The Sussex Street option in particular will have a significant impact on vehicular and pedestrian circulation in Chinatown. Arup (2009) indicate that in the order of 6,200 vehicles per day would be affected by a future light rail line along Sussex Street (Arup 2009).

There is an opportunity to utilise the light rail extension as a catalyst for the concurrent development of public domain improvements in Chinatown, especially along Sussex Street.



3.5 CYCLE STRATEGY

The City of Sydney's *Cycle Strategy and Action Plan 2007–2017* proposes to significantly increase the provision for cyclists throughout the City, including Chinatown. The City is progressively implementing its cycle strategy, which will have substantial effects on the way in which Chinatown's streets operate.

The key cycle facilities proposed within the Chinatown study area include:

- a separated cycle path along Ultimo Road, linking Harris Street to Hay Street;
- a separated cycle path along Hay Street; and
- separated cycle paths along Sussex Street, Goulburn Street and Liverpool Street.

The proposed development of cycle paths in Chinatown provides an opportunity to concurrently implement streetscape improvements in the affected streets. Furthermore, there is the potential to improve cycle connections to the west with a link through Darling Harbour.

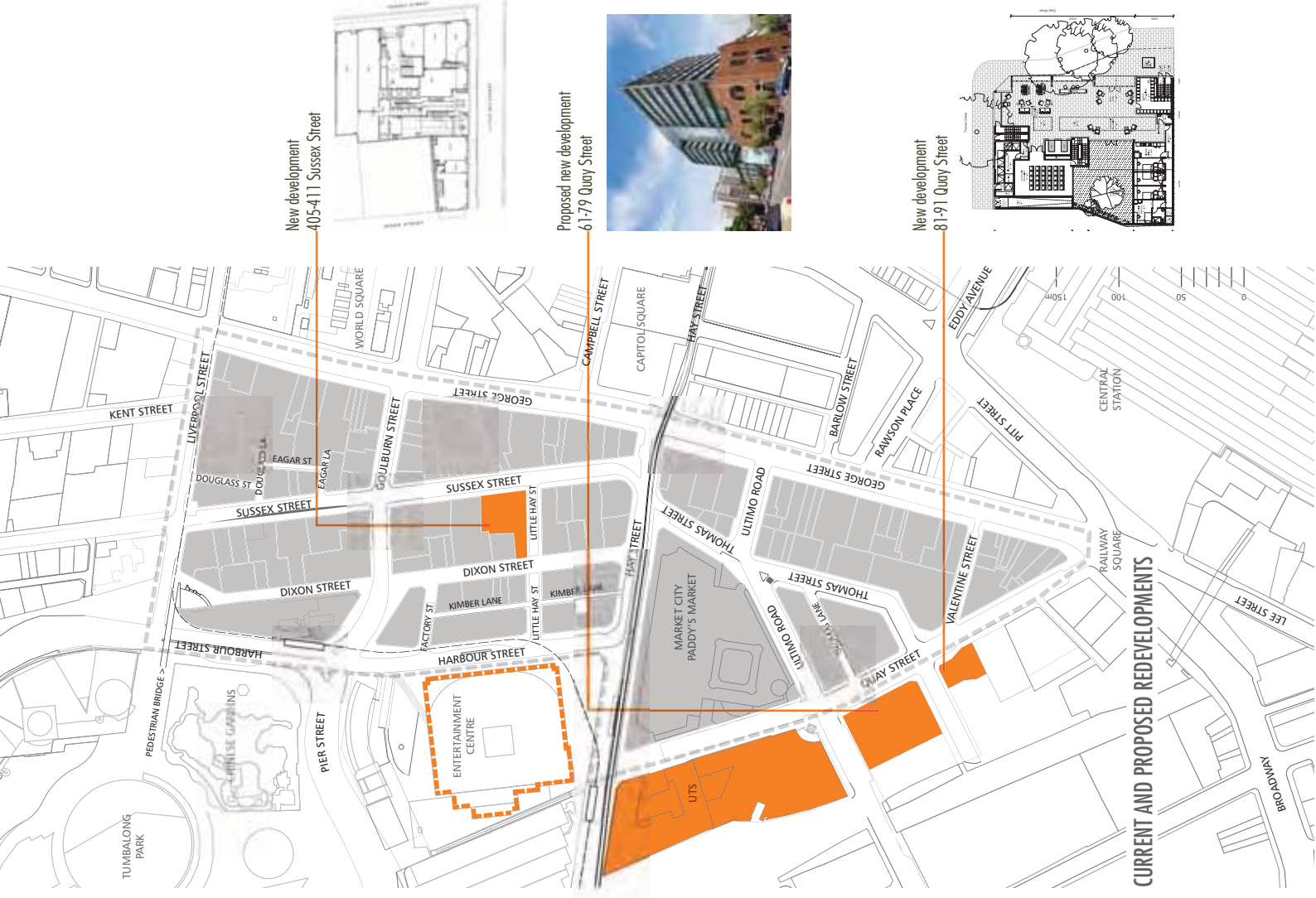


3.6 MAJOR DEVELOPMENTS

A number of large redevelopments, both proposed and currently underway, have the potential to affect significant changes on the urban form and character of the Chinatown, especially in the west of the study area. There is a great opportunity to utilise the change brought about by these developments to concurrently develop public domain improvements that could significantly transform the character and urban function of Chinatown's western edge.

Quay Street is currently undergoing substantial urban changes, with mixed-use commercial and multi-unit residential redevelopments have recently been completed, or are currently underway, at a number of sites along its western side. A major redevelopment of the Wilson carpark site (61-79 Quay Street) has also been approved by Council. Furthermore, the University of Technology Sydney (UTS) is planning to develop a number of new buildings at its City Campus, just west of the study area, as well as a major refurbishment of its Haymarket campus, located on the north-western edge of Quay Street. Combined, these developments will have a significant impact on the form and character of Quay Street, strengthening its role as a key entry point to Chinatown from Central and Broadway.

The future of the Entertainment Centre is also a key determinant of the character of Chinatown's western edge. Should the Entertainment Centre site be made available for redevelopment by the State Government, it would create a significant opportunity to reconfigure the relationship between Chinatown and Darling Harbour. Particularly desirable would be the extension of pedestrian access along the Quay Street axis to Darling Harbour, and the creation of a large public plaza that addresses Chinatown across Harbour Street.



3.7 TWO TYPES OF PROJECTS

This study proposes two types of projects to improve Chinatown's public domain:

- Chinatown-wide 'overlay' projects that aim to improve specific aspects of the public domain experience throughout the entire study area; and
- Place-specific upgrade projects that aim to make physical improvements to particular parts of Chinatown. These projects focus on discrete areas of Chinatown, and can be implemented independently of one another.

Project objectives

The primary objectives that for these projects are:

- To increase the amount of public space available to pedestrians and cyclists
- To improve the quality of the public domain experience
- To create better pedestrian and cycle connections between Chinatown and the surrounding urban areas
- To create distinctive public spaces that reinforce and enhance the unique characteristics of the Chinatown urban experience.

The following two chapters describe the overlay projects and upgrade projects proposed for Chinatown.



4 CHINATOWN—WIDE PROJECTS (OVERLAYS)

This chapter describes a series of 'overlays' to the City's existing palette of materials and fixtures for the city centre. These overlays address specific aspects of public domain across the entire study area, with the goal of improving the overall quality of the Chinatown public domain experience.

The proposed Chinatown—wide overlays are:

- Lighting overlay
- Materials and wayfinding overlay
- Furniture overlay
- Street tree overlay
- Environmental sustainability overlay
- Public art overlay

4.1 LIGHTING OVERLAY

The colourful lighting throughout Chinatown—a result of public art projects as well as signage from shops and restaurants—is a distinctive and memorable aspect of the area’s urban character. This is particularly so in the core of Chinatown, the location of both the greatest concentration of businesses and the Haymarket decorative lighting projects designed by Peter McGregor in collaboration with Hassell (1997).

Concurrently, there are many parts of Chinatown where the street lighting is poor, resulting in dark spaces where pedestrians report feeling unsafe. Recognising that lighting makes a significant contribution to the sense of place in Chinatown, it is important to ensure that the need to improve pedestrian safety does not result in over-bright, characterless streets.

Lighting objectives

- To improve public street lighting throughout Chinatown.
- To ensure that the atmospheric character of Chinatown’s lighting is maintained and enhanced.

Project steps

- Implement public lighting improvements with each street upgrade, to ensure that the streets are adequately lit for pedestrian safety.
- Take into consideration the light spill from late-opening businesses when providing public street lighting, and vary the intensity of the street lighting accordingly.
- Implement standard street lighting or pedestrian lighting fixtures that are appropriate to the scale and character of each particular street; for example, use smaller-scale smart poles and possibly a different coloured finish to differentiate Chinatown from the surrounding CBD fixtures.
- Investigate opportunities for additional decorative lighting/public art projects throughout Chinatown.



Dixon Street lighting (design: Peter McGregor & Hassell; photo: City of Sydney)



Example of 'village' smart pole at Darlinghurst Road, which is smaller in scale and darker in colour than the smart poles used for public lighting in the city centre.

4.2 MATERIALS AND WAYFINDING OVERLAY

The materials and finishes used in the public domain can make a significant contribution to an area's sense of place. The materials and finishes currently found in Chinatown's streets are largely inconsistent and worn. It is expected that any streetscape upgrades will implement the City of Sydney's standard palette of public domain materials, in accordance with Council's *Sydney Streets Design Code* (2006, interim). This is appropriate as the standard palette of finishes provides a neutral backdrop that allows each particular urban area's specific characteristics to take precedence.

Nonetheless, within the standard palette there is the possibility of introducing subtle variations in materiality or detailing that enable local differences to be expressed. Rather than introducing difference in the palette for its own sake, it is possible to use material variation as a means to improve wayfinding in Chinatown's public domain. For example, decorative insertions into the paving outside all arcade entrances could subtly yet clearly signalise the presence of through-site connections where they might otherwise be easily overlooked in the busy streets.

Materials palette objectives

- To upgrade public domain materials throughout Chinatown in accordance with the City of Sydney's standards.
- To introduce local variations to the standard palette in a way that is purposeful rather than arbitrary.

Project steps

- Implement the City of Sydney public domain materials palette with each street upgrade.
- Formulate a strategy for local variations, such as a decorative insertions/wayfinding overlay, that can be consistently implemented throughout Chinatown.



EMPHASISE ARCADE ENTRANCES



Above images: photomontages showing possible insertions into the standard granite paving to subtly indicate arcade entrances

4.3 FURNITURE OVERLAY

The City of Sydney's *Sydney Streets Design Code* (2006, interim) establishes a standard palette of street furniture—such as seats, rubbish bins, bollards—to ensure consistency throughout the City's public domain. It is anticipated that any streetscape upgrade in Chinatown would implement the standard street furniture palette in accordance with Council policy.

In addition to the standard palette, there is an opportunity to introduce non-standard, custom-designed, furniture items to distinguish 'special' places within Chinatown. The provision of place-specific custom-designed furniture is an approach that has been adopted in other parts of the City, for example at Pitt Street Mall. Within Chinatown, custom furniture should be considered only in discrete places with a strong pedestrian focus, with standard furniture provided in the main.

Project objectives

- To improve and increase the provision of street furniture in accordance with the City's standards.
- To allow for place-specific custom furniture where appropriate.

Project steps

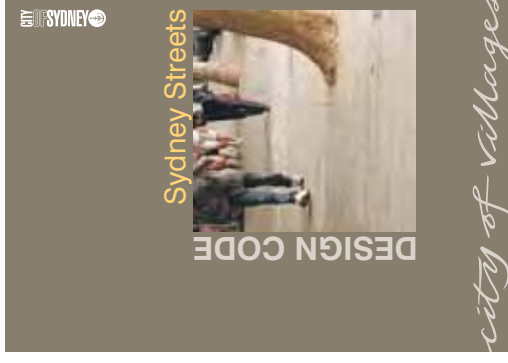
- Implement street furniture improvements with each street upgrade.
- Investigate place-specific custom furniture to distinguish pedestrian-focussed spaces. In principle, these should be places dedicated for public activity, such as: the Dixon Street mall and any proposed new plazas and squares.



City standard seat, Dixon Street



Custom seat (shown possibly refurbished), Dixon Street



Sydney Streets

DESIGN CODE

city of villages

4.4 STREET TREE OVERLAY

In addition to improving the urban microclimate, street trees have the ability to greatly influence the cultural and urban character of the public domain. Distinctive street tree plantings are often memorable, and contribute significantly to a particular area's sense of place. Currently, the Chinatown's defining tree plantings are the Weeping Figs and Crepe Myrtles in the southern section of Dixon Street. Other distinctive street trees include the Golden Rain Trees in Quay Street.

Street tree planting throughout the City of Sydney is guided by Council's *Street Tree Masterplan* (2004). The *Masterplan* adopts a precinct-based approach to street tree planting, including Chinatown, and describes recommended species for each street based on the principle of 'the right tree for the right place'. In its species recommendations, the *Masterplan* considers local environmental factors, physical restrictions, functional criteria, and aesthetic and other design factors.

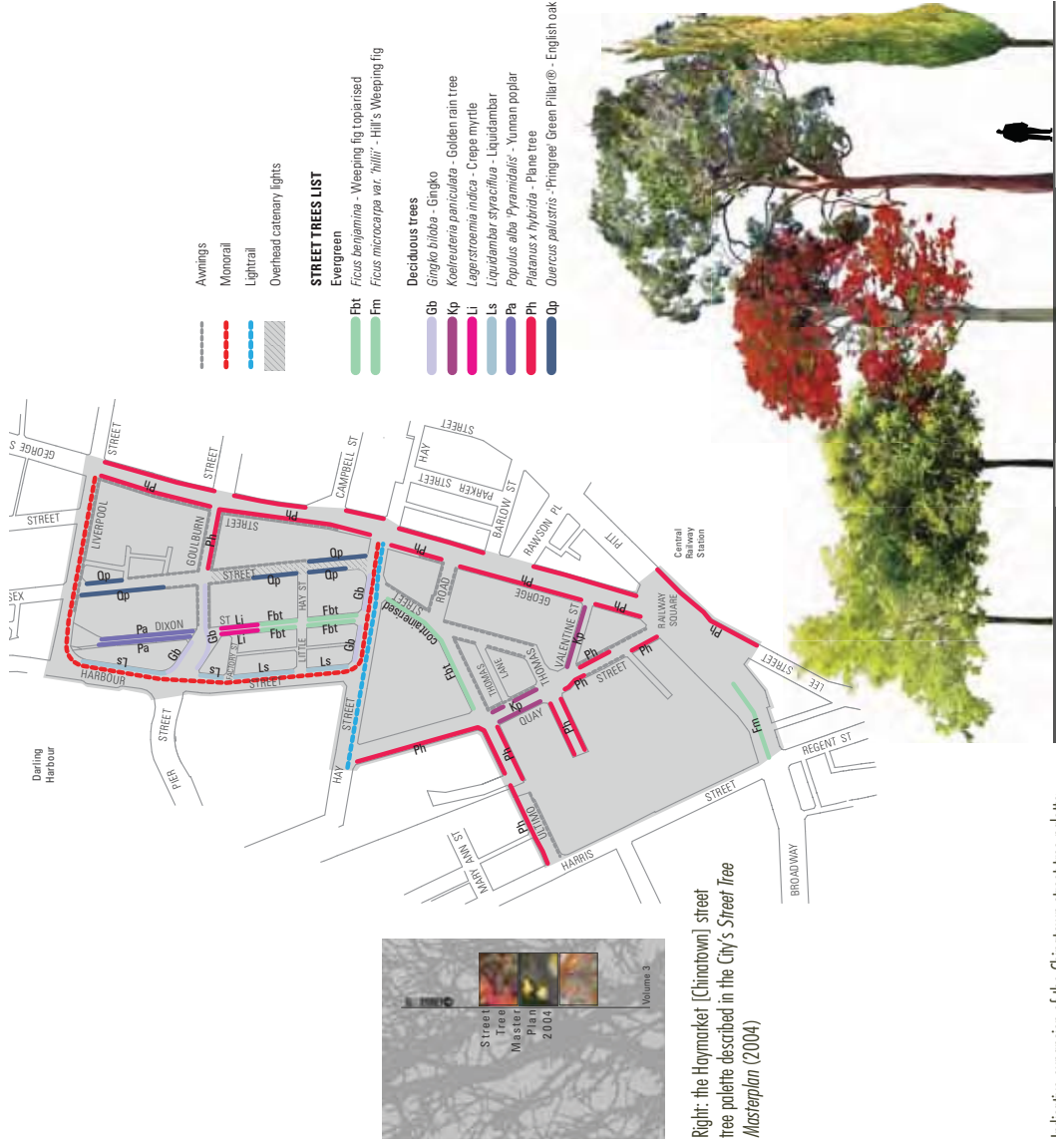
Currently, the key limiting factors to street tree planting in Chinatown are restricted footpath widths and the awnings that extend the full width of the footpaths. As the proposed street upgrades provide for widened footpaths and new plazas and squares, there is an opportunity to substantially increase the amount of tree planting throughout Chinatown, as well as broaden the species palette.

Project objectives

- Increase planting throughout Chinatown wherever possible.
- Provide for shade in summer, solar access in winter.
- Use distinctive street tree plantings to reinforce Chinatown as a unique place in the City.

Project steps

- Introduce additional street trees wherever possible as part of each street upgrade.
- Update the *Street Tree Masterplan*'s Chinatown tree palette in response to the opportunities created by the street upgrades.



Indicative expansion of the Chinatown street tree palette



Weeping Figs (*Ficus benjamina*), Dixon Street mall



Crepe Myrtles (*Lagerstroemia indica*), Dixon Street



Golden Rain Trees (*Koelreuteria paniculata*), Quay Street

4.5 ENVIRONMENTAL SUSTAINABILITY OVERLAY

The implementation of street upgrades throughout Chinatown provides a great opportunity to introduce environmental sustainability measures in conjunction with the upgrades. In particular, water sensitive urban design (WSUD) initiatives, specifically in relation to urban stormwater, would significantly improve the environmental sustainability of Chinatown's urban environment.

Project objectives

- To improve the environmental sustainability of Chinatown's urban environment

Project steps

- Implement WSUD initiatives with each street upgrade; for example, collecting stormwater off all awnings to water street trees.
- Investigate the introduction of stormwater infiltration beds where space and topography permits; for example, along Quay Street.
- Investigate the potential for other major stormwater retention sites; for example, in the space north of the Entertainment Centre (subject to negotiation and agreement from SHFA).
- Investigate other environmental sustainability initiatives for Chinatown.



Photomontage showing possible stormwater infiltration beds (rain gardens) along Quay Street



4.6 PUBLIC ART OVERLAY

Public art has the ability to contribute significantly to an urban area's sense of place and cultural expression. There are currently only four major public art works in Chinatown (refer map at left). The City's plan to improve the public domain throughout Chinatown provides an excellent opportunity to introduce new public art projects as part of the proposed street upgrades.

The City is currently formulating a public art strategy, the *Chinatown Public Art Plan*, with Gallery 4A. The Plan's approach is to:

- embrace the potential offered by the constantly evolving expressions of contemporary Asian culture,
- while at the same time respecting the past public art in Chinatown, which has employed a traditionally recognisable palette of Chinese elements (such as lanterns and red lighting).

The *Chinatown Public Art Plan* has been developed around four concepts:

- A conversation with the precinct—highlighting the density of textures, an awareness of old and new, and an invitation to engage with ideas as visitors move through Chinatown.
- The symbolic heart—building upon the existing cluster of public art projects around Dixon Street and Sussex Street
- Strengthening the edges—acknowledging the different entry points to Chinatown, and the cultural and social activity occurring in these places.
- Talking about public art—a program of public events and information delivery through talks and various technology platforms.

Three types of public art projects are proposed:

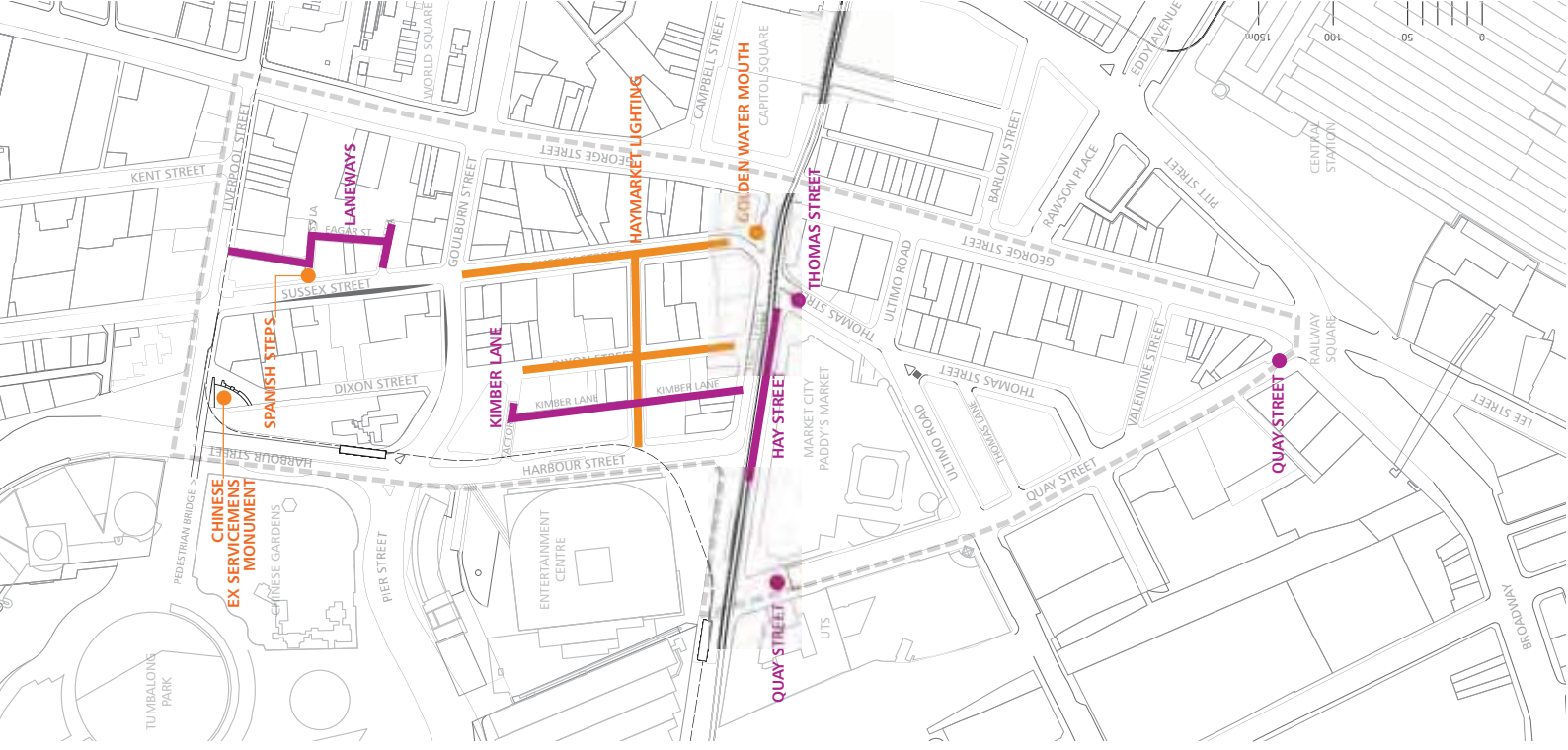
- Major permanent projects as part of street upgrades (refer map, left)
- Infrastructure for ongoing temporary and ephemeral projects, such as billboards, murals, banners; and
- Projects implemented as part of the 'early start' laneways projects at Kimber Lane and Factory Street.



Dixon Street lighting, Peter McGregor (photo: Gallery 4A)



TV Asahi (Roppongi, Japan), Tatsuo Miyajima (photo: Gallery 4A)





5 PLACE-SPECIFIC PROJECTS (UPGRADES)

This chapter describes a series of place-specific projects that aim to make physical changes that improve Chinatown's public domain. Each project focuses on a discrete area of Chinatown and can be implemented independently of the other projects.

The proposed Chinatown upgrade projects are:

- Dixon Street: renovation
- Sussex Street: trams
- Goulburn Street: connecting
- Hay Street: hub
- Harbour Street: welcome mat
- Thomas Street: spine
- Ultimo Road: cycle
- Quay Street: boulevard
- Valentine Street
- Douglass Street & Douglass Lane,
Eagar Street & Eagar Lane: laneways revitalisation
- Little Hay Street, Factory Street & Kimber Lane: early start

5.1 DIXON STREET: RENOVATION

THE EXISTING SITUATION

Dixon Street is a north-south street situated between Sussex Street and Harbour Street. The street is bisected by Goulburn Street, a busy east-west arterial route through the city. Pedestrian crossing at the Goulburn Street intersection is facilitated by traffic lights.

The section of Dixon Street south of Goulburn Street is a pedestrian mall, and is popularly regarded as the social and cultural heart of Chinatown. The Dixon Street mall has a bustling, lively urban character—with a weekday peak hour of 1,230 people, and a weekend peak hour of 2,154 people (Gehl Architects 2007, *in* Arup 2009). A number of retail arcades connect Sussex Street to the Dixon Street mall, which is occupied on both sides by busy shops and restaurants. Many of the restaurants also offer outdoor dining in leased areas along both sides of the mall.

The Dixon Street mall underwent a major upgrade in 2000, which included new granite paving, seating, decorative lighting and tree planting. Since 2000, the fig trees in the section of the mall between the Chinatown Gates have matured to become an iconic part of the mall's character. The fig trees cast a deep dappled shade in the mall, which is well appreciated in the summer. However, in conjunction with the dark granite paving, the shade can create a dark, somewhat gloomy, atmosphere at other times.

The Dixon Street mall is the focus of many of Chinatown's cultural festivals and events, particularly

the month-long Chinese New Year celebrations. The busy Chinatown Night Markets, held every Friday evening, occupies the entirety of the mall space. The community consultation for this project revealed that there is a strong desire from the community, including local businesses, for additional space for events and festivals in Chinatown to relieve the congestion that can often occur in Dixon Street.

The section of Dixon Street north of Goulburn Street is significantly less busy than the mall, with a weekday peak hour of 204 people and a weekend peak hour of 354 people (Arup 2009). This part of Dixon Street is a currently shared zone, and has substantially fewer active building frontages. The Trades Hall is a landmark building located at the intersection with Dixon Street, and the Southern Cross on Harbour Hotel and Garden Plaza occupy the entire western frontage of this section of the street. At the northern end of Dixon Street is a small plaza which contains the Chinese Ex-Servicemens Monument. A pedestrian bridge north of the plaza connects Liverpool Street to Darling Harbour, across Harbour Street. There are no street trees in north Dixon Street.

Constraints

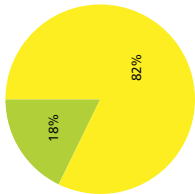
The section of Dixon Street north of Goulburn Street is governed by SHFA. Any changes here would require negotiation with, and agreement from, SHFA.

Opportunities

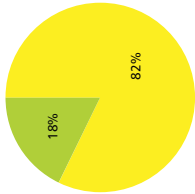
During the community consultation process for this project, a suggestion was made by community and



ALLOCATION OF SPACE IN DIXON STREET



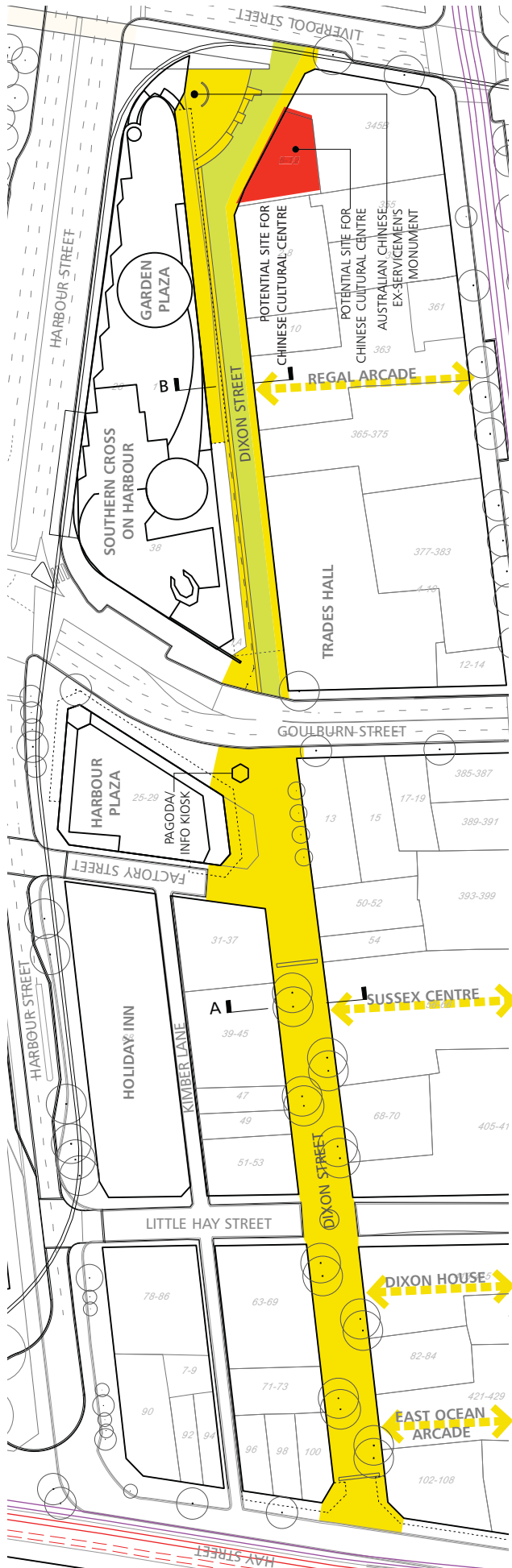
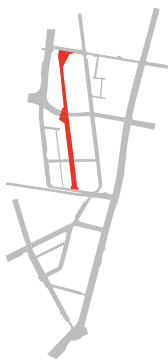
EXISTING



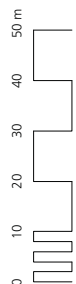
PROPOSED



SPACE FOR PEDESTRIANS & CYCLISTS: (footpaths, cycle paths and shared)



LEGEND



business leaders at the Lord Mayor’s Roundtable Luncheon for the establishment of a Chinese Cultural Centre in Chinatown. The northern end of Dixon Street would be a good strategic location for such a cultural centre, as it could help to attract more public activity to this underutilised part of Dixon Street.

THE PROJECT

Unlike other parts of Chinatown, public domain improvements in to Dixon Street would not require winning back additional space for pedestrians, as the entire street is already a pedestrian-priority space. Instead, what is required in Dixon Street is a renovation. As the existing character and public domain issues are very different north and south of Goulburn Street, the renovation project is considered in two parts which respond to the particular needs at either end of Dixon Street.

DIXON STREET SOUTH

Project objectives

- To relieve pedestrian congestion.
- To make the space brighter.

Project components

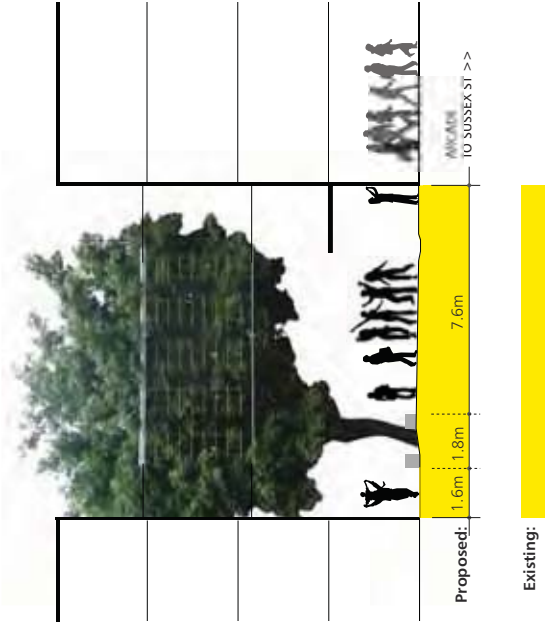
- As Dixon Street mall is already a pedestrian-priority space, there is no opportunity to increase the amount of pedestrian space to relieve the congestion. Instead, the proposed strategy is to increase the amount of space available for pedestrian activity, festivals and programmed events in the surrounding streets to relieve the pressure on Dixon Street.

- An incremental strategy is proposed for increasing the ambient light levels in the space. This involves:
 - Incremental and ongoing maintenance trimming (canopy thinning) of the fig trees to let in more light. This would be done as part of the City’s yearly tree maintenance program.
 - Ongoing monitoring of the trees and consideration of other strategies should canopy thinning not be sufficient in increasing the ambient light levels. This could include:
 - Selective removal of some fig trees. Preliminary advice from the City’s arborists indicate that this may not be possible in some cases.
 - Additional lighting in the space, possibly in-ground, that visually complements and functionally supplements the existing overhead lighting.
 - Strategic introduction of lighter coloured paving. This could be done in a selective manner (for example, in bands) to avoid the wholesale replacement of paving.
 - Increased ongoing maintenance cleaning of the paving to improve its brightness.
- Increased visual prominence to the arcade entrances, possibly through markings in the paving (refer materials/wayfinding overlay description).
- Selective renovation of furniture items, such as the public seating.
- Review of the management of the licensed areas for outdoor dining to resolve any conflicts between public

and private seating, and ensure that the licensed areas do not compromise the public amenity of the mall.

Feasibility

The City of Sydney has the authority to undertake renovations to Dixon Street south.





EXISTING: DIXON STREET MALL



PROPOSED: DIXON STREET MALL

DIXON STREET NORTH

Project objectives

- To improve the character of the street.
- To encourage increased public activity.

Project components

- Streetscape improvements, including: new paving, pedestrian lighting, and planting.
- Renovation of the level change edge to the Garden Plaza to incorporate public seating and planting.
- Increased visual prominence to the Regal Arcade entrances, both on Dixon Street Sussex Street, possibly through markings in the paving (refer materials/wayfinding overlay description).
- Investigate possible projected art at the Garden Plaza awning to increase the visual prominence and interest of north Dixon Street when viewed from the southern side of Goulburn Street.
- Investigate the introduction of programmed events, such as the extension of Dixon Street’s weekly night markets into this space.
- Investigate establishing a Chinese Cultural Centre at the former Harbour City Cinema site to create a prominent activity attractor at the northern end of Dixon Street.

Project benefits

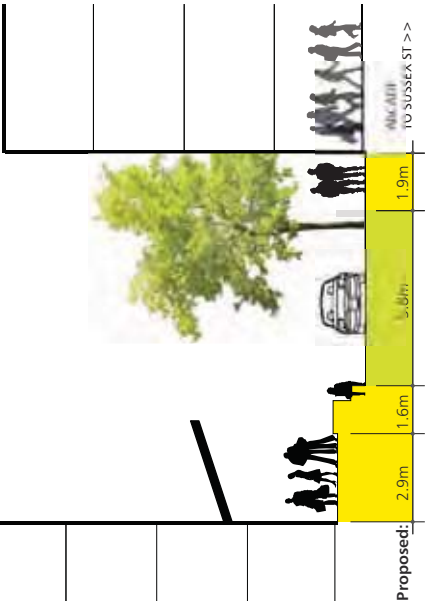
The public domain upgrade would make Dixon Street north more visually appealing and inviting. This would potentially attract more visitation and consequently facilitate increased business activity fronting the street.

Feasibility

Changes to Dixon Street north would require negotiation with SHFA, the governing agency for this section of the street. Preliminary discussions with SHFA as part of this study indicate that it is supportive of the suggested improvements.

SECTION B

- Shared zone
- Existing footpath





EXISTING: DIXON STREET NORTH



PROPOSED: DIXON STREET NORTH

DIXON STREET

5.2 SUSSEX STREET: TRAMS

THE EXISTING SITUATION

Sussex Street is situated immediately east of, and runs parallel to, Dixon Street. It is a lively street with active street frontages, consisting primarily of small retail businesses and restaurants. A number of pedestrian arcades provide access to both George Street in the east, and Dixon Street in the west.

Sussex Street's north-south orientation provides good solar access to the street. Despite limited footpath space, there are existing street trees located along Sussex Street, primarily north of Goulburn Street. At night, decorative lighting (designed by Peter McGregor) suspended across the street forms a luminous 'ceiling' above Sussex Street south of Goulburn Street.

The primary public domain issue at Sussex Street is the confluence of strong vehicular and pedestrian activity, which compete for limited space. A (southbound) one-way street, Sussex Street currently experiences high levels of vehicular traffic (average weekday volume of 6,235; Arup, 2009). It also provides important service access (loading) to businesses—not only along Sussex Street, but also the Dixon Street pedestrian mall.

The high volume of vehicular traffic coincides with high levels of pedestrian activity along Sussex Street, (2,274 weekday peak hour, 2,676 weekend peak hour; Arup 2009).

The conflict between vehicular and pedestrian activity is particularly evident at the Goulburn Street

intersection, where the narrow footpaths experience significant congestion. During the community consultation for this study, the limited footpath space at Sussex Street was strongly identified as an issue to be addressed.

Constraints

- The primary constraint to widening the footpaths along Sussex Street is the need to provide for loading access to the businesses along Sussex Street and Dixon Street.
- Along some sections of the street, the presence of awnings over the existing footpaths limit the opportunities for street tree planting.

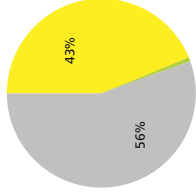
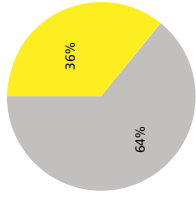
Opportunities

Sussex Street has been identified by Transport NSW as one of the potential routes for the planned light rail extension from Haymarket to Circular Quay. Should this route be adopted (subject to the outcome of Transport NSW's Light Rail Feasibility Study), the way Sussex Street operates would change. In all likelihood, the trams would run along the centre of the street in both directions; consequently, Sussex Street would also become two-way for cars. Parking and loading would most likely need to be maintained on either side of the street.

The significant physical and operational changes resulting from the introduction of light rail along Sussex Street could provide the impetus for the simultaneous development of public domain improvements. However, public domain



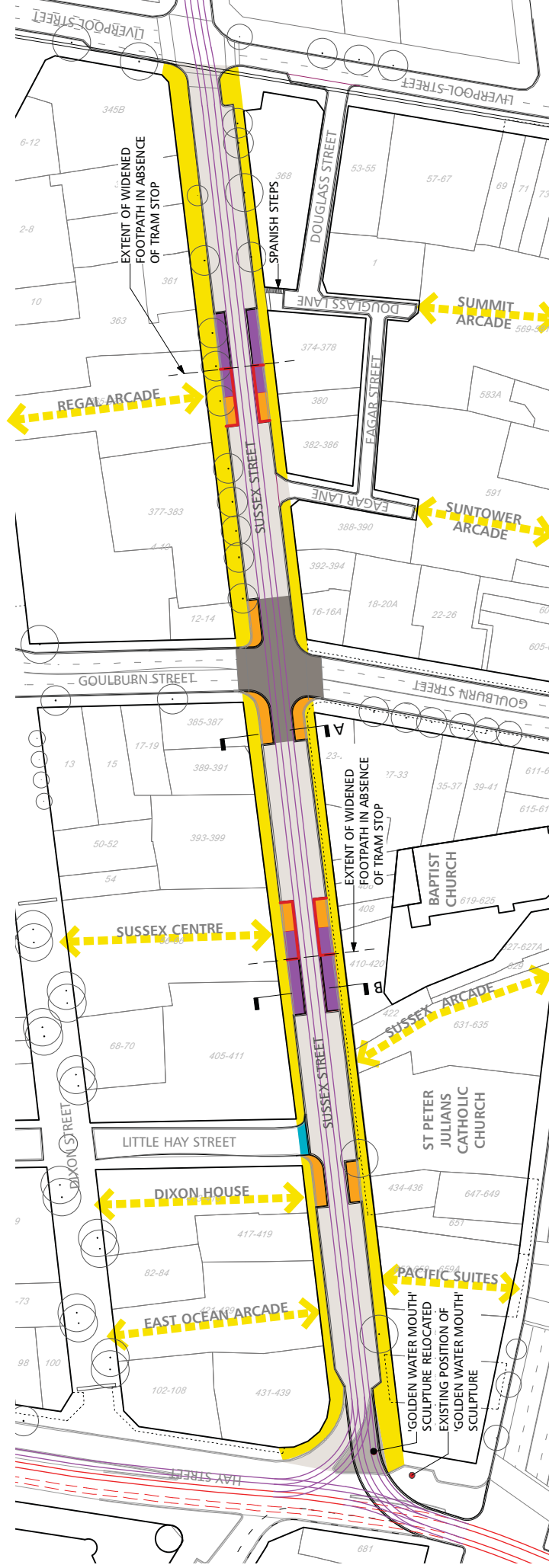
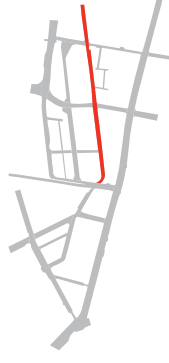
ALLOCATION OF SPACE IN SUSSEX STREET:



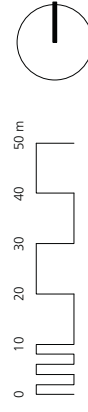
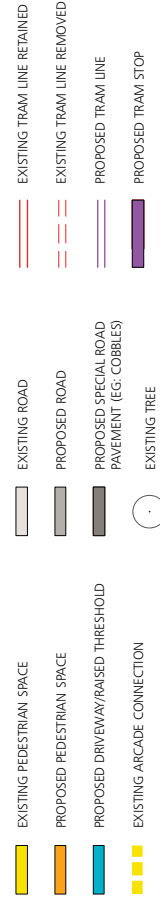
SPACE FOR PEDESTRIANS & CYCLISTS: (footpaths, cycle paths and shared)



24% GAIN



LEGEND



improvements to Sussex Street should not be contingent upon the development of light rail.

THE PROJECT

Project objectives

- To create more pedestrian space along Sussex Street, particularly at the Goulburn Street intersection.
- To maintain provisions for on-street parking and loading.
- To allow for potential future light rail development along Sussex Street.

Project components

- Footpath widening at three sides of the Goulburn Street intersection. At this time, kerb widening is not proposed

at the north-eastern corner of the intersection, in order to maintain the existing busy left turn from Sussex Street into Goulburn Street. However, should traffic volumes change in the future, kerb widening at this corner should be considered.

- Footpath widening to create generous mid-block pedestrian crossings. The crossings are strategically located at entrances to existing arcades, and have the potential to be expanded to form tram stops if required in the future.
- Increased visual prominence to the arcade entrances, possibly through markings in the paving (refer materials/wayfinding overlay description).
- Streetscape improvements, including: new paving, pedestrian lighting and street furniture.

- Street tree planting at widened footpaths, and elsewhere where space permits.
- Stormwater harvesting off building awnings, where applicable, to water street trees.

Provision for cyclists

The City's *Cycle Strategy and Action Plan 2007-2017* has recommended the development of a separated cycleway along Sussex Street. In light of the potential introduction of light rail along Sussex Street, the type of provision for cyclists here requires further investigation. There is the potential for cyclists to utilise the tram lanes in a shared environment, similar to the current situation along Hay Street.





EXISTING: SUSSEX STREET/GOULBURN STREET INTERSECTION

Project benefits

- Increased footpath space that facilitates pedestrian crossing.
- Potential for outdoor dining at widened footpath areas.
- On-street parking and loading provisions are substantially maintained.

Feasibility

- Council has the authority to undertake the upgrade.
- Footpath widening and other streetscape improvements can be implemented regardless of whether the light rail development along Sussex Street occurs.



PROPOSED: SUSSEX STREET/GOULBURN STREET INTERSECTION

5.3 GOULBURN STREET: CONNECTING

THE EXISTING SITUATION

Goulburn Street is a busy two-way street that forms a vital east-west arterial route in the City's road network. Within Chinatown, it bisects Dixon Street and Sussex Street north of the Dixon Street mall, effectively separating the Chinatown's 'urban core' from its northern area.

The section of Goulburn Street east of Dixon Street is very lively, with active street frontages comprising primarily retail businesses and restaurants. It forms a busy pedestrian route from George Street, providing the primary access to Chinatown from the north. This is reflected in the high volumes of pedestrian activity (1,524 weekday peak hour, 2,730 weekend peak hour; Arup 2009), which coincides with high volumes of vehicular traffic (26,412 average weekday traffic; Arup 2009). The competition between cars and pedestrians for space along Goulburn Street is particularly evident at the pedestrian crossings at the Sussex Street intersection.

There is significantly less pedestrian activity on Goulburn Street between Dixon Street and Harbour Street (426 weekday peak hour, 432 weekend peak hour; Arup 2009), where the road is substantially wider and there is less commercial street frontage.

Constraints

Goulburn Street is an RTA-controlled road; as such, any changes to the operation of the road would require negotiation with, and approval from, the RTA. As Goulburn Street forms a major east-west connection through the City, it is highly unlikely that

changes that affect the capacity of the road would be accepted.

THE PROJECT

Project objectives

- To improve pedestrian amenity at the Sussex Street and Dixon Street intersections.
- To increase the sense of connection between Chinatown's core and Chinatown north.

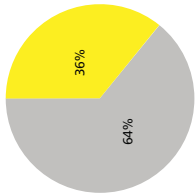
Project components

- Footpath widening on Sussex Street to increase pedestrian space at intersection (refer Sussex Street project description).
- Visually emphasise the intersections at Sussex Street and Dixon Street, to prioritise the pedestrian crossing experience and visually connect Chinatown across Goulburn Street, through:
 - decorative lighting across the intersections
 - change of road pavement surface at the intersections, and
 - raised pedestrian thresholds at the intersections.

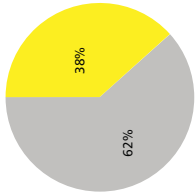
Changes at the intersections could comprise any or all of the above suggested components, depending on negotiations with the RTA.



ALLOCATION OF SPACE IN GOULBURN STREET:



EXISTING



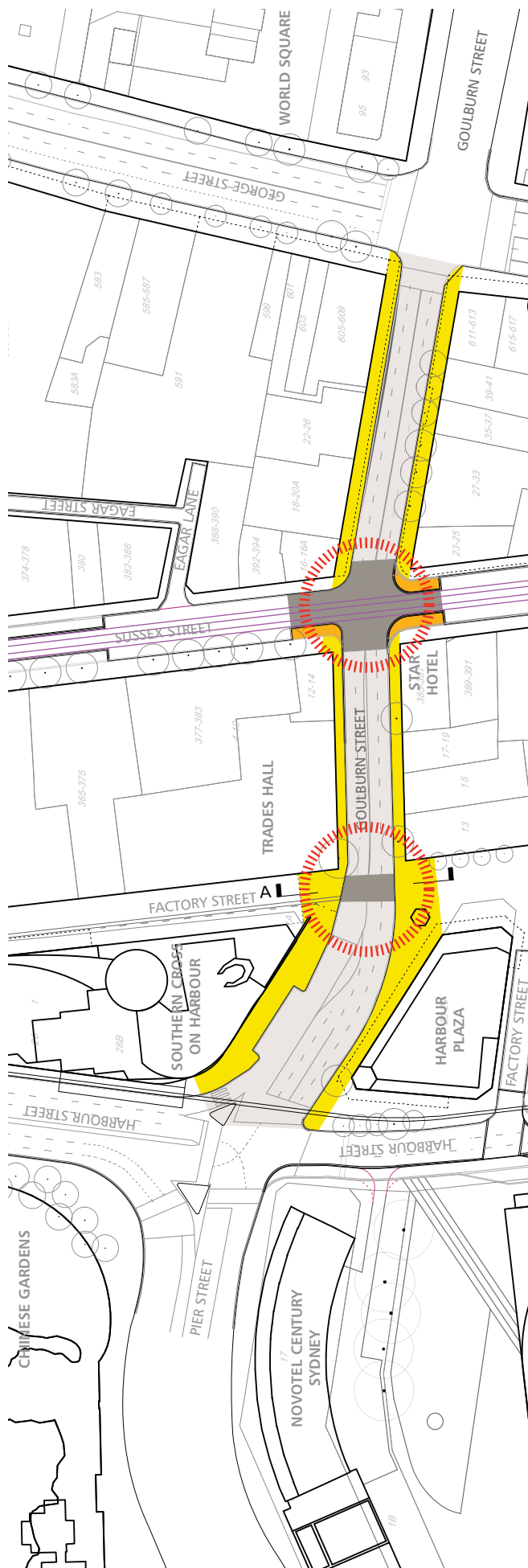
PROPOSED

CARS
PEDESTRIANS
SHARED
CYCLE

SPACE FOR PEDESTRIANS & CYCLISTS: (footpaths, cycle paths and shared)

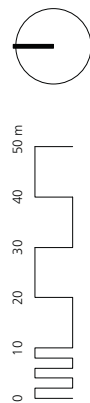


6% GAIN



LEGEND

- EXISTING PEDESTRIAN SPACE
- PROPOSED PEDESTRIAN SPACE
- EXISTING ROAD
- PROPOSED SPECIAL ROAD PAVEMENT (EG: COBBLES)
- EXISTING TREE



- Streetscape improvements, including: new paving, pedestrian lighting and street furniture. Street tree planting where space permits.
- Stormwater harvesting off building awnings, where applicable, to water street trees.

Provision for cyclists

The City's *Cycle Strategy and Action Plan 2007-2017* has recommended the development of a separated cycleway along Goulburn Street, east of Sussex Street. As Goulburn Street is a busy arterial road and controlled by the RTA, the type of provision for cyclists here requires further investigation.

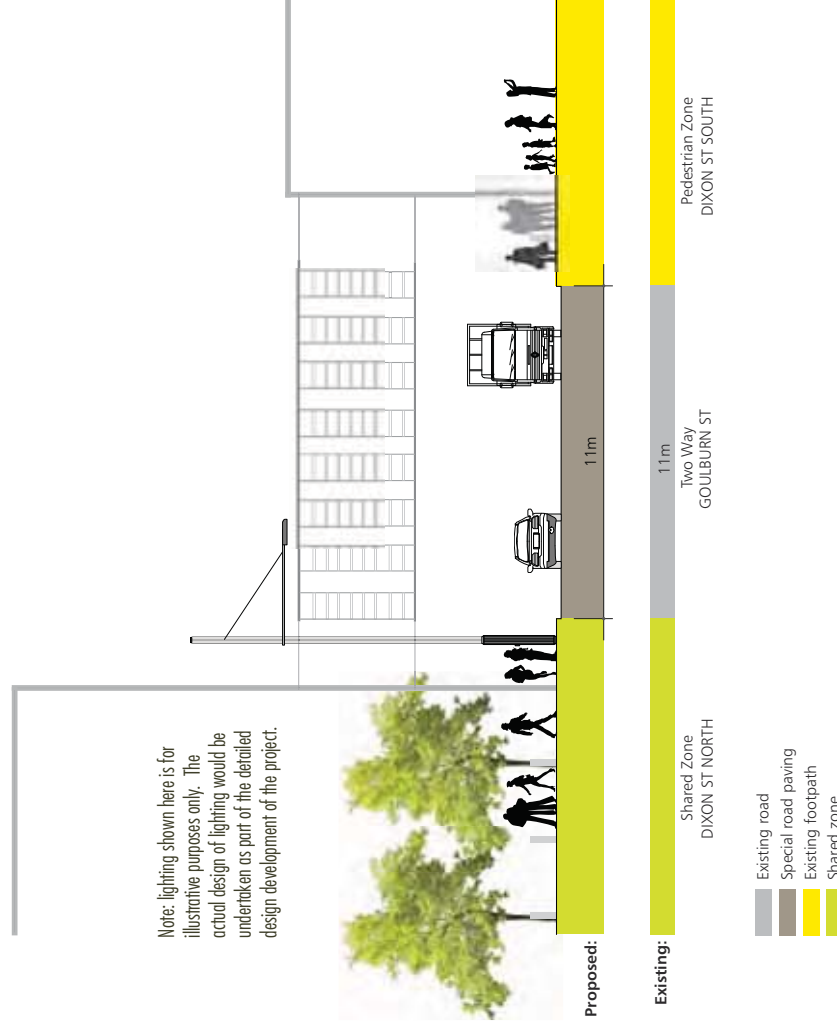
Project benefits

- Increased footpath space at Sussex Street facilitates pedestrian crossing
- Visual emphasis on the Sussex Street and Dixon Street intersections connects Chinatown across Goulburn Street, and prioritises the pedestrian experience, without compromising the capacity of the road to handle large volumes of through traffic.

Feasibility

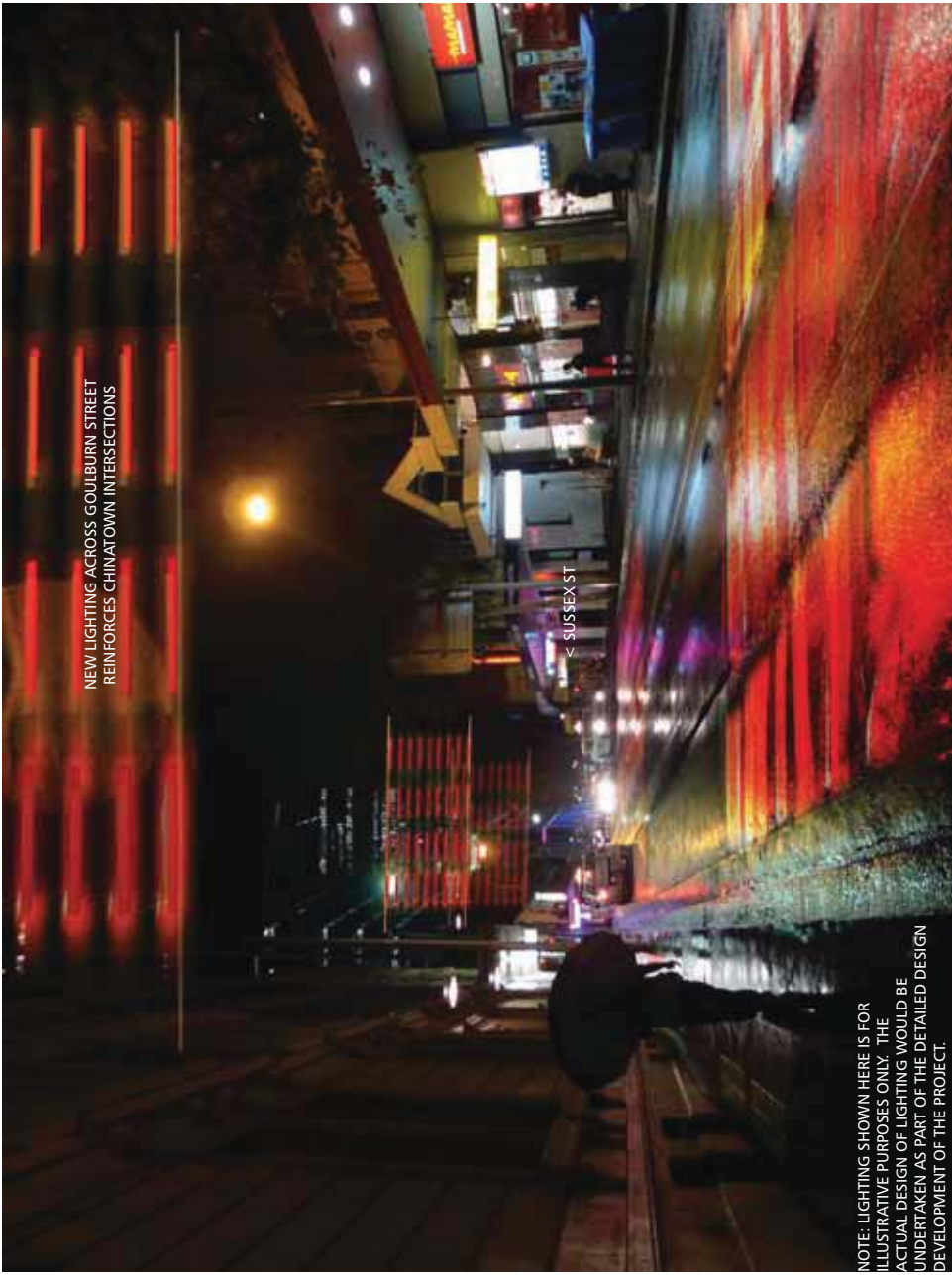
The City of Sydney has the authority to undertake the footpath widenings at the Sussex Street intersection (refer Sussex Street project description).

The other suggested changes at the Sussex Street and Dixon Street intersections would require negotiation with the RTA.





EXISTING



NEW LIGHTING ACROSS GOULBURN STREET
REINFORCES CHINATOWN INTERSECTIONS

< SUSSEX ST

NOTE: LIGHTING SHOWN HERE IS FOR
ILLUSTRATIVE PURPOSES ONLY. THE
ACTUAL DESIGN OF LIGHTING WOULD BE
UNDERTAKEN AS PART OF THE DETAILED DESIGN
DEVELOPMENT OF THE PROJECT.

PROPOSED

5.4 HAY STREET: HUB

THE EXISTING SITUATION

Hay Street is a key east-west connection in the city's road network, servicing pedestrians, cars and light rail. It has been identified by both *Sustainable Sydney 2030* (City of Sydney, 2008) and the *Public Spaces Public Life Study* (Gehl Architects, 2007) as an important pedestrian route in the city, linking Belmore Park to the Powerhouse Museum. Hay Street has also been identified in the City of Sydney's *Cycle Strategy and Action Plan 2007-2017* (2007) as a regional cycle route.

In addition to being a major cross connections through the city, Hay Street also functions as Chinatown's urban nexus, providing pedestrian access to Dixon Street, Sussex Street and Thomas Street, as well as Paddy's Market and the Entertainment Centre.

Hay Street currently experiences high volumes of pedestrian activity, with an average weekday peak hour of 2,298 people and an average weekend peak hour of 2,754 people (Arup 2009). However, high volumes of road traffic (6,289 average weekday volume, Arup 2009), in conjunction with the tram lines that occupy the southern half of the street, significantly impede pedestrian access between the Chinatown's core and the area south of Hay Street.

Paddy's Market occupies much of Hay Street's southern frontage, with the primary entry to the markets and Market City located at the intersection with Thomas Street. However, the market activity is internalised, and the presence of the tram lines immediately adjacent to the market building limits pedestrian accessibility to its northern edge. This

has resulted in a largely inactive southern side to Hay Street, in contrast to its busy northern side.

Constraints

- A heritage listed storm water channel is situated under Hay Street. The location of the storm water channel needs to be considered in any proposed physical reconfiguration of Hay Street, and may restrict the location of proposed services and tree planting.

- Hay Street is an RTA-controlled road. Any changes to its operation would require negotiation with, and approval from, the RTA.

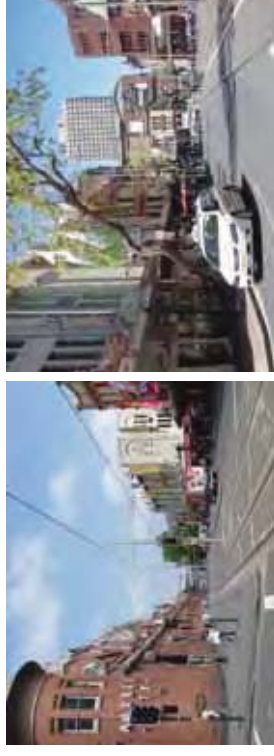
Opportunities

- The heritage listed storm water channel is a significant cultural artefact that could potentially be expressed as part of the street upgrade.

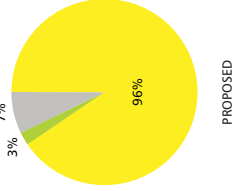
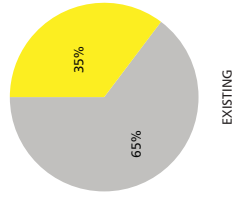
THE PROJECT

Project objectives

- To strengthen Hay Street's role as the urban heart of Chinatown
- To improve the pedestrian amenity of the street, and strengthen connectivity between Chinatown 'core' and Chinatown south.
- To create space for events and festivals
- To activate the northern façade of Paddy's Market
- To improve the character of the street



ALLOCATION OF SPACE IN HAY STREET:



CARS
PEDESTRIANS
SHARED
CYCLE

SPACE FOR PEDESTRIANS & CYCLISTS: (footpaths, cycle paths and shared)

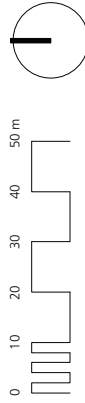


163% GAIN



LEGEND

- EXISTING PEDESTRIAN SPACE
- PROPOSED PEDESTRIAN SPACE
- PROPOSED DRIVEWAY/RAISED THRESHOLD
- EXISTING ARCADE CONNECTION
- EXISTING ROAD
- EXISTING TREE
- EXISTING TRAM LINE RETAINED
- EXISTING TRAM LINE REMOVED
- PROPOSED TRAM LINE



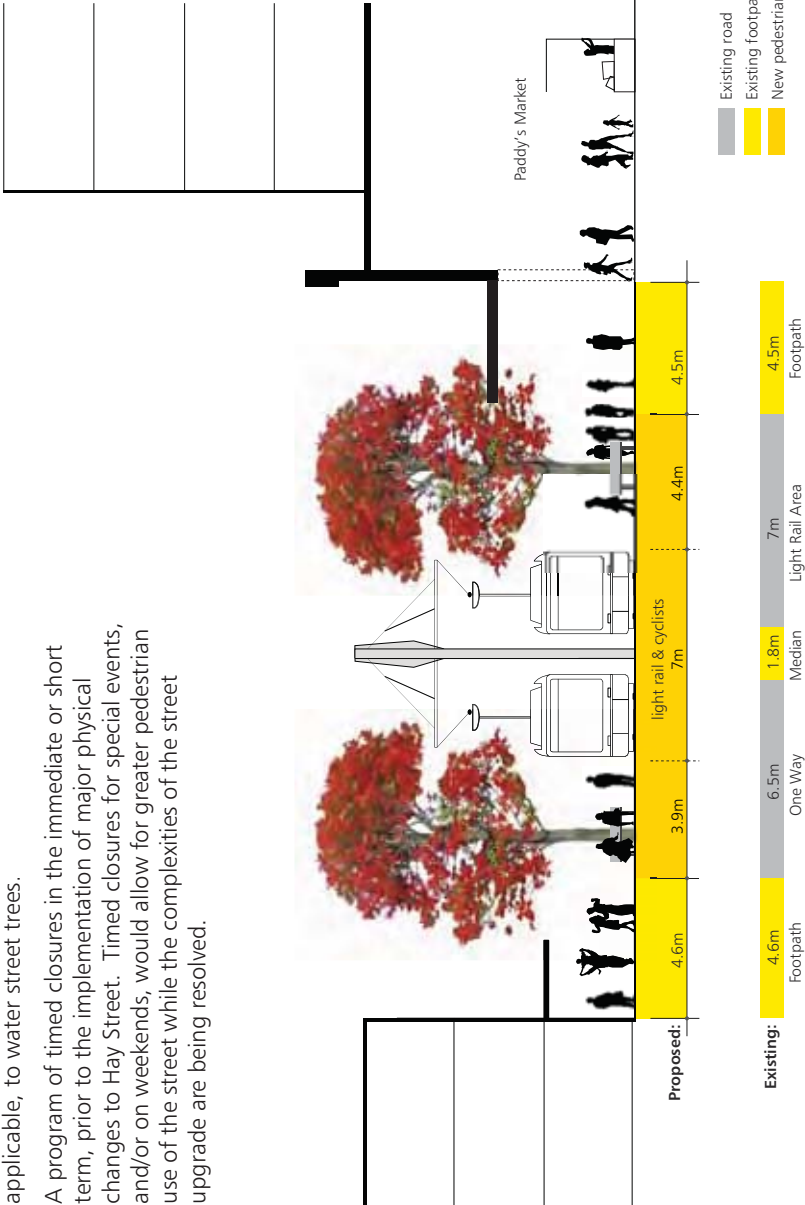
Project components

- Close Hay Street to vehicular traffic west of Sussex Street, creating a pedestrian mall (similar to Pitt Street). Vehicular access for loading would be maintained through timed access, similar to Dixon Street.
- The Sussex Street intersection would be reconfigured to maintain vehicular connectivity with George Street, and allow for potential light rail development in the future. Whilst the Thomas Street intersection would be closed to traffic, vehicular access to the Marigold Carpark would be provided by a driveway from George Street.
- Reconfiguration of the Sussex Street intersection would most like require the minor relocation of the existing 'Golden Water Mouth' sculpture (to be undertaken in consultation with the artist).
- Centre the trams in Hay Street by moving the southern (currently westbound) tram line north of the existing northern (eastbound) tram line. The result would be similar to Bourke Street Mall, in Melbourne.
- The relocation of the tram line would provide more space adjacent to northern façade of Paddy's Market, creating an opportunity to activate that edge with programmed activities and events, such as outdoor markets and festivals.
- Develop an awning along the northern façade of Paddy's Market, along with provision for access to power and water, to facilitate programmed activities and events.
- A major permanent public art project at the north-eastern end of Paddy's Market, opposite Dixon Street. This project could be embedded in the paving and/or a kinetic electronic display, responding to the dynamism of the street activity (refer Chinatown Public Art Plan).

Provision for cyclists

- Streetscape improvements, including: new paving, pedestrian lighting and street furniture.
- Tree planting along the new pedestrian mall, preferably using a species with high visual impact and seasonal interest.
- Stormwater harvesting off building awnings, where applicable, to water street trees.
- A program of timed closures in the immediate or short term, prior to the implementation of major physical changes to Hay Street. Timed closures for special events, and/or on weekends, would allow for greater pedestrian use of the street while the complexities of the street upgrade are being resolved.

The City's *Cycle Strategy and Action Plan 2007-2017* has recommended the development of a separated cycleway along Hay Street. However, with the development of a





pedestrian mall, it may be more appropriate to provide for cyclists in a shared environment in Hay Street. Details of type of cyclist facility to be provided in Hay Street warrants further investigation as part of the development of the concept design for this project.

Project benefits

- A major new pedestrian-priority space in the heart of Chinatown that strengthens east-west connectivity through Chinatown, and facilitates north-south connectivity between Chinatown's urban core and the area south of Hay Street.
- Additional space for events and festivals within Chinatown, which will help to relieve the current pressure in Dixon Street as the activity focus of Chinatown.
- This project creates opportunities to further win back public space elsewhere in Chinatown, particularly at Harbour Street and Thomas Street (refer respective project descriptions).



Potential extension of Hay Street west

The changes to Hay Street shown here extend west to Quay Street, the limit of the study area. Between Harbour Street and Quay Street, the mall connects with the existing forecourt space south of the Entertainment Centre. From this space, pedestrian access west to the Powerhouse Museum and Harris Street/Ultimo is currently provided from the Paddy's Markets monorail station via a pedestrian bridge. The legitimacy of this route from Hay Street is very poor, and signposting is inconspicuous.

Extension of Hay Street west, across Darling Drive to Macarthur Street, would significantly improve the east-west pedestrian route from Belmore Park to Ultimo. Such an extension would involve crossing the existing rail corridor at grade, and would require agreement from a number of agencies including SHFA and the Rail Infrastructure Corporation. The extension of Hay Street could form part of the Hay Street upgrade, or be undertaken as a separate project.

Feasibility

- The pedestrianisation of Hay Street is a major undertaking that would require negotiation with multiple stakeholders, including the RTA, SHFA, Paddy's Market, Metro Light Rail and local

businesses. As such, a long and complex design process is likely to be required before this project is realised. However, a program of timed closures could be implemented in the immediate or short term, which would facilitate improved pedestrian use of the space for events and festivals.

- The reconfiguration of the light rail in Hay Street would be a significant and costly undertaking. While the public domain benefit of centring the trams is also substantial, the creation of the pedestrian mall need not, and should not, be contingent upon the suggested changes to the light rail.

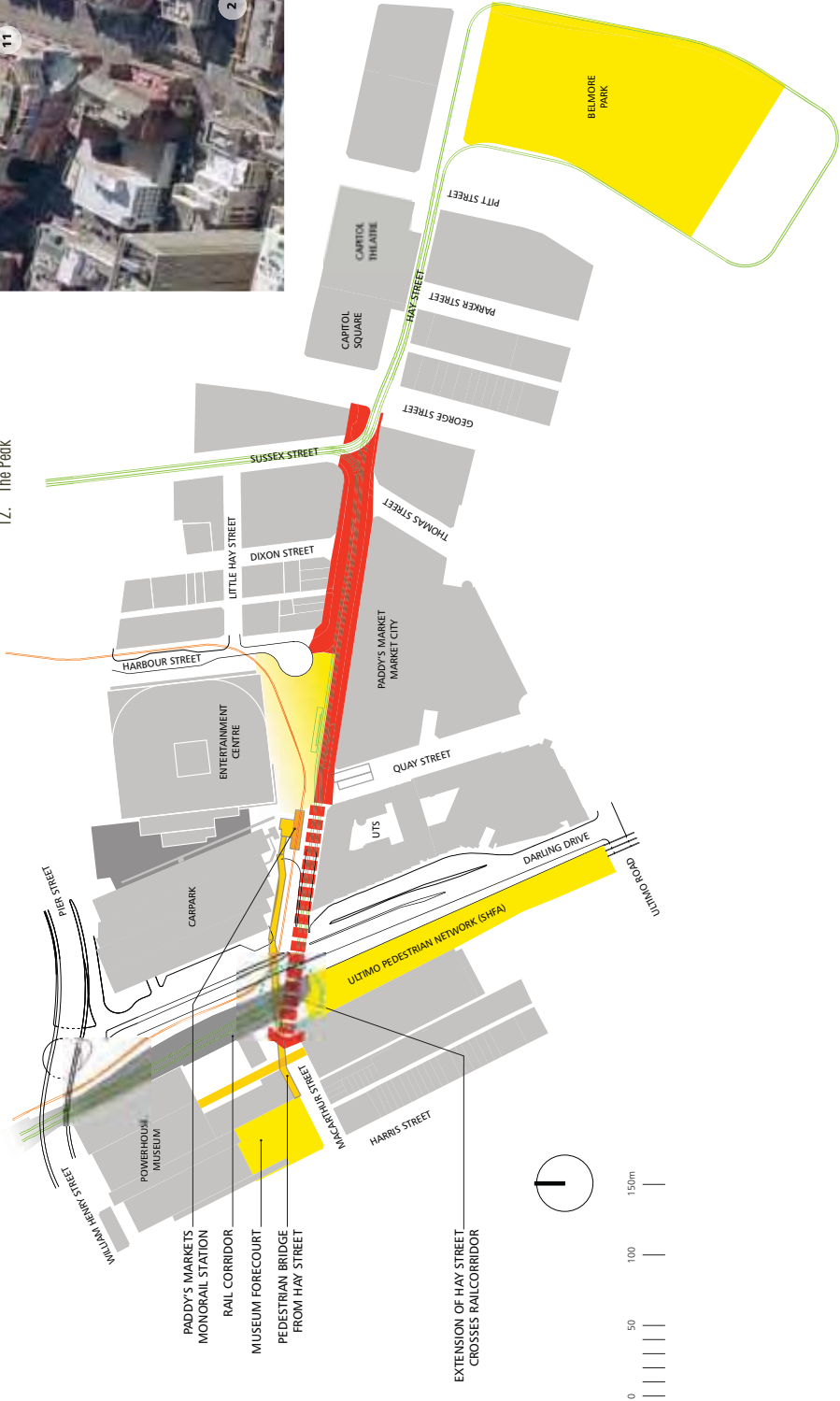


Left: Access to pedestrian bridge to Powerhouse Museum, at the Paddy's Markets monorail station in Hay Street.
Top: Light rail lines and pedestrian bridge at Darling Drive/Hay Street intersection.
Above: Extension of Hay Street alignment to Macarthur Street would need to cross the existing rail corridor.



source: www.bing.com, photo date: 2010

1. Hay Street
2. George Street
3. Macarthur Street
4. Powerhouse Museum
5. Museum forecourt
6. pedestrian bridge
7. Paddy's Market monorail station
8. Entertainment Centre
9. UTS
10. carpark
11. Paddy's Market
12. The Peak



5.5 HARBOUR STREET: WELCOME MAT

THE EXISTING SITUATION

Situated generally parallel to Dixon Street, Harbour Street forms the boundary between Chinatown and Darling Harbour at the western edge of the study area. North of Goulburn Street, Harbour Street functions as a busy main road that provides access to the Western Distributor and Harbour Bridge. The western side of this section of Harbour Street is bounded by the Chinese Gardens, which is enclosed by a high wall with no openings to the street (entry to the gardens is located in Darling Harbour).

South of Goulburn Street, Harbour Street is one-way (northbound) road that operates in conjunction with Hay Street to provide a busy through-traffic route from George Street. Small retail and restaurant businesses, as well as the Holiday Inn hotel, front the eastern side of this section of Harbour Street. The Entertainment Centre is situated on the western side of this section of Harbour Street; the large forecourt spaces surrounding the Entertainment Centre function informally as supplementary event space for Chinatown.

Constraints

- Harbour Street is an RTA-controlled road. Any changes to its operation would require negotiation with, and approval from, the RTA.
- The western side of Harbour Street is governed by SHFA; changes here would require negotiation with, and agreement from, SHFA.

Opportunities

The potential future redevelopment of the Entertainment Centre would create an opportunity to increase pedestrian-oriented space on Harbour Street, possibly with a plaza that addresses Chinatown's western edge.

THE PROJECT

Project objectives

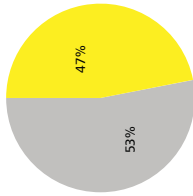
- To improve pedestrian connectivity between Chinatown and Darling Harbour, including the Entertainment Centre and Chinese Gardens.
- To create space for large events and additional street markets, to relieve the pressure on Dixon Street.
- To maintain event access provisions to the Entertainment Centre, as well as general access to businesses along the eastern side of Harbour Street.
- To improve the character of the street.

Project components

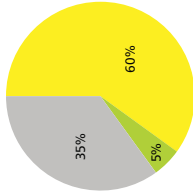
- Closure of Harbour Street at Hay Street, and the introduction of two-way traffic along Harbour Street with a vehicle turnaround at the Hay Street end.
- Widen footpaths on both sides of Harbour Street. Provision for event coach parking outside the Entertainment Centre, and vehicle pull-in outside the Holiday Inn, would be maintained.



ALLOCATION OF SPACE IN HARBOUR STREET:



EXISTING



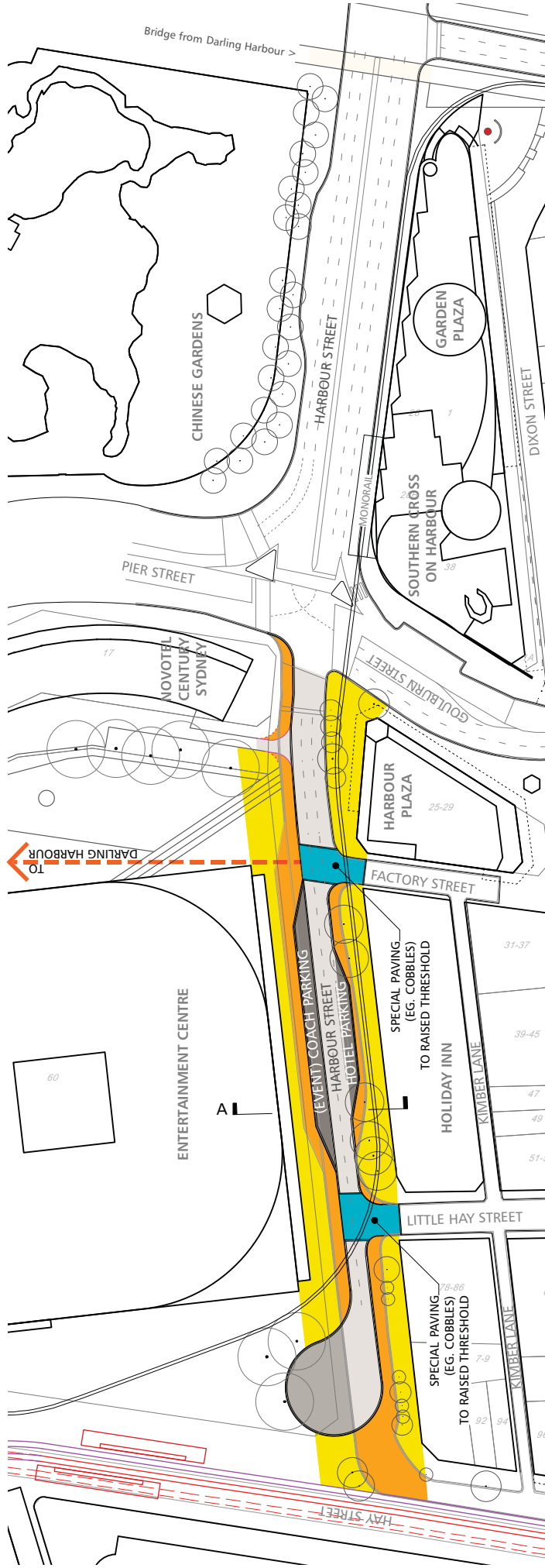
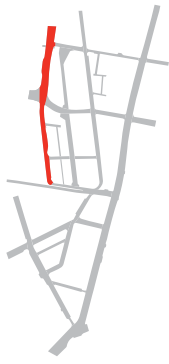
PROPOSED



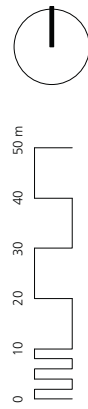
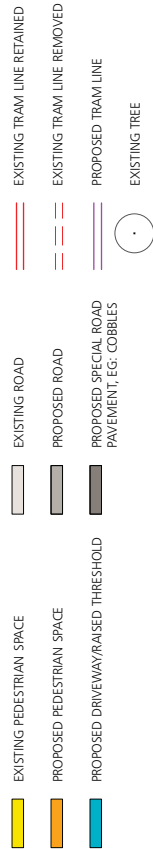
SPACE FOR PEDESTRIANS & CYCLISTS: (footpaths, cycle paths and shared)



39% GAIN



LEGEND



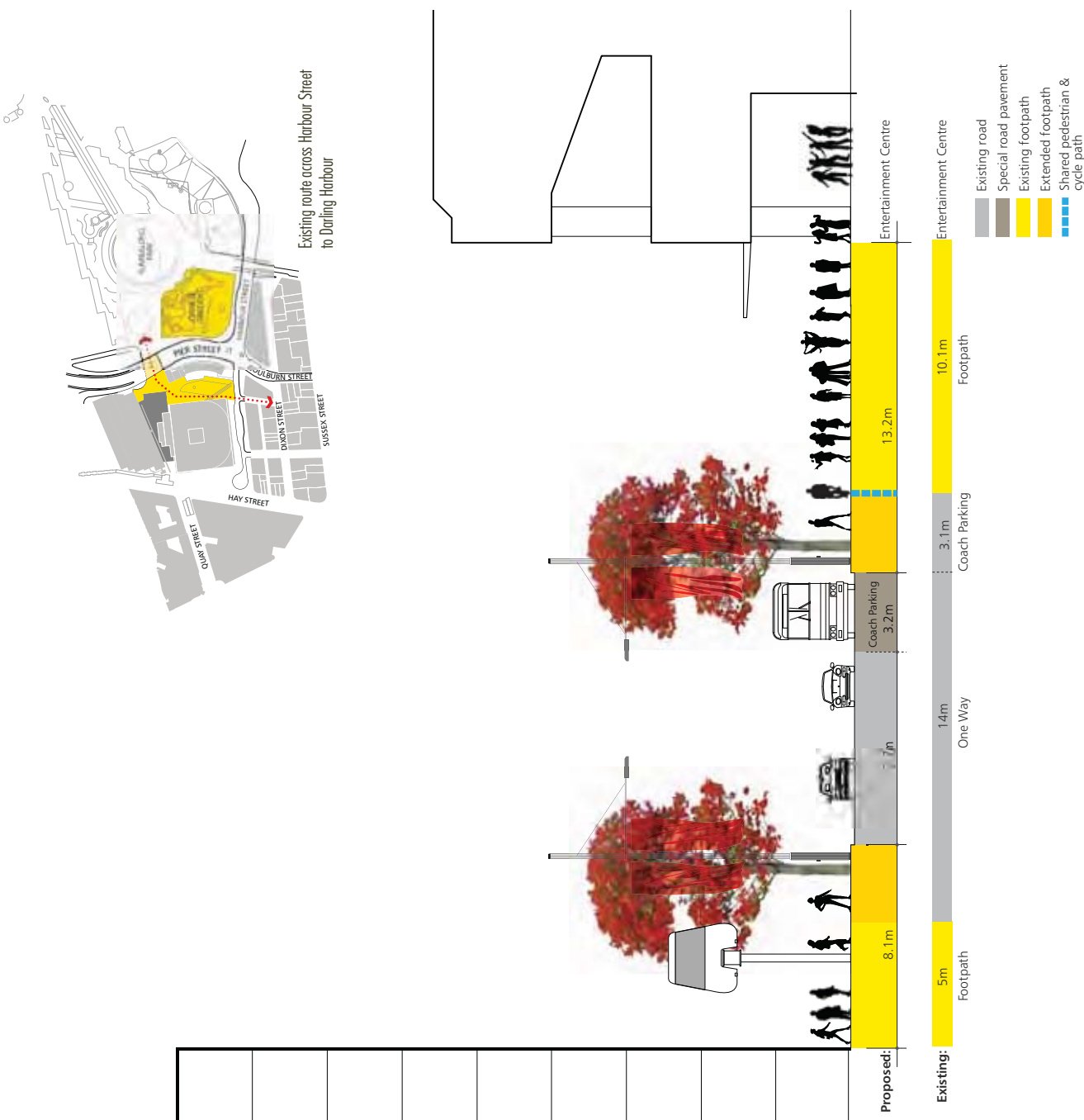
- Raised pedestrian thresholds at both Little Hay Street and Factory Street, extending across Harbour Street to provide level pedestrian connectivity between Chinatown and Darling Harbour.
- Shared pedestrian and cyclist path to Darling Harbour (subject to further investigation at design development).
- Streetscape improvements, including: new paving, pedestrian lighting, street furniture and street trees.
- Stormwater harvesting off building awnings, where applicable, to water street trees.

Project benefits

- Stronger pedestrian connection between Chinatown and the Entertainment Centre and Darling Harbour. In particular, the extension of pedestrian-priority space (raised threshold) across Harbour Street at Factory Street strengthens the existing pedestrian route from Chinatown to the Chinese Gardens.
- Additional space along Harbour Street for events and festivals, as well as easier access to the large forecourt spaces around the Entertainment Centre for events and festivals. The additional space would help to relieve the current pressure on Dixon Street as the activity focus of Chinatown.

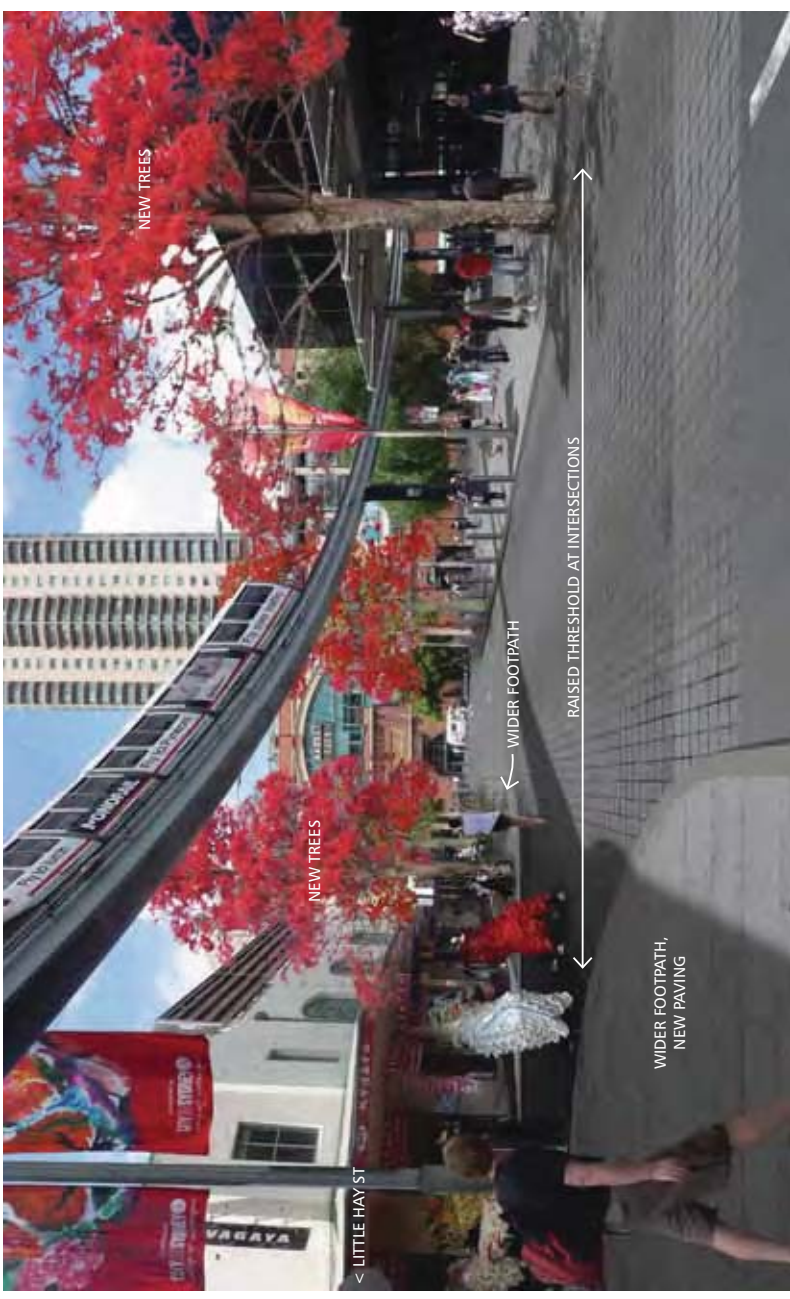
Feasibility

The closure of Harbour Street at Hay Street, and the introduction of two-way traffic, is contingent upon the development of the Hay Street mall. However, the suggested footpath widening on either side of Harbour Street, as well as the raised pedestrian thresholds at Little Hay Street and Factory Street, could be implemented irrespective of any changes to Hay Street. Nonetheless, these changes would require negotiation with both the RTA and SHFA.

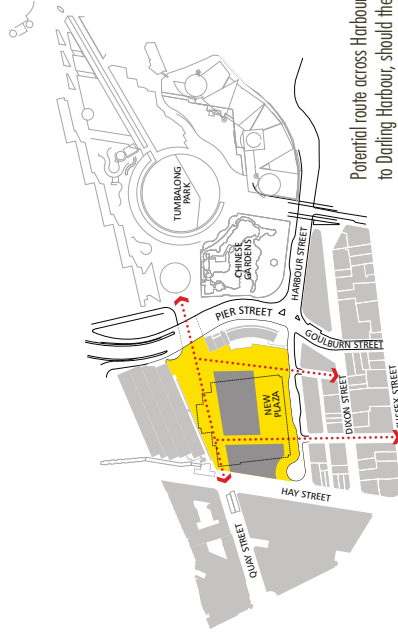




EXISTING



PROPOSED



Potential route across Harbour Street to Darling Harbour, should the Entertainment Centre be redeveloped

5.6 THOMAS STREET: SPINE

THE EXISTING SITUATION

Thomas Street is of vital importance to Chinatown's pedestrian network, as it provides the only north-south pedestrian route through the southern part of the study area.

The section of Thomas Street north of Ultimo Road is very busy and active. It experiences very high volumes of pedestrian activity, with an weekday peak hour of 1,704 people and a weekend peak hour of 2,796 people (Arup 2009). The high pedestrian activity coincides with high traffic volumes, with an average weekday volume of 5,190 (Arup 2009). Conflict between pedestrian activity and traffic is acutely evident around Paddy's Market, at Thomas Street's intersections with Hay Street and Ultimo Road.

South of Ultimo Road, Thomas Street experiences noticeably less traffic and pedestrian activity, although it is by no means inactive. This section of Thomas Street services a weekday pedestrian peak hour of 1,326 people, and a weekend peak hour of 1,806 people (Arup 2009). The average weekday traffic volume here is 3,982.

Constraints

- Some provision for loading access to businesses must be maintained.
- Access to the Marigold carpark needs to be maintained.

Opportunities

The City of Sydney is the governing authority for Thomas Street; as such, unlike some other upgrade projects for Chinatown, physical changes to the street can be made without the need to seek agreement from other agencies. Nonetheless consultation with agency stakeholders and the local community, including businesses, would be required as part of the normal development process.

THE PROJECT

Project objectives

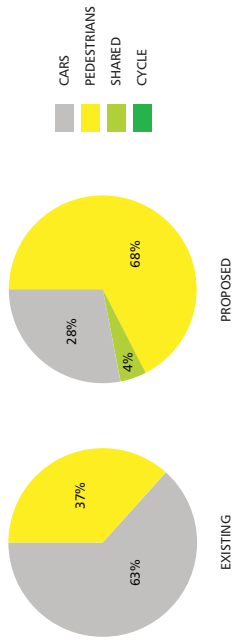
- To increase amount of pedestrian-priority space in the southern part of Chinatown.
- To strengthen pedestrian access through the southern part of Chinatown.
- To improve the character of the street.

Project components

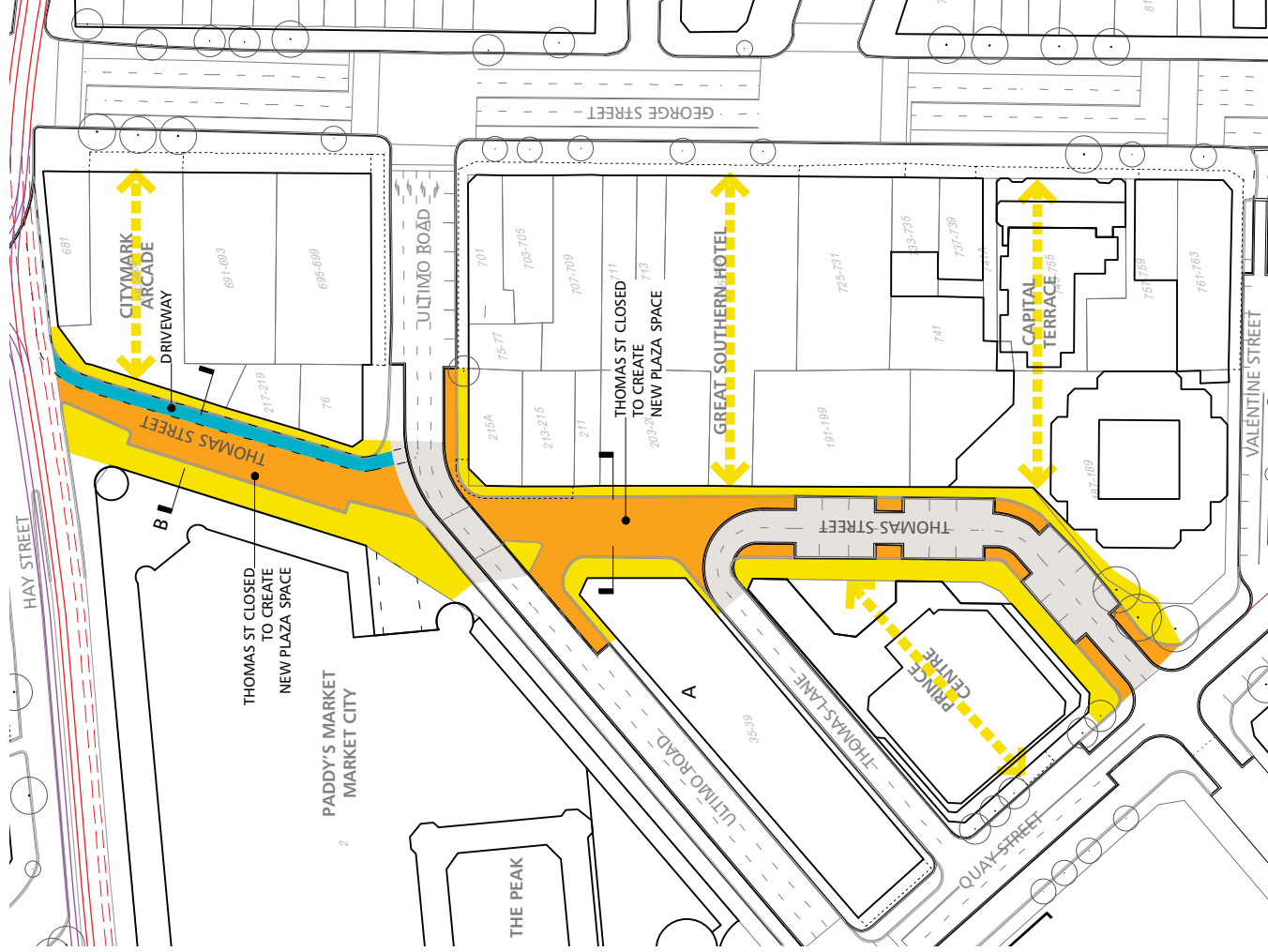
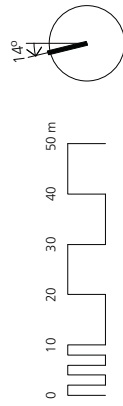
- South of Ultimo Road:
 - Create a small new plaza by closing Thomas Street between Ultimo Rd and Thomas Lane
 - Modify the intersection with Thomas Lane to create a one-way loop from Quay Street
 - Footpath widening at Quay Street intersection
 - Maintain parking along Thomas Street south of Thomas Lane, with intermittent footpath widenings to provide additional space for street tree planting and seating



ALLOCATION OF SPACE IN THOMAS STREET:



SPACE FOR PEDESTRIANS & CYCLISTS: (footpaths, cycle paths and shared)



- North of Ultimo Road:
 - ▢ Create a small new plaza by closing Thomas Street between Ultimo Rd and Hay Street
 - ▢ Provide a one-way driveway to maintain vehicular access to the Marigold carpark.
 - ▢ Provide for cyclists in a shared environment (detail to be confirmed at design development)
- Timed access to the two new plazas for vehicle deliveries to businesses.
- A major permanent public art project in Thomas Street, that establishes a dialogue with the existing 'Golden Water Mouth' sculpture (refer Chinatown Public Art Plan).
- Increased visual prominence to the arcade entrances, possibly through markings in the paving (refer materials/wayfinding overlay description).
- Streetscape improvements, including: new paving, pedestrian lighting, street furniture and street trees.
- Stormwater harvesting off building awnings, where applicable, to water street trees.

Project benefits

- Two new plazas in the southern part of Chinatown, located where current pedestrian activity is most concentrated.
- A pedestrian spine in the south of Chinatown that provides a strong, clear,

- pedestrian connection to the heart of Chinatown from the south.
- Provision for loading access to businesses is maintained through the Thomas Lane–Thomas Street loop, and timed access to the two new squares.
- Access to the Marigold carpark is maintained.

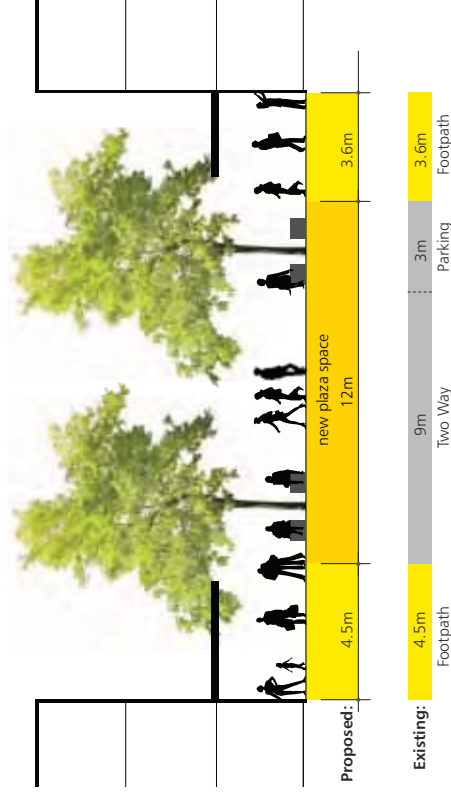
Traffic impacts

Advice from Arup (2010) indicates that the full closure of Thomas Street south of Ultimo Road is possible because local access and circulation can be facilitated by the loop system utilising Thomas Lane, and the removal of local through traffic to Ultimo Road. Introduction of the local loop would potentially halve the number of vehicles using Thomas Street each day.

The closure of Thomas Street north of Ultimo Road will remove some 5,000 vehicles that currently travel southbound daily. These vehicles would be redirected to George Street or removed from the area completely by choosing wider travel routes. The proposed driveway across the plaza could attract some 300-500 vehicle movements per day, making it suitable for designation as a shared zone.

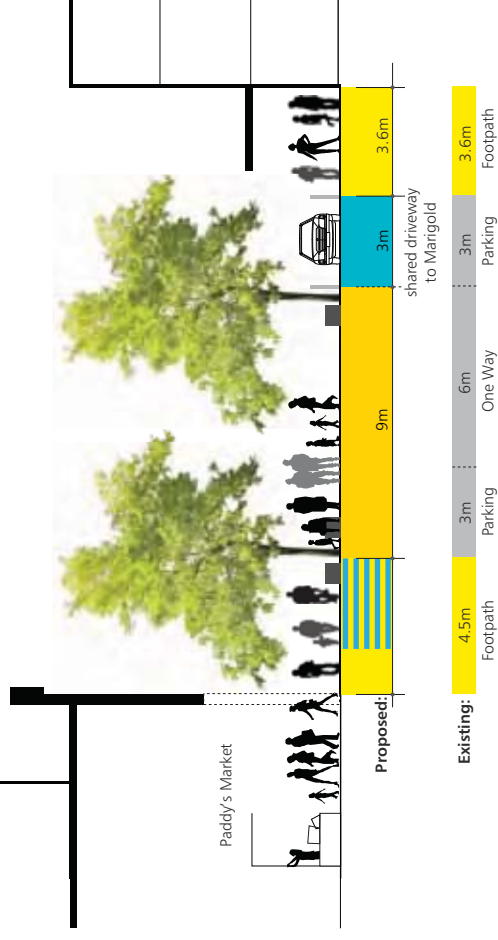
Feasibility

The closure of Thomas Street between Ultimo Road and Thomas Lane could occur in the immediate to short term, as it is unlikely to cause significant adverse traffic impacts (subject to detailed traffic study).



Above: SECTION B, north of Ultimo Road
Below: SECTION A, south of Ultimo Road

- Existing road
- Existing footpath
- New plaza space
- New plaza space
- Cycle provision in plaza





EXISTING: THOMAS STREET, SOUTH OF ULTIMO ROAD

The closure of Thomas Street north of Ultimo Road should more likely occur in conjunction with the closure of Hay Street. Nonetheless, this part of the Thomas Street upgrade is not contingent upon the Hay Street project and could be implemented independently of it, albeit with more substantial impacts to traffic flow than the proposed closure south of Ultimo Road alone.



PROPOSED: THOMAS STREET SQUARE, SOUTH OF ULTIMO ROAD