

**ITEM 3. KENT STREET UNDERPASS UPGRADE – DEVELOPED DESIGN – PROJECT SCOPE****FILE NO: S110386****SUMMARY**

On 3 November 2014, Council approved a refined concept design for the Kent Street Underpass for the purpose of proceeding with detailed design and further community consultation. This report describes the developed design and associated public consultation.

The site is owned by Roads and Maritime Services and currently maintained by the City of Sydney under an existing lease agreement. The underpass is a key pedestrian and cycle link connecting the city with Harbour Village North and Barangaroo. As one of only a few east-west connections from the City to the Barangaroo precinct, increased patronage of the Kent Street Underpass is expected as new residential, commercial and other facilities become operational. The consequential need for public domain improvement was identified in the Harbour Village North Public Domain Study adopted by Council on 14 May 2012.

The underpass area was constructed in the 1970s and is now worn out. The project will significantly lift the appearance of the space with improved finishes, lighting and signage to enhance legibility and clarify the separation between pedestrians and bike riders. The proposals also integrate areas of additional planting to create a strong green landscape character.

The developed design has been informed by the community's feedback on the previous stage and additional design investigations.

During the developed design exhibition period between April and May 2015, the project was viewed by 337 individual users and the plans were downloaded 86 times. Nine submissions were received. Where possible, appropriate suggestions have been integrated into the final developed design.

**RECOMMENDATION**

It is resolved that Council approve the developed design of the Kent Street Underpass as described in the subject report for the purpose of proceeding with detailed design, seeking any relevant planning approvals, documentation and tender for construction of the works.

**ATTACHMENTS****Attachment A:** Concept Design Plan**Attachment B:** Developed Design Exhibition Panels

**Attachment C:** Financial Implications (Confidential)

**(As Attachment C is confidential, it will be circulated separately from the Agenda Paper and to Councillors and relevant senior staff only).**

## BACKGROUND

1. The Kent Street Underpass was identified as a priority project in the Harbour Village North Public Domain Study adopted by Council on 14 May 2012. The site is owned by Roads and Maritime Services and currently maintained by the City of Sydney under an existing lease agreement.
2. The underpass is a key pedestrian and cycle link connecting the city with Harbour Village North and Barangaroo. It is a network of underground pathways and spaces under the Western Distributor between Grosvenor and Kent Streets. The site includes three main pocket spaces (York Street Pocket, Middle Pocket, Kent Street Pocket) connected by a network of concrete and quarry tile pathways below street level.
3. This project seeks to address the following challenges:
  - (a) the look and feel of the place;
  - (b) the ease with which people can find their way around; and
  - (c) attracting people to the space and people feeling safe to be there.
4. A draft concept design was prepared for the Kent Street Underpass based on the directions outlined in the Harbour Village North Public Domain Study. The draft concept was presented to key stakeholders and the community through an extensive engagement program in June-July 2014.
5. In response to these comments and further investigations, the concept design (see Attachment A) was refined to ensure a stronger aesthetic response and a bespoke lighting proposal was incorporated. The children's play was reconsidered, and the planting design was augmented and amended. In lieu of fixed infrastructure for a specific use, the proposals created space to cater for temporary programs – art and recreation – to further activate the underpass. The initial approach to cycling set by Harbour Village North Public Domain Study was also amended to ensure separation of modes was retained.
6. Upon approving the refined concept design on 3 November 2014, Council identified the following additional inclusions in the next stage of design:
  - (a) improvements to the existing stair access from Kent Street to the underpass;
  - (b) paving details and other measures to inhibit skating on pedestrian paths and to encourage slow speed cycling; and
  - (c) elements to engage children as they move through the underpass.

## DEVELOPED DESIGN

7. The developed design creates a refined and green characterful space that counters the "infrastructure" landscape of the surrounding roads and freeways. It retains the current pedestrian and cycling spaces but provides greater clarity and appropriate transition zones between them, and cues for a slower speed, pedestrian emphasised space (see Attachment B).

8. The exhibition of the developed design provided detailed plans to the community showing how the concept design was further resolved with regard to layout levels, materials, plant selections and junctions.
9. The developed design retains key features of the refined concept design including:
  - (a) removal of some of the raised planters and terraces to 'open up' the space, improve sightlines and reduce the dominance of concrete elements;
  - (b) high quality pedestrian paved paths, raised and separated from the cycleway by a kerb (150mm). The re-surfaced cycleway will be similarly paved to create a cohesive environment and signal slower speeds. Transitions to the cycleway will be calmed with graded ramps to footpath level;
  - (c) the City's way finding signage system to make navigating the site easier;
  - (d) a palette of robust and richly textured low ground covers and high canopy trees to provide scale and glimpses of the sunken landscape from the surrounding streets;
  - (e) conversion of the York Street Link Road to a raised and paved shared zone with a 10km/hr speed limit and pedestrian priority to provide a safe connection for pedestrians to cross the underpass;
  - (f) a sweep of planting adjacent the footway from York Street to the eastern underpass, fills the unused sunken concrete space of the York Street Pocket;
  - (g) the ring of low concrete walls are removed and a flexible space is located within the Middle Pocket, able to be activated by temporary events such as art displays or used for fitness training in times of inclement weather, set within new landscape planting; and
  - (h) the Kent Pocket is reconfigured to reflect the character and palette of the other pockets.
10. In response to directions set by Council when it approved the refined concept design, as well as subsequent further investigations, the developed design also incorporates several new or amended elements as follows:
  - (a) Clusters of palm trees throughout the site

The refined concept design proposed a series of light pillars. Arranged in clusters in each of the key pocket spaces, the feature light pillars were to create interest and character. After further exploration and input from specialists and the Design Advisory Panel, they were deemed infeasible due to cost, durability and sustainability factors. Instead, the developed design includes extensive clusters of tall, straight palm trees to break the horizontal lines of the walls and bridges and provide visual links through the spaces. Advanced specimens are proposed to be installed to create an immediate amenity and up lighting to the trees will create a night time character element.

- (b) A new stair access from Kent Street to the underpass

The existing stair access from Kent Street to the underpass will be replaced with a more generous and accessible staircase. This will accommodate the anticipated increase in pedestrian traffic with the development of Barangaroo, and help to address the limited sightlines from the adjacent cycleway.

- (c) Playful elements

To address the desire for playful elements that engage children and adults as they move through the underpass, the developed design incorporates musical chimes arranged to play tunes and affixed to the walls in the four tunnel spaces. Pedestrians will be able to strike the chimes as they journey through the underpass creating playful interludes with the spaces.

Alongside the chimes, dynamic lighting has been incorporated into the tunnel spaces transforming these dark foreboding spaces into energetic playful bursts of light within the journey.

- (d) Temporary program

Supporting infrastructure to the middle pocket to facilitate temporary events includes a flat central area and essential services such as power, water, lighting and fixing points to the underside of the underpass. This space is designed to be capable of activation through a rotation of programmed activities across the year, such as fitness activities and art installations.

- (e) Paving design

High quality stone paving will be used, with different pattern and colours to differentiate between pedestrian, cycleway and shared zones. To inhibit skating in pedestrian areas, sections of highly textured porphyry will be incorporated into the space. In addition, these paved surfaces slope up to planting and planted areas to further limit skating opportunities.

- (f) Separated cycleway

The cycleway will be similarly paved to the footway with textured porphyry stone paving setts to create a cohesive environment and signal an off-road, slower speed environment.

In the developed design, the areas of separated cycleway have been increased and the extent of shared path decreased, necessitating cyclists to slow down when approaching changes of direction to further limit pedestrian and cyclist conflict.

## Accessibility

11. The draft City of Sydney's Inclusion (Disability) Action Plan 2014-2017 outlines Council's commitment to making its services and amenities accessible and 'barrier-free' to all residents, workers and visitors.

12. Some of the existing slopes within the Kent Street Underpass limit accessibility. Due to site constraints, compliant gradients are not feasible however the proposed design consists of a series of smooth transitional slopes and no stairs. Level rest points, seating and new lighting will improve access and mobility.

### **Tree Management**

13. The removal of 16 trees in poor health is proposed as part of the works, to be replaced by 27 mature Cabbage Tree Palms (*Livistona australis*).
14. The trees to be removed are indicated on the public exhibition plans and include:
  - (a) eight *Casuarina* species in poor and average condition adjacent to the Kent Street south entry to be replaced by a grove of native palms;
  - (b) one *Eucalypt* at the Kent Street stair to allow for the new, widened staircase;
  - (c) three *Casuarina* species in average condition in the Middle Pocket;
  - (d) one Chinese Elm in poor condition at the Kent Street Pocket to be replaced by a grove of native palms;
  - (e) one Plane Tree in conflict with sightlines and other trees at the Kent Street North Entry; and
  - (f) two *Melaleuca* species in average condition at the York Street raised area. The canopy of these trees encourages rough sleepers to occupy this dangerous area located at the edge of the freeway and with significant fall risks.
15. In addition, seven existing palm trees will be transplanted and relocated into the Middle Pocket garden bed in the space between the overhead road infrastructures (Western Distributor).

### **PUBLIC CONSULTATION UNDERTAKEN TO DATE**

16. The first stage of community consultation was carried out between 26 June and 27 July 2014 when community feedback was sought on the draft concept design. 105 people participated in the intercept survey, 24 completed the survey online and 25 submissions were received. As previously reported to the Environment Committee on 27 October 2014, a comprehensive report on the outcomes of this consultation was prepared and the concept design was refined in response to this feedback and further internal review.
17. Public exhibition of the Kent Street Underpass Developed Design was carried out over two weeks between 27 April and 10 May 2015. The consultation activities included:
  - (a) a letter sent out to 2,500 local businesses and residents informing them of the project and submission details;
  - (b) a webpage on [Sydneyyoursay.com.au](http://Sydneyyoursay.com.au) where submissions could be made;
  - (c) a webpage on the City of Sydney website;

- (d) key stakeholders in the area, including the Barangaroo Delivery Authority, Fort Street Public School, the Millers Point Residents Action Group and the Millers Point Leaseholders Group were notified of the consultation via email and invited to make comment. An offer was made for the project team to visit these groups to discuss the design;
  - (e) the developed design was displayed in two locations on the subject site, at the One Stop Shop in Town Hall House and the Harry Jensen Community Centre in Millers Point; and
  - (f) the project team presented the developed design to the Executive Committee of the Body Corporate for the Observatory Towers.
18. On the Sydneyyoursay webpage, the project was viewed by 337 individual users and the plans were downloaded 86 times. Overall, seven submissions were received regarding the developed design.
19. Key issues raised during the community consultation were:

New design elements

- (a) unanimous support for the shared zone treatment proposed for York Street to increase pedestrian safety;
- (b) strong support for the increased separation between pedestrian and cyclists through the underpass;
- (c) a mixed response for the installation of chimes. Residents like the idea but are concerned about the volume in nearby residential buildings;
- (d) requests to have increased way finding in the tunnels;
- (e) concerns about the possibility of vandalism/graffiti. Suggested that the City install elements on the walls to discourage this (e.g. mesh or a mural) and also make sure lighting is recessed into the wall so it cannot be easily tampered with;
- (f) a single concern for the requirement to water the planting under the rain shadow of the overpass;
- (g) a single request for the cycleway to be completely removed from the underpass;

Previous design elements

- (h) installing outdoor gym equipment in the middle pocket of the underpass;
- (i) four residents stated they would like to see the playground from the original design returned; and
- (j) three residents would like the return of the expanded entry stair from York Street that appeared in the original design.

20. The following comments are provided in response to the issues and suggestions raised by the community:

(a) Musical Chimes

The sound volume of the tuned chimes can be adjusted, and this will be tested before proceeding with this component. Sample chimes will be temporarily installed in the tunnels and tested with sound measuring instruments in nearby residential buildings and anecdotally with residents to ensure they do not constitute a nuisance.

(b) Way finding signage in the tunnels

The project will incorporate the City's new way finding signage throughout the underpass, adopting the standards of this best practice system. The signage will focus on clear and concise information in appropriate locations and avoid cluttering the space.

(c) Concern for vandalism and graffiti of the underpass walls / Request for mesh or murals and tamper proof lighting

In consultation with the City's Public Space Liaison Officer and the NSW Police, Crime Prevention through Environmental Design strategies have been employed to reduce vandalism and graffiti through the design of the underpass. These include:

- (i) Surveillance – incorporating clear sightlines and effective lighting in the underpass. Increased visitation from the Barangaroo development, pedestrian and cyclist traffic will provide greater passive surveillance. Robust anti-vandal strip light fittings will be selected for the tunnel spaces
- (ii) Territorial reinforcement – it is anticipated that the proposed upgrade will significantly improve the quality of the underpass and in turn raise the public's esteem for the space. Attention to post construction maintenance regimes to ensure that the spaces are clean and well maintained including rapid repair of vandalism and graffiti.
- (iii) Art – The site has not been identified for a major public artwork under the City's public art initiatives. However, consistent with the approach for changing programs, the underpass has been identified by the 'Art and About' program as a candidate site to host temporary artwork, which could involve a wall composition. This project will also install fixings to the engineering structures to facilitate potential suspended artworks. At the time of writing, works are under consideration for this site in the current Art and About program.

(d) Planting requiring irrigation will waste water

The developed design proposes attractive gardens throughout the underpass that will provide respite from the surrounding roads and freeways. Like many urban sites, this planting will require irrigation.



(e) Removal of the cycleway

The Kent Street Underpass serves critical regional cycling routes, connecting the city with Harbour Village North, and via the Sydney Harbour Bridge, the lower north shore. The consultation revealed a strong preference by both bike riders and pedestrians for separated provision.

(f) Request the outdoor gym and playground from the original design

Council endorsed removal of the previously proposed playground and fitness equipment. The middle pocket has been designed as a large flexible space with the potential to cater for temporary programs (art and recreation) to further activate the underpass. The proposed design enables continuation of the current use by fitness groups in inclement weather. Recreation installations could be part of a temporary program, but permanent fixed elements, such as play or exercise equipment, would restrict the flexible use of this space.

The low amenity of this sunken space amongst freeways was likely to limit the success of the playground, and the proximity to people who are homeless sheltering under the freeway structures also made these proposals problematic.

(g) Request for the second entry from York Street from the original design

Council endorsed the removal of the expanded entry (stair) in the York Pocket from the concept design. The grand scale of the stair and associated costs were incongruent with the project, which now proposes a swathe of planting to reduce the amount of walling in the space and create a more attractive green character.

## KEY IMPLICATIONS

### Strategic Alignment - Sustainable Sydney 2030

21. *Sustainable Sydney 2030* is a vision for the sustainable development of the city to 2030 and beyond. It includes 10 strategic directions to guide the future of the city, as well as 10 targets against which to measure progress. This developed design is aligned with the following strategic directions and objectives:

- (a) Direction 4 - A City for Walking and Cycling – providing an enhancement of the Kent Street Underpass as a key pedestrian and cycle thoroughfare between the City and Harbour North / Barangaroo.
- (b) Direction 7 - A Cultural and Creative City – creating opportunities for temporary programs of art and recreation through the design of flexible spaces within the Kent Street Underpass.
- (c) Direction 9 - Sustainable Development, Renewal and Design – responds to sustainability and environmental imperatives facing our cities. Actions under this direction aim to better capture the potential of streets, parks and squares in public life and improve design excellence in our buildings. Objectives under this direction include defining and improving the city's streets, squares, parks and open space, and enhancing their role for pedestrians and in public life.

**Organisational Impact**

22. The refurbishment of the space will not negate the need for continued operational investment in the site:
  - (a) City Greening and Leisure – ongoing maintenance of the Kent Street Underpass including lighting, landscape garden beds, graffiti and rubbish removal, signage, pavements and surface drainage; and
  - (b) Safe City – ongoing outreach to rough sleepers who occupy the Kent Street Underpass, particularly in the Middle Pocket. The developed design does not prohibit or enhance the activity.
23. City Life and City Greening and Leisure will include the upgraded space in their potential candidate sites for periodic art installations or rotational recreation activities to help activate the Kent Street Underpass. These are envisaged to be implemented under existing programs as appropriate opportunities are identified.

**Risks**

24. Authority approval risks are considered low, with Roads and Maritime Services 'in principle' approval obtained for the 10km/h shared zone. Resolution of the Deed of Agreement is progressing between the City of Sydney and Roads and Maritime Services, and is anticipated to be finalised in the documentation stage. As part of the planning approval processes, a Review of Environmental Factors under part 5 of the Environmental Planning and Assessment Act 1979 will need to be prepared. The endorsement of this planning document requires landowners, Roads and Maritime Services, consent.

**Social / Cultural / Community**

25. The revitalisation of the Kent Street Underpass integrates flexible spaces (Middle Pocket), which can be activated by a rotation of temporary events (art and recreation) throughout the year. During non-event modes, the space is available for fitness training in inclement weather.

**Environmental**

26. The project integrates sustainability initiatives to improve the environmental performance of the Kent Street Underpass. The key elements include:
  - (a) removal of some impermeable paving and addition of planting;
  - (b) transplant of existing seven semi-mature palms into reconfigured garden beds;
  - (c) new low energy lights; and
  - (d) new pavement will be built up from the existing pavement, which will be retained where possible.

**Economic**

27. The Kent Street Underpass improvements will elevate the amenity of this thoroughfare, improving the look and feel of the space, making it easier to navigate, attract people and boost the feeling of safety. Greater numbers of people (pedestrians and cyclist) will access this key east/west link as Barangaroo is developed, which will more broadly contribute to the City's economic prosperity.

**BUDGET IMPLICATIONS**

28. An estimate of cost has been prepared based on the developed design. There is sufficient funding in the 2015/2016 capital works budget and future years forward estimate to complete the design and construction for the project (see confidential Attachment C)

**RELEVANT LEGISLATION**

29. Environmental Planning and Assessment Act 1979 (Part 4 and 5). The scope of works has been reviewed by a statutory planner and a Development Application is not required. The State Environment Planning Policy (Infrastructure) 2007 ('the infrastructure SEPP'), enables the project to be carried out as 'development without consent' under Part 3, Division 17 (Roads and Traffic), Subdivision 1 (Road Infrastructure Facilities). The City will prepare a Review of Environmental Factors to consider the impact of the proposal and determine appropriate mitigations.
30. Procurement of consultants and contractors for this project will be in accordance with the Local Government Act 1993.
31. Attachment C contains confidential information which, if disclosed, would confer a commercial advantage on a person with whom Council is conducting (or proposes to conduct) business. Discussion of the matter in an open meeting would, on balance, be contrary to the public interest because it would compromise Council's ability to negotiate fairly and commercially to achieve the best outcome for its ratepayers.
32. NSW Roads Act 1993 for road related approvals (shared zone). The proposed York Street link road shared zone has in-principle approval from Roads and Maritime Services.

**CRITICAL DATES / TIME FRAMES**

33. The key milestones for the project are

Planning approvals and preparation of construction documentation	June – October 2015
Tender Period	October 2015 – March 2016
Construction	March 2016 – July 2017

**PUBLIC CONSULTATION GOING FORWARD**

34. Further updates on the project, including construction notification, will be provided through the following channels:
- (a) updates on the [Sydneyyoursay.com.au](http://Sydneyyoursay.com.au) and City of Sydney webpages;

- (b) notifications sent to local residents, business owners and people who have made submissions on the concept design; and
  - (c) during construction, updates will be displayed on-site.
35. Post construction, the City Access Unit (cycle team) will run a 'Share the Path' information session on site to reinforce safe, courteous cycling. The Unit currently undertakes a number of these sessions in the Kent Street Underpass throughout the year.

**AMIT CHANAN**

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