

Sydenham to Bankstown Metro: Key issues and opportunities



December 2017



Endorsed by Council 28 November 2017

Preamble

Council places on public record its opposition to the current State Government's proposal to replace the existing Sydenham to Bankstown rail line with a Metro Line.

Whilst the provision of much needed infrastructure to service the growing needs of our community is welcomed it should not be at the expense of our existing effective transport system but in addition to the service which currently provides for the thousands of commuters on this line.

The Sydney Metro proposal as it currently stands lacks the vision and commitment needed to provide economic, social and infrastructure opportunities for the people of Canterbury-Bankstown.

Council does not accept that the case for the Sydney Metro in its current form has been adequately made and that significant upgrades to the proposal such as undergrounding Bankstown Station and investigating alternate routes and creating place making initiatives along the proposed route have not been fully addressed.

The current EIS and the extremely short and unrealistic public exhibition timeframe has done little to allay the fears and concerns of our residents and fails to set out in detail how the process to replace the current line with a Metro will take place. As such our community is not prepared to accept the disruption caused by this project and is not convinced that our various communities will benefit from this proposal. There are major traffic concerns and impacts during general construction and shut down periods that are not adequately addressed by the EIS.

There are a large number of items yet to be costed. Many items in the proposal place significant responsibility on Council to provide infrastructure and services that are not fully explained nor adequately funded. These additional costs should not be borne by the people of Canterbury-Bankstown alone.

Significant heritage items in our community are also under threat and there is little evidence provided to ensure that these items will be protected.

There is little to no quantitative or qualitative reference to the impacts on the East Hills line of commuter overflow that also needs to be investigated.

The Government is currently unable to identify council assets that will be impacted upon by such a development as there is no information in the EIS about the nature of adjacent works in the corridor and insufficient information about any mitigation measures for impacted areas.

Equally the level of growth proposed by the Government in its Sydenham to Bankstown Urban Renewal Corridor Strategy is not supported by the Council and will place additional stress on our resources and community.

Should the State Government persist with this project then Canterbury-Bankstown Council insists that an embargo be placed on the proposed upzonings in the Sydenham-Bankstown Urban Renewal Corridor (SBURC) until after the completion of the Metro (Infrastructure before Upzonings) and that the cumulative impacts of private construction due to the SBURC and public construction for the Metro Line be undertaken and exhibited before any approval is given for the Metro Line.

- As adopted by Council at the 28 November Ordinary Council Meeting

Introduction

The City of Canterbury Bankstown (Council) provides comment on the Metro Southwest EIS to highlight the significant city shaping opportunities that would be missed if the current plan was constructed as proposed.

Significant transport infrastructure creates social, environmental and economic opportunity. Council welcome investment into public transport infrastructure in our City. Council recognise the benefits of more frequent services between stations within the corridor (a train every four minutes) and increased connection to jobs and other opportunities for our community across metropolitan Sydney.

Transport projects such as these have an operational life of 100 years or more. It is imperative that each investment dollar is optimised to deliver maximum value to the community, taxpayer, sustainability benefits and the economy over the project's operational life.

Council has significant concerns that the project as planned will have detrimental outcomes for our community and that key opportunities are not being realised. Similarly, there are a number of sustainability and liveability issues that are not being addressed.

Council insists that this submission be carefully considered by TfNSW, especially considering that the local government area has both some of the most vulnerable communities in the State and has major scope to develop an economic centre of significance within the Sydney region.

To aid the assessment of the Metro Southwest, Council has engaged a number of consultants who have carefully workshopped the key issues and opportunities with Council specialists. We have combined the in depth knowledge and experience from Council with consultants who have significant experience in the design and delivery of projects of a similar scale and typology.



Council identifies the following key issues and opportunities:

- 01 Equity and Value Add for Canterbury-Bankstown
- 02 Integration with strategic opportunities across Metro Sydney
- 03 Realise the potential of Bankstown
- 04 Transport Hierarchy and Connectivity Improvements
- 05 Station Design and Placemaking
- 06 Managing impacts on our community
- 07 Consistency with Government Policy on Design
- 08 Process after Environmental Impact Statement (EIS) approval

Council's submission is supported by detailed analysis of the opportunities for each centre which, if adopted, would result in a better outcome for our community and assist the NSW Government in achieving their City Shaping vision for Sydney.

Detailed feedback is provided by station/locality indicating the relevant Secretary's Environmental Assessment Requirements (SEARs) to ensure the submission can be effectively evaluated by the Department of Planning and Environment (the Department) and Transport for NSW (TfNSW).

Council's submission is comprised of three reports which together form our position on the Metro project and the opportunities to create better places:

1. Sydenham to Bankstown Metro: Key issues and opportunities
2. Creating Better Places: Opportunities for our Metro Centres
3. Technical Review

This is Submission Report - Part 1 which sets out Council's key issues and opportunities for the Metro project and **directions towards getting a better outcome for our City.**

01 Equity and Value Add for Canterbury-Bankstown

The EIS does not propose a adequate investment to improve the region's connectivity both from a rail perspective and other transport modes. Rather, the proposal perpetuates the **lack of connections for pedestrians and cyclists between the north and south of the line**, with some elements of the proposed station designs exacerbating this issue.

The Metro Southwest proposes an “as little as possible, as much as necessary approach” rather than a “creating and adding value approach”.

The City of Canterbury Bankstown suggests the Canterbury-Bankstown community deserves a better outcome. The comparison between Metro Southwest and Metro Northwest illustrates a **significant lack of equity** between the projects:

- **Sydenham to Bankstown corridor is proposed to accommodate double the number of dwellings by 2036 in significantly less of the corridor length of the Northwest Metro**
 - Total proposed dwellings at 2036 around the Northwest Metro corridor will be 40,000 dwellings compared to the proposed 85,000+ within the Sydenham to Bankstown Metro corridor (see Figure 2). The 85,000+ figure includes the 35,400 additional dwellings target in the Sydenham to Bankstown urban renewal corridor strategy. It should be emphasised that

Council does not support the level of growth proposed by the Department in the Sydenham to Bankstown Urban Renewal Corridor Strategy and will be outlining these concerns with the growth in a submission to that Strategy.

- **High growth forecast in Canterbury-Bankstown LGA** - Over 5,500¹ dwellings have been completed or will be completed in the next 2-3 years. The LGA is expected to be one of the top dwelling generators over the next five years (see Figure 1).
- **Similar jobs numbers by 2036 (Canterbury-Bankstown compared to Hills Shire)** - Although the Hills Shire is projected to experience jobs growth, the City of Canterbury Bankstown currently exceeds The Hills Shire in employment. Ultimately there will be an on par result when forecast growth is considered (124K in Hills Shire compared to 122K in Canterbury-Bankstown)
- *A full list of comparative data and the sources is provided in Table 1.*

Top five LGAs for Sydney Housing Supply



Figure 1 Top five Local Government Areas for Sydney Housing Supply
- Additional homes forecast (2016/2017 to 2020/2021) and additional homes built (2011/2012 to 2015/2016), Department of Planning and Environment, 2017

¹<http://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Sydenham-to-Bankstown-Urban-Renewal-Corridor/Documents>

Metro Northwest and Southwest comparison

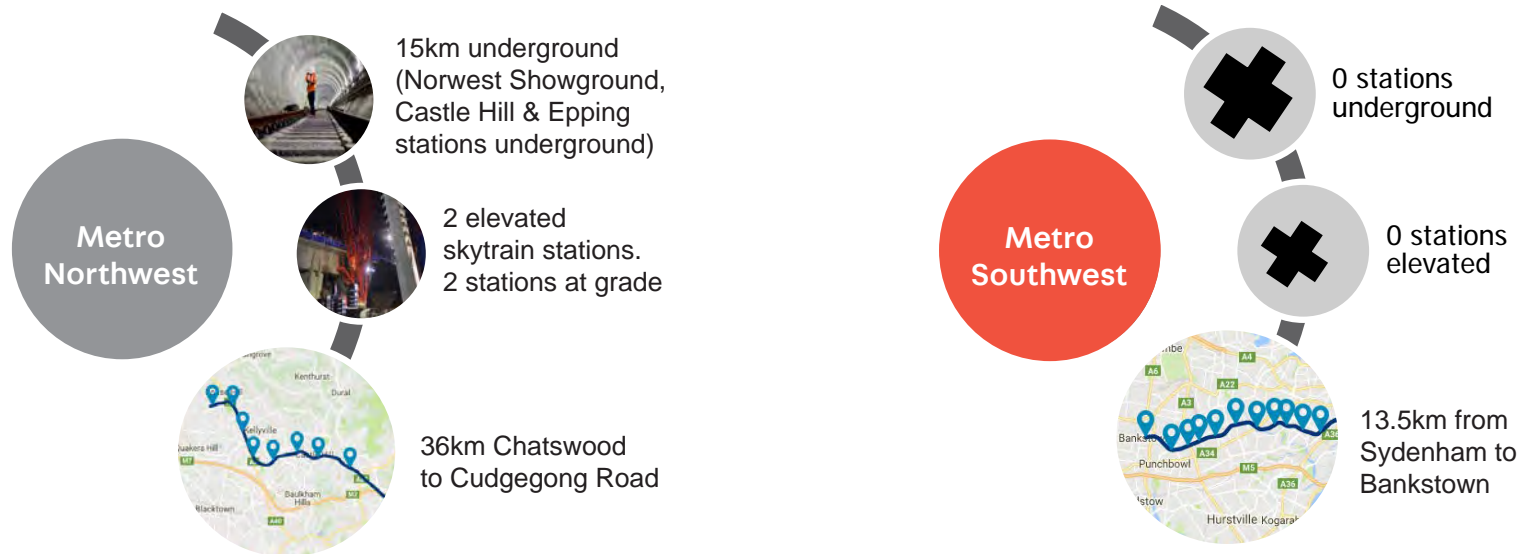


Figure 2 Comparison between Metro Northwest and Southwest level of investment, Department of Planning and Environment, 2017

	Metro City & Southwest (Sydenham to Bankstown)	Metro Northwest (Epping to Cudgong Road)
Contract value	Unknown at this time, however Government documents indicate between \$6.2-4.9 billion ²¹	\$8.3 billion ⁴
Length	13.5km (upgrade)	36km
Tunnelling	None proposed	15km between Bella Vista and Epping (longest railway tunnels ever to be built in Australia) – 4 underground in Hills Shire and 4km sky train ⁵
Dwellings in corridor	85,000+ for the Sydenham to Bankstown corridor (the Department and dwelling forecasting in Metro business case) ⁶	Additional 28,660 by 2036 ⁷ from a low base of 10,850 dwellings to deliver a total of 39,650 dwellings
Total households 2036 forecast	Canterbury-Bankstown – current households 113,583 (2016) ⁸ + 35,000 =148,000	Hills Shire – 81,828 prepared May 2016 in conjunction with Council Planners ⁹
Total population	366,623 persons ¹⁰ (CB City)	165,001 ¹¹ persons (The Hills Shire)
Projected population to 2036	466,408 ¹² persons (100,000 person growth) (CB City)	252,308 persons ¹³ (78,000 person growth) (The Hills Shire)
Total potential population servicing by Metro 2036	Metro extension potential to efficiently service 472,000 in CBC, 311,000 in Liverpool + up to 1800 Western Sydney Airport passengers per hour by 2063	525,000 (DPE projections to 2036 for The Hills Shire + half of Blacktown) Note that Metro project collateral suggests 600,000
Additional jobs in corridor	8,680 jobs ¹⁴	49,500 jobs ¹⁵
Current jobs	114,039 jobs located in the City of Canterbury Bankstown in the year ending June 2016 ¹⁶ (CB City)	Approximately 79,000 (The Hills Shire)
Current + expected jobs	122, 719 jobs (likely under-estimated considering the economic agglomeration created by the new university campus in Bankstown) (CB City LGA)	124,928 jobs (The Hills LGA)
Gross Regional Product (Hills Shire and Canterbury-Bankstown)	City of Canterbury Bankstown's - \$14.29 billion in the year ending June 2016 or 2.7 per cent of Gross State Product ¹⁷	Hills Shire - \$10.37 billion in the year ending June 2016 or 2 per cent of Gross State Product ¹⁸
Current local businesses	City of Canterbury Bankstown – 29,257 ¹⁹	Hills Shire – 18,852 ²⁰

Table 1 Comparison of key data for the Metro Southwest and Northwest, Department of Planning and Environment, 2017

⁴ <https://www.sydneymetro.info/northwest/project-overview#pid-256216>

⁵ <https://www.sydneymetro.info/northwest/project-overview#pid-256216>

⁶ <http://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Sydenham-to-Bankstown-Urban-Renewal-Corridor/Documents>

⁷ <http://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Sydney-Metro-Northwest-Priority-Urban-Renewal-Corridor/Documents>

⁸ <http://profile.id.com.au/canterbury-bankstown/households>

⁹ <http://forecast.id.com.au/the-hills/population-households-dwellings>

¹⁰ <http://forecast.id.com.au/canterbury-bankstown>

¹¹ <http://forecast.id.com.au/the-hills/population-households-dwellings>

¹² <http://forecast.id.com.au/canterbury-bankstown>

¹³ <http://forecast.id.com.au/the-hills/population-households-dwellings>

¹⁴ <http://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Sydenham-to-Bankstown-Urban-Renewal-Corridor/Documents>

¹⁵ <http://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Sydney-Metro-Northwest-Priority-Urban-Renewal-Corridor/Documents>

¹⁶ <http://economy.id.com.au/canterbury-bankstown>

¹⁷ <http://economy.id.com.au/canterbury-bankstown>

¹⁸ <http://economy.id.com.au/the-hills>

¹⁹ <http://economy.id.com.au/canterbury-bankstown>

²⁰ <http://economy.id.com.au/the-hills>

²¹ <https://www.sydneymetro.info/article/nsw-budget-12-billion-metro-rail-revolution> ; [https://www.budget.nsw.gov.au/sites/default/files/budget-2017-06/NSW %20Budget%202017-18%20-%20Budget%20Overview.pdf](https://www.budget.nsw.gov.au/sites/default/files/budget-2017-06/NSW%20Budget%202017-18%20-%20Budget%20Overview.pdf)

Council is extremely dissatisfied that undergrounding was not proposed for Bankstown station, which will be the key interchange station between metro and heavy rail. Bankstown Station will also benefit from future transport connections to Parramatta, Kogarah, Liverpool and beyond to the new airport at Badgerys Creek, as outlined in recently released Greater Sydney Region Plan (DRAFT) and the Future Transport Strategy 2056 (discussed further in Issue No.2).

The EIS is not informed by an economic assessment of the value of the urban renewal that undergrounding would unlock for future development. Similarly, no economic assessment is presented for the potential productivity gains for the Inner West and City of Canterbury Bankstown through increasing permeability, better connectivity, improved corridor ecology and improved active transport links within the region as a result of undergrounding.



The business case² was dismissive of underground options for the Sydenham to Bankstown portion of the line (assessment against project objectives was not even undertaken³), yet the region is experiencing substantial growth. The business case also did not consider extending the Metro to other suburbs not currently serviced by rail. Accessibility would be improved with undergrounding to above ground stations.

An assessment of the further development potential of the 55 ha corridor as well as further work on the social and economic benefits should have been undertaken. The economic assessment should consider:

- Consideration of the 55 ha of rail corridor land in the Canterbury-Bankstown LGA (with additional that would be unlocked in the Inner West) within 17km of the Sydney CBD that would be unlocked with development within 800 to 1000m walk to a train station;
- The economic costs of upgrading 23 underpasses and overpasses, and the associated cumulative productivity costs, as well as the potential cumulative productivity of undergrounding the line in delivering increased productivity for the region (for example, Council's analysis has revealed that

up to seven new connections from north to south could be made with an underground station solution);

- The economic potential of delivering a highly cohesive active transport corridor in the current rail corridor in concert with well-considered development (considered significant economic generators in their own right);
- A full cost/benefit analysis considering the potential for extension of the Metro to Liverpool (and the economic generation this may deliver), and future links with Bankstown Airport and ultimately Western Sydney Airport; and
- Air-rights to offset project costs associated with undergrounding be considered.

Government has a responsibility to maximise the community benefit of the expenditure.

² TfNSW, Sydney Metro and Southwest, Final Business Case Summary, October, 2016 as viewed at <https://www.sydneymetro.info/sites/default/files/Sydney%20Metro%20CSW%20Business%20Case%20Summary.pdf> on 8 October, 2017.

³ TfNSW, Sydney Metro and Southwest, Final Business Case Summary, October, 2016 - Section 4.5.2 Underground options as viewed at <https://www.sydneymetro.info/sites/default/files/Sydney%20Metro%20CSW%20Business%20Case%20Summary.pdf> on 8 October, 2017

In addition, if Metro was constructed underground with tunnel boring machines, there would potentially be significantly less disruption to transport services during construction than is presently proposed, as it would enable the current heavy rail line to remain operational during construction.

It must be recognised that some parts of the Canterbury-Bankstown community have a higher level of economic vulnerability and are more reliant on cohesive and connected places to access social and economic opportunity. The public transport system is a vital social and economic lifeline in Canterbury-Bankstown, for both commuting and social purposes. The economic and social opportunities are not fully realised in the current plan.

The EIS generally approaches the Metro Southwest as a heavy rail upgrade, seeking to create as few impacts as possible. However, this project should be viewed as a major city-making project that can greatly contribute to the place outcomes for each centre. This is a once-in-a-100-year opportunity with major expenditure of taxpayer funds and government has a responsibility to maximise the community benefit of the expenditure.

Equity and Value Add for Canterbury-Bankstown

The project should recognise that:

- The Canterbury-Bankstown community and business deserve greater investment to optimise value-add for this project;
- The current plan ignores significant opportunities for renewal and city shaping; and
- Connectivity and permeability need to be optimised to deliver a high level of serviceability for the community considering the population density and projected increases – a major opportunity to increase the serviceability of this part of Sydney by undergrounding at Bankstown is not contemplated in the EIS.





02 Integration with strategic opportunities across Metropolitan Sydney

Council recognise that one of the key goals of this project is to remove Bankstown trains off the Sydney CBD City Circle to unlock capacity in the CityRail network.

However, Council believe this immediate imperative may have reduced the assessment of the long-term opportunities that undergrounding the Metro Southwest could unlock:

- The opportunity to directly link with Western Sydney Airport and Liverpool, then through to the Western Sydney Airport linking three strategic centres (as outlined in the Western Sydney Rail Needs Scoping Study – see Figure 3 and confirmed in the recently released Draft Future Transport Strategy 2056). Bankstown is also a key node for a future connection between Kogarah and Parramatta (as set out in the recently released Draft Future Transport Strategy 2056 provided at Figure 4). The potential for further economic agglomeration in each of these important strategic centres should be thoroughly assessed. Maintaining the above ground configuration sterilises this opportunity by

not rationalising the alignment of the Sydenham to Bankstown corridor, which would be undertaken with undergrounding.

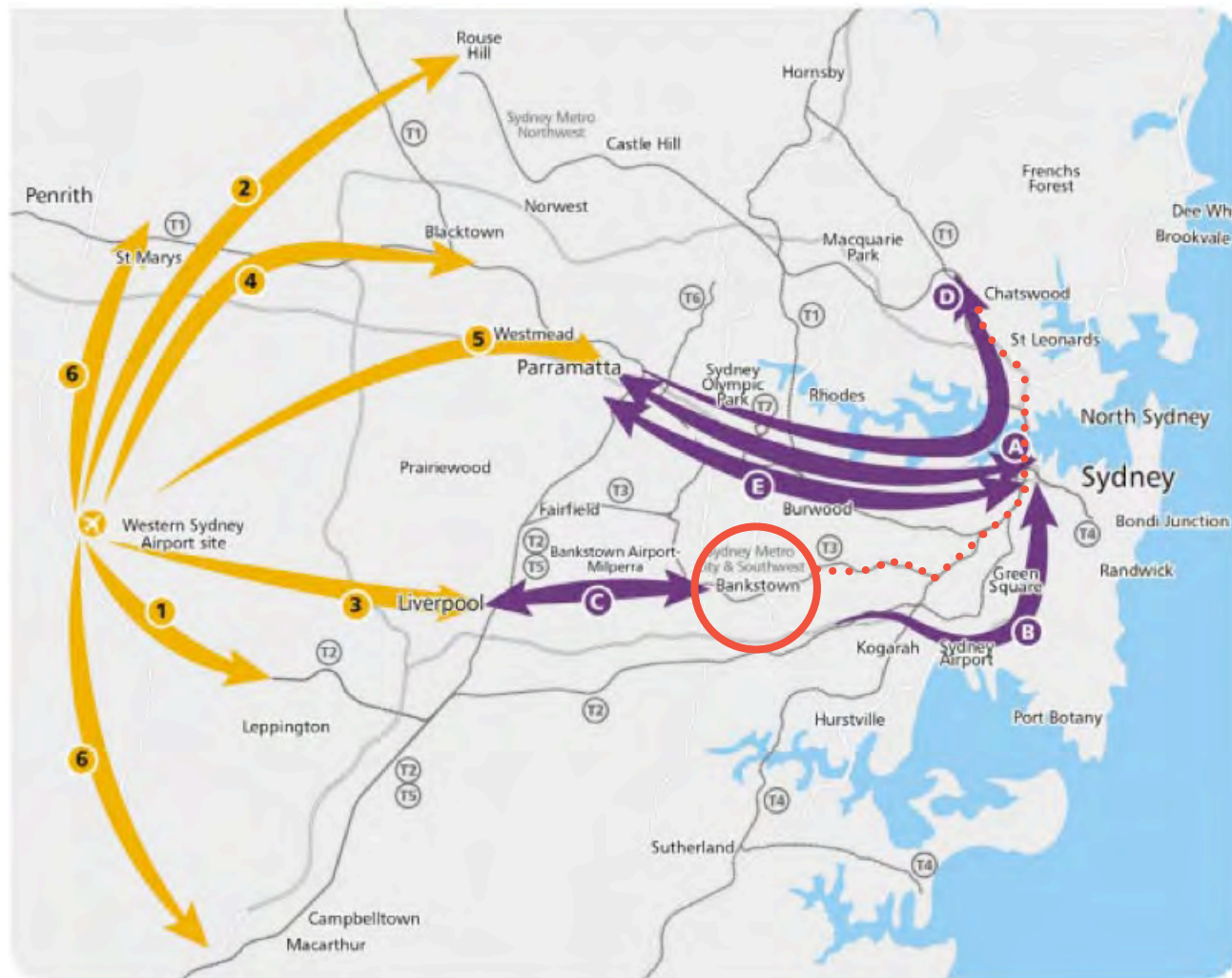
- The Metro corridor servicing, by 2036, not only the 466,000 people in the Canterbury-Bankstown LGA but will effectively service 311,000 in the Liverpool LGA. Up to 874,000 people in total would be serviced by 2036 compared with the Northwest Metro expecting to service 600,000.
- Unlocking a highly efficient transport route servicing its share of 1800 airport passenger movements per hour by 2063.
- The economic potential of unlocking 55ha of valuable rail corridor land in the Canterbury-Bankstown LGA alone could deliver an estimated 1 to 1.5 million sqm of development within 17km of the Sydney CBD, with quality access to Parramatta and Liverpool, the northern economic arc and the new Western Sydney Airport economic hub (this excludes extra development potential in Inner West and Liverpool LGAs).
- Council estimates that the land unlocked represents at least \$5 billion in land value

(considering a conservative 50 per cent land usage in the corridor and 2.0-2.5:1 FSR development at a 75 per cent efficiency rate). Based on a basic assessment of current land value rates, this does not account for the value uplift a highly efficient Metro.²¹

- The undergrounding of 15km of Metro Northwest was reportedly \$1.15 billion (June 2013). Council suggests that a thorough cost/benefit analysis should be undertaken considering the various inputs and be released to Council.

The Sydney Metro proposal lacks the vision and commitment needed to provide economic, social and infrastructure opportunities for the people of Canterbury-Bankstown and beyond.

²¹ Based on 50 per cent of 55 ha's (to allow for open space and roads etc) of land unlocked by the undergrounding the Metro time an average of six storey development (FSR approximately 2:1) at a 75 per cent efficiency rate. This has been multiplied by the average current per sqm land values of the Metro Southwest Station localities as sourced at <https://www.microburbs.com.au/heat-map/land-value-per-sqm/City#151.082611713623;-33.92321696556286;13>



“This is a chance to build more than just railway stations”

Rodd Staples, Sydney Metro program director

Figure 3 Western Sydney rail options.
Western Sydney Rail needs Scoping Study –
Discussion Paper, September 2016; and annotated by Canterbury-Bankstown Council

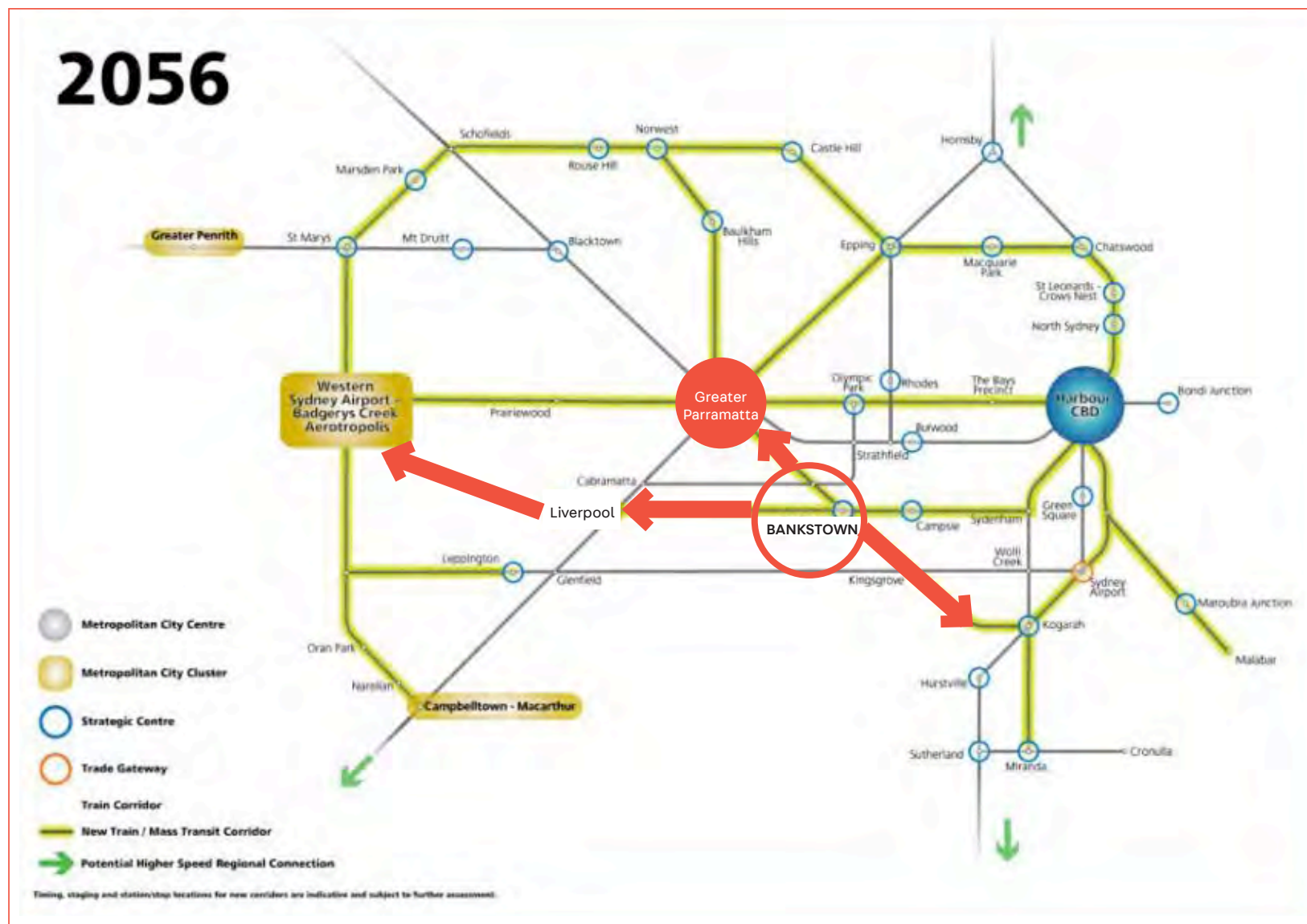


Figure 4 Greater Sydney Intermediate Transit Network, Draft Strategy Future Transport 2056, October 2017; and annotated by Canterbury-Bankstown Council

The Sydenham to Bankstown Metro corridor could deliver one of the most effective active and public-transit corridors in the country. The existing line could become a showcase for active transport (proven economic generators in their own right) combined with future development.

Council suggests the Metro Southwest project should significantly add to the Greater Sydney Commission's objective of creating The Western Sydney City Deal, a key imperative to create jobs where population growth is occurring. Council suggests that Metro to Liverpool, linking both Bankstown and Parramatta centres through to the Sydney CBD, should be considered a highly viable alternative, ensuring the Western Sydney Airport can be accessed by the greatest number of people and would work towards achieving that objective. The Metro Southwest project should not undermine this future opportunity and be of broader focus than just on the Sydney CBD.

There are major economic, social and environmental opportunities that have not been adequately assessed by both the Business Case and the Metro Southwest EIS.

Integration with strategic opportunities across Metropolitan Sydney

- The Metro EIS in its current form will sterilise opportunities for future transport connections to strategic centres; and
- The Sydenham to Bankstown Metro corridor could deliver one of the most effective active and public-transit corridors in the country.



The Sydenham to Bankstown Metro corridor should deliver one of the most effective active and public-transit corridors in the country

03 Realise the potential of Bankstown

“do it once, do it right”

Council considers it is imperative that further investigation of the undergrounding of Bankstown Station is completed prior to approval of this project.

This includes design and appropriate sequencing of the works. While Council recognise that one of the key goals of the project is to unlock public-transit capacity in the Sydney CBD by removing the Bankstown line from the City Circle, the lack of a commitment to undergrounding at Bankstown Station reinforces Council's concerns that the benefits are not being adequately shared with other centres that can deliver localised employment.

Bankstown is a strategic centre in the corridor and confirmed as an important future education and health precinct in the recently released Draft Sydney Region Plan October 2017 (Figure 5). It is also identified as a focus for 6000 additional dwellings as proposed by the Department in the Sydenham to Bankstown Urban Renewal Corridor Strategy.

Bankstown Station has attracted a Western Sydney University campus increasing its strategic importance. There are also high-level considerations for a new hospital site within the CBD. Therefore, the centre will feature a university campus, TAFE, hospital, residential growth area, major commercial and retail and arguably its connectivity importance for major industrial (including Bankstown Airport agglomeration) should be recognised.

The business case for the broader Metro project identified the hierarchy of functions at various stations (see Figure 6). Yet when comparing the Metro Northwest project infrastructure delivery, stations with a similar hierarchy of station function (or indeed lower) are being delivered as underground solutions (e.g. Castle Hill, Showground and Cherrybrook).

More significant still, Bankstown is identified as having an increased interchange function with a mass transit investigation between the centre, Parramatta and Liverpool – see Figure 3 & 4.

The investigation of extending the underground line to Punchbowl Station should also be considered. This would result in placemaking, connectivity and traffic network improvements.

Undergrounding Bankstown station would deliver seven additional logical connections across the centre.



Figure 5 Draft Greater Sydney Region Plan, November October 2017; As marked up by Canterbury-Bankstown Council

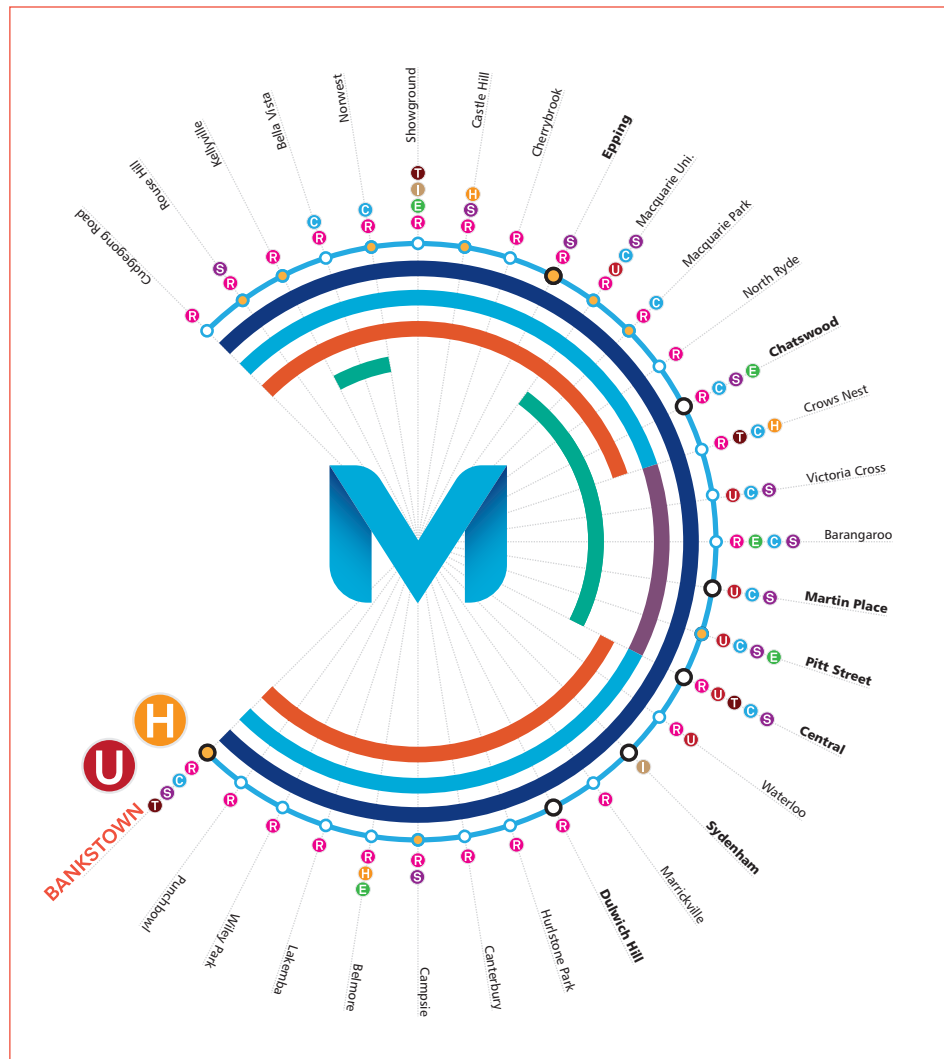


Figure 6 Centre Functional Hierarchy in Metro Business Case. Sydney Metro City & Southwest - Business Case Summary, October 2016; As marked up by Canterbury-Bankstown Council

<https://www.sydneymetro.info/sites/default/files/Sydney%20Metro%20CSW%20Business%20Case%20Summary.pdf>

Considering this, An underground station at Bankstown is reasonable and essential, particularly considering the further economic agglomeration that is occurring in the centre. The existing division of the centre caused by the rail corridor, which is compounded in the current EIS proposal, will hamper Bankstown's ability to realise its potential and the benefits that can flow to the South District. Analysis by Council (shown in the Creating Better Places: Opportunities for our Metro centres document) reveals that undergrounding the station would deliver seven additional logical connections across the centre (see Figure 7). Undergrounding the line would also enable improved connectivity along the entire line from Punchbowl to Bankstown, which currently suffers as a result of no connections for approximately 1.5kms.

The EIS states that the future undergrounding of the station is being 'future-proofed'. However, there is little information to assess this statement. It appears to be an afterthought, not a rigorously planned, viable option. The inherent difficulty in re-closing the line for future works would cause another period of significant disruption (or more likely never happen). Considering the investment made in other parts of the Metro system, Council asserts that this should be a "do it once, do it right" scenario.

Council recommends that further investigation be undertaken prior to the approval of the EIS to:

- Recognise the current changes that are occurring in Bankstown CBD and conduct a full Economic Impact Assessment of the benefits of undergrounding including investigating the potential economic return on the land resources that could be made available by an underground proposal;
- Recognise that there is a significant lack of permeability between the north and the south of the line between Punchbowl and Bankstown of approximately 1.5kms in length that the undergrounding of the station could resolve, thereby improving the economic performance of the region;
- Recognise that the current proposal exacerbates division within the centre and delivers a poor hierarchy of transport (further discussed in this submission); and
- Further investigate flooding and hydrology at the station, which Council believes are a major concern in the current proposal (the northern entrance to the proposed Metro station experiences significant localised flooding and an undergrounding of the station would make major improvements to regional flooding issues).

Further discussion regarding these issues is provided in the Bankstown Station section of this submission.

“Do it once, do it right” Realise Bankstown’s potential and add value

- Bankstown has an opportunity to be a major economic anchor connecting the economic golden arc to future extensions planned from Bankstown to Liverpool, Parramatta and Kogarah as well as future links to Western Sydney Airport precinct;
- The Metro design for Bankstown Station should respond to its role as a strategic centre and a major transport interchange; and
- Bankstown Station should be undergrounded and integrated with new development over and adjacent to the station rather than isolated from the centre. It should include civic spaces that connect the interchange between train lines, buses and active transport; and display design excellence, prominence and scale that reinforces the hierarchy of the centre and the station as the heart.



Figure 7 New Connections, Canterbury-Bankstown Council

04 Lack of transport hierarchy and connectivity

Council are concerned that in multiple instances, **TfNSW's own transport hierarchy is not adhered to in the EIS**. Similarly, Council is concerned that the active transport corridor is not resolved. Achieving critical cross corridor connectivity for pedestrian and cyclists should also be delivered as part of the project.

Bankstown – Dilution of intermodal change

Easy, efficient and intuitive interchanges between connecting modes of public transport is critical to delivering a world-class transport network and achieving an acceptable customer experience. At Bankstown, the EIS proposes truncating the existing heavy rail service and abutting the new Metro station, meeting end to end. This arrangement means a double platform almost 400m in length and the need to cross through an unpaid concourse.

In addition to this, the bus layover adjacent to the proposed Metro station at Bankstown does not facilitate seamless intermodal change. The City of Canterbury Bankstown asserts that better solutions to support intermodal change must be sought for Bankstown Station.

Resolve the active transport corridor and deliver in concert with the Metro

Active transport in combination with the improved transport system will be critical to ensure the corridor can manage significantly

increased population pressure. In many locations the alignment of the active transport corridor is not fully resolved. Best practice would dictate the delivery of a fully resolved 'greenway' corridor proposal for both the north and south sides of the rail corridor allowing for meaningful ecological, habitat and recreational outcomes is essential. **This proposal should be funded and implemented with the construction of the Metro.**

Council insists on a firm commitment to the delivery of the full Active Transport Corridor (Greenway South West) as part of the Metro works, not just segments near stations within the rail corridor. Council also seeks clarity on the ownership and maintenance of the active transport corridor infrastructure.

Undermining the transport hierarchy

Each station should be designed with the principle that users are catered for in the following order with the first being located closest to the station entry and the last furthest from the entry (see Figure 8):

1. Pedestrians;
2. Cyclists;
3. Buses;
4. Disability parking spaces;
5. Taxis and other ride-hailing services;
6. Delivery vehicles; and
7. Private vehicles.



Figure 8 Sydney Metro City & Southwest – Sydenham to Bankstown upgrade EIS, September 2017



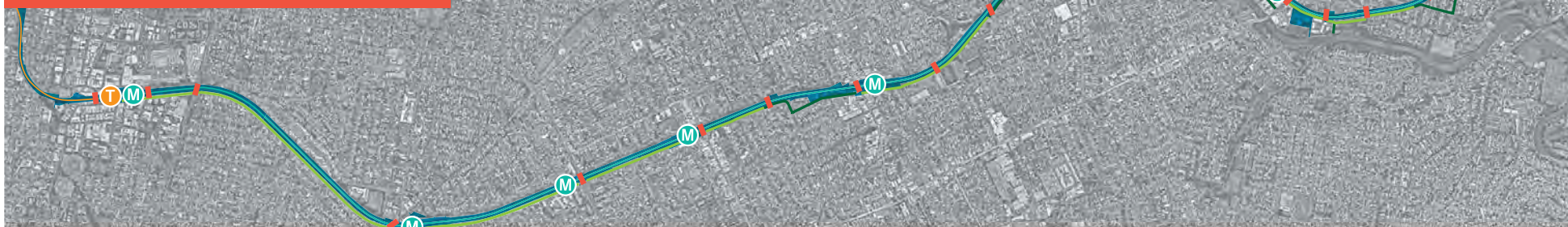
ACTIVE TRANSPORT CORRIDOR

The entire active transport corridor should be delivered with the Metro, not in the future.



CONNECTIVITY

All underpasses and overpasses need to be upgraded for safe pedestrian and cyclist access, which may require widening. All existing and new concourses should provide free access across the rail line to contribute to connectivity. Additional underpasses or overpasses are required every 400m for better connectivity (currently up to 2km between crossings).



TREE LOSS

The quantum of tree loss along the corridor is unacceptable.



COMMUNITY SPACES

There should be no impacts or reductions to community spaces during and after construction. This includes Warren Reserve (Punchbowl), Dog Park (Canterbury) and the rear of Bankstown Arts Centre.

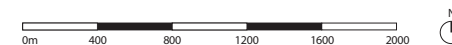


Figure 9 Metro corridor at a glance, Transport for NSW 2017; key issues for council

There are many instances of non-conformances with the stated transport hierarchy in the EIS.

The delivery of a station precinct with well-designed and properly integrated mode interchange facilities is critical, promoting active transport and public transport changes. Key examples where improvements in the EIS are required include:

- Rethinking the parking strategy that often gives precedence to commuter parking than modal change or active transport;
- Resolving the disconnect of 'kiss and ride' at multiple stations;
- Cycling facilities at significant distance to station entries, often with car parking given precedence;
- The bus layover being retained adjacent to the Metro entry at Bankstown is inefficient in terms of promoting modal change; and
- Disability parking spaces at considerable distance to from station entries.

The overall transport hierarchy needs to perform seamlessly to cope with the population pressures the corridor is proposed to experience. Maximising public-transit patronage supplemented by convenient active transport, must be optimised.

The EIS needs to identify appropriate locations for additional and displaced commuter parking.

Cross corridor connectivity: The existing rail corridor is a significant barrier to north-south movement by all modes, in some cases there are no crossings for 1-2km within the Canterbury-Bankstown LGA. As undergrounding is not proposed, existing crossings are being upgraded to maintain (not increase) existing capacity, and do not adequately accommodate other modes, particularly cycling and pedestrian safety. In addition, further opportunities to increase connectivity should be explored along the entirety of the corridor.

Additional pedestrian overbridges should be constructed to provide better connection and permeability, and all existing cross corridor connections should be upgraded to a minimum standard that includes safe access for pedestrians, cyclists and buses (see Figure 9).

Transport hierarchy and connectivity

- Metro EIS should deliver better intermodal changes and deliver excellence in transport hierarchy planning;
- Fully resolve and deliver a quality 'greenway' active transport corridor;
- The overall transport hierarchy needs to perform seamlessly to cope with the population pressures and maximise public-transit patronage supplemented by convenient active transport wherever possible; and
- Significantly improve the connectivity between the north and south of the line. Opportunities for new crossings for pedestrians and cyclists are provide in the detailed analysis.

05 Station Design and Placemaking

Council rejects the “as little as possible, as much as necessary approach” that has been used in the Metro EIS concerning station design and placemaking.

Council reiterates that this project is an opportunity for city shaping in a part of the Greater Sydney Region experiencing dramatic change and renewal.

Council’s key issues are:

Corridor and Station Vision: The EIS concept designs are not informed by an overarching corridor vision nor visions for each centre. Council suggest undergrounding the Metro could have delivered a world-class active transport and development opportunity. Without the undergrounding option, our preliminary analysis as outlined further in this submission, has missed key opportunities across the line.

Station designs: Station designs, and proposed locations, do not integrate with the town centre fabric. Relocating stations reduce activity and pedestrians on main streets and will have potentially negative effects on surrounding

businesses. Each station should be more sensitively designed to relate to the desired future character of the area. This includes retaining the existing entry locations (in addition to new entries) rather than moving them away from the main street and the most active parts of the town centre. The stations should integrate with the town centre and include active uses such as retail to connect station entries to surrounding uses. They should contribute to connectivity and should provide continuous weather protection from the platform to the adjoining areas. Weather protection requirements for patrons have largely been ignored.

The current designs are schematic and omit details such as levels, heights, landscape, footpaths, lighting and so forth. Council requests further involvement in the detailed design, particularly in terms of upgrades to adjoining streets and public spaces;

Station design often reduces connectivity: In the EIS, concourse design, which could often serve as convenient links between north and south of the line for non-patrons, are often configured as paid access. To address this, all concourse overbridges should provide free access across the corridor



Haldon Street Festival, Canterbury-Bankstown Council

(with the Opal readers positioned at the tops of stairs/ lifts rather than at each side of the bridge).

Over station / within corridor development:

All station precincts have been identified for high-density development by the Department and Environment. **Council does not support the level of growth proposed by the Department in the Sydenham to Bankstown Urban Renewal Corridor Strategy and will be outlining these concerns with the growth in a submission to that Strategy.**

All corridor land should be utilised for its highest value use subject to the centres context and proposed growth under the Corridor Strategy so as to minimize the broader impacts on the community. The closure of the line for up to 6 months presents a unique opportunity to undertake works would otherwise be prohibitive in an operational rail environment. All station precincts should identify underutilised sites such as vacant land, carparks and station buildings as potential development sites and at a minimum provide infrastructure to enable renewal and development at later stages.

To facilitate the most effective use of land resources with and surrounding the corridor, detailed master planning for overstation and corridor development should be undertaken at each station precinct.

Unique places: Council recognises that the current station designs in the EIS endeavour to balance the need for project identity but avoids an overly standardised approach to design of stations. Council generally supports a unique identity approach and the appropriate retention of heritage items. However, Council suggests further consideration should be made of:

- Recognition of origin and destination stations in the corridor such as Lakemba and Punchbowl;
- Strengthen, grow and facilitate evening economies;
- Understand the social uses of spaces around the stations; and
- Retain all State and locally significant heritage buildings.

These principles are discussed further in this submission.

CPTED principles: There are a number of locations where patron safety has not been adequately resolved or are difficult to resolve in the current plans (further discussed in individual stations).

Tree cover and landscape planning: The quantum of tree loss is unacceptable. Effects include increased heat island, loss of flora and fauna, loss of shade, impact on views and urban amenity. The landscaping plans are unresolved and difficult to assess.

Station Vision, Design and Placemaking

From Council's perspective, it is critical that:

- The Metro plan must provide a vision for the corridor and for each centre that will inform any masterplanning process;
- More robust integration of transport infrastructure with corridor planning is needed;
- A better understanding of the current movement patterns to protect existing high streets to minimise the impact on existing social and economic structures;
- Resolve patron comfort (weather protection) and safety issues (CPTED principles);
- Protect urban amenity by minimising tree loss;
- Maximise connections for both patrons and the general public through station design; and
- Plan for station and corridor renewal and development in a fully integrated master plan including car park sites and other underutilised corridor land.
- Tree cover should be enhanced.

06 Manage impacts on our community during construction

The EIS does not sufficiently address the significant impacts of construction and long-term changes on our environment, community and local businesses.

A robust temporary transport strategy.

The temporary transport strategy during line closure is of major concern to Council with key issues being:

- The 'temporary' transport options will be in place for 5+ years. The plan does not use the strategy as an opportunity to transition to a better transport hierarchy;
- The convergence of 101 buses per hour on Sydenham Station in the AM peak – it is unclear how the volume of buses can be accommodated;
- Bus only clearways should be identified upfront to aid efficient transport and a plan for the design and future of bus stops constructed to serve the temporary transport periods. Council seeks clarity on the ownership and maintenance of this infrastructure;
- More focus is required on movement patterns to centres on the line – not just CBD inbound passengers;

- The potential to create a more distributed replacement bus system in the vicinity of the rail corridor rather than immediately in it. This would assist in reducing congestion during the closure periods;
- Little detail on how bus movements will be managed within the centres and specific pinch point concerns are outlined further in this submission; and
- The line closure would be an opportunity to develop 'on demand' transport strategies currently being contemplated to promote continued public-transit use throughout the closure period.

Further details are provided in Section C of this submission – Technical Peer Review and Recommendations.

A strong business support strategy.

There will be significant impacts on businesses in the corridor from construction, culminating in line closure for a period of six months. However, in some station locations there will be cumulative impacts of both construction and long-term changes to movement patterns as a result of significant relocations or demolitions of existing station entries. The economic impacts of this are not adequately explored in the EIS.



Track laying at Rouse Hill, Sydney Metro 2017

A detailed strategy to understand, avoid and mitigate these impacts is required.

Council seeks an analysis of compensation measures to assist our business community and the following should be recognised in the EIS:

- There must be recognition that during line closure, the economic impacts on small businesses need to be mitigated and that a comprehensive communication and action plan needs to be developed well in advance of construction; and
- Technical Paper 6 Business Impact Assessment outlines some measures to mitigate impacts on business including:
 - Business management strategies for each construction site (and/or activity), identifying affected businesses and associated management strategies, including the employment of Place Managers, and specific measures to be put in place to assist small business owners adversely impacted by construction. (Technical Paper 6, p.106);
 - A business consultation forum linked to the consultation strategy for the project (Technical Paper 6, p.106); and

- In conjunction with (a) Business Management Plan, a Small Business Owners' Support Program would provide assistance to small business owners adversely impacted by construction. (Technical Paper 6, p.107).

However, the EIS states that these will be conducted as required and is left to the construction contractor (Table 4, Appendix D). Council asserts that a more proactive and carefully programmed approach (as per outlined in Technical Paper 6) needs to be undertaken and should be specified as part of contractor responsibilities in Appendix D. This will ensure that not only businesses can ride the short and long-term impacts, but protects community cohesion which could be seriously undermined by the inability for local businesses to survive.

Excellence in community engagement.

The Canterbury-Bankstown community has a strong diversity of culture, language and, in some cases, significant socio-economic barriers. It is absolutely vital that a best practice communications and engagement strategy is developed in concert with the Metro project. To date, the City of Canterbury Bankstown has found the communications regarding the project have been of sub-standard quality. To manage the impacts on the community, substantial improvement is going to be required.

Council recommends a community consultative committee to ensure community concerns are addressed pre and post approval.

Effective place management will be critical to enable the community to manage the impacts of the construction. Table 4.4 of Section 4, Part 1A of the EIS does outline the stakeholder community activities. However, the EIS does not acknowledge:

- The vulnerability of some members of the community and its relationship with higher levels of train use compared to the rest of Sydney (17.5 per cent in the CCB LGA compared to 13.8 per cent for Greater Sydney and identified in Technical Paper 5 – Social Impact Assessment);
- The diversity of language and cultural backgrounds that will need to be effectively dealt with in the community consultation and engagement; and
- The impact on centres on the line, particularly those that are destination as well as origin stations (e.g. Lakemba), where well-established social functions of centres could be significantly impacted and are central to community cohesion.

The EIS specifies place managers for all phases of the projects. However, it is unclear the number and specifications for place managers (cultural and language specialists). Council asserts that place managers are essential for this project

and must be provided on site, considering the diversity and vulnerability in our community. The number of place managers should be outlined and discussed with Council. This must be specified in the final EIS. Secondly, Appendix D's description of the responsibility of contractors suggests that the responsibility for community engagement lies with them, yet does not specify the appointment of place managers.

In this regard, Council asserts that any Communication Strategy created is informed by the following:

A Communication Strategy will be developed by each Sydney Metro Principal Contractor and should be modified to include the word “in accordance with the Sydney Metro Overarching Community Communications Strategy²².

- Requiring a place management approach, outline the number of place managers and the specifications (language and diversity);
- Include liaison with Council as part of the place management framework; and
- Community information sessions numbers should be specified (not listed “as required”)

as per Sydney Metro Overarching Community Communications Strategy²³. These will be absolutely essential to effectively prepare the community (well before construction commences) and manage changes to transport and access arrangements. These should be supplemented by mobile displays designed to both help the community understand the project, including the long-term benefits, as well as managing the short-term impacts. This needs to be delivered in a manner that carefully considers language barrier.

Council is very concerned that without these measures, Council will become the community's go-to point of contact for which Council does not have the resources.

²² TfNSW Sydney Metro Overarching Community Communications Strategy, September 2017

²³ TfNSW Sydney Metro Overarching Community Communications Strategy, September 2017

Impacts on valued social infrastructure.

The EIS identifies many locations where valued open space, community facilities and other community land will be directly impacted by the project. This submission provides alternative options for TfNSW to reduce the impacts on valued places such as Warren Reserve (Punchbowl) and memorials within the corridor such as at Lakemba Station. These matters are further discussed in the individual station sections.

Council is concerned that potential impacts to the Bankstown Arts Centre and the open space to the rear of this facility cannot be assessed as there is no information in the EIS about the nature of adjacent works in the corridor. Council requests that any works to this part of the corridor be clarified by the relevant authority and provided to Council for review.

Council understands that the former Canterbury Bowling Club (known as 15 Close Street, Canterbury) and part of 15A Close Street, Canterbury will be the subject of a compulsory acquisition for a fixed period as a works site. The impacts of this action are that current users of this community facility will have to be relocated, residents in proximity to the site to the east may be subject to unreasonable noise, vibration and dust, and there may be limited access to the valued Close Street reserve during the construction period. The EIS does not provide sufficient mitigation measures for these impacts.



Bankstown Arts Centre Forecourt (Bankstown),
Canterbury-Bankstown Council

07 Inconsistency with Government Policy on Design

There is now a sound base of NSW State Government policy and guidance on best practice design processes and practice that TfNSW could have drawn on to ensure that the Metro project can deliver great places and “place outcomes” as required by the Place Making and Urban Design SEAR.

TfNSW Interim Urban Design Best Practice Guidelines (2017)

TfNSW's Sustainable Design Guidelines (Version 4.0, 2017) states “all projects to address the urban design principles in the TfNSW Interim Urban Design Best Practice Guidelines”. Council's review finds that the principles do not inform the current plan:

- **Principle 1** - *Draw on a comprehensive site and context analysis to inform the design direction* – Council asserts that comprehensive site and context analyses have not been undertaken;
- **Principle 2** - *Provide value-for-money design solutions that achieve high quality low maintenance architectural and urban design outcomes that have longevity* – In addition to the serious concerns about the lack of long-term vision for the corridor as outlined above, Council has provided an assessment against the new “Better Placed” urban design framework and finds the project does not meet the standards set for development in NSW; (refer to submission in Document 2)
- **Principle 3** - *Provide connectivity and permeability for pedestrians* – serious breaches of improving connectivity and permeability have been outlined as provided above and outlined further in part 2 of Council's submission;
- **Principle 4** - *Integrate the project with the surrounding area* – In some cases, there has been little integration with the Sydenham to Bankstown Corridor Strategy;
- **Principle 5** - *Maximise the amenity of the public domain* – Council asserts that basic requirements such as patron safety, weather protection and CPTED principles have not been addressed in a number of locations;

Design an efficient and functional transport solution, which enhances and contributes to local amenity and prosperity.

- **Principle 6** - *Protect and enhance heritage features and significant trees* – Council assert that in some instances, heritage loss is not adequately explained in the EIS. Landscaping plans are highly unresolved making it difficult to assess tree loss impact;
- **Principle 7** - *Maximise positive view opportunities* – there are opportunities in the corridor to enhance city vistas. The impact of plans or how to maximise these view opportunities have not been discussed; and
- **Principle 8** - *Design an efficient and functional transport solution, which enhances and contributes to local amenity and prosperity* – Local amenity could be significantly improved by an underground solution and local economic prosperity could be significantly enhanced by an underground solution.

The guideline also states that an assessment against the principles should be delivered in the early design phase. The Metro EIS suggests throughout that further design work will be undertaken for some key elements. Council asserts that as much information as possible is required upfront to in accordance with the TfNSW guidelines.

Sustainable Design Guidelines Version 4.0



May 2017

Assessment against “Better Placed: An integrated design policy for the built environment of New South Wales (2017)” principles.

A review of the project scope and concept against the new government policy “Better Placed” finds that the project as it currently stands does not meet the standards set for development in NSW:

✘ **Better fit: contextual, local and of its place**

- The position and arrangement of new elements causes obstructions to the use of the public realm; and
- New buildings do not provide prominent entrances from key streets.

✘ **Better performance: sustainable, adaptable and durable**

- The plan does the “minimum” in responding to environmental imperatives;
- Budget-related imperatives override environmental performance; and
- The concept plans deliver poor design outcomes that impact comfort and use, as well as natural resources.

✘ **Better for community: inclusive, connected and diverse**

- Urban areas fail to provide inclusive and accessible shared public spaces.

✘ **Better for people: safe, comfortable and liveable**

- Poor access, orientation or spatial arrangements compromise human comfort or safety particularly in terms of lack of attention to active transport modes;
- Activity in the public realm is discouraged through poor interfaces; and
- Construction efficiency is prioritised over liveability or health.

✘ **Better working: functional, efficient and fit for purpose**

- Quality of life for people and communities, as well as their resilience to change, is lower when particular usage patterns are locked-in, restricting change and adaptation over time – in this case the current usage patterns are severely undermined, instead of enhancing both existing and new movement patterns.

✘ **Better value: creating and adding value**

- Costs increase over time as a result of failing to meet current standards – Council believes that the short term imperatives have overridden the long-term opportunities that a full upgrade of this corridor would present;
- Poor design locks in higher maintenance costs over time; and
- They do not reflect the sufficient commitment to delivering high quality experience for people, and as a result are not highly valued or cared for by the local community.

✘ **Better look and feel: engaging, inviting and attractive**

- The plans lack design consideration and refinement. Reflect poor choices of materials, elements and/or overall composition.

The City of Canterbury Bankstown requests that the identified opportunities and key issues identified in Parts 2 & 3 of this submission are considered as a starting point to deliver better outcomes for the LGA’s community.



OBJECTIVE 1.

Better fit

contextual,
local and
of its place

Good design in the built environment is informed by and derived from its location, context and social setting. It is place-based and relevant to and resonant with local character, heritage and communal aspirations. It also contributes to evolving and future character and setting.

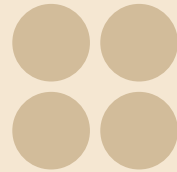


OBJECTIVE 2.

Better performance

sustainable,
adaptable
and durable

Environmental sustainability and responsiveness is essential to meet the highest performance standards for living and working. Sustainability is no longer an optional extra, but a fundamental aspect of functional, whole of life design.



OBJECTIVE 3.

Better for community

inclusive,
connected
and diverse

The design of the built environment must seek to address growing economic and social disparity and inequity, by creating inclusive, welcoming and equitable environments. Incorporating diverse uses, housing types and economic frameworks will support engaging places and resilient communities.

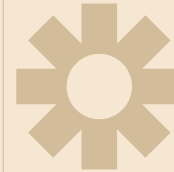


OBJECTIVE 4.

Better for people

safe,
comfortable
and liveable

The built environment must be designed for people with a focus on safety, comfort and the basic requirement of using public space. The many aspects of human comfort which affect the usability of a place must be addressed to support good places for people.



OBJECTIVE 5.

Better working

functional,
efficient and
fit for purpose

Having a considered, tailored response to the program or requirements of a building or place, allows for efficiency and usability with the potential to adapt to change. Buildings and spaces which work well for their proposed use will remain valuable and well-utilised.

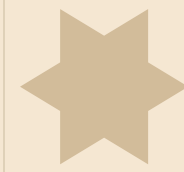


OBJECTIVE 6.

Better value

creating and
adding value

Good design generates ongoing value for people and communities and minimises costs over time. Creating shared value of place in the built environment raises standards and quality of life for users, as well as adding return on investment for industry.



OBJECTIVE 7.

Better look and feel

engaging,
inviting and
attractive

The built environment should be welcoming and aesthetically pleasing, encouraging communities to use and enjoy local places. The feel of a place, and how we use and relate to our environments is dependent upon the aesthetic quality of our places, spaces and buildings. The visual environment should contribute to its surroundings and promote positive engagement.



08 Process after approval

Three robust mechanisms should be implemented post the EIS to ensure better outcomes for the LGA.

Design Review Panel: A Design Review Panel should be set up to ensure quality throughout the design and construction process and alignment with future development plans by the Department, Council and the private sector. Representatives of Australian Institute of Landscape Architects, Australian Institute of Architects and Councils should vote on the panel. The panel should have an agreed governance model so that it has decision-making power.

Interface Agreement: It will be essential that Council has a strong and constructive Interface Agreement with TfNSW. Council and TfNSW will need to work in a co-ordinated and cohesive manner to ensure that community impacts are identified well in advance and mitigation measures are implemented wherever possible.

Community Consultative Committee: This committee would ensure that TfNSW and contractors engage with the community and key stakeholders. The Department provides guidelines on roles and responsibilities of such committees.

Process after approval

- Council must have a decision-making role on urban design aspects moving forward; and
- The Interface Agreement must be developed in collaboration and address community impacts.



For further information,
contact council's City Design Team
on 9707 9000.





Metro Southwest EIS Submission Report Part 2: Creating Better Places: Opportunities for our Metro centres

Endorsed by Council 28 November 2017





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1. Creating Better Places – Centres Analysis

Council's submission is comprised of three documents which together form Council's position on the Metro project and the opportunities to create better places:

Part 1. Sydenham to Bankstown Metro: Key Issues and Opportunities

Part 2. Creating Better Places: Opportunities for our Metro Centres

Part 3. Technical Review

This is **Submission Part 2** which responds directly to the concept designs provided in the EIS for each station. Our response highlights opportunities and provides our recommended improvements. Council requests revised concept plans which consider these opportunities.

Council secured a win for **Placemaking** when the Department of Planning and Environment agreed to include a requirement that the Metro Southwest EIS consider its impact on 'Place Making and Urban Design'. The project must ensure this major transport infrastructure delivers great places along with better transport services. The performance outcome of the Place Making SEAR is:

- *The project design capitalises on opportunities to improve place.*
- *Character and the quality of the surrounding built environment (including adjoining public spaces).*
- *The project contributes to the accessibility and connectivity of communities.*

In addition to this requirement, the NSW Government recently released the **Better Placed: Integrated Design Policy** to "deliver the strategic approach needed to ensure that as our cities and towns grow bigger they get even better". **Better Placed** provides seven objectives which have been created to define key considerations in the design of the built environment (See Figure 1). The NSW Government considers that achieving these objectives will ensure our cities and towns, our public realm, our landscapes, our buildings and our public domain will be healthy, responsive, integrated, equitable, and resilient:

Council believes there has never been a better time to create great places in collaboration with the NSW State Government. Council has used these important policy directions to assess the TfNSW concept plans for the stations and the corridor. This submission identifies where proposed station designs miss opportunities and could deliver better outcomes. Council does not suggest these are refined plans, but rather the starting point to explore how better outcomes may be achieved to meet our community's, and Council's, aspirations and the NSW Government's 'place' objectives.

For each station, Council has developed plans reflecting the "Better Placed" framework and we have provided illustrations of key opportunities we request are explored.

To aid Transport for NSW to evaluate the submission, station opportunities illustrations adopt an equivalent look and feel to the drawings provided in the EIS to allow simpler side-by-side comparison. The drawings are the outcome of a high level, council-led process of identifying opportunities and constraints in the vicinity of each station precinct. The drawings seek to acknowledge the fundamental elements of Metro planning and operation - such as straight platforms, equitable access, simplified station management and tap on/off technology.

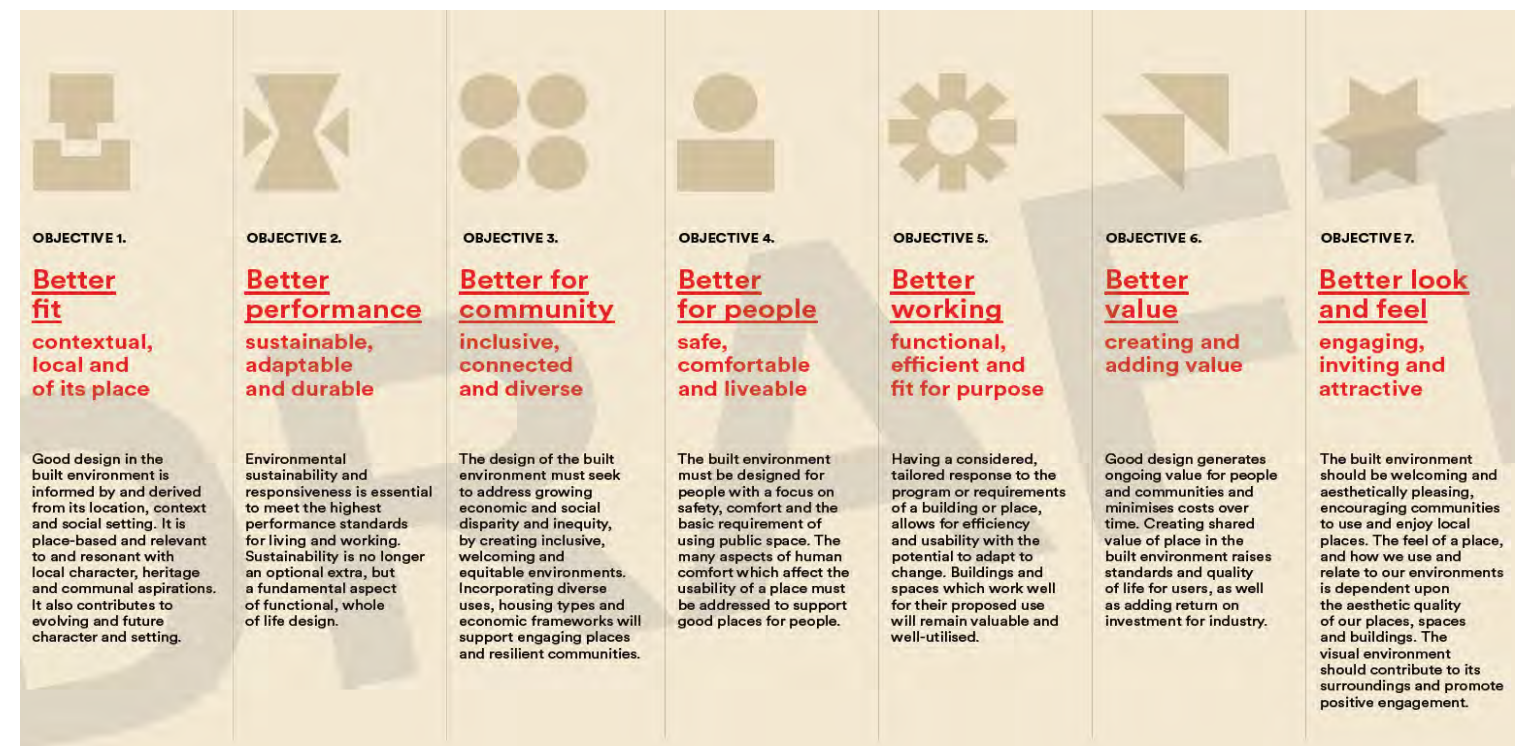


Figure 1: Better Placed Principles, Government Architects Office (2017)



The opportunities assessments reflects the limited amount of time available during the EIS exhibition period and are not the result of an integrated, multi-disciplinary team working over an extended period of time.

Recognising the above points, the drawings apply urban design and place-making principles to each station precinct to achieve an improved place outcome, without compromising Metro planning and operation. These urban design and place-making principles include:

- Utilising new concourses to improve town centre permeability
- Improving pedestrian priority across town centres
- Establishing a clearer, more consistent transport mode hierarchy
- Retention of existing station entries to protect existing high street functions as well as new entries
- Carefully scaled new public spaces activated fringed by retail uses
- Retention and incorporation of characterful existing features - trees, station buildings, heritage items and so on
- Integrating renewal opportunities to link existing centres with new retail in a manner that allows both to thrive
- Providing continuous weather protection to station entries
- Ensuring passive surveillance and CPTED is embedded in all station precinct planning.

As previously outlined in Part 1 of this submission, Council also firmly request a key decision-making role as station designs are refined moving forward in this process.



2. Corridor-wide Summary: Assessment against the Better Placed Framework



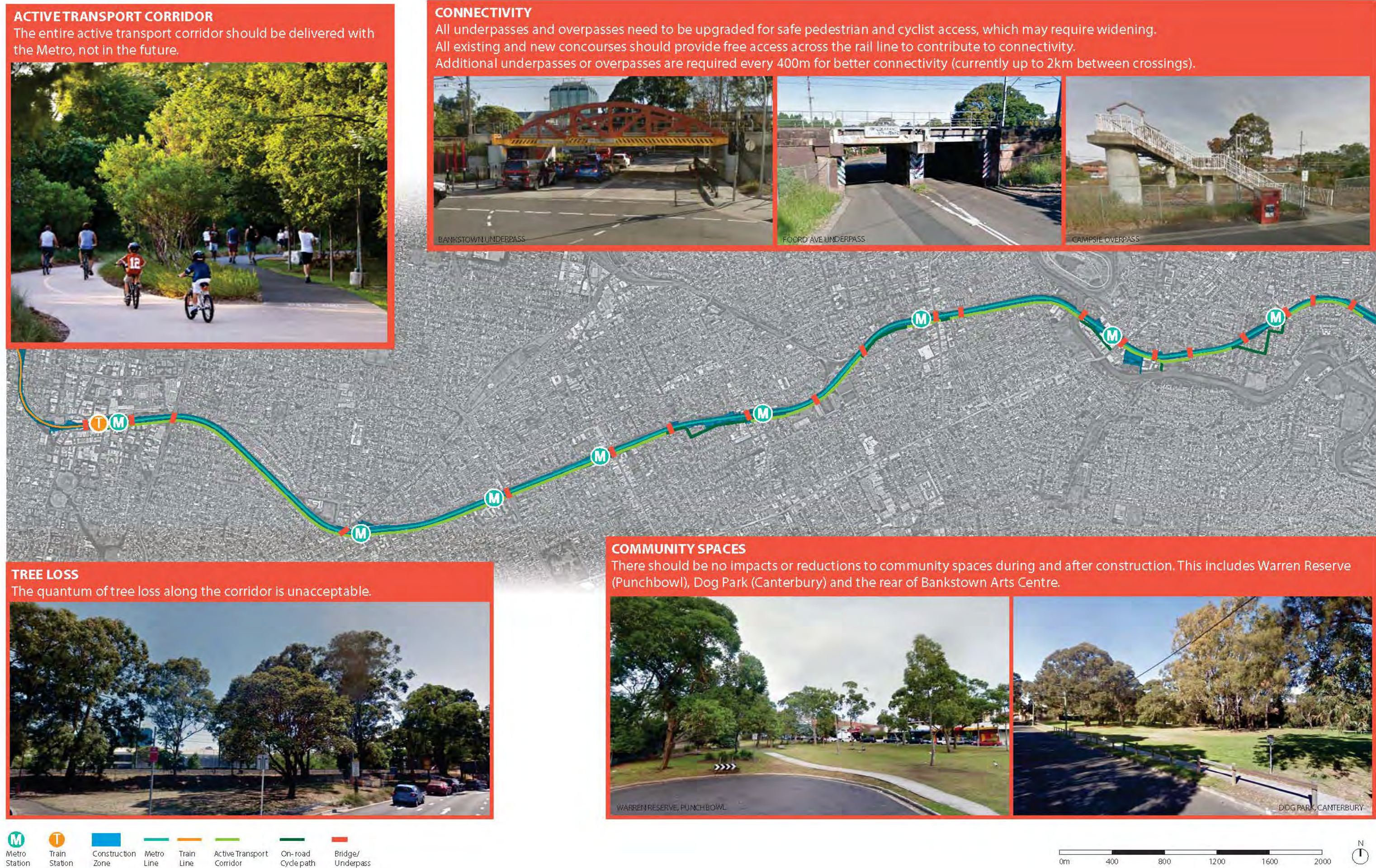
Belmore-Bankstown Railway opening ceremony (1909). Source: Canterbury Bankstown Council Historical Studies Collection.

The Sydenham to Bankstown line was constructed in the late 19th and early 20th century to relieve congestion on the Main South Line and to encourage suburban development and the growth of agriculture.

The railway stations continue to provide a focus for civic life in the City and to connect our community to jobs, housing and recreation opportunities across Greater Sydney. The Metro upgrade project can provide the opportunity to deliver great places that our community can be proud of and that will stimulate economic and social activity.

This section provides issues and opportunities for the corridor in the exhibited concept plans and documentation. Following the maps are tables describing the opportunities in detail and the relevant *Better Placed* principles they address.

Figure 1 Corridor-wide opportunities and gaps





2.1 Corridor-wide Key Opportunities & Gaps

Better fit: contextual, local and of its place

Good design in the built environment is informed by and derived from its location, context and social setting. It is place-based and relevant to and resonant with local character, heritage and communal aspirations. It also contributes to evolving and future character and setting.

Better performance: sustainable, adaptable and durable

Environmental sustainability and responsiveness is essential to meet the highest performance standards for living and working. Sustainability is no longer an optional extra, but a fundamental aspect of functional, whole of life design.

Resolve the Place Making elements to ensure Better Fit

The station precincts contain various elements that work together to contribute to their character and are highly valued by the community. These include station heritage buildings, commercial and residential heritage streetscapes, mature trees, spaces for gathering and honouring the achievements of the community, and special views and vistas.

The EIS does not adequately consider the importance of these elements and in many cases, removes, or significantly impacts them without appropriate justification. Heritage significance is impacted or removed from the centre with no consideration of alternatives that might allow heritage buildings and elements to be retained. Significant tree loss would occur with little consideration for its impact on the streetscape and urban heat island effects. Impacts on highly valued public spaces within the station precincts including public art and monuments are not considered.

Resolve the active transport corridor and deliver in concert with the Metro

Active transport in combination with the improved transport system will be critical to ensure the corridor can manage significantly increased development. Deliver a fully resolved 'greenway' corridor proposal for both the north and south sides of the rail corridor allowing for meaningful ecological, habitat and recreational outcomes. This proposal should be funded and implemented with the construction of the Metro.

Landscaping and tree loss and its relationship to social spaces

The Environmental Impact Statement (EIS) presents very little detail about the nature or configuration of proposed landscaping (or potential tree loss). Without detailed master planning at each station precinct, it is difficult to interpret the proposed landscaping as anything other than potentially disconnected patches of turf. Particularly given the level of development these locations will experience, maximising landscaping and tree retention to reduce the urban heat island effect and produce "social" spaces are critical. Many of the station space within the Canterbury Bankstown LGA have a dual function of social and commuter spaces.

There are instances, such as at Lakemba station, where large paved social spaces are proposed resulting in significant tree loss, but are not particularly suited to the social space function (e.g. the gradient of the land at Lakemba).



Better for community: inclusive, connected and diverse

The design of the built environment must seek to address growing economic and social disparity and inequity, by creating inclusive, welcoming and equitable environments.

Incorporating diverse uses, housing types and economic frameworks will support engaging places and resilient communities.

Better for people: safe, comfortable and liveable

The built environment must be designed for people with a focus on safety, comfort and the basic requirement of using public space. The many aspects of human comfort which affect the usability of a place must be addressed to support good places for people.

Inequity in Metro delivery

Significantly greater investment has occurred to create better places in other Metro locations (e.g. the Northwest Metro) despite the Sydenham to Bankstown corridor proposed to deliver significantly more housing opportunity in a shorter corridor. Considering Bankstown's strategic importance and the inherent connectivity issues, the undergrounding of Bankstown station should be of critical importance now, not an unclear after-thought.

This has now been reinforced in recently released planning and transport strategies. It is essential that the planning of Bankstown Station aligns with future connections with Parramatta and Liverpool as outlined in the DRAFT Future Transport Strategy 2056.

Corridor Connectivity

The EIS doesn't address the economic, social and sustainability gains that could be achieved with the Metro upgrade. These include:

- » Undergrounding Bankstown Station to deliver much better connectivity within the centre.
- » Promoting connectivity across the corridor. The section of line between Punchbowl and Bankstown currently has no connectivity for approximately 2 kilometres. Table 1 and Figure 1 provides guidance for TfNSW about the type of enhancements and new crossings Council seeks from the Metro project to address connectivity issues.
- » Most new concourses being delivered as paid access only, reducing the potential connectivity within centres.
- » Upgrades to underpasses and overpasses do not address additional requirements for increased cycling or pedestrian activity.
- » In addition to not providing a cohesive active transport plan, north/south connections to the active transport corridor have not been addressed.
- » The inadequacy of the Active Transport Corridor / Linear Park is further reinforced by the lack of transport hierarchy considerations at multiple stations. Repeatedly commuter transport parking is closer to the station entry than disabled or bike parking.

Dilution of a compelling case for intermodal change

Easy, efficient and intuitive interchange between connecting modes of public transport is critical to delivering a world-class transport network and achieving an acceptable customer experience. At Bankstown, the EIS proposes truncating the existing heavy rail service and abutting the new metro station, meeting end to end. This arrangement means a double platform almost 400m (8 Olympic swimming pools long) in length. In addition, the premium location for interchange from Metro to bus is retained as a bus layover.

Continuous weather protection is expected to deliver customers from the edge of the station precinct to the station entry in hot or wet weather. It needs to be safe, comfortable and efficient.



Better working: functional, efficient and fit for purpose

Having a considered, tailored response to the program or requirements of a building or place, allows for efficiency and usability with the potential to adapt to change. Buildings and spaces which work well for their proposed use will remain valuable and well-utilised.

Patron safety

Crime Prevention Through Environmental Design does not appear to have been resolved in many instances. For example, the proposed new station entry and western concourse at Canterbury are relatively isolated from the existing town centre and well-used high streets. Entries include little infrastructure and are potentially inactive out of business hours. This creates safety concerns for customers.

Conflict is not resolved between modes in many locations. For example, Lilian Lane in Campsie, a relatively narrow laneway lacking in passive surveillance, will be utilised by cars, trucks, the active transport network and by all customers that would have used the existing station entry. The potential for unresolvable conflict is significant.

Undermining the transport hierarchy

There are a number of instances of non-conformances with the stated transport hierarchy in the EIS. The delivery of a station precinct with well-designed and properly integrated mode interchange facilities is critical. Interchanges must promote easy active transport and public transport interconnections. Key examples include:

- » Rethinking the parking strategy that often gives precedence to commuter parking than modal change or active transport.
- » Disconnect of 'kiss and ride' at multiple stations.
- » Cycling facilities at a significant distance to station entries, often with car parking given precedence.
- » The bus layover being retained adjacent to the Metro entry at Bankstown is inefficient in terms of promoting modal change.
- » Disabled parking spaces as considerable distance to from station entries.



Better value: creating and adding value

Good design generates ongoing value for people and communities and minimises costs over time. Creating shared value of place in the built environment raises standards and quality of life for users, as well as adding return on investment for industry.

Better look and feel: engaging, inviting and attractive

The built environment should be welcoming and aesthetically pleasing, encouraging communities to use and enjoy local places. The feel of a place, and how we use and relate to our environments is dependent upon the aesthetic quality of our places, spaces and buildings. The visual environment should contribute to its surroundings and promote positive engagement.

Master Planning to add value

The entire corridor and each station precinct need a credible, well-coordinated vision and master plan to describe the integration of station infrastructure within the immediate urban context. Without a vision and masterplan, urban renewal opportunities cannot be optimised. Throughout the EIS, there are numerous instances where the station planning does not:

- » integrate rail corridor urban renewal opportunities that could significantly increase serviceability in many locations.
- » link in well with planning undertaken by the Department of Planning (DPE) in the Sydenham to Bankstown Urban Renewal Corridor Strategy in some locations.
- » Integrate well with existing high streets, significantly shifting movement and consequently economic patterns without considering retaining the existing entry as well as new ones (which should be feasible with electronic ticketing).
- » evaluate the consequences of new connections as being paid only access.
- » appropriately locate or align station entries at many locations resulting in them being disconnected from main streets. Some entries have significant surveillance and safety concerns.

A significant project such as the Southwest Metro stays with a community for at least 100 years. The costs and issues associated with rectifying issues after completion are immense, and would likely never be achieved.

More effort in the master planning process now will provide an economic return to government, efficiency of transport and productivity across the region, as well as immeasurable social and sustainability benefits.

Detailed, integrated master planning must be undertaken, in concert with Council, to fully realise the value of the project.



Table 1 Essential works that need to be undertaken to improve the serviceability of underpasses and overpasses

Site	Include the following in Design and Construct package
Foord Ave, Hurlstone Park (underpass)	<ul style="list-style-type: none"> • Provide footpaths on both sides of the underpass.
Broughton Street, Canterbury (Underpass)	<ul style="list-style-type: none"> • Redesign to allow for cycleway, wider footpaths and footpaths both sides.
Wairoa Street, Canterbury (underpass)	<ul style="list-style-type: none"> • Improve safety for pedestrians, wider footpaths, lighting.
Duke Street, Campsie (overpass)	<ul style="list-style-type: none"> • Provide cycle access to overpass. • Improve pedestrian crossing and create an inviting path to the entry of overpass. • Design competition, lighting, public art.
Loch Street, Campsie and Moreton St, Lakemba (overpasses)	<ul style="list-style-type: none"> • Remove hump in the bridge to allow for sight lines to the intersection with ATC, widen footpaths, lighting.
Belmore Oval to Redman Parade, Belmore (underpass)	<ul style="list-style-type: none"> • Increase safer for pedestrians, e.g. lighting, visibility and general finish/design of underpasses.
Burwood road, Belmore (road bridge)	<ul style="list-style-type: none"> • Widen footpaths and provide lighting. • Relocate pedestrian crossings to both ends of the bridge.
Haldon Street, Lakemba (road bridge)	<ul style="list-style-type: none"> • Widen footpaths and provide lighting.
West Terrace, Bankstown (underpass)	<ul style="list-style-type: none"> • Increase clearance and widen to include cycle paths.
New infrastructure	<ul style="list-style-type: none"> • Add new overpass for pedestrians and cyclists between King Georges Road and Punchbowl Road to increase connectivity and break down barriers. Currently, the distance between crossings is 1.3km. Pedestrian Crossings should occur within walkable catchments with one at least every 400m. • Add new overpass or underpass for pedestrians and cyclists between Punchbowl Road and Stacey Street to increase connectivity and break down barriers. Currently, the distance between crossings is 1.5km. Pedestrian Crossings should occur within walkable catchments with one at least every 400m. • Laneway off Waiora Street - Provide new pedestrian-scale and cyclist underpass between Little Tasker and Tasker Park. • Investigate additional crossing between Haldon Street and King Georges Road.



3. Bankstown Station



Vision for a new Bankstown plaza over underground Metro station. (Canterbury Bankstown Council, 2017)

Bankstown has been identified as a strategic education and health precinct in the recently released Draft Greater Sydney Regional Plan 2017 and the Draft Future Transport Strategy 2056. Effective planning to fully integrate the centre must be undertaken now to plan for the future upgrades. It is essential that key issues identified by Council are fully considered to enhance the strategic value of Bankstown.

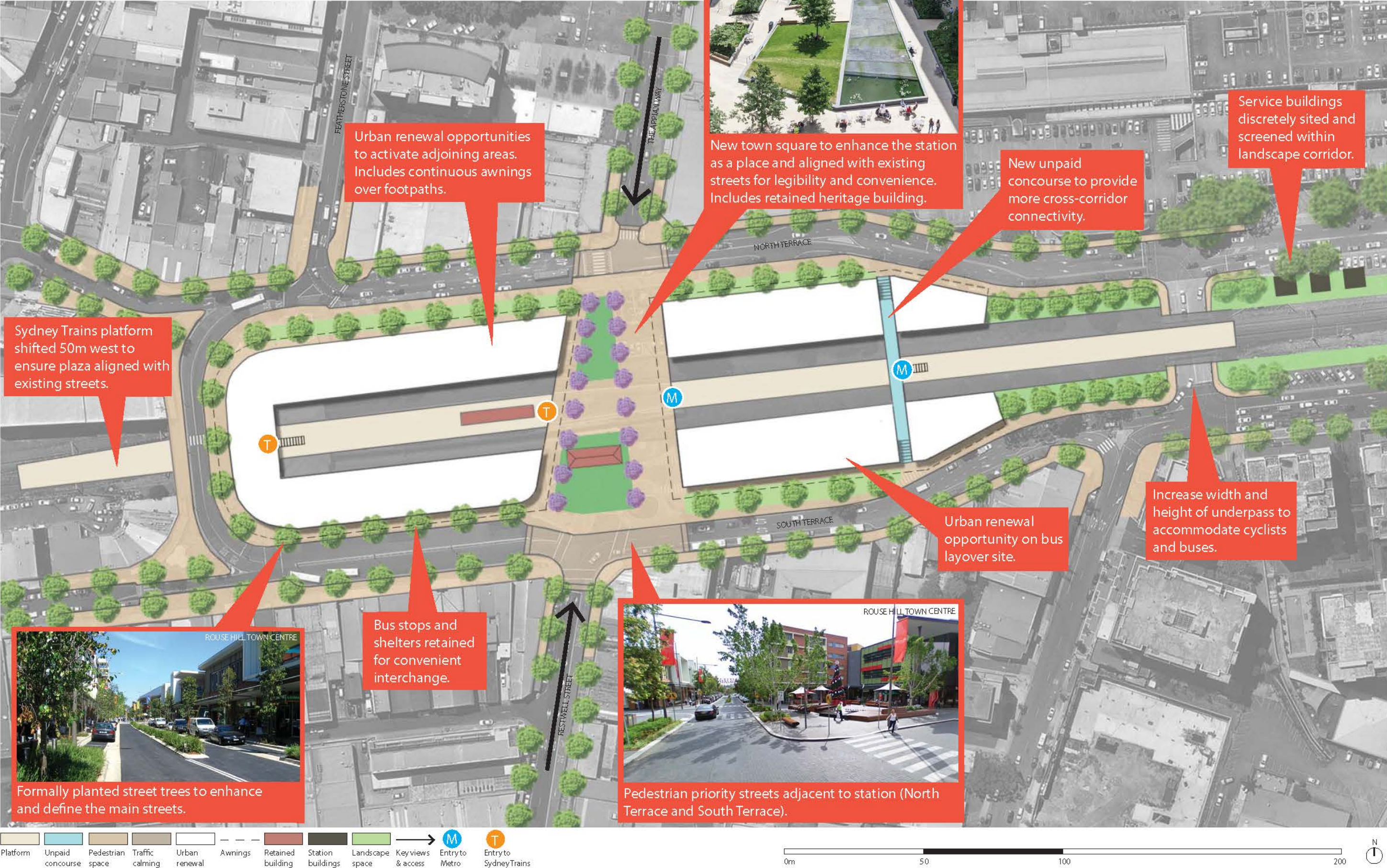
This section provides two maps showing opportunities for Bankstown Station if it were to be constructed underground, which is Council's preference, and if retained above ground configuration.

Following the maps are tables describing the opportunities in detail and the relevant *Better Placed* principles they address.

Figure 2 Key opportunities and gaps – Bankstown Station Underground Scenario



Figure 3 Key opportunities and gaps – Bankstown Station Above Ground Scenario





3.1 Bankstown Station Key Opportunities & Gaps

“Better Placed” framework principle

Better value
creating and adding
value.

Bankstown Station opportunities and gaps

Transformation not transportation

If the delivery of Metro is to be truly transformative and act as a catalyst for meaningful urban renewal - as is claimed - then the Bankstown town centre is the standout opportunity for urban renewal along the Sydenham to Bankstown corridor. It is an opportunity for over station development and ‘value capture’ by the project. Undergrounding the Metro station is critical to delivering on the NSW Government’s vision.

At a minimum, the economic potential of unlocked land resources at Bankstown should be assessed considering the increasing strategic importance of the centre (i.e. university campus and hospital now to be added to the major retail and commercial functions of the centre).

Bankstown is a key Sydney metropolitan centre and home to a broad range of government agencies/organisations, colleges and training facilities, hospitals and local, national and international businesses and corporation. Many of these businesses are knowledge-based and the enhanced rail service (and investment) will strengthen the region's potential to attract higher technology-based employers and workforce.

Key opportunities that would be delivered by an undergrounding solution would be:

- » Increased connectivity across the entire centre assisting to further consolidate the commercial, education and health functions of the centre (as outlined in the recent DRAFT Greater Sydney Regional Plan, October 2107).
- » Enable effective street alignment and continuous pathways across the rail line.
- » Unlocking development in the rail corridor and surrounding land (estimated at 6 ha).
- » Provide linear park opportunities and increased public realm.
- » Effectively link important cultural items such as the Bankstown Arts Centre and Bankstown Library and Knowledge Centre.
- » Resolve the issue of over 1.5km where there are no crossing points between Punchbowl and Bankstown.

Council estimates this would unlock substantial commercial and residential development opportunities at the heart of the CBD, strengthening its position as a strategic centre.

Key actions

Key action: *Further investigate the economic opportunities associated with undergrounding Bankstown Station.*

Key action: *Planning must be undertaken now to deliver the connections to Parramatta, Kogarah and Liverpool as outlined in the DRAFT Future Transport Strategy 2056 released October 2017.*



Better for community inclusive, connected and diverse

Connectivity in Bankstown (above ground scenario)

At a minimum in an above ground configuration, an unpaid concourse should create a legible connection from The Appian Way north of the Metro to Restwell Street south of the corridor. An option may be to shorten (due to shorter trains travelling west), or extend the train platform to the west but this is not discussed in the EIS. However, Council firmly assert this new connectivity point must be delivered as a public space. Illustrations of these concepts are provided in Figure 2 and 3.

Similarly, there is no discussion in the EIS as to why the gap between the Metro and Sydney Trains platforms (i.e. the pedestrian link) needs to be in the location identified. There was no discussion in the EIS regarding other alternatives explored. There is also no discussion about cross-pedestrian conflicts (north-south) versus east-west at this location and the potential need for a separated north-south facility for 'through movements'.

Council also assert that the current plan for Bankstown Station has the northern entry at a known localised flood zone (discussed further below).

Underpass upgrade

Rail infrastructure regularly creates a significant physical barrier within urban areas. In Bankstown these issues are perpetuated through the proposed upgrade of existing infrastructure. Opportunities to improve connectivity across the rail alignment are valuable and must be exploited. The proposed upgrade of the North/South Terrace underpass does not include pedestrian or cycle paths. Given that it is approximately 2km to the next eastern cross corridor crossing, this is a sub-standard outcome.

Key actions: Review undergrounding of Bankstown Station as above, or as an absolute minimum increase connectivity through aligning concourse between The Appian Way and Restwell Street and upgrade the underpass east of the station to include cycling and pedestrian facilities.

Please refer to illustration at Figure 2.

Better fit contextual, local and of its place

Context and place

There is a significant opportunity to coordinate station design with Council-owned land and private land to deliver a catalyst for broader centre development. This will ensure Bankstown delivers a cohesive urban outcome that promotes economic growth and enhances its education and health function. Instead, the lowest cost options for station entry/egress have been adopted which appear to limit land potential for well-integrated development.

Key action: Provide effective master planning to co-ordinate opportunities for Council-owned land with the Metro proposal to act as a catalyst for renewal in Bankstown.



Better performance
sustainable,
adaptable and
durable

Legibility

Improved legibility must be achieved if an above ground station configuration is developed. The EIS proposes a convoluted station entry that is hidden behind a bus layover on the southern side (with noise and fumes) and behind a blank wall on the northern side. Despite providing free access across the rail corridor there is no visual connectivity to assist with wayfinding. It is not a logical layout.

Weather protection

To promote public transit usage, weather protection must be provided the full length of platforms and outside stations to other modes of public transport and major attractors in the centre.

Connectivity

Section 7.2.4 of the EIS states that the project design has maintained the existing level of cross-corridor access, and has identified opportunities to upgrade access, but the design response is insufficient.

Key actions: *Ensure optimised legibility, connectivity and weather protection to ensure maximised patronage of the Metro.*

Please refer to illustration Opportunities for Bankstown (above ground scenario) at Figure 2.

Better for people
safe, comfortable and
liveable

Flood risk

Currently, the north Metro Station entry/egress is located at a position that experiences localised flooding. The EIS does not address this issue at all stating that the existing flooding conditions are minor (Section 3.6.4, Technical Paper 8) which is a significant omission on behalf of the TfNSW's team assessing hydrology/hydraulics.

The Salt Pan Creek Stormwater Catchment Study identifies the area at the station entrance and northern car park as being of medium flood risk but no flood mitigation measures are discussed. This is not justifiable. This issue is critical as it relates to the safety of users and as such fully compromises feasibility of the proposed station entry location. Undergrounding the station would assist to resolve these issues by alleviating wider regional flooding associated with the inadequacy of the culvert. At a minimum safe use of the station entry/egress must be resolved.

An opportunity to embellish the drainage network through landscaping / extensive planting could be achieved with a more robust approach. At an absolute minimum, the Metro must allow for upgrading of culverts in the future.

Key actions: *Incorporate flood impacts in the economic assessment of undergrounding Bankstown Station. At a minimum, re-evaluate the northern station entrance in terms of localised flooding.*



Better working functional, efficient and fit for purpose

Intermodal efficiency

The planning for Bankstown Station does not efficiently promote intermodal transit. Without an underground solution, the bus layover should not adjoin the station entry/egress. Relocating the bus layover to outside the CBD is a critical issue from both an efficiency of intermodal public transit and efficient use of land. TfNSW has previously identified this, but this has not been incorporated into the EIS.

Active Transport Corridor / Linear Park

The active transport corridor (ATC) / linear park must be resolved. At present, the EIS does not consider at all what would occur with the active transport corridor west of the station.

The EIS needs to address at least tentative integration of the proposed ATC into the existing cycling networks to the north and west of Bankstown Station. The current cycling corridor towards Fairfield and Parramatta goes along Glassop St with a link along the railway corridor west of the station and over the Marion St overpass to Weigand Ave being a preferred option.

Similarly, the location of cycling facilities does not support the recommended transport hierarchy, nor is the typology of facilities clear.

Key actions: *Review the transport hierarchy proposed at Bankstown, especially the bus layover location and resolve the active transport corridor.*

Better look and feel engaging, inviting and attractive

Master planning

The expanded station footprint and changed movement patterns will trigger potential decline in commuter/pedestrian related commerce in the western region of the CBD and fuel service and retail based business growth in districts that are currently predominately residential based or a shopping complex. It is expected a significant level of growth will be absorbed by the established shopping complex facility.

Master planning should be undertaken to protect existing high street functions and make new movement pattern streetscapes inviting and engaging. A changed flow of pedestrian and commuters will require an upgrade of wayfinding signage across the town centre to strengthen links with the centre's other attractors.

Key actions: *Review Council's initial urban design response to align EIS proposal to protect existing high streets and promote the renewal of other areas.*



4. Punchbowl Station



Punchbowl Station mural, Mayor Khal Asfour, Mural Artist and students of Punchbowl Boys High School. (Canterbury Bankstown Council)

Station planning at Punchbowl can better integrate with the existing movement patterns and new connections to support renewal. Opportunities to better integrate station entries with the centre will deliver a more cohesive result.

This section provides two maps showing opportunities for Punchbowl Station. One map shows an undergrounded Metro line (Figure 4), which is Council's preference, and the other map shows preferred improvements if the Metro is retained above ground (Figure 5). Following the maps are tables describing the opportunities in detail and the relevant *Better Placed* principles they address.

PUNCHBOWL BOYS HIGH SCHOOL

Expanded school oval or linear park.

South Terrace realigned to The Boulevard for better traffic flow.

New urban plaza linking the underground station entry to The Boulevard and Warren Reserve.

WARREN RESERVE

Urban renewal over rail line with active retail edges fronting streets and open spaces.

THE BOULEVARD

New connections over rail line to disperse traffic.

New parks.

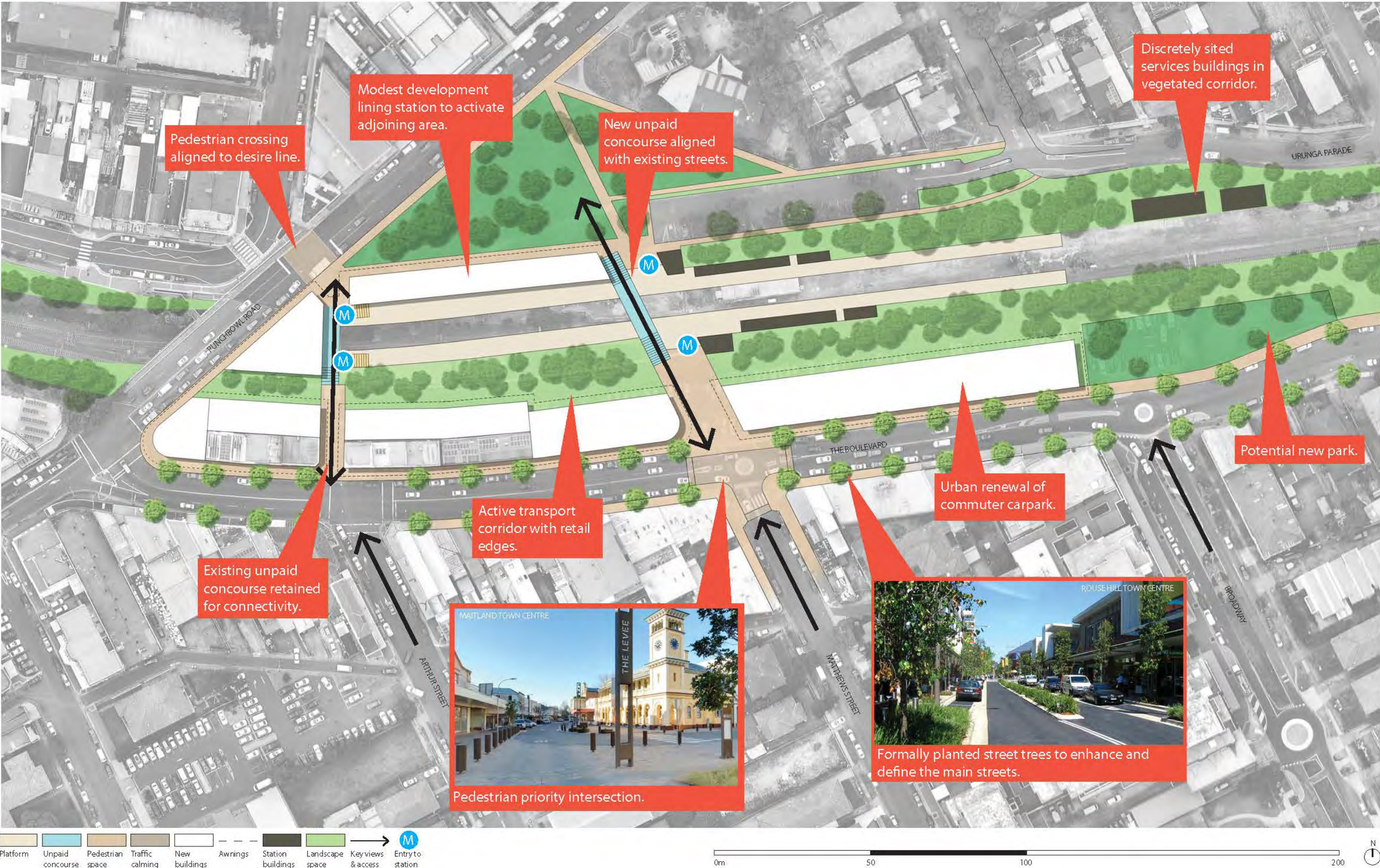
BRIDGEMAN AVENUE

THE BOULEVARD

MATTHEWS STREET

BROADWAY

Figure 5 Key opportunities and gaps –
Punchbowl Station above ground





4.1 Punchbowl Station – Key Opportunities and Gaps

“Better Placed” framework principle

Better performance
sustainable, adaptable
and durable

Better for community
inclusive, connected
and diverse

Better fit
contextual, local and of
its place

Punchbowl Station key opportunities and gaps

Better connectivity - New concourse alignment relocated to align with Matthews Street to Punchbowl Road

Considering the significant connectivity issues at Punchbowl, analysis of the potential advantages of undergrounding the station should be undertaken. At a minimum, consideration of a better alignment of the new concourse between Matthews Street and Punchbowl Road should be carefully examined.

This alignment would have the following advantages:

- » Provides better connectivity to the central spine of intensive urban renewal south of the line.
- » Provides excellent connectivity for redevelopment opportunities for the car park areas south of the line.
- » Connects all key areas north of the line identified for more intensive development under the Sydenham to Bankstown Urban Renewal Corridor Strategy.
- » Connects the Metro with bus stop locations for more efficient interchange.
- » The connection will allow a better resolution between the active transport network and the Punchbowl Road/The Boulevarde intersection. At present, due to the tightening of the corridor there would be significant conflict between the active transport corridor and commuters entering and exiting the station.

This needs to be delivered as unpaid concourse connection with pedestrian and cycling capability.

Retain station entry in addition to new concourse

The overall plan for Punchbowl, in Council’s opinion, creates greater disconnectivity. The EIS proposes the demolition of the existing station entry and station buildings on Punchbowl Road as a result of straightening the existing platforms. The proposed new station entry is located further east addressing an existing park to the north and a proposed new station plaza to the south. The southern station plaza appears to be relatively isolated from the existing town centre, is over-scaled and lacks sufficient retail or other activation to create safe, amenable new public space.

There appears to be no effort made to integrate the station with its surrounds in a meaningful and functional way. Positioning the station entry in the middle of the park presents a safety and surveillance issue at night, and is likely to result in tree loss to create a more open landscape.

Key actions

Key action: *Analyse the connectivity advantages of undergrounding the Metro inclusive of Punchbowl and Bankstown stations.*

Key action: *At a minimum, the design of the new concourse should align Matthews Street to Punchbowl Road. The concourse should offer unpaid access. This should be in addition to retaining the existing entry in a reconfigured. See below.*

Key action: *Retain existing station entry as well as new concourse. Refer to Punchbowl Key Opportunities and Gaps illustrations.*



	<p>The southern entry has been shifted from the main activity area further east next to the carpark which is more isolated from the town centre and away from the naturally active areas. The existing at-grade entry with only one set of stairs will be replaced with an 'up and over' connection with two sets of stairs reducing convenience. The resulting design is less integrated, less convenient and less safe, which is contrary to the design principles of the EIS.</p> <p>The existing station entry must be retained with a connection through to Punchbowl Road.</p>	
<p>Better for people safe, comfortable and liveable</p>	<p>Resolve active transport connections west of the station</p> <p>Very little has been done to address the connections of the active transport corridor west of Punchbowl. In addition, the proposed active transport corridor runs through a widened rear lane that lacks activation, passive surveillance and appears to be over-scaled and unsafe.</p>	<p>Key action: <i>Resolve the activation and passive surveillance of the active transport corridor and unsafe underpasses.</i></p>
<p>Better working functional, efficient and fit for purpose</p>	<p>Retail to address active transport route</p> <p>At present, the rear of shops is the interface with the active transport route on the south side of the line. To increase the quality of this streetscape, retail should be planned to interface with both The Boulevard and the rear active transport corridor. This will significantly improve safety, attractiveness and serviceability for both the active transport corridor and commuters.</p> <p>Low-scale retail to activate and provide surveillance to public park</p> <p>Retail uses could be provided aligned with the Metro to the north of the line to assist with public surveillance and provide commuter services between the two entry points. The underpass under Punchbowl Road is also particularly problematic in terms of safety. A design solution should be sought.</p>	<p>Key action: <i>Move the new concourse entry to minimise conflict between the active transport corridor and the commuter movement.</i></p>
<p>Better value creating and adding value.</p>	<p>Urban renewal opportunities at car parks</p> <p>Car parks south of the line represent a quality urban renewal opportunity effectively interfacing with a road network, an active transport corridor and within easy walking distance to the Metro. This development should be incorporated into the urban design of the station precinct. Both development and new open space resources could be delivered to better serve a community under a growth scenario.</p>	<p>Key action: <i>Provide an integrated approach between urban renewal opportunities (e.g. car parks) and the station design.</i></p>
<p>Better look and feel engaging, inviting and attractive</p>	<p>Discretely site services buildings in vegetated corridors and deliver a holistic urban renewal strategy</p> <p>Punchbowl in the EIS is a particularly unresolved station. The urban design needs a holistic view to ensure it integrates well with future urban development and delivers a much more serviceable and attractive town centre.</p>	<p>Key action: <i>Detailed master planning should be undertaken for each station. However, Council believe that Punchbowl is particularly unresolved and should be a very high priority.</i></p>



5. Wiley Park Station



Wiley Park Station and King Georges Road. Source: Public domain image

Better urban design at Wiley Park Station could significantly improve the amenity for residents and assist in revitalising the retail functions of the centre.

This section provides a map showing opportunities for Wiley Park Station. Following the maps are tables describing the opportunities in detail and the relevant *Better Placed* principles they address.

Figure 6 Key opportunities and gaps - Wiley Park Station





5.1 Wiley Park Station Key Opportunities and Gaps

“Better Placed” framework principle

Better performance
sustainable, adaptable
and durable

Better for people
safe, comfortable and
liveable

Better value
creating and adding
value

Wiley Park Station opportunities

Improved town centre outcomes – a shared way at Stanlea Parade

Economically, Wiley Park Town Centre businesses struggle due to poor parking, lack of foot traffic and poor image. The high-speed limit along King Georges Road adds to the challenges including trucks unloading and conducting business operations.

The impact of traffic volumes along King Georges Road and recently imposed clearway to increase vehicular traffic capacity has had a negative impact on the amenity and patronage of the traditional high street at Wiley Park. The proposed station configuration at King Georges Road is generally supported as it maintains the station presence on the primary local street, and configures retail uses in a manner that offers some protection for customers from traffic noise.

However, this strategy could be further expanded to bring improved amenity and activation to The Boulevarde and Stanlea Parade close to the intersection with King Georges Road. This would offer an opportunity for the existing town centre to expand in a way that was connected but protected from traffic impacts and maintaining a focus on the station entry as an important local element.

Without improved activation on side streets, good amenity for commuters using public transport is not adequately delivered. While the EIS acknowledges that the town centre is struggling, the Metro Plan does not consider options to address this. A re-think of the urban design surrounding this station could significantly improve amenity. Most significantly a pedestrian priority shared way at Stanlea Parade would provide a better outcome in terms of:

- Providing a higher order transport hierarchy such as ‘kiss and ride’/taxi and cycling functions.
- Serviceability of the existing businesses along King Georges Road.
- Delivering a linear green social space.
- Providing further opportunity for retail activation.

Key actions

Key action: *Deliver a quality, well-integrated shared way at Stanlea Parade to improve connectivity to the Metro and support the town centre.*



	<p>Corridor vegetation</p> <p>There is an opportunity to deliver a well-vegetated corridor outcome significantly improving the overall look and feel of the centre which is significantly impacted by the busy King Georges Road between Punchbowl Road and Canterbury Road..</p>	<p>Key Action: <i>Deliver a vegetated corridor</i></p>
<p>Better working functional, efficient and fit for purpose</p> <p>Better fit contextual, local and of its place</p>	<p>Improve connectivity - Additional crossing at the alignment of Shadforth Street and The Boulevard</p> <p>An additional overpass at Shadforth Street would significantly enhance amenity at Wiley Park Station. King Georges Road is a significant State road, providing low streetscape and amenity value. Dual station entries would provide significantly greater accessibility and amenity for residents. This is particularly vital considering the schools that are located to the south of the line.</p> <p>The additional overpass could provide improved densification outcomes for land west of the station that are less constrained by existing strata title. It would also considerably improve connectivity of development to the southwest of the train station, increasing patronage to support the town centre.</p> <p>This would also enable another ‘kiss and ride” location (a high mode share for this station) to service development to the south of the corridor. At present, the location of bicycle storage is not conducive to promoting this form of active transport considering their relative position to station entry. The additional entryway, and shareway, combined with the additional station entry would make this more cohesive.</p> <p>If an extra north/south connection is not delivered, these cycling facilities should be moved closer to the station entry.</p>	<p>Key action: <i>Deliver an additional corridor crossing at the alignment of Shadforth Street.</i></p> <p>Key action: <i>Without the above action, the transport hierarchy needs to be re-assessed.</i></p>
<p>Better look and feel engaging, inviting and attractive</p>	<p>Discretely position services buildings in the vegetated corridor</p> <p>Currently services buildings are positioned at the south-west corner of the station precinct and appear to be of a relatively intrusive nature on the streetscape. The services building should be positioned more discretely in the vegetated rail corridor.</p>	<p>Key action: <i>Reposition services building to be more discrete within vegetation in the transport corridor.</i></p>



6. Lakemba Station



Haldon Street Festival. Source: Canterbury Bankstown Council

Lakemba is both an origin and destination station. The centre features rich cultural heritage and events that draw large crowds and draws significant patronage to the night-time economy from along the line.

This section provides two options for Lakemba Station. Option 1 provides opportunities around a central plaza across the railway at Haldon Street. Option 2 considers a larger plaza and additional opportunities for mixed use development. Following the maps are tables describing the opportunities in detail and the relevant *Better Placed* principles they address.

Figure 7 Key opportunities and gaps - Lakemba Station (Option 1)



Figure 8 Key opportunities and gaps - Lakemba Station (Option 2)





6.1 Lakemba Station – Key Opportunities and Gaps

“Better Placed” framework principle

Better look and feel
engaging,
inviting and attractive

Better for community
inclusive, connected
and diverse

Better fit
contextual, local and of
its place

Better value
creating and adding
value

Lakemba Station key opportunities and gaps

Lakemba as a destination station - New town square and pedestrian priority from The Boulevarde to Railway Parade

In the Sydenham to Bankstown Urban Renewal Corridor Strategy, overstation public space is envisaged at Lakemba Station (refer to Figure 17 in documentation accompanying the strategy 1). Lakemba is both an origin and destination station. The centre features rich cultural heritage and events that draw large crowds and draws significant patronage to the night-time economy from along the line. Both sides of the railway station have important social and cultural functions (e.g. Ramadan for the north side and Anzac Day ceremonies at the War Memorial park). Combined with another identified requirement of widening the Haldon Street overpass (see below), there is an important opportunity to better link these two spaces and create a more cohesive town square function at the station.

With approximately 3,000 dwellings expected in Lakemba by 2036, improved and integrated public spaces, as well as improving the active transport access around the centre, should be a priority. Haldon Street forms the central spine of the proposed urban renewal under the Sydenham to Bankstown Urban Renewal Corridor Strategy.

Logical additional connections to the rail platform could also be delivered as part of this strategy. Council does not propose an over-scaled plaza, but rather one that can better accommodate community cultural events.

The proposed northern station plaza at Lakemba is over-scaled and lacks the critical mass to create an active, safe public space of meaningful utility. It is also unclear if significant existing trees are proposed to be retained. Critically, for cultural events, the gradient does not work well.

Key actions

Key action: Investigate the delivery of a cohesive over Metro line town square as per the Corridor Strategy.

Key action: Change the concourse arrangement to ensure access across the line.

Key Action: As a minimum, provide further details on the exact nature of the impact on the park and war memorial and minimise impact if an effective town square is not developed.

¹ DPE Lakemba Station Precinct Sydenham to Bankstown Urban Renewal Corridor Strategy – Fine Grain Public Domain Station Integration Strategy, as viewed at <http://www.planning.nsw.gov.au/~media/Files/DPE/Reports/fine-grain-public-domain-station-integration-study-lakemba-2017-04.ashx>



	<p>Reduction of park size and relocation of the War Memorial</p> <p>The EIS proposes to relocate the Lakemba War Memorial east to the south Metro entry and reduce the size of the park. Council assumes that this is a result of the requirement for a straightened track alignment at the station but it is not adequately explained in the EIS.</p> <p>This important cultural landmark and park are well utilised both on a daily basis. For Anzac Day ceremonies, the park is well over capacity. It is not clear from the EIS the impact of the Metro project on the War Memorial or park capacity.</p> <p>Maintain an unpaid concourse to maximise permeability</p> <p>A paid concourse is proposed and will decrease permeability across the rail line at the current concourse location. This should be avoided.</p>	
<p>Better performance sustainable, adaptable and durable</p>	<p>Avoidance of tree removal</p> <p>The EIS proposes to remove large trees on the northern side of the rail line at the end of Croyden St in order to provide a large wide paved space. It is unclear why such a large paved area is required at this location and subsequent impact on tree loss. As previously outlined, the location and gradient of this paved space does not make it particularly suitable for cultural events.</p>	<p>Key action: <i>The design should be reviewed to minimise tree loss.</i></p>
<p>Better for people safe, comfortable and liveable</p> <p>Better working functional, efficient and fit for purpose</p>	<p>Safety - Widened footpath on both Haldon Street overpass and on Railway Parade underpass and deliver cycling connection</p> <p>Suitable lighting for day and night time safety should be implemented among other CPTED responses. However, the EIS does not contemplate either.</p>	<p>Key action: <i>Investigate widening Haldon Street overpass and Railway Parade underpass to better accommodate active transport modes (at a minimum without the new town square).</i></p>



7. Belmore Station



Burwood Road Bulldogs Café. Source: Public domain image.

There is an opportunity to integrate the heritage elements of the centre and retain activity on Burwood Road.

This section provides a map showing opportunities for Belmore Station. Following the maps are tables describing the opportunities in detail and the relevant *Better Placed* principles they address.

Figure 9 Key opportunities and gaps - Belmore Station





7.1 Belmore Station Key Opportunities & Gaps

“Better Placed” framework principle

Belmore Station opportunities

Key actions

Better fit

contextual, local and of
its place

Better for community
inclusive, connected
and diverse

Retain existing station entry in addition to new entry

The station entry should be convenient, highly visible on the main street and integrated with the town centre to ensure existing movement patterns are supported as well as new ones as a result of new entries.

The closure of the existing entry will create an inactive edge on Burwood Road. The existing entry should be retained, given that the heritage building is being retained. The new entry shifts the activity away from the existing main street and is behind a carpark (poor visibility and safety at night).

Council recognise that the additional entry may be required for compliance purposes but can see no reason why the original cannot be retained.

Isolating heritage items

The EIS not only proposes to retain but abandon the current station building which is heritage listed, it also leaves heritage items surrounding it unresolved regarding their use or integration with the surrounding urban fabric. Council request a more integrated strategy.

Key action: *Retain the existing station in addition to new entries.*

Re-imagine the use of heritage buildings.

Better for people

safe, comfortable and
liveable

Better performance
sustainable, adaptable
and durable

Overbridge/concourse location

The size and lack of activity and passive surveillance in the new proposed plaza/station entry raises safety concerns, particularly at night. The plaza should be redesigned.

The overbridge should be free to use with the paid area beginning at the stairs/ lifts to maximise permeability at all centre locations.

Council recommends a smaller scale entry point and connectivity bridge be delivered aligning with Acacia Street and the Council owned building and development opportunities north of the line. This, combined with the retention of the existing station entry, will ensure alignment with higher density development outlined in the Sydenham to Bankstown Corridor Strategy south-east and north-east of the current station, and maintain a convenient entry point for the intensive development proposed east of the current rail station entry. It will support the events at Belmore Oval.

Resolve safety issues

Basic requirements such as a pedestrian crossing linking current and substantial future residential development north of the site are not provided.

Key action: *Re-examine the concourse location.*

Key action: *Resolve CPTED concerns.*



	<p>Provide the same level of pedestrian accessibility to the north-western side of the station and Burwood Road as currently exists. The proposal requires all pedestrians to use the new signalised intersection of Bridge Road / Burwood Road, which is an excessively long diversion to access the platform. There is also a connecting bus stop in Burwood Road northbound, north of the station which has no pedestrian crossing to the station.</p>	
<p>Better working functional, efficient and fit for purpose</p>	<p>Transport hierarchy improvements</p> <p>Resolution of the transport hierarchy at the station should include:</p> <ul style="list-style-type: none"> ➤ Increasing the size of the 'Kiss-and-Ride' north of the station. ➤ The retained and proposed bus stops are at considerable distance from the proposed station entries. ➤ Disabled parking is at a considerable distance from the station entry. ➤ Rethink the primary importance given to vehicle parking rather than the above transport modes. 	<p>Key action: <i>Resolve the transport hierarchy in the station precinct.</i></p>
<p>Better value creating and adding value.</p>	<p>Mismatch with the Sydenham to Bankstown Corridor Strategy and retention of car parking sites</p> <p>The Belmore precinct plan in the strategy proposes over station development and high-density development around the station. Council believes there are significant mismatches between the proposed station configuration and the EIS.</p> <p>The current station configuration has the potential to sterilise some of the outcomes of the Sydenham to Bankstown strategy, devaluing the economic return from the Metro Southwest. For example, no investigation has been undertaken into the development of car parks and council-owned buildings and how this might relate to the station entries and infrastructure. With densification planned around the station in the Corridor Strategy, it is inappropriate to leave large expanses of strategically located land for low value, inactive uses such as parking. Future redevelopment will have a major impact on the precinct and the station design needs to be coordinated with this, at least by identifying future development sites and designing the station to integrate and maximise these opportunities.</p>	<p>Key action: <i>Master planning exercises should be undertaken for each station location. Belmore is an imperative as there are significant opportunities not considered and the plan could detract from the town centre.</i></p>
<p>Better look and feel engaging, inviting and attractive</p>	<p>Over-scaled public spaces</p> <p>The proposed southern station plaza at Belmore is over-scaled, disconnected and lacks the critical mass to create an active, safe public space of meaningful utility. It is also unclear if significant existing trees are proposed to be retained. The plaza will also likely have a lack of passive surveillance issues. A more resolved plan must be prepared for these plazas and the metro connections generally.</p>	<p>Key action: <i>Deliver a more cohesive public space network that is safe and serviceable.</i></p>



8. Campsie Station



Campsie Food Festival, Beamish Street. Source: Canterbury Bankstown Council

Campsie is one of the stations on the Metro line set to attract the most intensive renewal. A more cohesive movement and access plan must be developed to enhance the connectivity and protect the vibrancy of this lively centre. There is an outstanding opportunity to enhance the movement system, integrating the station, Anzac Mall and Anzac Square.

This section provides a map showing opportunities for Campsie Station. Following the maps are tables describing the opportunities in detail and the relevant *Better Placed* principles they address.

Figure 10 Key opportunities and gaps – Campsie Station





8.1 Campsie Station Key Opportunities & Gaps

“Better Placed” framework principle

Campsie Station key opportunities

Key Actions

Better fit

contextual, local and of
its place

Better performance

sustainable, adaptable
and durable

Better for community

inclusive, connected
and diverse

Better value

creating and adding
value

Additional overpass on the alignment of Dewar Street and Asset Street - Improve connectivity across the centre particularly with Anzac Square and Mall

Delivering an additional pedestrian overbridge in the alignment of Asset Street to Dewar Street will provide significantly increased permeability across the centre. This is particularly vital as this centre is experiencing and will continue to experience significant growth.

The additional overpass will provide excellent integration of the key social and economic heart of the centre with Campsie Station. Under the Sydenham to Bankstown Urban Renewal Corridor Strategy, significant high and medium rise housing is being planned for the northern side of the rail corridor. This additional overpass will provide much more integration with this densification of development. This should be delivered with unpaid access for connectivity.

Consider an improved bus interchange system

Consideration should be given to better utilising the overstation development area to the east of the existing station. While this would require a redesign process, this location provides an ideal opportunity to develop a better transport interchange for Campsie.

Unlock significant development opportunity

An additional overpass will provide an ideal opportunity to deliver a highly integrated redevelopment of Campsie RSL to maximise commercial activation near the station and residential transit-oriented development. It would also better support development further east as the current car park locations and much of the high-density development is further south.

Key action: *Deliver an additional overpass at the alignment of Asset Street and Dewar Street to deliver increased connectivity throughout the centre enabling it to cater to the substantial growth it is and will continue to experience.*

Key action: *Unlock significant development opportunities.*



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Better working

functional,
efficient and fit for purpose

Improve safety and serviceability of Lilian Lane

At present, Lilian Lane is a highly constrained service lane that is proposed to be a shared cycling and pedestrian zone. Currently, the zone services trucks for commercial development and a significant number of cars accessing development and car parking. There is an opportunity to shift the alignment of the fencing along the rail corridor to provide sufficient space for active transport. We believe this is a vital improvement to the serviceability of the centre, in addition to providing the above connectivity to Anzac Square and Mall. The additional overpass (connecting Anzac Square) will also reduce the pressure on Lilian Lane.

Pedestrian priority - Traffic calming on Beamish Street

The EIS is largely silent on the matter of detailed master planning. The scale and configuration of the retail and plaza spaces either side of Beamish Street require detailed investigation to ensure the optimal balance between pedestrian thoroughfare and activation of the high street.

The Campsie bypass (to be funded under Special Infrastructure Contributions) provides an opportunity to deliver a more pedestrian-friendly environment at the current entrance to the station, particularly considering the increased role of bus/Metro interchange to the east of Beamish Street. Priority should be given to pedestrians and crossing Beamish Street with the use of a scramble crossing, with an improved streetscape. Provision for safe cycling lanes should also be provided. The EIS is silent on north-south cycling connectivity in this location and more broadly across the project.

Improve the serviceability for patrons with modest development on the southern side of North Parade

There is scope to provide modest low scale development directly adjoining the rail line along North Parade. This would increase the activation north of the line and provide continuous awning weather protection for patrons.

Key action: *Examine way to improve the serviceability of Lilian Lane considering pedestrian, cycling and current use by commercial buildings. Expand Lilian Lane utilising rail corridor land.*

Key action: *Examine traffic calming and pedestrian priority on Beamish Street outside the retained station entry.*

Key action: *Improve the serviceability through modest development along North Parade.*

Better look and feel
engaging, inviting and attractive

Urban cooling and delivering an attractive landscape

There are considerable opportunities to deliver a more attractive landscape and increase the urban cooling provided by trees and landscape. The car parking to the south-west of the station should be softened by landscaping, as should Beamish Street.

Key Actions: *Further landscaping of the corridor or surrounds should be examined to deliver urban cooling and enhance urban qualities.*



9. Canterbury Station



Canterbury centre high rise development. View from Tasker Park. Source: Canterbury Bankstown Council

The design at Canterbury Station needs to effectively integrate key points of urban renewal, and maintain existing activity and movement systems.

This section provides a map showing opportunities for Canterbury Station. Following the maps are tables describing the opportunities in detail and the relevant *Better Placed* principles they address.

Figure 11 Key opportunities and gaps – Canterbury Station





9.1 Canterbury Station Key Opportunities & Gaps

“Better Placed” framework principle

Canterbury Station key opportunities and gaps

Key actions

Better fit:
contextual, local and of
its place

Connectivity - Retain existing entry in addition to new concourse

The station entry should be convenient, highly visible on the main street and integrated with the town centre offering continued support to existing patterns of movement. The EIS proposes the closure of this station entry. Considering the level of development that will occur surrounding Canterbury Station, with the more westerly concourse servicing that development, the existing concourse should be retained as well as the new concourse. Council recognise that the new entry is required for compliance reasons as well as servicing new development, particularly at Canterbury Racecourse.

The existing station entry contains a number of landmark buildings. The retention of the entry to keep this important activity centre economically viable is essential.

Key action: Retain the existing entry to Canterbury Station in addition to the new concourse.

Better performance
sustainable, adaptable
and durable

Improve the alignment of the new concourse and deliver unpaid access

A direct pedestrian connection, on the alignment of Roberts Street, through an unpaid concourse has the potential to better connect the Canterbury town centre. In its current proposed configuration, the proposed concourse misses the alignment of Roberts Street and is for paid customers only, thereby not improving permeability and connectivity in the Canterbury town centre.

Connectivity – build the new Charles Street entry now

The majority of the residential catchment growth for this station is in the Charles Street catchment and there are clear benefits in building the Charles Street entry as part of the project, also considering that it would provide direct access from the proposed active transport corridor and a logical connection with the Cooks River cycleway. There is insufficient information in the EIS to determine why this important linkage is not included in the Metro Southwest project scope.

Key action: Align the new concourse with Roberts Street.

Key action: Deliver the Charles Street entry concurrently with the project.

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and diverse

Better for people
safe, comfortable and
liveable



Better working
functional,
efficient and fit for
purpose

Better look and feel
engaging,
inviting and attractive

Better value
creating and adding
value.

Enhance movement considering urban renewal

The design of new station buildings addressing Broughton Street, configured around an area of pavement appears unresolved and piecemeal in its approach. The triangle of land bounded by Broughton, Roberts and Jeffrey Streets presents a significant urban renewal opportunity and as such the design of Canterbury Station should anticipate and accommodate likely urban renewal projects currently being planned in the immediate station vicinity. There is little acknowledgement of integration with urban renewal sites in the EIS. The EIS should include access scenarios and improved linkages for renewal sites along Broughton Street to the north of the proposed station concourse. An unpaid concourse would provide a quality linkage to both the Metro, development south of the line, the Cooks River and two active transport linkages (that proposed in the EIS and the Cooks River cycleway).

Key action: *Resolve the interface between urban renewal opportunities, public realm the transport corridor and active transport corridor.*

Utilisation of rail corridor land

The EIS states any residual land not required for the operation of the project would potentially be available for redevelopment. Where residual land is available, Transport for NSW would review the opportunities for any possible future uses. The Design Guidelines and station design principles reiterate the need to design stations as 'places' integrated with the surrounding area, and to create integrated door-to-door journeys. This is not achieved.

The EIS looks only at providing Metro infrastructure and is not well integrated with the existing and planned future urban form of the surrounding town centre. The lack of integration between transport and urban design is unacceptable, particularly for such a major project and large capital expenditure.

Key action: *The urban design should reflect corridor development opportunities to optimise future outcomes.*



10. Hurlstone Park Station



Crinan Street, Hurlstone Park. Source: Canterbury Bankstown Council

Hurlstone Park has a highly cohesive high street and a genuine heritage presence. The station design should work to enhance high street functionality, deliver excellence in the transport hierarchy to promote active transport modes and improve safety and serviceability of the locality for the community.

This section provides a map showing opportunities for Hurlstone Park Station. Following the maps are tables describing the opportunities in detail and the relevant *Better Placed* principles they address.

Figure 12 Key opportunities and gaps - Hurlstone Park Station





10.1 Hurlstone Park Station Opportunities & Key Gaps

“Better Placed” framework principle

Hurlstone Park Station opportunities and gaps

Key actions

<p>Better for community inclusive, connected and diverse</p>	<p>Pedestrian priority and activating retail uses across Crinan Street</p> <p>Hurlstone Park’s well-formed high street needs to be protected and further supported. To ensure the on-going economic vitality of the centre, further work should be done to strengthen the pedestrian linkage and commercial activity between it and the Metro station.</p> <p>Investigate low-rise development lining the northern side of the corridor, as well as a shared arrangement for Floss Street promoting connection between the station and the high street, should be a priority.</p>	<p>Key action: <i>Deliver a shared way arrangement for Floss Street to more effectively link with retail function on Crinan Street. Modest retail could reinforce the function of the centre on the northern side of the line.</i></p>
<p>Better fit contextual, local and of its place</p>	<p>Heritage Loss</p> <p>Hurlstone Park is flanked by two Heritage Conservation Areas and the station itself is listed to be added to the State Heritage Register. While the EIS acknowledges the detrimental impact on the heritage significance of the locality, the validity of removal of these buildings to straighten this line is inadequately justified in the EIS. While Council understands that the platform must be straightened for the Metro, an investigation of alternative options must be provided.</p> <p>The EIS is silent on the significance and draft heritage status of the draft Floss St Heritage Conservation Area and Crinan St Shops Heritage Conservation Area & Station Masters Residence.</p>	<p>Key action: <i>Retain the pair of heritage listed station buildings.</i></p>
<p>Better performance sustainable, adaptable and durable</p>	<p>Flooding issues</p> <p>Significant flood issues affect areas north of the corridor at Hurlstone Park. The EIS has very little information on flooding for all stations west of Marrickville. No 2D flood analysis was undertaken with the exception of Marrickville and should be undertaken for the entire project. It is essential that further investigation into flooding be undertaken at Hurlstone Park.</p>	<p>Key action: <i>2D flood modelling should be conducted for the entire project. At a minimum, further investigation should be undertaken at Hurlstone Park.</i></p>



<p>Better for people safe, comfortable and liveable</p>	<p>Widen Foord Avenue underpass to accommodate pedestrians and cyclists</p> <p>Widening this underpass to accommodate pedestrians and cyclists, like all connection points across the corridor, is essential. This will not only provide safe connection to the active transport corridor / linear park associated with the Metro, it can also connect to the Cooks River cycle path. Safe north-south connections must be delivered with the Metro. These works are nearly impossible and far more costly to achieve when the transport corridor is operational.</p>	<p>Key Action: <i>Deliver a pedestrian priority environment at Crinan Street outside the station.</i></p> <p>Key Action: <i>Widen the Foord Avenue underpass to accommodate pedestrians and cyclists.</i></p>
<p>Better working functional, efficient and fit for purpose</p>	<p>Transport hierarchy re-assessed</p> <p>The Hurlstone Park plan features bicycle parking facilities at the furthest point of the station precinct. The transport hierarchy should be re-assessed.</p> <p>Similarly, the EIS does not consider an integrated streetscape or transport improvement of the overbridge such as cycle lanes, street trees, lane widths etc despite being immediately outside the station and an important cross-corridor connection.</p>	<p>Key action: <i>Reassess the transport hierarchy at the station and improve for active transport modes.</i></p>
<p>Better value creating and adding value.</p>	<p>Urban Renewal – Master planning should identify underutilised sites</p> <p>The EIS does not propose any redevelopment in the rail corridor. The EIS states any residual land not required for the operation of the project would potentially be available for redevelopment. Where residual land is available, Transport for NSW would review the opportunities for any possible future uses. The Design Guidelines and station design principles reiterate the need to design stations as 'places' integrated with the surrounding area and maximised access to public transport. This is not achieved.</p>	<p>Key Action: <i>There are some quality development opportunities near Hurlstone Park Station that should be identified and planned for to ensure good integration with the station.</i></p>
<p>Better look and feel engaging, inviting and attractive</p>	<p>Discretely position services buildings</p> <p>Services buildings should be more discretely positioned within landscaping on the southern side of the line.</p>	<p>Key Action: <i>Reconsider position of services building.</i></p>



Metro Southwest EIS Submission Report Part 3: Technical Review

Endorsed by Council 28 November 2017





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1. Technical Review

Council's submission is comprised of three reports which together form our position on the Metro project and the opportunities to create better places:

Part 1 - Sydenham to Bankstown Metro: Key Issues and Opportunities

Part 2 - Creating Better Places: Opportunities for our Metro Centres

Part 3 - Technical Review

This is **Submission Report - Part 3: Technical Review** which contains detailed tables for the corridor and each centre documenting all impacts in relation to urban design, traffic and transport, biodiversity, flooding and hydrology, noise and vibration, economic and social impacts, construction impacts, heritage, land use, sustainability, waste and consultation.

The Technical Review has been developed through a partnership between subject matter experts within Council and Elton consultant team which included sub-consultants in planning, urban design traffic, and noise and vibration. Feedback from workshops was collated to form the basis for the review. Where possible, references in the EIS and an indication of the relevant Secretary's Environment Assessment Requirement (SEAR) has been provided.





2. Corridor-wide Issues

The corridor-wide issues identified by the subject matter experts are provided in the tables below.

Issue	Opportunity/ issue	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
1	Location of new connections - distance from town centres	<ul style="list-style-type: none"> Clearly justify the reasoning for relocating pedestrian entry points and provide a more comprehensive impact assessment of the patronage reduction effects of longer walk links for most access mode connections. Review the suitability of existing cross corridor connections for all transport modes and identify where new cross-corridor connections are needed. Include any required upgrades/ new connections as part of the Metro construction. The EIS should examine corridor-wide opportunities to improve cross-corridor permeability for pedestrians, cyclists and other vehicles. 	<ul style="list-style-type: none"> Station entry points are retained in the current locations for as many stations as possible. Ensure all existing connections are upgraded to be wide enough for pedestrians and cyclists and construct new connections where there is more than 400m between connections. Upgraded rail infrastructure that improves local permeability across the corridor at approximately every 400m. 	<ul style="list-style-type: none"> Impact mitigation strategies are provided to manage the impacts of station access locations being shifted. Ensure all existing connections are upgraded to be wide enough for pedestrians and cyclists. A well-considered plan for the future implementation of new underpasses and over bridges that improve local permeability across the corridor at approximately every 400m. 	7.2.4, 8.1.3, 11.4.3	14.2.e. minimising barriers across the rail corridor 14.1-14.4
2	Weather protection from platform to town centre	EIS to investigate awnings on all platforms, as well as all station entries and linkages to adjoining areas.	Continuous weather protection provided from the platform to the town centre	Predominantly continuous weather protection provided from the platform to the town centre	Chapter 8 – Station Designs	14 (1)



Issue	Opportunity/ issue	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
3	Active transport corridor - concurrently built and funded with project	<ul style="list-style-type: none"> The EIS should include construction of the full active transport corridor from Bankstown - Sydenham. The EIS should examine a whole-of corridor active transport corridor strategy, with a detailed, resolved alignment able to be implemented on both the northern and southern sides of the rail corridor, with regular opportunities to cross the corridor from north to south approximately every 400m Review plans to include the Active Transport Corridor at this stage of the project Consider including the Active Transport Corridor as part of the definition of the project 	<ul style="list-style-type: none"> Design and construct the entire continuous active transport corridor concurrent with the Metro A fully resolved active transport corridor proposal for both the north and south sides of the rail corridor and allowing for regular connection approximately every 400m from north to south. This proposal should be funded and implemented with the construction of Metro Active Transport Corridor opened for use at the same time as the Metro Including the active transport corridor as part of the project 	<ul style="list-style-type: none"> Design the entire continuous active transport corridor and confirm the relevant department who will manage delivery, identify the source of funding and confirm timeframe for delivery. A fully resolved active transport corridor proposal for both the north and south sides of the rail corridor and allowing for regular connection approximately every 400m from north to south. All components of this proposal, which are situated within the rail corridor, should be funded and implemented with the construction of metro, allowing for the 'missing links' to be implemented progressively after the completion of construction of Metro. Identify the sections of the active transport corridor between stations as high priority active transport projects for early state funding under other programs. 	8.1.4, 11.3.4, 11.4.2	13.2. The EIS must define a transport hierarchy and a framework for an active transport strategy. 14.1-14.4



Issue	Opportunity/ issue	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
4	Station entry closures - economic impacts	<ul style="list-style-type: none"> Recognise and assess the impact of entry closures in Technical Paper 6. Clearly justify the reasoning for relocating pedestrian entry points and provide a more comprehensive impact assessment for the reduction of pass by trade from main streets and the pressures to extend centres outwards down side streets. Strategies to be put in place to keep operators aware of all matters that may impact upon their business. 	<ul style="list-style-type: none"> Station entry points are retained in the current locations for as many stations as possible. Routine consultation with business owners be conducted while construction is underway. 	<ul style="list-style-type: none"> Impact mitigation strategies are provided to manage the impacts of station access locations being shifted. 	Technical Paper 6, EIS Chapter 8 – Station Designs	10 (1) (2)
5	Future proof station undergrounding - stormwater, flooding and hydrology assessments concurrent with project	<ul style="list-style-type: none"> All undersized stormwater drainage lines located below the rail corridor to be upgraded to improve regional flooding across the LGA. The impacts and associated mitigating measures should be identified. 	<ul style="list-style-type: none"> No adverse impacts on regional flooding. Impacts are prevented from occurring by the proposed measures. 	<ul style="list-style-type: none"> Impacts are prevented from occurring by the proposed measures. 	Key Issue #6 - Flooding and Hydrology	6
6	Future connections west - Liverpool, Airport, and further connections through Sydney.	<ul style="list-style-type: none"> Include a discussion on potential extensions further west and what this means for the consideration of undergrounding Bankstown Station now rather than future-proofing as identified in the EIS. 	<ul style="list-style-type: none"> Lower the line through Bankstown Station to future-proof likely future extensions to the west. 	<ul style="list-style-type: none"> Discuss further in the EIS how the metro-standard line could be extended further west 		
7	Ensure a fully integrated plan - investigate stations as precincts (e.g. overstation development) integrated with DPE urban renewal corridor Preserve and maximise development opportunities	<ul style="list-style-type: none"> The station designs should investigate in detail the opportunity for development integrated within surplus rail land and above stations to create a seamless urban environment. The EIS should prepare a compelling, visionary whole-of corridor urban renewal strategy. Additionally, each station precinct needs a credible, well-coordinated master plan to describe the extent, configuration and connectivity of proposed new development and public space, including the articulation of a compelling vision for each local centre. 	<ul style="list-style-type: none"> Development sites identified in the EIS, particularly at Bankstown and infrastructure provided during Metro construction to facilitate development. A compelling corridor vision for the Metro. Along with a series of well-designed, safe and active station precincts that positively define public space connects seamlessly with the existing local centres, improving local connectivity and permeability, providing continuous weather protection and delivering 	<ul style="list-style-type: none"> Investigation into development opportunities within and above the rail corridor. A compelling corridor vision for Metro. Along with a series of well-designed, safe and active station precincts that positively define public space connects seamlessly with the existing local centres, improving local connectivity and permeability, providing continuous weather protection and delivering customers to the existing or new station entries. 	7, 8.1.4	14.1-14.4



Issue	Opportunity/ issue	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
			customers to the existing or new station entries.			
8	Tree losses - Retain all mature trees. Where removal unavoidable replacement with appropriate mature trees at ratio of 3:1	<ul style="list-style-type: none"> Tree management strategy and street tree planting plan needs to be developed with Council, any proposed bio credit offsets should be purchased and retained within the Canterbury Bankstown LGA. 	<ul style="list-style-type: none"> Tree management strategy and street tree planting plan needs to be developed with council, any proposed bio credit offsets should be purchased and retained within the Canterbury Bankstown LGA. 	<ul style="list-style-type: none"> 3:1 tree replacement that achieves visual, landscape and environmental outcomes higher than existing. Biodiversity offsets are purchased and retained within the Canterbury Bankstown LGA 		17
9	Aboriginal heritage investigations	<ul style="list-style-type: none"> EIS team should undertake a review of the Aboriginal heritage plan prior to project commencement. 	<ul style="list-style-type: none"> Review and modify the construction of the Metro as required. 			7
10	Construction and long-term changes to traffic impact on placemaking	<ul style="list-style-type: none"> EIS to include confirmation that all temporary transport changes to be reinstated at the completion of project and included in budgets. The EIS should clearly state which temporary measures to mitigate against traffic congestion will be removed once the construction of the Metro is complete and operational. Consider the shifts in traffic demands around the stations and their impacts on placemaking, particularly in the vicinity of the street corners near stations. 	<ul style="list-style-type: none"> All impact streets, footpaths etc. reinstated to a high quality and aligned with the ie. hierarchy of users in Council's transport strategy with pedestrians first, vehicles last. No increase of road capacity along the rail corridor as a result of the construction of Metro. Potential increase in pedestrian and cycling facilities upon completion of metro construction. Include a specific impact assessment on changing traffic patterns and their impact on placemaking. 	<ul style="list-style-type: none"> All affected areas reinstated to pre-development condition. No increase of road capacity along the rail corridor as a result of the construction of Metro. Include a specific impact assessment on changing traffic patterns and their impact on placemaking 	Chapters 13 & 14	14.1-14.4
11	Greater consideration of night time use and impacts - safety, light pollution,	<ul style="list-style-type: none"> All upgraded stations and centres should be a showcase of environmental world-class design. 	<ul style="list-style-type: none"> Stations and town centres that are world class in design and have the built- 	<ul style="list-style-type: none"> Increased levels of safety incorporated into design 	17.3.3	14.1-14.4



Issue	Opportunity/ issue	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
	CEPTD, night time economy and any additional services required	<ul style="list-style-type: none"> The EIS should prepare a compelling, visionary whole-of corridor urban renewal strategy. Additionally, each station precinct needs a credible, well-coordinated master plan to describe the extent, configuration and connectivity of proposed new development and public space, including the articulation of a compelling vision for each local centre. More detail required on placemaking strategies and adequate space provided for community meeting spaces/pop up opportunities etc. 	<ul style="list-style-type: none"> in capacity to operate in the 24/7 environment. A transport system that recognises and supports the active and vital evening economies of many of the local centres along the corridor, is well-lit, safe and comfortable to use. Resources and space provided and detailed in the plan of each station precinct for placemaking/ community meeting and activity beyond retail opportunities. 	<ul style="list-style-type: none"> for commuters and visitors to centres A transport system that recognises and supports the active and vital evening economies of many of the local centres along the corridor, is well-lit, safe and comfortable to use. Each station has designated safe, child-friendly-meeting space for community engagement e.g. weekend market. 		
12	Rethink parking strategy	<ul style="list-style-type: none"> Develop a corridor park and ride strategy considering potential locations where park and ride could be encouraged and where it should be discouraged, and develop parking infrastructure plans accordingly. Identify increase in car parking demands as a result of higher usage of Metro compared to the existing train service and recommend strategies for the provision of additional car parking. 	<ul style="list-style-type: none"> The delivery of a station precinct with well-designed and properly integrated mode interchange facilities, that conform to the stated transport hierarchy. A more holistic approach to park and ride impact assessment. Clear strategy for addressing an increased demand for car parking. 	<ul style="list-style-type: none"> The delivery of a station precinct with well-designed and properly integrated mode interchange facilities, that conform to the stated transport hierarchy. Consider where parking is lost and what the next alternative station might be for cumulative impact assessment. 		14.1-14.4
13	Advocate for Council to be consulted moving forward - design review panel	Include section about Council's ongoing role in the detailed design and delivery process	<ul style="list-style-type: none"> " - Section included in EIS - Council has representation on Design Review Panel - Integrated Agreement includes input into detailed design issues that arise during construction." 	<ul style="list-style-type: none"> As per preferred outcome 		



Issue	Opportunity/ issue	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
14	Greenway constraints and opportunities - should be fully provided in the project, design to be green and permeable, consider stormwater and provide for urban cooling.	The EIS should examine a whole-of corridor 'greenway' strategy, including active transport, with a detailed proposal for both the northern and southern sides of the rail corridor. This strategy must examine and propose ecological, habitat and recreational opportunities that present themselves at an urban/regional scale and suggest means of implementation within the scope of the metro project.	<ul style="list-style-type: none"> A fully resolved 'greenway' corridor proposal for both the north and south sides of the rail corridor allowing for meaningful ecological, habitat and recreational outcomes. This proposal should be funded and implemented with the construction of Metro. 	<ul style="list-style-type: none"> A fully resolved 'greenway' corridor proposal for both the north and south sides of the rail corridor allowing for meaningful ecological, habitat and recreational outcomes. All components of this proposal, which are situated within the rail corridor, should be funded and implemented with the construction of metro, allowing for the 'missing links' to be implemented progressively after the completion of construction of metro. 		14.1-14.4
15	Refine stations to deliver a 100-year design life	Each station precinct needs a credible, well-coordinated master plan to describe the extent, configuration and connectivity of proposed new development and public space, including the articulation of a compelling vision for each local centre.	<ul style="list-style-type: none"> A well-designed, safe and active station precinct that positively defines public space, connects seamlessly with the existing local centre, improving local connectivity and permeability, providing continuous weather protection and delivering customers to the existing or new station entries. 	<ul style="list-style-type: none"> A master plan for the future implementation of a well-designed, safe and active station precinct that positively defines public space, connects seamlessly with the existing local centre, improving local connectivity and permeability, providing continuous weather protection and delivering customers to the existing or new station entries. 		14.1-14.4
16	Acoustic impacts from freight line and Metro-appropriate mitigation particularly for dense centres	Improve the efficiency and height of the proposed barrier in order to decrease the noise levels from Freight Trains	<ul style="list-style-type: none"> Better level of noise attenuation for the residents located along the Metro line Well-designed noise attenuation structures that develop a sense of place. 			



Issue	Opportunity/ issue	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
17	Cultural Strategy - respect the local character and history	More detail required on placemaking strategies and adequate space provided for community meeting spaces/pop up opportunities as per outlined in station assessments. Develop a public art strategy associated with the station.	<ul style="list-style-type: none"> Refer to station opportunities – Part 2 of this submission Develop a public art/cultural strategy 			14.1-14.4
18	Ensure equitable access across train line (unpaid concourses)	Each station precinct needs a credible, well-coordinated master plan to describe the extent, configuration and connectivity of proposed new development and public space, including an unpaid concourse within each proposed new station entry.	<ul style="list-style-type: none"> An unpaid public concourse provided at each proposed new station entry to improve local permeability and connectivity within the station precinct. 		Chapter 8	14.1-14.4
19	Over railway connections - opportunity for new overpasses and underpasses	<ul style="list-style-type: none"> Widen the bridges across the corridor to provide separated cycling lanes or sufficient shared path lines. Include a discussion on potential opportunities to augment the current project definition with a list of associated projects which will add value to the current project like more cross-connections. Provide new underpasses/overpasses to make a link from the south at regular intervals between the adjacent stations. 	<ul style="list-style-type: none"> Ensure all overpasses and underpasses on the corridor provide quality cycling and pedestrian facilities. Provide more underpasses and overpasses. 			13 (2)
20	Investigate utilities and other services to be upgraded during construction (Sydney Water, Ausgrid)	<ul style="list-style-type: none"> All undersized utility infrastructure constrained by the rail corridor should be upgraded to future proof. 	<ul style="list-style-type: none"> Future-proof utilities provision during the construction process. 	<ul style="list-style-type: none"> No adverse impacts on regional utility infrastructure. 	Key Issue #16 – Utilities "Environmental Assessment Requirements Reference 12.2. EIS Section 24.1. and Section 24.3 "	16
21	Utilise rail corridor to assist resolve the open space deficit in the Canterbury Bankstown LGA	Identify landscape planning objectives to ensure open spaces are integrated well planned and safe for the broader community and not entirely focussed on active transport outcomes. Open space used for work sites during the construction are returned to public with greater social and recreation opportunities.	<ul style="list-style-type: none"> Identify landscape planning objectives to ensure open spaces are integrated well planned and safe for the broader community and not entirely focussed on active transport outcomes. Open space used for work sites during the construction are returned to the public with greater social and recreation opportunities. 			
22	Opportunities for energy infrastructure	<ul style="list-style-type: none"> Upgrades to utilities should allow for future installation of energy drawing equipment such as electric vehicle recharge Stations, back-up emergency battery storage or similar systems that may require a larger than usual current / maximum kVA at Stations . 	<ul style="list-style-type: none"> All stations to provide designated parking space for car share vehicles – the number of spaces to 	<ul style="list-style-type: none"> • Carparks at all Stations provide designated parking space for car share vehicles – the 	Reference 12.2.	12



Issue	Opportunity/ issue	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
		<ul style="list-style-type: none"> Upgrades to utilities should allow for future connection to on-site renewable energy upgrades such as solar PV or small-scale wind generation. 	<ul style="list-style-type: none"> be determined by negotiation with service providers. Carparks and of key/Park-and-Ride Stations such as Canterbury, Punchbowl, or Wiley Park to be designed and built as 'solar ready' and with adequate electricity infrastructure to allow for future 'low emission' transport options such as charging stations. 	<ul style="list-style-type: none"> number of spaces to be determined by negotiation with service providers. Carparks at Stations to be designed with the anticipation that future retrofits may occur that allow for future 'low emission' transport options. 	EIS Section 24.2. and Section 24.3 "	
23	Impact and relevance to community and social infrastructure	<p>The social impacts and the actions to address these need higher priority in the planning process so that they influence the design and not addressed as good as possible after the design.</p> <p>Opportunities to improve community outcomes through enhanced open space and social infrastructure such as improved design opportunities at Warren Reserve (see Submission Report 2, Punchbowl Opportunities)</p>	<ul style="list-style-type: none"> The social impacts and the actions to address these need higher priority in the planning process so that they influence the design and not addressed as good as possible after the design. Higher supply, diversity and quality of open space and social infrastructure than what is currently provided 	<ul style="list-style-type: none"> The social impacts and the actions to address these need higher priority in the planning process so that they influence the design and not addressed as good as possible after the design. Higher supply, diversity and quality of open space and social infrastructure than what is currently provided 	Section 3 in Appendix I	16
24	Greenway design to be green and permeable, consider stormwater and provide for urban cooling.	Water sensitive urban design and urban heat island effect considered in all design for greenway and open space	<ul style="list-style-type: none"> Best practice design guidelines should be developed to ensure consistent standards along active transport corridor to deliver wsud outcomes. Opportunities for pocket parks and rain gardens to be incorporated as part of stormwater management should be identified so Council can work with the 	<ul style="list-style-type: none"> Water sensitive urban design and urban heat island effect considered in all design for greenway and open space. 	Technical paper 8 - Hydrology, flooding and water quality assessment.	Key Issue #6 - Flooding and Hydrology



Issue	Opportunity/ issue	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
			authority to design and deliver. Opportunities to expand the open space planting themes into local streets should be explored to increase local tree canopy cover and invite and promote access to the greenway.			
25	Car share opportunities	Include some discussion on car share, ride share and electric vehicles and what provisions could be made in the detailed design	<ul style="list-style-type: none"> The EIS states that car share, ride share and electric vehicles will need to be considered in the detailed design Resolve a strategy to address these issues 			12
26	Drainage and Flooding Impacts on Neighbouring Properties	Undertake flood impact assessments for all Metro stations in the Canterbury Bankstown LGA, regardless of perceived impacts. 2D modelling should be undertaken for the whole corridor.	Investigation undertaken to determine appropriate flood mitigation opportunities in this area, and measures evaluated in consultation with Council. Subsequent to this, the most effective option should be undertaken.	Investigation undertaken to determine appropriate flood mitigation opportunities in this area, and measures evaluated in consultation with Council.		6
27	Care to be taken in Flood Storage Areas	Where changes to existing levels are made, the impacts on flooding needs to be modelled and assessed. The creation of areas of new flooding and exacerbation of existing flood impacts is to be avoided. Care also needs to be taken in areas that existing flood mapping has shown to be flood storage areas so that these impacts are not unacceptably transferred to private properties.	Where changes to existing levels are made, the impacts on flooding needs to be modelled and assessed. The creation of areas of new flooding and exacerbation of existing flood impacts is to be avoided. Care also needs to be taken in areas that existing flood mapping has shown to be flood storage areas so that these impacts are not unacceptably transferred to private properties.	Where changes to existing levels are made, the impacts on flooding needs to be modelled and assessed. The creation of areas of new flooding and exacerbation of existing flood impacts is to be avoided. Care also needs to be taken in areas that existing flood mapping has shown to be flood storage areas so that these impacts are not unacceptably transferred to private properties.		6
28	Opportunities to create catch drains within the	TfSW should investigate the use of surplus areas of land for retention basins, or transferring land suitable for the construction of retention	The railway upgrade provides the opportunity to create catch drains beside the railway to detain the water rather			15 & 6



Issue	Opportunity/ issue	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
	railway corridor or adjacent lands owned by the State Government Opportunity to use surplus lands for Detention Basins	basins over to Local Government to construct as part of floodplain risk management plans. Use of or transferring such suitable land over to Council will be invaluable in reducing the impacts of flooding in urbanized areas where there is little available land unlocked for flood mitigation measures.	than flooding the railway itself, and/ or provide additional storage to alleviate downstream flooding. Areas, where this could be investigated, include: the area between 158 Wattle Street and the next downstream culvert, should upgrading the culvert be proven not to be beneficial.			
29	Opportunities to Introduce Water Sensitive Urban Design Options as part of a multi-purpose corridor Opportunity to Treat Surface Water draining from the Metro in line with modern standards	<ul style="list-style-type: none"> • Inclusion of WSUD measures wherever possible, particularly stations that have large increases in impervious areas. Stations that have large green spaces including Punchbowl, Wiley Park and Belmore should be investigated for the feasibility of including WSUD measures. • Any natural creeks, drainage lines, overland flow paths, catch drains and detention basins within the rail corridor should be improved by use of natural type treatments, including rock lining and use of native vegetation wherever possible. • Water discharged from water quality treatment devices should meet the requirements of the Botany Bay Water Quality Improvement Plan. 	<ul style="list-style-type: none"> • Inclusion of some type of WSUD to meet the Botany Bay Water Quality Objectives at each station. 	<ul style="list-style-type: none"> • Inclusion of some type of WSUD at each station, no matter how small. However, it is suspected that some stations would have opportunities for large WSUD measures. 		6 (3)
30	There are a number of major North/South drainage flow path crossing the east/west rail corridor;- <ul style="list-style-type: none"> - West of Campsie station - West of Belmore Station (Bridge Rd/Marie Ln to Belmore Ave) - West of Lakemba Station (Sproule St to Bellvue Ave) - West of Wiley Park (Open Channel b/n Glynn and Corneilia St to western side of Wiley Park High School) 	Assess the opportunity to increase pipe capacities through rail corridor to assess the potential for flood mitigation	<ul style="list-style-type: none"> • Improvement to existing drainage and flooding issue 	<ul style="list-style-type: none"> • No deterioration to existing drainage and flooding issue 		6 (1)
31	Consideration of travel times for residents further west of Bankstown	Review implications of trips from non-metro stations west of Bankstown and Metro station locations in the corridor to stations such as Newtown. Further information required on journey time impacts for interstation journeys.	<ul style="list-style-type: none"> • No impacts on travel time to key destinations 		5.3 Travel time savings	13 (2)



3. Construction Impacts

Council staff, with the aid of sub-consultants with experience in transport planning and construction issues, have undertaken a detailed assessment of the construction impacts outlined in the Metro Southwest EIS. There are many impacts and mitigation measures that need to be undertaken prior to, and during, the construction program. Not only will there be physical impacts, such as noise and traffic congestion, but also economic and social impacts. In this regard, consultation and engagement prior to the construction period is critical to ensure that the people are informed and aware of the implications of the proposed works. The project must be informed by consultation process and undertaken in a manner commensurate with expected levels of impact and stakeholder significance.

The following table outlines critical areas of concern prior to and during the construction phase of the project. The table outlines the areas of concern, key issue and what action or outcome is required.

In summary, however, Council's key areas of concern are:

- The unresolved nature of the Temporary Transport Strategy, and particularly the ability for Sydenham Station to effectively interchange the 101 buses that will converge on the station precinct each AM peak. There is a lack of resolution about the capacity of centres to manage significantly increased bus services.
- The lack of recognition of commuters getting to centres within the corridor – the Temporary Transport Strategy generally focuses on commuters to CBD only. It should be noted that the City of Canterbury Bankstown 114,039 jobs located in the City of Canterbury Bankstown in the year ending June 2016.
- There is little acknowledgement in the EIS of the relatively high reliance on train services in the Canterbury Bankstown LGA and that the construction will significantly impact Culturally and Linguistically Diverse (CALD) and socio-economically vulnerable communities. The communications and engagement strategy outlined in the EIS needs to better identify a best practice approach to minimise impacts on the community.
- The lack of business impact mitigation measures identified in the main body in the EIS.



Category

Community engagement and communication strategy including face-to-face engagement.

Key Issues

Council is disappointed that the Stakeholder Engagement and Community Consultation section of the EIS (Section 4, Part 1A) does not acknowledge:

- The vulnerability of some members of the community and their relationship with higher levels of train use compared to the rest of Sydney (17.5 percent in the CCB LGA compared to 13.8 percent for Greater Sydney and identified in Technical Paper 5 – Social Impact Assessment)
- The diversity of language and cultural backgrounds that will need to be effectively dealt with in the community consultation and engagement process
- The impact on centres on the line, particularly those that are destination as well as origin stations (e.g. Lakemba), where well-established social functions and social cohesion of centres could be significantly impacted
- That this is a renewal project, and will, therefore, have major impacts on the movement patterns within each of the locations and, consequently, the businesses that rely on these.

It is essential that a best practice Community Engagement approach is implemented in preparing the community for the Metro upgrade and during construction.

The EIS needs to provide sound protocols for the level of engagement required during each stage of the project and how CALD and other vulnerable groups will be targeted. A strong consultation strategy can ensure the following key benefits be realised:

- A strong community engagement strategy ensures that the community is aware of the periods of impacts and can plan accordingly. In this regard, a strong interface agreement between TfNSW, contractors and Council can ensure that ongoing issues are resolved in an appropriate manner.
- A tailored communication strategy or plan must be developed in collaboration with Council by TfNSW that considers the needs of our community. This will ensure that Council is fully informed and can share with the community the program to ensure timely responses to their concerns during construction and operation of Metro.

Key actions

Key action: EIS should provide more direction on the quality of engagement required in the Canterbury Bankstown context. That is, provide a communication and engagement strategy that considers the diversity of the community

Key action: All communication and engagement strategies are to be prepared in consultation with Council and community leaders

Key Action: Ensure the communication and engagement strategy includes an appropriately formulated timetable for closures

Key action: Needs specification that a comprehensive communication strategy is developed by a suitably qualified consultant with expertise in engagement with CALD and vulnerable communities.

Key Action: Council suggests Appendix D and the EIS needs to be more specific in:

- Section 4.2 Community Communication Strategy. A Community Communication Strategy will be developed by each Sydney Metro Principal Contractor, and the condition should be modified to include the word “in accordance with the Sydney Metro Overarching Community Communications Strategy¹
- Requiring a place management approach, outlining the number of place managers and the specifications (language and diversity)

¹ TfNSW Sydney Metro Overarching Community Communications Strategy, September 2017



Category

Key Issues

Key actions

Traffic and Transport Planning: Corridor Wide

Capacity of station precincts deliver bus requirements

- The Temporary Transport Strategy (TTS) mostly relies on direct buses to replace the removed train services. Whilst this 'same seat' journey will assist in maintaining public transport share, there will still be interchange delays at Sydenham, as well as delays while buses negotiate traffic at the 3-4 stations before running an express to Sydenham. The Baseline Temporary Transport Strategy for possession periods indicates that 101 buses per hour would approach Sydenham Station in the AM peak and that Bankstown to Sydenham journey would be >45 minutes by bus in the AM peak. Sydenham Station could not accept this number of additional buses per hour, and it is more likely the park and ride, and hail and ride would dominate at other stations. Also, in the PM peak, layover of buses at Sydenham waiting for connecting trains is a major issue for this space-constrained station.
- An additional 33 buses per hour would need to pick up from Bankstown Station during possession periods. It is highly unlikely that the existing stop space available would be able to

- Include partnership with Council as part of the place management framework
- Community information sessions (CIFs) numbers should be specified (not listed "as required") as per Sydney Metro Overarching Community Communications Strategy². These will be absolutely essential to effectively prepare the community (well before construction commences) and manage changes to transport and access arrangements. The CIFs should be supplemented by mobile displays designed to both help the community understand the project, including the long-term benefits, as well as managing the short-term impacts. This needs to be delivered in a manner that carefully considers language barriers.

City of Canterbury Bankstown is very concerned that without these measures, Council will become the community's go-to point of contact for which Council does not have the resources.

Key actions: Provide detail about the capacity of station surrounds, particularly Sydenham, to process the bus to train interchange proposed. Include impact assessment for Sydenham Station because the effectiveness of the mitigation strategy appears unserviceable in Council's opinion

Key Action: Undertake microsimulation modelling of the Bankstown Station precinct with the additional buses expected during possession periods and any traffic network changes to identify impacts

Key Actions: Bus stop demand be listed and compared to supply to identify needs to temporarily extend stops. Fare scheme for replacement buses recommended as an action in EIS

² TfNSW Sydney Metro Overarching Community Communications Strategy, September 2017



Category

Key Issues

cater for these additional buses. Footpath storage for usual-train passengers waiting for replacement buses needs to be evaluated.

- Modelling for a minimum travel time analysis has not been published. This should show the 'before' versus 'after' possession travel times for the most common trips, such as from Bankstown beyond Sydenham in the AM peak. This analysis will show if the strategy is reasonable. This may provide a better indication of demand for the replacement buses and, alternatively, increased demand at park and ride sites at alternative rail line stations.
- There is also likely to be queue lengths for waiting for buses. Bus volumes should be confirmed such that the scale of secondary impacts can be identified now. Council is of the view that waiting to resolve these issues until following phases may prove too late to secure additional bus layover areas, or additional park and ride facilities needed at specific locations.

Bridge and underpass closures

- There are some major increases in saturation of the intersection reported due to bridge closures. The ramifications of these issues are better explained with average delays and queue length outputs for each intersection. This will enable conclusions to be drawn regarding other traffic movements which have secondary effects. The Burwood Road bridge and the Haldon Street bridge closures appear to generate the largest impacts and alternative options should be contemplated in the EIS.

Delivering road capacity for the Temporary Transport Strategy

- Identify sensitive pinch points across the corridor that are likely to become issues during the construction period and consider temporary clearway arrangements
- Council requests the Temporary Transport Strategy report to better understand the modelling associated with the data inputs used. The impact of additional buses on traffic capacity at key intersections has been modelled, but there are limitations as to how this has been reported. The EIS does not discuss in sufficient detail how additional buses will be catered for at station bus stops, in terms of stop capacity and temporary stop access arrangements.
- There will be a need to offset the additional travel time impacts in using replacement buses; this partially be achieved through 'free' replacement buses. There are a number of roads and intersections near stations that are well over capacity in peak periods, such as Punchbowl Road and King Georges Road. The cumulative effects of additional cars and buses, and potentially

Key actions

Key Action: Consider a more distributed transport mitigation strategy

Key Action: Revisit the Temporary Transport Strategy so that it properly recognises door-to-door travel time impacts and customises the strategy accordingly

Key Action: Include more detailed reporting of delay and queue length impacts including blocking from one intersection into the next as associated secondary impacts on buses and active transport movements

Key Action: Provide average delays and queue length data for bridge and underpass closures. Assess alternative options particularly for the Haldon Street and Burwood Road bridge closures in particular.

Key Action: The Temporary Transport strategy should incorporate clearways to north to south and east to west to ensure better flow of bus and general traffic

Key actions: Recommend temporary clearways where possible, particularly near stations where the most congestion would be likely.

Key Actions: Consult with businesses and affected residents prior to the introduction of any new clearways

Key action: Work with Council to ensure a robust Interface Agreement, including the outcomes of the Temporary Transport Strategy



Category

Key Issues

some lane closures, will exacerbate existing issues. Whilst some intersection analyses have been undertaken, the impacts are not clear given how the outputs are reported.

- The EIS provides no detail surrounding the forecast bus requirements at stations. It is unclear whether these bus volumes simply replace the seats lost on the associated rail service removals or whether they account for reduced public transport usage which is likely. Also, the diversion of public transport trips to other locations (via bus-rail connections or park and ride at other stations) has not been documented.

Ensuring the Temporary Transport Strategy considers inbound trips

- The EIS tends to focus on the impacts on inbound commuters towards the CBD. The closures of stations will also affect commuters inbound to each centre for employment or activities. Additional congestion due to lane closures, bridge closures and more buses will also affect non-commuting trips. These issues have not been specifically covered (for example, by identifying the origins of inbound train and bus trips to each centre around each station) in the EIS.

Potential for 'on-demand' services

- There is a key opportunity to introduce an 'on demand' trial along the corridor during the construction period for non-commuter demands and to optimally cater for of peak demands

Construction compound access and parking

- The access routes into construction compounds are understandably difficult to determine at this stage of the planning process, however, restrictions on the usage of local streets or turn limitations at access locations where congestion or safety issues exist should at least be noted in the EIS
- Construction that is proposed at stations is likely to have construction worker parking demands coincide with commuter parking demands and local centre parking demands. The cumulative assessment of construction period parking impacts that has been undertaken, just stated that sufficient alternative parking is available within 400m of the station. Whilst 400m is a typical station catchment for walk-up commuters, it is too large a radius for park and ride commuters.

Key actions

Key action: Provide Council with the modelling and assumptions made for the Temporary Transport Strategy

Key Actions: Ensure delays do not increase more than 20% and queues not increase more than 20% compared to the without construction condition.

Key Action: Incorporate in the Temporary Transport Strategy more detail about inbound trips to Canterbury Bankstown.

Key action: Include a discussion on the potential benefits for on-demand bus services as part of a diversified package of mitigation measures during the rail line closure periods.

Key Action: Provide some basic principles and some specific turn ban limitations for construction compound accesses

Key Action: Include detailed planning of access to construction compounds in the Interface Agreement

Key Action: Provide more detail about the cumulative impact of construction worker parking and commuter parking in the EIS

Key Action: Consider the potential for remote construction worker parking and public transport access for those who don't rely on their vehicles



Category

Key Issues

Key actions

A 200m radius would appear more appropriate given that the impact is on an interchange link not an access link to a station. Consideration should also be given for construction workers to park in a designated area off street.

Unresolved infrastructure requirements

- It appears that the Baseline TTS has unresolved issues that cannot be mitigated without additional infrastructure. This has not been contemplated in the EIS (Section A7 of the TTS). It is essential that these issues be addressed in the EIS.

Park and Ride demand

- Parking push from station precincts is likely to create conflict in residential areas

Key Action: Section A7 of the TTS lists unresolved 'outcomes'. For each of the outcomes listed in A.7, provide mitigation measures to address them.

Key Action: Consider a temporary Resident Parking Scheme

Traffic and transport Planning: Bankstown Station

- This station caters for over 18,000 passenger entry/exits per day which, during possession, will store on footpaths and use crossing points. These volumes are worthy of pedestrian capacity analyses to determine if any associated issues are generated for footpaths
- Bus storage capacity will see buses frequently queueing out of stops and block traffic lanes.
- Large construction vehicles are proposed to share access with the bus layover on South Terrace. This will exacerbate traffic and pedestrian safety issues for shared access.
- Whilst it is recognised that Bankstown should aim to actively reduce its Park and Ride provision over time well over 2,000 cars per day would be expected to be associated with Park and Ride at this station, quite possibly making use of pay-to-park off-street areas as well. There may be shifts in the location of parking should the replacement buses during possession periods be allocated specific stands on either side of the rail line and splitting 'inbound' and 'outbound' stops may be preferable from a Park and Ride management perspective

Key actions: Include a pedestrian waiting area and footpath capacity assessment

Key action: Further analysis of bus stop capacity and queue back impacts into traffic movements.

Key action: Assess the pedestrian safety risks for access on South Terrace and identify access needs to be relocated

Key Action: Address Park and Ride, parking and access impacts associated with construction period changes

Traffic and transport Planning: Punchbowl Station

- There is only enough space for one bus on The Boulevard during possession. A second bus will queue back close to the intersection of Punchbowl Road. This stop may need to be relocated eastwards to cater for the 40+ additional buses per hour likely to be added to this stop during possession periods

Key actions: Document how many buses would be queued and for how long to demonstrate impacts. Provide additional temporary bus stop capacity

Key Action: Include a parking management strategy that goes beyond reducing parking demand



Category	Key Issues	Key actions
	<ul style="list-style-type: none"> Given the limitation of free, available parking at Bankstown, Punchbowl has an important Park and Ride role and would be estimated to generate in the order of 800 cars per day. Loss of the nearest and most accessible bays will have flow-on effects through the centre 	
Traffic and transport Planning: Lakemba Station	<ul style="list-style-type: none"> In relation to the Haldon Street closure, if the bus replacement strategy is in place at the same time that the stops are relocated to near the Moreton Street bridge, there are likely to be significant negative Park and Ride impacts in this residential area The Boulevarde / Haldon Street signals are over capacity now. Consider the need to relocate the taxi rank in The Boulevarde on approach to Haldon Street to ensure that the impacts of construction traffic (which may occupy both approach lanes to turn) is minimised. This is a popular Park and Ride location and parking area for the surrounding streets. Over 1,200 station entries (passengers) are Park and Riders, potentially equating to nearly 1,000 cars. 	<p>Key Action: Provide significantly more analysis of construction traffic and transport impacts at Lakemba</p>
Traffic and Transport Planning: Belmore Station	<ul style="list-style-type: none"> In relation to the Burwood Road bus stops and route relocations, there is no indication of where the stops will be relocated to and how the routes will service these stops if buses are not allowed to use the bridge. It is noted that the next closest stops are in the shopping precincts and the TTMP queuing requirements may have significant impacts on prime street parking as well as nearby park and ride demands at these stops In terms of Loss of Parking and Park and Ride demands, all day (commuter) parking will spread into the adjacent residential areas and a specific resident parking management plan may be needed in this area given the limited nearby available on-street parking. Park and ride is a major part of the access demand for this station with potentially 800-900 vehicles arriving per day to Park and Ride. 	<p>Key Action: Document stop locations and demonstrate sufficient stop capacity</p> <p>Key Action: Contemplate a temporary resident parking permit scheme and some 2P time limits to preserve resident parking</p>
Traffic and Transport Planning: Campsie Station	<ul style="list-style-type: none"> In terms of temporary stops for replacement buses, the cumulative impacts in removing and relocating the South Parade stop to North Parade, plus the need to accommodate replacement buses, has not been assessed considering the limited kerbside space and shop-based parking demands There is no right turns from Beamish Street into North Parade whereas buses turn right from Beamish Street to South Parade – This route diversion cannot be achieved. The Beamish Street / North Parade intersection is well over capacity. Additional traffic management measure would be required to allow buses to exit North Parade. 	<p>Key Action: EIS needs to demonstrate sufficient bus stop capacity exists with the change proposal</p> <p>Key Action: Demonstrate how right turning buses can be accommodated given the right turn ban</p> <p>Key Action: Assess the potential to signalise North/Beamish for construction period but then retained into the future. This would provide both short-term construction management benefits and provide better circulation for traffic in the long term.</p>



Category	Key Issues	Key actions
Traffic and Transport Planning: Canterbury Station	<ul style="list-style-type: none"> The loss of parking will push the park and ride parking demand on street and a reasonable distance further away from the bus stops where replacement buses will be. Minimum distance to parking is 400m. This will further encourage park and ride diversions towards Sydenham or elsewhere. 	<p>Key Action: 400m is too large a distance for parking. Many on street areas are used for construction traffic. More specific assessment of parking impacts for each station is required, but particularly Canterbury.</p>
Traffic and Transport Planning: Hurlstone Park Station	<ul style="list-style-type: none"> The cumulative impacts of the removal and relocation of the stops on the Crinan Street bridge plus the need to accommodate replacement buses have not been assessed nor addressed in the EIS. This is of importance considering the limited kerbside space near the station. 	<p>Key Action: Address in EIS the cumulative impacts of the removal and relocation of the stops on the Crinan Street bridge</p>
Economic Impacts	<ul style="list-style-type: none"> There must be recognition that during line closure, the economic impacts on small businesses be mitigated and that a comprehensive communication and action plan be developed well in advance of construction. <p>The Social Impact Assessment classes the impact to businesses during construction as minor to medium, while the longer-term positive impacts in the operational phase of the project are also described as minor to medium (2.3 Summary and assessment of potential employment and economic impacts, Technical Paper 5 – Social Impact Assessment). However, there is little recognition of the cumulative impacts of major movement changes within centres that will result for those stations in the Canterbury Bankstown LGA where station entries are to be moved.</p> <p>Not only will these businesses experience negative impacts during construction, but there will be the long-term effects of movement pattern changes. While Council applauds the improved accessibility that new station entries at some locations will provide, and believe this is essential, Council can see no reason why existing entries cannot be retained in a number of locations to protect existing high street functions. In the station opportunities section, Council propose that dual new and existing station entries be retained (refer to Section B of this submission). Secondly, the Temporary Transport Strategy needs to better acknowledge support for existing businesses must be of primary concern.</p> <p>Technical Paper 6 Business Impact Assessment outlines some measures to mitigate impacts on business including:</p> <ul style="list-style-type: none"> business management strategies for each construction site (and/or activity), identifying affected businesses and associated management strategies, including the employment of Place Managers, and specific measures to be put in place to assist small business owners adversely impacted by construction. (Technical Paper 6, p.106) 	<p>Key Action: Amend the EIS to acknowledge and mitigate the cumulative impact of the Temporary Transport Strategy and the proposed change in location of station entries within the Canterbury Bankstown LGA. Ensure that the recommendations in Technical Paper 6 are clearly articulated within the EIS and implemented.</p> <p>Key Action: Ensure rail service closures are scheduled in advance and communicated to operators along the corridor; this will be incorporated into a comprehensive Communication Plan for the construction period. This should also be included in the Interface Agreement.</p> <p>Key action: A comprehensive communication plan delivering routine and timely updates for rail commuters. Consideration of a no cost or reduced cost of travel will go some way to ensuring that public-transit patronage is maintained to minimise road network impacts.</p>



Category

Key Issues

Key actions

- a business consultation forum linked to the consultation strategy for the project (Technical Paper 6, p.106)
- In conjunction with (a) Business Management Plan, a Small Business Owners' Support Program would provide assistance to small business owners adversely impacted by construction. (Technical Paper 6, p.107).
- The EIS states that these will be conducted as required and is left to the construction contractor (Table 4, Appendix D). Council asserts that a more proactive and carefully programmed approach needs to be undertaken and should be specified as part of Contractor responsibilities in Appendix D. This will ensure that not only can businesses ride the short and long-term impacts, but protects community cohesion which could be seriously undermined by the inability for local businesses to survive.
- Events are important for marketing and promoting the City to first-time visitors while fuelling the local economy - predominantly local small business operators in town centres. While it is understood that at times, construction will require the closure of the rail line service, Council would not support closures of the service on weekends when events/special events are scheduled to be hosted. Local events generally include road closures and are a catalyst for increased car and truck movements at town centres.
- The development of a comprehensive communication plan with deliverables should work to reduce the impact of line closures on employers and employees; this includes the decline in commuter based commerce that these centres will experience from time to time.
- Infrastructure upgrades that involve closure have a significant impact on business primarily due to the reduced level of commuter-based commerce activity in the centre. Compensation to business owners may go some way to ensuring their continued operation through the construction period.
- Work to minimise the impact of construction-related vehicles on the business operators along the corridor such as business services impacts to loading zones and laneway restrictions.
- Ensure key stakeholder employers along the corridor are engaged in the pre-commencement consultation for this project i.e. Federation Centres, Bankstown Sports, Canterbury L.C., Centrelink, TAFE, Dept. Education (schools)

Key action: Ensure that the recommendations to support businesses recommended in Technical Paper 6 are implemented

Key action: Seek to enlist the support of local key stakeholder organisations and ensure this group are aware of the likely impact of this upgrade.

Key action: Liaise with Council regarding weekend line closure and any conflicts with special events in the LGA

Social Impacts

- Construction impacts will be significant to Canterbury Bankstown's diverse and vulnerable community members

Key Action: The SIA for the project and the communications strategy need to better reflect the specific impacts on vulnerable community members and the diversity within the community. More robust mitigation strategies are required in the EIS.



Category

Key Issues

Key actions

- Community murals and memorials must be retained and access ensured throughout the year (consider Friday afternoon prayers and local events)
- The notion of 'community infrastructure' has been limited to buildings, services and recreational facilities, however public art has not been mentioned in the EIS and is a valid community infrastructure.

Key action: Public art, murals and memorials should be treated as part of local heritage contributing to the unique character of the area and paying tribute to its residents e.g. Lakemba Multicultural Mosaic. The EIS should reflect this. Construction impacts should consider these.

Key action: Construction programming needs to consider local special events and regular events such as Friday afternoon prayers

Key action: Ensure that existing murals such as Lakemba Multicultural Mosaic, are protected from the presence of work site, machinery and equipment, fencing, waste material etc.

Noise and vibration impacts

- Council requests detailed dilapidation reports around stations, routes and compounds
- The key benefit of the noise and vibration monitoring is to inform the population on how the construction is tracking against the criteria to mitigate excessive noise and vibration levels. Noise and vibration monitoring during construction activities is best practice in order to manage noise and vibration impacts of large-scale and long-term construction activities. The monitoring can keep the community informed of the impacts and provides feedback to the sub-contractors executing the works.
- The noise impact assessment demonstrates that there will be a significant number of exceedances of the criteria for a significant number of residents. Provide noise mitigation measures which will reduce the amount of noise exposure
- Many of the City's most affordable housing is located adjacent to the metro corridor in the form of strata titled, 3-storey walk-ups.
- Provide a clear strategy on how noise impact during the night time is going to be managed for a 6-year program
- It is not clear in the EIS the exact nature of the strategy to conduct night time works besides closing off the station. Provide information to the community as to when the disruptive works will be programmed. There is no real strategy that has been developed, other than generic noise and vibration mitigation measures that have been provided at this point in time.

Key action: Detailed dilapidation reports required for all areas affected owned by Council by works, stockpiling and equipment storage. Include 'before' photographs and CCTV where applicable

Key action: Enforce noise and vibration monitoring during construction

Key action: Inform the community as to when the works will be programmed for, provide a 24h hotline to register complaints, implement noise and vibration measures as nominated within the Construction Noise and Vibration Management plan, implement localise noise mitigation measures.

Key action: Provide treatment to residential dwellings minimising the impact on the receivers of noise during construction periods, specifically addressing the night time exceedances.



Category

Key Issues

Key actions

		Key Action: Include further work on the strategy for night time works
Compulsory Acquisition	<ul style="list-style-type: none">There is significant concern that the properties being temporarily acquired for the project, particularly the land utilised for construction compounds, may not have suitable safeguards to mitigate any impacts on neighbouring and surrounding properties.The Close Street Reserve, in particular, is of concern to ensure that access to the dog park and Cooks River is maintained. This area services a high-density development pocket.	<p>Key action: Identify all temporarily acquired land and how the land will be utilised and what mitigation methods will be implemented</p> <p>Key Action: Outline how activity impacts will be mitigated for neighbouring properties</p> <p>Key Action: Provide a detailed plan for the Close Street Reserve in Canterbury adjacent to potential compound site.</p>



4. Bankstown Station

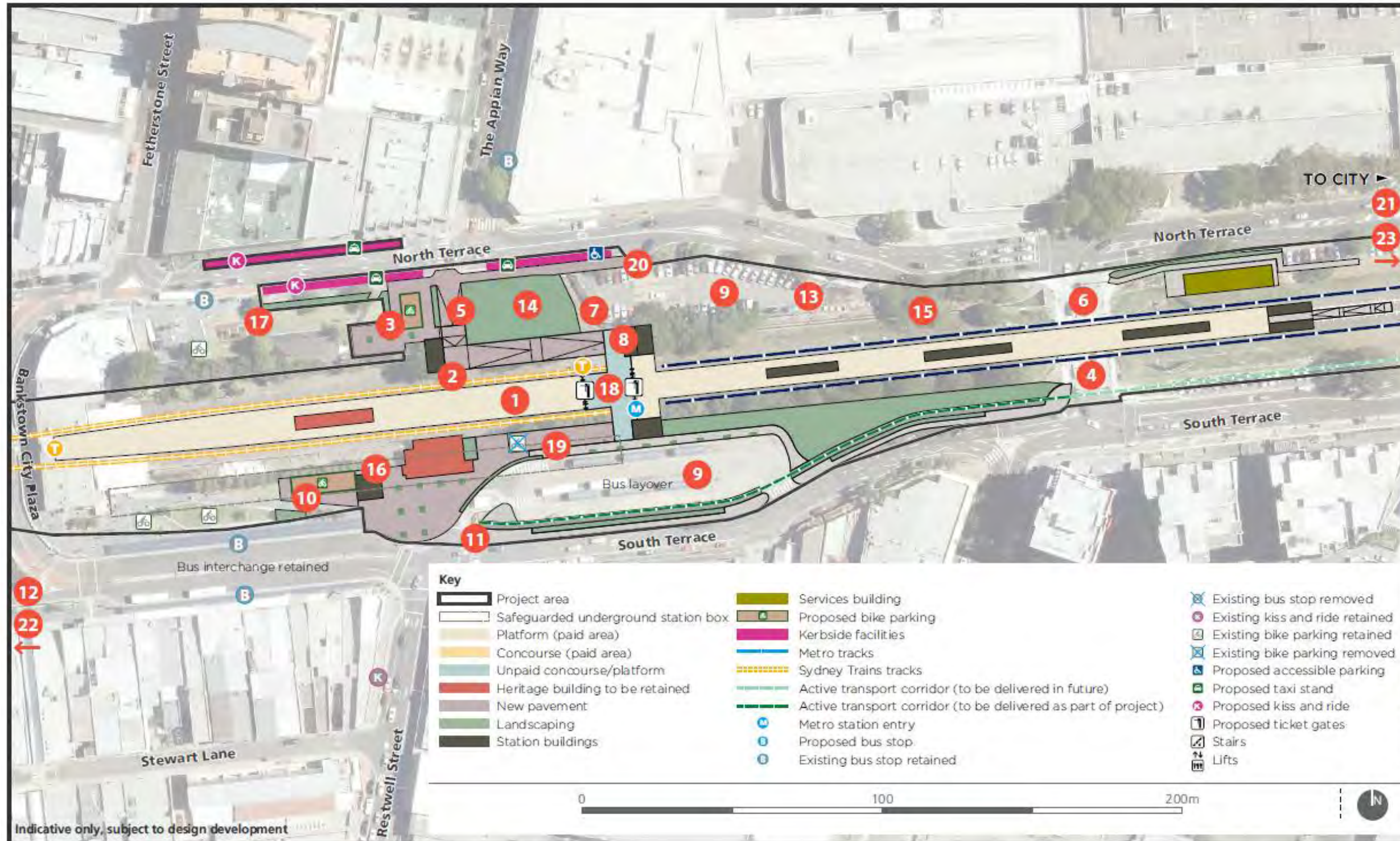


Figure 1: TfNSW EIS Concept Plan for Bankstown Station; annotated by Canterbury-Bankstown Council



4.1 Bankstown Station – Key Issues/Opportunities and Preferred Outcomes

#	Opportunity/Issue	What should be done	Preferred outcome	Minimum outcome	EIS Reference	SEARS Reference
1	Undergrounding station, delivery of a credible future underground strategy with a better urban design outcome for an above ground solution (refer to Submission Report Part 2 Bankstown Station part of this submission)	<ul style="list-style-type: none"> Economic impact assessment (EIA) to be undertaken for rail station undergrounding scenario. EIS should consider opportunities for improving flood conveyance through the area with undergrounding. The proposed Metro station entry is impacted by significant local flooding. Station undergrounding would provide the opportunity to use the existing station entry to access the underground platforms. The existing entry is not flood affected and therefore the exposure to flood hazards would be avoided The EIS needs to properly document a viable, credible alternative to a surface station upgrade at Bankstown in order to meet the commitment to safeguarding an underground station. <ol style="list-style-type: none"> Undertake detailed investigations and business case evaluation for undergrounding of the Metro at Bankstown Station. Such an investigation would need to consider the value of: <ul style="list-style-type: none"> the economic return to the NSW government from allowing high-density development above the rail line; the improvement of transport connectivity north-south across the rail line if it were undergrounded (seven logical connections would be created in Bankstown); the ability to provide new open space on top of an undergrounded line (which is not being provided in the Corridor Strategy despite creating an additional 35,000 dwellings); and the ability to accommodate significant new mixed-use and residential development on rail land. Redesign the station to a standard expected for a strategic centre (as recognised in the latest land use strategies for Greater Sydney), not a suburban station. It should be a major civic place and seamlessly integrated with the town centre. Integrate the station with the Corridor Strategy and the development plans for the surrounding area. <p>Reduce the length of the Sydney Trains platform or relocate westwards to reduce the length of the platform and allow for a direct</p>	<ul style="list-style-type: none"> Undergrounding of rail station Rail corridor no longer a constraint to flood conveyance. A resolved, credible, truly transformative underground Bankstown Station included as a key benefit of the project. Construct an underground station at Bankstown and redevelop the surplus rail corridor land at ground level to seamlessly reconnect the town centre streets, buildings and spaces. 	<ul style="list-style-type: none"> New platforms delivered (with significant improvements) at proposed location (see Submission Document Part 2 of this submission - Bankstown Station) Resolve the issue of localised flooding at the Metro entry on the Northern side of the corridor. A resolved, credible, truly transformative underground Bankstown Station safeguarded for the future. An improved proposal for the upgrade of the existing Bankstown Station to allow for improved access, public realm and centre integration. Bankstown station redesigned to provide wider at-grade cross corridor connection directly aligned with Restwell St/ The Appian Way; creation of a major civic place; station design to be of a scale and quality expected for a strategic centre; relocate bus layover away from station entries; include development sites in rail corridor. An alternative option be provided, such as a grade-separated pedestrian connection between Restwell Street and The Apian Way, should the Sydney Trains platform not be able to be shortened or relocated westwards An existing Bankstown Station upgrade that provides a well- 	6, 8.1.1 EIS: Table 8.11, Figure 8.20, Section 11.4	14.1-14.4 14.1 (a) " 13(2)



4.1 Bankstown Station – Key Issues/Opportunities and Preferred Outcomes

		<p>pedestrian linkage to be provided between Restwell Street and The Appian Way.</p> <p>Alternative platform configurations should be considered, compared and evaluated - along with issues such as access linkages and the surrounding urban structure of Bankstown town centre.</p>		<p>designed urban structure without creating conflicts and barriers at the street level.</p> <ul style="list-style-type: none"> Align the cross-corridor connection with Restwell St/ The Appian Way. 		
2	Provide additional connection north/south - between Restwell St and The Appian Way	<p>Add an investigation into either realigning the pedestrian plaza between the Metro and Sydney trains platforms to allow for direct alignment between Restwell Street and the Apian Way, or provide a land bridge/pedestrian overpass on this alignment for north-south movements</p> <p>Consider ways of shortening the Sydney Trains platform or extend it west to enable the cross-corridor at-grade connection to align with Restwell St/ The Appian Way.</p> <p>Review the proposal to provide the unpaid concourse between the existing station platform and new Metro platform</p>	<ul style="list-style-type: none"> A direct, at-grade pedestrian connection between Restwell Street and the Apian Way Undergrounding the Metro Station 	<ul style="list-style-type: none"> A grade-separated pedestrian connection between Restwell Street and the Apian Way Provision of the unpaid concourse between the existing station platform and new Metro platform 	EIS: Table 8.11, Figure 8.20, Section 11.4	13(2)
3	Council land ownership	<p>Approval should be sought from Council as to whether it will permit access across its development site. If so, designs should be developed to ensure both 'access' and 'development' can occur together on this site.</p>	<ul style="list-style-type: none"> Undergrounding of rail station 	<ul style="list-style-type: none"> Detailed Design showing integrated design of station entry/exit and Council's development site. Provide Property Boundary / Allotment Map, to ascertain impacts on Council land. 	16.4.2	10.1-10.2
4	Underpass North and South Terraces - widening, height issue, no cycle path, 2km to next crossing at Stacey St, Metro will increase congestion	<p>The EIS needs to credibly investigate opportunities to augment road capacity to accommodate public and active transport modes (i.e.: adequate footpaths and separated cycle paths) and to find opportunities to improve corridor-wide connectivity and permeability. Review the suitability of cross-corridor connections for all modes and include any required upgrades as part of the Metro construction. Recognise the opportunity to upgrade the underpass as part of the project and include upgrades as part of the project:</p> <ul style="list-style-type: none"> Consider station undergrounding as part of resolving traffic issues at the underpass. If the undergrounding is not an option propose widening and lowering of the underpass and readjustment of the culvert underneath to preserve its hydraulic capacity. 	<ul style="list-style-type: none"> Station undergrounding or an enhanced at-grade solution 	<ul style="list-style-type: none"> Underpass upgrade to include capacity for cyclists and pedestrians. Increase the width and height of the underbridge to allow for cyclists and buses. Widen the western side shared path to 2.0m wide. Widening and lowering of the underpass and readjustment of the culvert underneath to preserve its hydraulic capacity 	7.2.4 8.1.3 11.4.3 Table 8.11 Figure 8.20 Section 11.4	14.2(e) 14.2.e. minimising barriers across the rail corridor 13 (2)



4.1 Bankstown Station – Key Issues/Opportunities and Preferred Outcomes

5	Weather protection for connections	<p>The EIS needs to propose an acceptable minimum level of weather protection to deliver customers to the station entry.</p> <p>Redesign the station to provide more continuous weather protection from the platform to the town centre and other modes.</p>	<ul style="list-style-type: none"> • An underground Bankstown Station with over station development (including awnings and weather protection) to deliver customers to the station entry. • Continuous weather protection provided from the platform to town centre and other modes. 	<ul style="list-style-type: none"> • An existing Bankstown Station upgrade that includes awnings and weather protection to deliver customers from the station precinct boundary and adjacent footpaths to the station entry. • Predominantly continuous weather protection provided from the platform to town centre and other modes. 	Section 8	14.2(b)
6	Flooding issues along North Terrace and The Appian Way	<p>Flooding in this area should be noted & the proposed changes to the station should not exacerbate these issues.</p> <p>EIS should investigate opportunities for upgrading the existing underpass to reduce regional flooding. Consultation with council should be undertaken to assess the viability of incorporating these works into the project.</p> <p>EIS needs to review the flooding issues at North Terrace and propose an alternative location for station entry, away from the identified floodway, or propose amplification to 100-year capacity and covering of the existing open channel, which would reduce overland flow in the vicinity of the station entry to an acceptable level. Refer to Council's hydraulic modelling and preliminary assessment of options for increase of capacity of the channel: "Bankstown CBD Drainage Modelling", DHI August 2017</p>	<ul style="list-style-type: none"> • No exacerbation of existing flood issues. • Upgrade of existing underpass to reduce regional flooding issues. • Having the station entry at the same location as the current station entry as part of the undergrounding. 	<ul style="list-style-type: none"> • No exacerbation of existing flood issues. • Maintain existing flood conveyance capacity through the underpass. • Amplification to 100-year capacity and covering of the existing open channel, which would reduce overland flow in the vicinity of the station entry to an acceptable level. <p>OPTION 1: replace the existing open channel with a 6m x 1.5m culvert or</p> <p>OPTION 2: provide a 4m x 1.5m duplication culvert along NORTH Terrace</p>	Technical paper 8 - Hydrology, flooding and water quality assessment.	6 - Flooding and Hydrology



4.1 Bankstown Station – Key Issues/Opportunities and Preferred Outcomes

7	Flooding issues - Station entry at high-risk flood zone	Investigate opportunities to increase pedestrian safety in flood conditions or relocate station entry away from high flood risk precinct. EIS should deal with flood mitigation measures at Bankstown Station.	<ul style="list-style-type: none"> Implement measures to ensure pedestrian safety in flood event. Ensure Station and entries are protected from flooding. 2D flood modelling to be undertaken for the whole of the corridor. 	<ul style="list-style-type: none"> Pedestrian safety is assured in events up to the 100 year ARI. Ensure Station and entries are protected from flooding. 2D modelling to be undertaken for the whole of the corridor 	Technical paper 8 - Hydrology, flooding and water quality assessment. Technical Paper 8 - Section 3.6.4 Table 3-3 and Fig 3-14	6 - Flooding and Hydrology
8	Plan for better access to existing station - access across station should be at grade (refer to Submission Report #2 – Bankstown Station)	Amend the design to provide cross corridor connectivity aligned with existing streets and where there is sufficient land for enhanced public space outside the station entries. Platform geometry should be adjusted to allow for a direct, unpaid concourse link between the north and south sides of Bankstown town centre - on the direct alignment of The Appian Way and Restwell Street.	<ul style="list-style-type: none"> Construct an underground station at Bankstown and redevelop the surplus rail corridor land at ground level to seamlessly reconnect the town centre streets, buildings and spaces. An underground Bankstown Station with modest over station development that extends the surrounding urban structure through the station precinct. 	<ul style="list-style-type: none"> Provide a wider at-grade connection aligned with Restwell St and The Appian Way An existing Bankstown Station upgrade that includes a direct, at-grade pedestrian connection, on the alignment of The Appian Way and Restwell Street through an unpaid concourse. 		14.1
9	Opportunity site - Car park north of station, bottom of Fetherstone St, bus layover and landscaped area, Bankstown City Plaza	Review all of the underutilised land and reconfigure existing public spaces to deliver well-designed public spaces of an appropriate scale. Identify surplus land for modest redevelopment for mixed-use or residential development.	<ul style="list-style-type: none"> Utilise rail corridor land for well-designed public spaces and new development sites. Minimise underutilised land and low value uses such as carparks (locate these underground if required) 	<ul style="list-style-type: none"> Utilise rail corridor land for well-designed public spaces and new development sites, with minimal underutilised land and low value uses such as carparks (locate these underground if required) 	Section 8, 16.4.3	10.1 – 10.2, 14
10	Active transport facilities - secure and well-located	Each station precinct needs a credible, well-coordinated master plan to describe the integration of station infrastructure within the immediate urban context.	<ul style="list-style-type: none"> An underground Bankstown Station with over station development that incorporates all station infrastructure including bike parking and facilities. 	<ul style="list-style-type: none"> An existing Bankstown Station upgrade that includes sensitively sited bike facilities in the context of a coordinated master plan for other place-making and urban renewal opportunities. 	Section 16	14.1



4.1 Bankstown Station – Key Issues/Opportunities and Preferred Outcomes

11	Cycleway issues - active transport corridor on both sides of train line and continued in westerly direction	<p>Resolve opportunities to extend/augment existing cycleway facilities with additional facilities to the west. Consider how the station construction works could be used to facilitate or trigger these considerations, to further encourage cycle access from the residential catchment to the west of the station.</p> <p>Consider implications of not having a cycleway/shared path along the northern side.</p>	<ul style="list-style-type: none"> Nominate an alignment for extending the cycleway corridor (which is shown to terminate at the southwest corner of the station platform) to the west from the station, potentially also considering the use of any excess rail corridor lands to do so. Nominate a cycleway corridor to the north of the station which can be included in the reconfiguration of the North Terrace frontage. Include the additional cycleway along the northern side of the corridor into the proposal. 	<ul style="list-style-type: none"> Document issues and opportunities for cycleway corridor/facilities to the north of the station and to the west of the station, including barriers to implementation Provide the intermediate crossing points/shared bridges over the railway corridor to bring the cyclists/pedestrians to the Active Transport Corridor on the southern side of the railway. 	EIS: Table 8.11, Figure 8.20, Section 11.4	13(2)
12	Opportunity to connect to Arts Centre (refer to designs in Submission Report #2 of this submission)	<p>Incorporate a review of major local activity generators around the station and active transport improvement needs.</p> <p>Clearly indicate potential future links of the Active Transport Corridor with the networks to the west of Bankstown station.</p>	<ul style="list-style-type: none"> Identify active transport desire lines between key activity areas and station, overlay existing facilities and identify active transport links which require further investigation/upgrade. Include the upgrade of key active transport links as part of the project definition given that the Metro will increase demand for these trips. Continuation of the Active Transport Corridor along the railway corridor and over the Marion St Overbridge towards Weigand Ave and Glossop St. 	<ul style="list-style-type: none"> Identify active transport desire lines between key activity areas and station, overlay existing facilities and identify active transport links which require further investigation/upgrade. 	EIS: Table 8.11, Figure 8.20, Section 11.4	13(2)



4.1 Bankstown Station – Key Issues/Opportunities and Preferred Outcomes

13	Car parking and bike parking capacity	Develop a parking management strategy which outlines the parking supply approach during construction and operation stages. This should be informed by the Corridor Strategy work.	<ul style="list-style-type: none"> • Parking Management Strategy developed. • Describe the specific strategies recommended to discourage Park and Ride to achieve the low Park and Ride access modal shares reported in the EIS. • Specification of bicycle storage facility standards including examples of typical locker/rack facilities proposed 	<ul style="list-style-type: none"> • Parking Management Strategy developed • Park and Ride parking management principles and bicycle parking facility design principles to carry through to the design phase. 	EIS: Table 8.11, Figure 8.20, Section 11.4. TT&A Paper Section 8.12	13(2)
14	Opportunity to link green spaces and increase green buffers	Each station precinct, and the rail corridor need a credible, well-coordinated master plan to describe the extent of potential tree loss and the extent, configuration and connectivity of proposed new landscaping, including new tree plantings.	<ul style="list-style-type: none"> • An underground Bankstown Station with over station development that incorporates a cohesive, well-designed public realm - including accessible, useful green space. 	<ul style="list-style-type: none"> • An existing Bankstown Station upgrade that incorporates a cohesive, well-designed public realm - including accessible, useful green space and landscaping 	EIS: Section 8	14.1-14.4
15	Flooding issues - channel north side of line impacts car parking capacity	<p>Embellish the existing concrete drain through landscaping / extensive planting within the existing drainage easement and existing railway easement.</p> <p>EIS should investigate opportunities for upgrading the existing open channel to reduce regional flooding. Consultation with council should be undertaken to assess the viability of incorporating these works into the project.</p> <p>Review extending the carpark to the railway embankment which could be possible if the open channel is covered in conjunction with resolving flooding issues/capacity amplification</p>	<ul style="list-style-type: none"> • Embellishment of the existing concrete drain through landscaping / extensive planting within the existing drainage easement and existing railway easement. • Upgrade of existing culvert to reduce regional flooding issues • Investigation of the closure of the Sydney Water channel and widening of the carpark area over the channel to provide additional car parking capacity. 	<ul style="list-style-type: none"> • Weeding and removal of exotic and weed vegetation in reserves, and replacement with native vegetation that offers shade. • Ensure station upgrade works do not restrict council from upgrading the culvert in the future. 	Technical paper 8 - Hydrology, flooding and water quality assessment.	6 - Flooding and Hydrology



4.1 Bankstown Station – Key Issues/Opportunities and Preferred Outcomes

16	Relocate existing toilet block	Each station precinct needs a credible, well-coordinated master plan to describe the integration of station infrastructure within the immediate urban context - to optimise urban renewal opportunities.	<ul style="list-style-type: none"> An underground Bankstown Station with over station development that incorporates public facilities, including public toilets. Remove old toilets, provide new ones in station. 	<ul style="list-style-type: none"> An existing Bankstown Station upgrade that incorporates public facilities including public toilets. Remove old toilets, provide new ones in the station. 	EIS Section 8 Bankstown Station	14.1-14.4
17	Increase public space (e.g. Council site near women's rest centre, insufficient space for public use)	Each station precinct needs a credible, well-coordinated master plan to describe the extent, configuration and connectivity of proposed new landscaping and public space.	<ul style="list-style-type: none"> An underground Bankstown Station with over station development that incorporates a cohesive, well-designed public realm - including accessible, useful public space. 	<ul style="list-style-type: none"> An existing Bankstown Station upgrade that incorporates a cohesive, well-designed public realm - including accessible, useful public space. 	EIS Section 8 Bankstown Station	14.1-14.4
18	Improve connection between Sydney Trains and Metro service for commuters	Alternative platform configurations should be considered, compared and evaluated - along with issues such as access linkages and the surrounding urban structure of Bankstown town centre.	<ul style="list-style-type: none"> An underground Bankstown Station with over station development that provides a seamless interchange between heavy rail and metro without creating conflicts and barriers at the street level. 	<ul style="list-style-type: none"> An existing Bankstown Station upgrade that provides a seamless interchange between heavy rail and metro without creating conflicts and barriers at the street level. 	EIS Section 8 Bankstown Station	14.1-14.4
19	Southern Pedestrian access impacted - bus layover adjacent to Metro station, potential to swap with interchange or move elsewhere - remove bus only approach at South Terrace.	<p>Investigate options for relocating the bus layover area and what alternative public uses this space could then be used for which support pedestrian connectivity, visibility and presence of the station from the south.</p> <p>Include potential changes of the bus layover to benefit the access to the proposed station.</p>	<ul style="list-style-type: none"> Relocate the bus layover area to outside of the CBD precinct 	<ul style="list-style-type: none"> Relocate the bus layover area away from station entry. 	EIS: Table 8.11, Figure 8.20, Section 11.4	13(2)
20	Plan for the activation of North Terrace	The EIS should include access scenarios and improved linkages for renewal sites along North Terrace to the east of the proposed station entry. These renewal sites include strong desire lines and potential new streets, which the station entry could anticipate and connect with.	<ul style="list-style-type: none"> An underground Bankstown Station with over station development that incorporates a well-designed urban structure that anticipates future renewal opportunities in the vicinity of the station precinct. 	<ul style="list-style-type: none"> An existing Bankstown Station upgrade that incorporates a well-designed urban structure that anticipates future renewal opportunities in the vicinity of the station precinct. 	Can only be resolved with a better urban design structure	14(1)-14(4)



4.1 Bankstown Station – Key Issues/Opportunities and Preferred Outcomes

21	Opportunity to Improve High hazard flooding downstream of 158 Wattle Street Bankstown	Modelling needs to be undertaken to determine if supplementing the existing 1 x 1200 mm and 1 x 1350 mm pipes to cater for the 100-year flow (and possibly more) underneath the railway can alleviate the flood risks described above in this area. Appropriate measures should be evaluated in consultation with Council.	<ul style="list-style-type: none"> Investigation to be undertaken to determine appropriate flood mitigation opportunities in this area, and measures evaluated in consultation with Council. Subsequent to this, the most effective option should be undertaken. 	<ul style="list-style-type: none"> Investigation to be undertaken to determine appropriate flood mitigation opportunities in this area, and measures evaluated in consultation with Council. 	EIS: Technical Paper 8 – issue not identified	6 (1) (a) (b) (d)
22	More information required on impact on Bankstown Arts Centre	Detailed information required for potential work on west side of station adjacent to Bankstown Arts Centre	<ul style="list-style-type: none"> Trees are retained with no damage 	<ul style="list-style-type: none"> Trees are retained with no damage 	Table 17.2	
23	Additional overpasses	Walkability, connectivity and permeability should be increased between Bankstown and Punchbowl Stations. The existing rail line has no crossings between Stacey Street and Punchbowl Road (1,600m). Two additional overpasses should be provided between Stacey Street and Punchbowl Road. Preferred locations are in line with Scott Street and near the corner of Stansfield Avenue and Wattle Road or through 150 Wattle Road (requires easement through private land or property acquisition).	<ul style="list-style-type: none"> An additional crossing every 400m between Stacey Street and Punchbowl Road 	<ul style="list-style-type: none"> Two additional overpasses between Stacey Street and Punchbowl Road. Preferred locations are in line with Scott Street and near the corner of Stansfield Avenue and Wattle Road or through 150 Wattle Road (requires easement through private land or property acquisition). 		13 (2)



5. Punchbowl Station

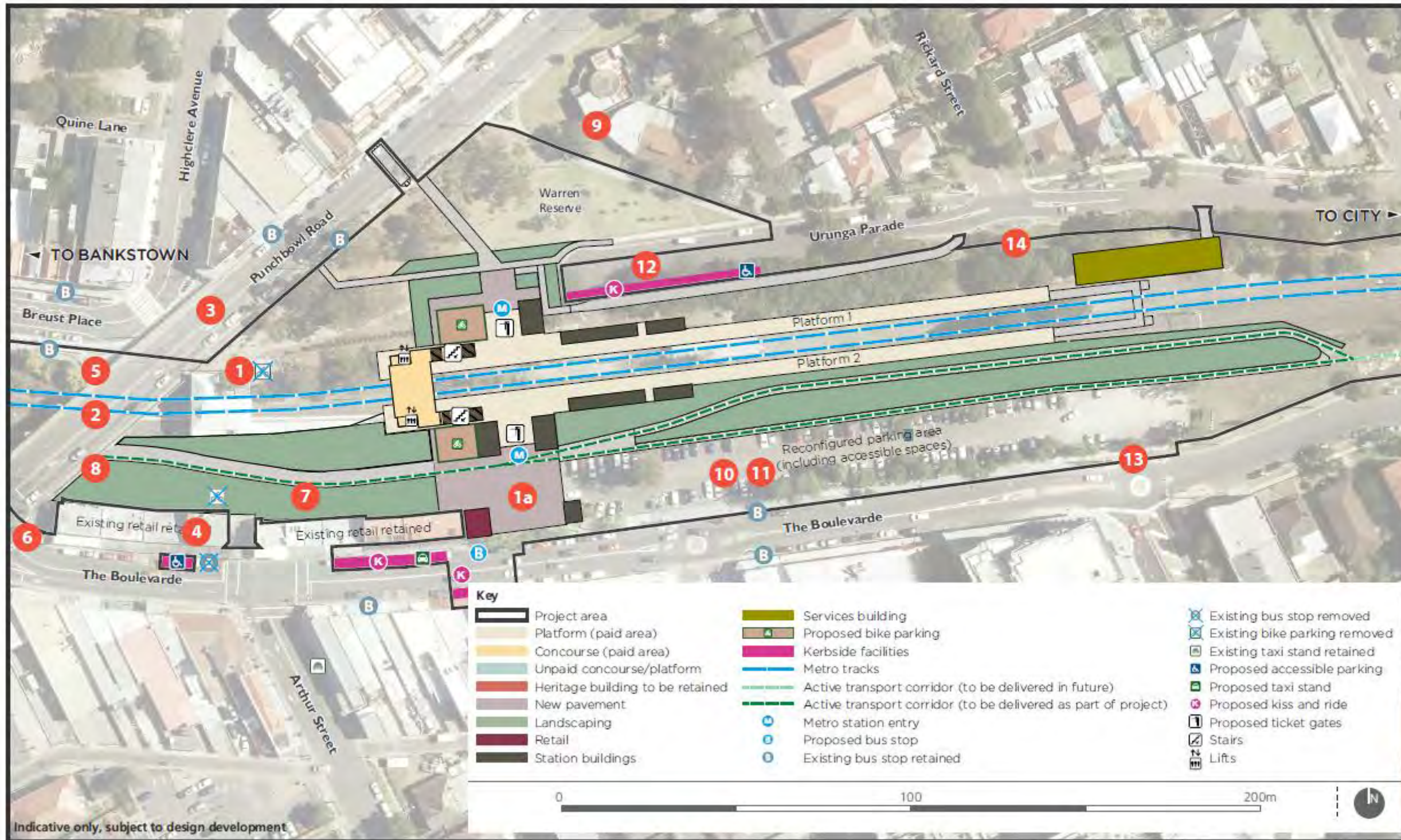


Figure 2: TfNSW EIS Concept Plan for Punchbowl Station; annotated by Canterbury-Bankstown Council



5.1 Punchbowl Station – Key Issues/Opportunities and Preferred Outcomes

Map Reference	Opportunity/ issue	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
1	<p>Align new concourse to connect with Matthews Street</p> <p>Retain existing Station entry and align with Arthur Street</p> <p>Improve overall connectivity of the centre</p> <p>Distinct character and active business community</p>	<p>Landscape design that considers to the future activation and circulation within Warren Reserve and the park's use as a civic precinct and not just a station forecourt.</p> <p>Create linkage with Matthews Street creating better connections with urban renewal opportunities. Encourage social and night-time economy benefits to increase attractiveness as a destination station.</p> <p>Each station precinct needs a credible, well-coordinated master plan to describe the extent, configuration and connectivity of proposed new development and public space.</p> <p>The reconfiguration of Warren Reserve to the north of the station entry needs to be more thoughtfully resolved and include continuous weather protection, potentially activating retail uses to improve safety and the definition of public space.</p> <p><i>Refer to Submission Part 2 – Creating Better Centres: Opportunities for our Metro Centres – Punchbowl Station</i></p>	<ul style="list-style-type: none"> Warren Reserve activated as civic precinct The reconstruction of existing station entry and station building on Punchbowl Road, including retail uses and upgraded, safe pedestrian links to the local centre. A well-designed, mixed-use southern station plaza that positively defines and activates new public space, connects seamlessly with the existing town centre, provides continuous weather protection, safely delivering customers to existing and new station entries. The northern station entry designed to positively define and activate embellished public space, connect seamlessly with the existing town centre, provide continuous weather protection and be activated with new retail uses. The location of the proposed new station entry should move west to align with Arthur Street and be configured with an unpaid concourse to improve connectivity and permeability within the town centre. 	<ul style="list-style-type: none"> Landscape design that considers to the future activation and circulation within Warren Reserve and the use as a civic precinct and not just a station forecourt. The reconstruction of existing station entry and station building on Punchbowl Road, including retail uses and upgraded, safe pedestrian links to the local centre. A master plan for the future delivery of a mixed-use southern station plaza that positively defines and activates new public space connects seamlessly with the existing town centre, provides continuous weather protection, safely delivering customers to existing and new station entries. The location of the proposed new station entry should move west to align with Arthur Street and be configured with an unpaid concourse to improve connectivity and permeability within the town centre. 	EIS Table 7.9 - page 7-29, Table 8.10 Figure 8.12 Table 10.48, Section 11.4.12	14(1)-14(4) 13(2)



5.1 Punchbowl Station – Key Issues/Opportunities and Preferred Outcomes

1 (a)	Station entry - unnecessarily wide and access doesn't consider road levels (TO BE CONSIDERED IF REALIGNMENT OF CONCOURSE IS NOT INCORPORATED)	Consider reducing the pedestrian 'open' area fronting the station and consider its use for other purposes Reconfigured area between the platform and the Boulevard (east of entrance) to enhance pedestrian, cyclist and car movements as there is likely to be a high level of conflict between modes at this point. The EIS should develop a credible, appropriately-scaled station entry and include an unpaid pedestrian concourse link across the rail corridor	<ul style="list-style-type: none"> The station entry and concourse needs to be designed with an appropriate scale, and to improve connectivity and permeability across the local centre. Concept plan amendment: Move existing mid-block pedestrian crossing in line with new entry [loss of parking to be off-set]. Rationalise entrances into commuter parking and provide access off roundabouts. Reduce the pedestrian 'open' area fronting the station and consider its use for other purposes 	<ul style="list-style-type: none"> Reduce the pedestrian 'open' area fronting the station and consider its use for other purposes The station entry and concourse needs to be designed with an appropriate scale, and to improve connectivity and permeability across the local centre. 	EIS Sections 7.3.5, 7.3.9, Table 7.4, Table 8.10	13(2) 14(1)-14(4)
2	Widen pedestrian access on Punchbowl Rd over train line and provide separated cycleway connections	Add additional works to widen the existing narrow footpaths on the Punchbowl Road overpass. Widen the bridge to provide separated cycling lanes to connect with the ATC to the south of the railway	<ul style="list-style-type: none"> Add additional works to widen the existing narrow footpaths on the Punchbowl Road overpass. Widened bridge with separated cycle path lanes 	<ul style="list-style-type: none"> Not preclude the future upgrade of the South Terrace / Punchbowl Road intersection and widen the Punchbowl Road overpass for future works as part of the RMS Pinch point program. 	EIS Table 7.9 - 7.29, Table 8.10 Table 8.12 Table 10.48, Section 11.4.12	13(2)
3	Move new signalised crossing to connect with Highclere Ave This is connected to an option to widen the bridge as discussed in issue 2 above.	Consider alternative pedestrian crossing locations, either at-grade and signalised or to improve the existing underpass to provide DDA compliant access.	<ul style="list-style-type: none"> Improve the existing underpass in conjunction with the retaining of the existing access to the station near to Punchbowl Road providing DDA compliant access. 	<ul style="list-style-type: none"> Relocate the proposed pedestrian traffic signals to the south as close to Highclere Avenue and Bruest Place as feasible. 	EIS Sections 7.2.4, 11.4.12	13 (2)
4	Servicing businesses	Include impact on access for vehicles for servicing businesses in local transport impacts.	<ul style="list-style-type: none"> Design retail outlet area to provide dedicated screened areas for waste and recycling storage, accessible for waste collection vehicles, with designated standing areas for vehicles to carry out services. 	<ul style="list-style-type: none"> Separate waste and recycling storage from green space and active transport corridor. 	EIS Vol 1B Section 11.4.8	13(2)



5.1 Punchbowl Station – Key Issues/Opportunities and Preferred Outcomes

5	Widen underpasses - retain underpass from Bruest Place under Punchbowl Road. Heavily used but suffers from lack of passive surveillance opportunities. PLEASE NOTE: The local high school is concerned about this location and teachers are positioned there to ensure student safety.	Additional works to widen the existing narrow footpaths on the Punchbowl Road overpass. Widening of the underpass and ensuring better CPTED principles are employed Uses to encourage passive surveillance (safety issues - antisocial behaviour in and around underpass	<ul style="list-style-type: none"> • Add additional works to widen the existing narrow footpaths on the Punchbowl Road overpass. • Widened underpass with access paths to the station and Bruest Place. 	<ul style="list-style-type: none"> • Not preclude the future upgrade of the South Terrace / Punchbowl Road intersection and widen the Punchbowl Road overpass for future works as part of the RMS Pinch point program. 	EIS Table 7.9 - page 7-2 and 7-29, Table 8.10 Table 8.12 Table 10.48, Section 11.4.12	13(2)
6	Improvement to the function of Punchbowl Road/The Boulevard/South Terrace (Money in the RMS Pinch Point Program for this which can be augmented by the Metro project.)	Extend the study area to include this intersection within its scope and provide for improved connectivity to access the parking area and kiss-and-ride location on the southern side of the station. Reconsider traffic movement along Punchbowl Road to reduce impacts of congestion on the centre.	<ul style="list-style-type: none"> • Upgrade the South Terrace / Punchbowl Road intersection and widen the Punchbowl Road overpass. • Concept plan amendment: Show the widening of Punchbowl for two lanes each way - widen bridge - key north/south connection; liaise with RMS. 	<ul style="list-style-type: none"> • Not preclude the future upgrade of the South Terrace / Punchbowl Road intersection and widen the Punchbowl Road overpass for future works as part of the RMS Pinch point program. 	EIS Table 7.9 - page 7-2 and 7-29, Table 8.10 Table 8.12 Table 10.48, Section 11.4.12	13(2)
7	Opportunity south of line in landscaped area and improve pedestrian amenity behind shops Activate rear of shops and create night-time economy opportunities	Each station precinct needs a credible, well-coordinated master plan to describe the extent, configuration and connectivity of proposed new development and public space. Investigate lining the south side of rail corridor with shops to provide activity and surveillance and better link the station with the town centre. This would provide improved safety for cyclists and pedestrians. <i>Refer to Submission Report B – Creating Better Centres: Opportunities for our Metro Centres – Punchbowl Station</i>	<ul style="list-style-type: none"> • The design and delivery of an improved active transport corridor south of the proposed platform realignment at Punchbowl station including a positive configuration of open space, and its improved access, activation and embellishment. • Line the south side of rail corridor with shops to provide activity and surveillance and better link the station with the town centre. 	<ul style="list-style-type: none"> • A resolved, credible master plan for the future delivery of an improved active transport corridor south of the proposed platform realignment at Punchbowl station including a positive configuration of open space, and its improved access, activation and embellishment. • Amend the design to provide more surveillance and activity in the area surrounding the station and better integrate with the surrounding areas. 	Table 8.10 Figure 8.12	14 (1)-14 (4)



5.1 Punchbowl Station – Key Issues/Opportunities and Preferred Outcomes

8	Cycleway - westerly over/under Punchbowl Rd, lack of cycleway on overpass - widening required, forced dismounts at various sections (alternative route - north of station) conflict at station entry	Include provisions for an off-street active transport corridor along the whole corridor to be delivered as part of the project within the rail corridor. Modal split could be increased with better active transport connections to the station. Increase connections to and from the station for pedestrians and cyclists.	<ul style="list-style-type: none"> Off-street active transport corridor delivered within the scope of the project within the rail corridor. Concept plan amendment: show future connection from north of Metro line to ATC. 	<ul style="list-style-type: none"> At a minimum a safer, active transport connection across Punchbowl Road and potential provision for Council to provide the active transport corridor beyond the station precinct during construction of the Metro rail line, funded by the project, delivered by Council. 	EIS Table 8.12	13(2)
9	Council property north of Warren Reserve.	Embellish and adapt early childhood health building for future council activation as offset for loss of open space	<ul style="list-style-type: none"> Embellish and adapt early childhood health building for future council activation as offset for loss of open space 	<ul style="list-style-type: none"> Positive adaptive reuse of early childhood health centre 	EIS Table 8.12	13(2)
10	Car park development opportunities	Consider providing additional park and ride spaces at Punchbowl, if possible, to offset losses at other stations, such as Campsie, Belmore and Bankstown. Increase/improve usage of land.	<ul style="list-style-type: none"> Provide additional park and ride spaces at Punchbowl and upgrade spaces to meet DDA compliance. 	<ul style="list-style-type: none"> Not preclude providing additional park and ride spaces at Punchbowl, potentially through transfer of land from Sydney Metro to Council for future works or re-locating development sites so that those closer to the station are used for development and parking is located further away as part of meeting the modal hierarchy. 	EIS Sections 7.2.4, 11.4.12	13(2)
11	Landscaped area south of line opportunity for development - TfNSW acquiring Council land	Consider the carpark as a redevelopment site and plan accordingly. Public parking could be provided as basement parking in any redevelopment.	<ul style="list-style-type: none"> Identify the carpark as a redevelopment site in the EIS 	<ul style="list-style-type: none"> Identify the carpark as a redevelopment site in the EIS 	EIS Table 8.12	
12	Car parking investigations - Kiss and ride in cul-de-sac (Urunga Parade), parking for businesses, reduce antisocial behaviour	Each station precinct needs a credible, well-coordinated master plan to describe the extent, configuration and connectivity of proposed new development and public space. The reconfiguration of Warren Reserve to the north of the station entry needs to be more thoughtfully resolved and include an integrated solution for kiss and ride spaces, continuous weather protection, and potentially activating	<ul style="list-style-type: none"> The design and delivery of an improved configuration, access, activation and embellishment of the northern station entry and associated upgrade to Warren Reserve to mitigate against any reduction in the extent of public open space. Provide kiss and ride on The Boulevard or Punchbowl Rd 	<ul style="list-style-type: none"> A resolved, credible master plan for the future delivery of an improved configuration, access, activation and embellishment of the northern station entry and associated upgrade to Warren Reserve to mitigate against any reduction in the extent of public open space. Provide kiss and ride on The Boulevard or Punchbowl Rd 	EIS Sections 7.2.4, 11.4.12	14(1)-14(4) 13(2)



5.1 Punchbowl Station – Key Issues/Opportunities and Preferred Outcomes

		<p>retail uses to improve safety and the definition of public space.</p> <p>Review design to locate kiss-and-ride on The Boulevard or Punchbowl Road</p> <p>Reconsider the location for kiss-and-ride bays in a location that is directly accessible from Punchbowl Road or The Boulevard.</p>	<ul style="list-style-type: none"> Extend kiss and ride (KnR) on the southern side of the station and remove KnR spaces to the north of the station. 	<ul style="list-style-type: none"> Provide improved lighting and wayfinding for commuters using the northern side Urunga Parade kiss and ride location. 		
13	New driveway entrances into reconfigured car parking area aligning with roundabouts	<p>Use the roundabouts as access points to the park-and-ride (PnR) area for traffic efficiency and circulation benefits</p> <p>Reconfigured area between the platform and the Boulevard (east of entrance) to enhance pedestrian, cyclist and car movements.</p>	<ul style="list-style-type: none"> Use the roundabouts as access points to the PnR area for traffic efficiency and circulation benefits Concept plan amendment: Relocate existing mid-block pedestrian crossing in line with new entry [loss of parking to be off-set]. Rationalise entrances into commuter parking and provide access off roundabouts. 	<ul style="list-style-type: none"> Use the roundabouts as access points to the PnR area for traffic efficiency and circulation benefits 	EIS Sections 7.2.4, 11.4.12	13(2)
14	Additional overpasses	<p>Walkability, connectivity and permeability should be increased between Punchbowl Station and King Georges Road. The existing rail line has no crossings between Punchbowl Station and King Georges Road (1,300m). An additional overpass should be provided. Preferred location is in line with Robinson Street.</p>	<ul style="list-style-type: none"> In addition to the two new overpasses suggested as part of Punchbowl and Wiley Park station provide a crossing between Punchbowl Station and King Georges Road. Preferred location is in line with Robinson Street. 	<ul style="list-style-type: none"> An additional overpass should be provided. Preferred location is in line with Robinson Street. 		13 (2)



6. Wiley Park

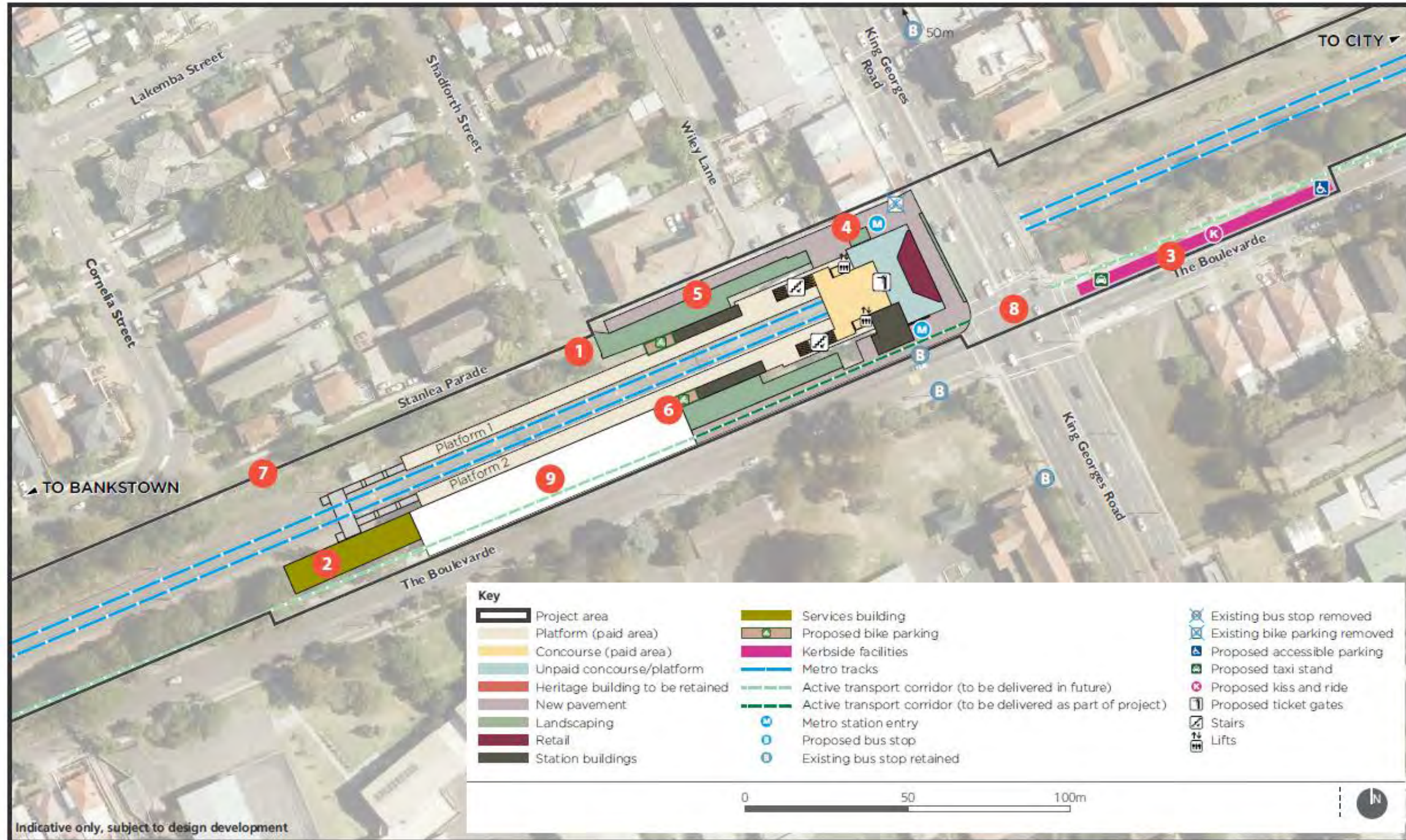


Figure 3: TfNSW EIS Concept Plan for Wiley Park Station; annotated by Canterbury-Bankstown Council



6.1 Wiley Park – Key Issues/Opportunities and Preferred Outcomes

Map Reference	Opportunity/ principle	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
1	<p>Extra connection required on Shadforth Street.</p> <p>Improve connection with cycleway</p> <p><i>Refer to Submission Report Part 2 – Creating better places: Opportunities for our Metro Centres</i></p>	<p>Increase connections to and from the station for pedestrians and cyclists and across the corridor.</p> <p>The EIS should examine a potential second station entry and unpaid concourse link on the alignment of Shadforth Street, including possible pedestrian crossing points at both ends - Stanlea Parade and The Boulevarde.</p>	<ul style="list-style-type: none"> • Provide pedestrian overbridge at west end of platform aligned with Cornelia St or Shadforth St for pedestrian and cycling access. • Concept plan amendment: Stanlea Parade becomes one-way road with kiss n ride at the eastern end. TfNSW to dedicate land for this. • A well-designed, safe and active station precinct that positively defines public space, connects seamlessly with the existing local centre, improving local connectivity and permeability, providing continuous weather protection and delivering customers to the upgraded existing station entry. 	<ul style="list-style-type: none"> • Widen King Georges Road overpass to provide for a future north-south active transport connection. • A master plan for the future delivery of a well-designed, safe and active station precinct that positively defines public space, connects seamlessly with the existing local centre, improving local connectivity and permeability, providing continuous weather protection and delivering customers to the upgraded existing station entry. 	EIS Section 11.4.11 Page 11-33	13 (2) 14(1)-14(4)
2	<p>Loss of trees south side of station (move services building north to opposite Cornelia Street extension)</p>	<p>The EIS should examine alternative siting strategies for the services building, potentially to the north of the corridor, in the vicinity of Cornelia Street, where there appears to be less tree cover.</p> <p>Investigate relocating service building and carpark north of rail line.</p> <p>Investigate relocation of infrastructure shed to northern side of line to avoid impacts on trees</p>	<ul style="list-style-type: none"> • Sensitively sited and designed services buildings that do not unnecessarily interrupt the continuity of 'green' corridor opportunities. • Avoid any tree loss • trees on southern side of station are retained 	<ul style="list-style-type: none"> • Sensitively sited and designed services buildings that do not unnecessarily interrupt the continuity of 'green' corridor opportunities. • Minimise any tree loss • 3:1 tree replacement that achieves visual, landscape and environmental outcomes higher than existing. Biodiversity offsets are purchased and retained within the Canterbury Bankstown LGA 	Figure 8.16	14(1)-14(4)



6.1 Wiley Park – Key Issues/Opportunities and Preferred Outcomes

3	<p>Disconnection of 'kiss-and-ride' and accessible parking location - provide in RMS designated parking or move to another location</p>	<p>The EIS should propose a viable alternative location for kiss-and-ride spaces that allow a safe and seamless interchange for customers. Potentially this could be co-located and shared within the RMS off-street car parking.</p> <p>Investigate relocating kiss-and-ride closer to station entry on The Boulevarde.</p> <p>Include a condition to relocate the proposed kiss-and-ride location to either Stanlea Parade or on the Boulevarde (west of King Georges Road). The kiss-and-ride could be included in the current proposed RMS clearways parking and parking could be provided in the proposed kiss-and-ride location on the Boulevarde (east of King Georges Road).</p> <p>Increase connections to and from station for pedestrians and cyclists and across corridor; enhanced kiss n ride.</p>	<ul style="list-style-type: none"> • Thoughtfully designed and integrated kiss-and-ride facilities that are accessible and safe to use. • Relocate kiss-and-ride closer to station entry on The Boulevarde. • Relocate the kiss-and-ride location to either Stanlea Parade or the Boulevarde. The kiss-and-ride could be included in the current proposed RMS clearways parking and parking could be provided in the proposed kiss-and-ride location on the Boulevard (east of King Georges Road). • Concept plan amendment: Stanlea Parade becomes one-way road with kiss-and-ride at the eastern end. TfNSW to dedicate land for this. 	<ul style="list-style-type: none"> • Thoughtfully designed and integrated kiss-and-ride facilities that are accessible and safe to use. • Relocate kiss-and-ride closer to station entry on The Boulevarde • Increase frequency and duration of pedestrian crossing periods across King Georges Road to reduce pedestrian waiting times given the high number of pedestrian movements expected. 	<p>EIS Figure 8.16, Section 11.4.11 - Page 11-33</p>	<p>14.1-14.4 13 (2)</p>
4	<p>Rethink the town centre - parking and public domain/amenity as businesses struggle</p> <p>Consider share way at the location of Stanlea Parade</p> <p><i>Refer to Submission Report Part 2 – Creating better places: Opportunities for our Metro Centres</i></p>	<p>Need to re-think the design of the station and the town centre.</p> <p>Wiley Park Town Centre businesses struggle due to lack of foot traffic, poor parking and poor image. The high-speed limit along King Georges Road adds to the challenge for trucks unloading and conducting business operations (40km in school limited times).</p> <p>The EIS should examine a potential augmentation of retail uses and public realm improvements associated with the upgraded existing station at King Georges Road between The Boulevarde and the extension of Stanlea Parade</p>	<ul style="list-style-type: none"> • Community consultation of the users and all stakeholders of area and re-think the design • A well-designed, safe and active station precinct that positively defines public space, connects seamlessly with the existing local centre, improving local connectivity and permeability, providing continuous weather protection and delivering customers to the upgraded existing station entry. 	<ul style="list-style-type: none"> • A master plan for the future delivery of a well-designed, safe and active station precinct that positively defines public space, connects seamlessly with the existing local centre, improving local connectivity and permeability, providing continuous weather protection and delivering customers to the upgraded existing station entry. 	<p>EIS Figure 8.16</p>	<p>14(1)-14(4)</p>



6.1 Wiley Park – Key Issues/Opportunities and Preferred Outcomes

5	<p>The proposed landscaped area is an opportunity to create a laneway for Shadforth St, Cornelia St and Wiley Lane - with retail ground floor and kiss-and-ride.</p> <p><i>Refer to Submission Report Part 2– Creating better places: Opportunities for our Metro Centres</i></p>	<p>The EIS should examine enhanced retail uses and public realm improvements associated with an upgraded station entry along Stanlea Parade towards Shadforth Street, linking with a potential second station entry on the alignment of Shadforth Street. This connection would benefit students accessing the school from the north of the rail line.</p> <p>Consult with Council and DPE about future development plans adjoining station and opportunities for an upgraded shared zone in this linkage.</p>	<ul style="list-style-type: none">• A well-designed, safe and active station precinct that positively defines public space, connects seamlessly with the existing local centre, improving local connectivity and permeability, providing continuous weather protection and delivering customers to the upgraded existing station entry.• An active and well-designed access that accommodates future development between King Georges Rd and Cornelius St		EIS Figure 8.16	14(1)-14(4)
6	<p>Additional bike parking required - retain existing facility, proposed is distant from entry</p>	<p>The EIS should ensure that cycling facilities are given greater priority to align with the station hierarchy of transport modes.</p> <p>Relocate bike parking to station entry both sides</p>	<ul style="list-style-type: none">• Convenient, safe and easy to use bike storage facilities located close to station entries.• Relocate bike parking to station entry both sides.• Ensure adequate bike parking.		EIS Figure 8.16	14(1)-14(4)
7	<p>Potential for new commuter parking on railway land between Shadforth Street and Cornelia Street aligning with Stanlea Parade</p>	<p>Consider providing additional park-and-ride spaces at Wiley Park, if possible, to offset losses at other stations, such as Campsie, Belmore and Bankstown.</p> <p>Increase connections to and from the station for pedestrians and cyclists and across corridor; enhance kiss n ride.</p>	<ul style="list-style-type: none">• Provide additional park-and-ride spaces at Wiley Park and upgrade spaces to meet DDA compliance.• Concept plan amendment: Stanlea Parade becomes one way road with kiss-and-ride at the eastern end. TfNSW to dedicate land for this.	<ul style="list-style-type: none">• Not preclude providing additional park-and-ride spaces at Wiley Park, potentially through transfer of land from Sydney Metro to Council for future works or re-locating development sites so that those closer to the station are used for development and parking is located further away as part of meeting the modal hierarchy.	EIS Section 11.4.11 Page 11-33	13 (2)
8	<p>Active transport corridor-uncertain what options will be for cyclist crossing King Georges Rd to continue east.</p>	<p>Consider linking active transport corridor under King Georges Road.</p> <p>Enhanced Active Transport Corridor at Wiley Park Station to improve attractiveness as modal option.</p>	<ul style="list-style-type: none">• Consider linking active transport corridor under King Georges Road overpass.• Concept plan amendment: explore running Active Transport Corridor underneath rail bridge.	<ul style="list-style-type: none">• Widen King Georges Road overpass or undertake works near Shadforth Street to provide for a future north-south active transport connection.	EIS Table 8.9 page 8-29, Section 11.4.1 Page 11.33	13 (2)



6.1 Wiley Park – Key Issues/Opportunities and Preferred Outcomes

9	Consider increasing capacity of park and ride in conjunction with Council works project funded by RMS	Consider providing additional park-and-ride spaces at Wiley Park, if possible, to offset losses at other stations, such as Bankstown.	<ul style="list-style-type: none">• Provide additional park-and-ride spaces at Wiley Park and upgrade spaces to meet DDA compliance.	<ul style="list-style-type: none">• Not preclude providing additional park and ride spaces at Wiley Park, potentially through transfer of land from Sydney Metro to Council for future works or re-locating development sites so that those closer to the station are used for development and parking is located further away as part of meeting the modal hierarchy.	EIS Section 11.4.11 Page 11-33	13 (2)
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7. Lakemba Station

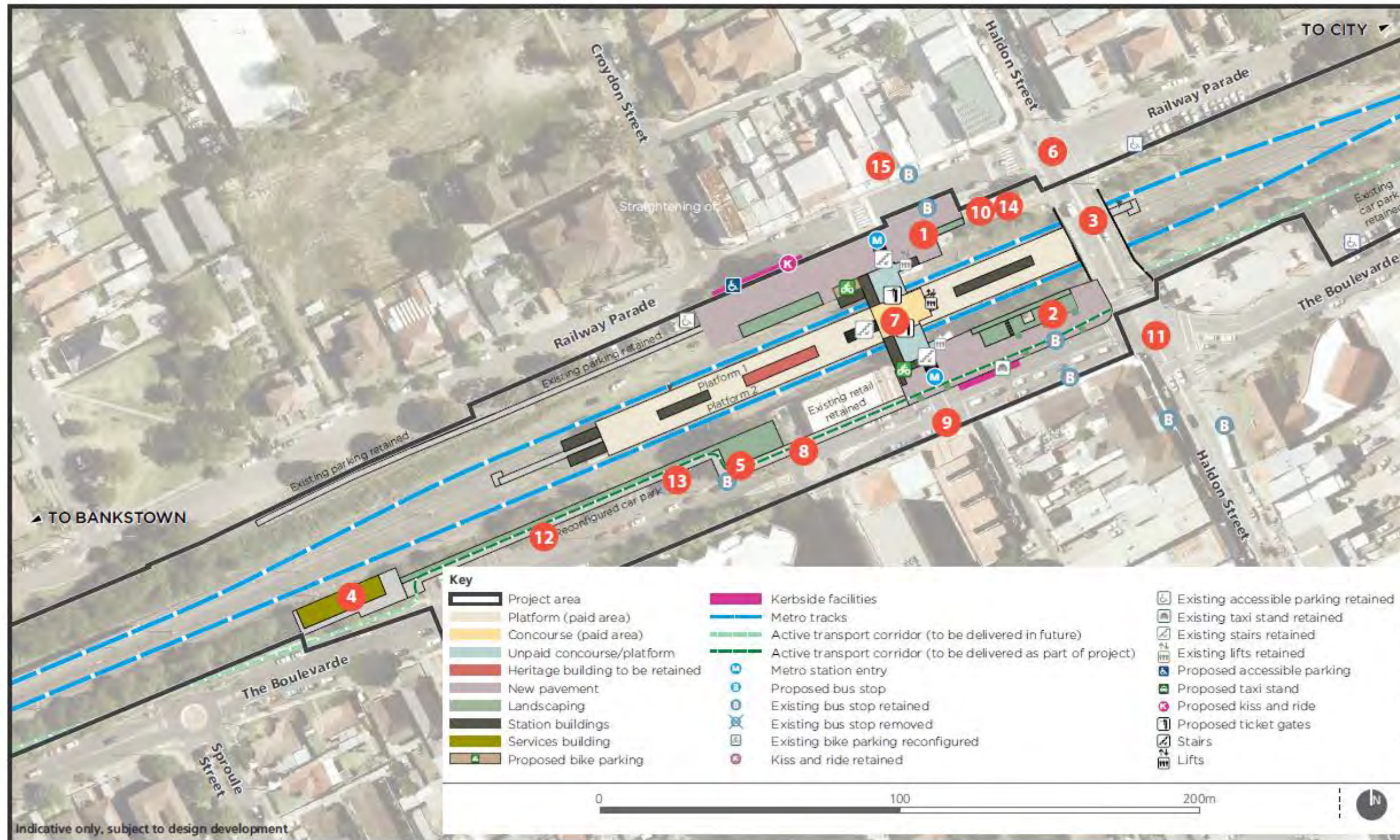


Figure 4TfNSW EIS Concept Plan for Lakemba Station; annotated by Canterbury-Bankstown Council:



7.1 Lakemba Station – Key Issues/Opportunities and Preferred Outcomes

Map Reference	Issue / Opportunity	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
1	<p>Opportunity to provide a quality town square with flexible use and improve the amenity of Railway Parade.</p> <p>Please note: A considerable paved area is suggested between Haldon Street and the Metro entrance. This location has a significant slope and Council do not believe that it is a quality solution for the cultural event needs of Lakemba.</p> <p><i>Submissions Report Part 2 – Creating Better Places: Opportunities for our Metro Centres that outlines alternative visions for Lakemba</i></p>	Refer to Submissions Report Part 2 – Creating Better Places: Opportunities for our Metro Centres that outlines alternative visions for Lakemba	<ul style="list-style-type: none"> Linkage and expansion of town square at the corners of Haldon/ Railway Parade and Haldon St/ The Boulevard as per original Sydenham to Bankstown Urban Renewal Corridor Strategy (see Submissions Report Part B – Creating Better Places: Opportunities for our Metro Centres Lakemba Option 1) Enables Haldon Street to provide appropriate pedestrian and cycling access and link the two town square locations. 	<ul style="list-style-type: none"> Upgraded well-defined town squares on the corners of Haldon/ Railway Parade and Haldon St/ The Boulevard Widening of Haldon Street to provide appropriate pedestrian and cycling access 	EIS: Table 8.8, Figure 8.14	14 (1) – (3)
2	<p>Reduction of park size and relocation of War Memorial</p> <p><i>Submissions Report Part 2 – Creating Better Places: Opportunities for our Metro Centres that outlines alternative visions for Lakemba</i></p>	<p>It will be difficult to assess the exact implications for the War Memorial and evaluate the impacts on the park once the project has been approved.</p> <p>In Part 1A of the EIS, it is suggested the war memorial is retained. In Part 1B the mapping suggests the War Memorial is to be removed (Figure 14.5). Council is assuming that the park within which the War Memorial sits is to be reduced in size and therefore, the War Memorial relocated.</p> <p>If this is the case, Council seeks clarity in the EIS to understand the exact impacts on the future park size, and if not, why the War Memorial needs to be relocated.</p> <p>This space is highly valued by the community and contributes to its character.</p> <p>Targeted engagement with the existing users of the war memorial/park.</p>	<p>Provide a well-integrated public realm in Lakemba able to service the important cultural functions of the centre.</p> <p>Refer to Submissions Report Part 2 – Creating Better Places: Opportunities for our Metro Centres</p>	<p>A master plan for the future delivery of a well-designed, safe and active station precinct that positively defines public space, connects seamlessly with the existing local centre, providing continuous weather protection and delivering customers to the upgraded existing station entry.</p> <p>Additionally, at Lakemba, important ceremonial public spaces need to be maintained or augmented in close and careful consultation with Council, existing users and community groups.</p>	Part 1A –Table 8.8 Part 1B – Figure 14.5	14 (1)-14 (4)



7.1 Lakemba Station – Key Issues/Opportunities and Preferred Outcomes

3	Lighting on bridges, Railway Parade and Haldon St	Improved lighting on Haldon Street overbridge for pedestrians. Widen footpath for pedestrian safety during the day and night time periods in response to CPTED. Increased pedestrian safety to meet needs of future centre population is essential.	Widened footpath on both Haldon Street overpass and on Railway Parade underpass with suitable lighting for day and night time safety Concept plan amendment: Include signalised traffic lights at Haldon Street and Railway Parade.	Additional lighting on Haldon Street overpass / Railway Parade underpass and widening	EIS Table 7.9, Table 8.12, Sections 7.2.1, 7.3.4, 11.4.2, 17.2.3, 25.3.10	13(2) and 14 (1e)
4	Retain large mature trees or replace with street tree plantings of similar scale in the centre.	Tree management strategy and street tree planting plan needs to be developed with Council, any proposed biodiversity credit offsets should be purchased and retained within the Canterbury Bankstown LGA and within the corridor.	Tree management strategy and street tree planting plan needs to be developed with Council, any proposed bio credit offsets should be purchased and retained within the Canterbury Bankstown LGA	3:1 tree replacement that achieves visual, landscape and environmental outcomes higher than existing. Biodiversity offsets are purchased and retained within the Canterbury Bankstown LGA		
5	Cycleway issues - crossing at Haldon St, around car park and safety issues next to services building.	Include provisions for an off-street active transport corridor along the whole corridor to be delivered as part of the project within the rail corridor. Station cycling access modal split could be increased with better active transport connections to the station. Increased transport options for future population in high growth area.	Off-street active transport corridor delivered within the scope of the project within the rail corridor. Concept plan amendment: revise location of services building and straighten Active Transport Corridor.	A well-design integrated active transport corridor.	EIS Table 7.9, Table 8.8, Sections 5.3.4, 7.2.1, 7.3.1,	13(2)
6	Intersection Railway Parade and Haldon - traffic lights for pedestrian access	Signalisation of the Railway Parade / Haldon Street intersection for both pedestrian and traffic congestion reasons. Increase pedestrian safety to meet needs of future centre population.	Add in signalisation of the Railway Parade / Halidon Street intersection for both pedestrian and traffic congestion reasons. Concept plan amendment: Include signalised traffic lights at Haldon Street and Railway Parade.	Safeguarding the intersection for future signalisation, which at a minimum would include adding it to the scope of the project, potentially installing signal conduits in the road.	EIS Table 10.46 and paragraph below page 10-63	13(2)
7	Need unpaid concourse connection	Introduce a detailed design solution for unpaid concourse connection at Lakemba station. Review design to allow free access across overbridge	Unpaid concourse connection. Provide free access to overbridge	Unpaid concourse connection. Provide free access to overbridge	EIS: Figure 8.14	14.1-14.4



7.1 Lakemba Station – Key Issues/Opportunities and Preferred Outcomes

8	Pedestrian lights required at Croydon St and The Boulevarde; signalised intersection to replace roundabout	<p>Signalisation of The Boulevarde / Croydon Street intersection (currently a roundabout) for both pedestrian and traffic congestion reasons.</p> <p>Increase pedestrian safety to meet needs of future centre population.</p>	<p>Add in signalisation of The Boulevarde / Croydon Street intersection (currently a roundabout) for both pedestrian and traffic congestion reasons, potentially widening the pedestrian crossing on The Boulevard to the west of Haldon Street and having an extended pedestrian crossing at the proposed signals at Croydon Street to replace the existing mid-block crossing.</p> <p>The mid-block crossing may not meet current standards for distance between signals and would not be able to be retained should the intersection be signalised.</p> <p>Concept plan amendment: relocate pedestrian crossing on The Boulevarde from current position to Croydon Street/The Boulevard intersection.</p>	Safeguarding the intersection for future signalisation, which at a minimum would include adding it to the scope of the project, potentially installing signal conduits in the road.	EIS Table 10.23 - page 10-25	13(2)
9	New schools - signalised lights	Increase pedestrian safety to meet needs of future centre population.	Concept plan amendment: relocate pedestrian crossing on The Boulevarde from current position to Croydon Street/The Boulevard intersection.		No reference in EIS	13 (2)
10	Distinct character and cultural influences - should be respected. Lakemba is destination station, with much-loved festivals and mosque and Multicultural Mosaic on north side of station.	<p>Include social infrastructure/public art and monuments within corridor for Lakemba (and all stations) and consider impacts and mitigation measures. Include in Table 4-8 as an impact.</p> <p>Include a comment that amalgamated Councils are in the process of developing a new Community Strategic Plan (CSP) and that the community values of an amalgamated Council should be considered when the draft is available for exhibition.</p> <p>Culturally specific consultation will need to be included at the design phase of the project. TfNSW to work directly with</p>	<ul style="list-style-type: none"> Reinstate the war memorial with sufficient space for congregation area (dependent on user engagement feedback) Reinstate the multicultural mosaic if affected by construction works with sufficient space for congregation area. Include text on new CSP in development. the existing Mosaic is replaced and retained on the original site, Messages from the community consultations end up in the design of the development Hold community consultations particularly with key cultural groups through community leaders and Council. 		EIS: Table 8.8, Figure 8.14	



7.1 Lakemba Station – Key Issues/Opportunities and Preferred Outcomes

		Council to ensure community needs are considered.				
11	Potential for slight straightening of The Boulevard across Haldon Street	Include slight straightening of the intersection of Haldon Street / The Boulevard to the scope of the project for reconsideration of the geometry to improve efficiency and safety for motorists and pedestrians. Enhance road safety to support population density in the growth corridor.	Straighten the alignment for The Boulevard across Haldon Street to improve pedestrian safety and improve traffic operations Concept plan amendment: include an option to slightly straighten The Boulevard to enhance visibility for cars crossing Haldon Street.	Safeguarding for the straightening of the intersection in the future through building location/design.	EIS Table 10.46 and paragraph below page 10-63	13(2)
12	Opportunity for park-and-ride focus (available parking either side of station - in need of upgrade)	Consider providing additional park-and-ride spaces at Lakemba, if possible, to offset losses at other stations, such as Campsie, Belmore and Bankstown. TfNSW must provide a commuter parking strategy as part of the EIS (including cycle and vehicle parking).	Provide additional park-and-ride spaces at Lakemba and upgrade spaces to meet DDA compliance.	Not preclude providing additional park and ride spaces at Lakemba, potentially through transfer of land from Sydney Metro to Council for future works or relocating development sites so that those closer to the station are used for development and parking is located further away as part of meeting the modal hierarchy.	Sections 7.2.4, page 7.7, 7.3.8, page 7.16. o 11.3.2, page 11.4 and 11.4.10, page 11.31	13(2)
13	No accessible parking on the southern side	Accessible parking should be provided on both sides of the train line and at all stations along the corridor to enable easy access by people with disabilities.	Provide accessible parking on both sides of the corridor		Sections 7.2.4, page 7.7, 7.3.8, page 7.16. o 11.3.2, page 11.4 and 11.4.10, page 11.31	13(2)
14	Retain Multicultural Mosaic & the Cedar tree north of train line	The Mosaic and Cedar tree are a part of local heritage and valued spaces which the community has contributed to the planning of. Council is planning to create a multicultural meeting space on this site with	New pavement extended to the area around the Multicultural Mosaic & Cedar tree	Area around Multicultural Mosaic & Cedar tree retained for future redevelopment by Council.	EIS: Table 8.8, Figure 8.14	14.1-14.4



7.1 Lakemba Station – Key Issues/Opportunities and Preferred Outcomes

		additional paving, seating, shelter, lighting & artwork.				
15	Station design and surrounds reflective of the religious and cultural influences of the community	Cultural specific consultations will need to be included in the design phase of the project. TfNSW and to work directly with Council to ensure community needs are considered.	Final design is reflective of community expectations		EIS: Table 8.8, Figure 8.14	14.1-14.4



8. Belmore Station

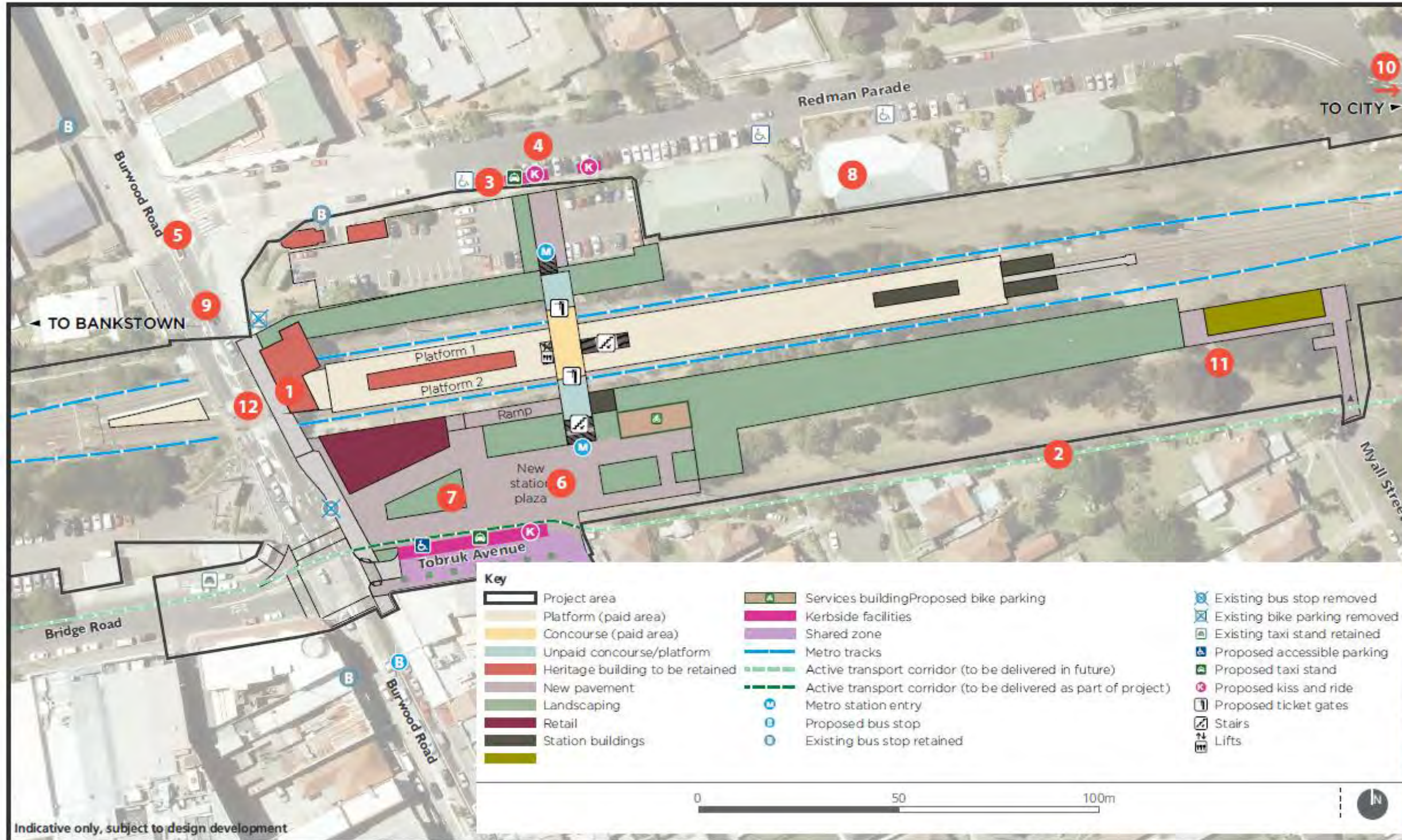


Figure 5: TfNSW EIS Concept Plan for Belmore Station; annotated by Canterbury-Bankstown Council



8.1 Belmore Station – Key Issues/Opportunities and Preferred Outcomes

Map Reference	Opportunity/Issues	What should be done	Preferred outcome	Minimum outcome	EIS Reference	SEARS Reference
1	<p>Retain existing entry and provide a new proposed entry with unpaid concourse connection.</p> <p>Increase activation - urban plaza size and retail building appropriate.</p> <p><i>Refer to Submission Report Part 2– Creating Better Centres: Opportunities for our Metro Stations.</i></p>	<p>Existing station entries should be maintained in all cases. New metro station entries should be configured as additional, rather than alternative, access points.</p> <p>Redesign station so the entry and plazas focus activity to Burwood Road rather than the side streets.</p> <p>Deliver as an unpaid concourse to increase permeability in the centre.</p> <p>Each station precinct needs a credible, well-coordinated master plan to describe the extent, configuration and connectivity of proposed new development and public space.</p>	<ul style="list-style-type: none"> The existing Belmore station entry should be retained as an operational Metro station entry, with supplementary retail uses included within the existing heritage building. Additionally, the proposed new metro concourse should better integrate with Council controlled buildings to the north-east of the northern entry plaza. Station redesigned with existing entry retained, smaller scaled plazas both north and south side fronting Burwood Rd and the carparks on north and south side identified as development sites to provide active frontages to the plazas. New free access overbridge located further east. A well-designed, mixed-use station plaza that positively defines and activates new public space, connects seamlessly with the existing town centre, provides continuous weather protection and delivers customers to the new and existing station entries. 	<ul style="list-style-type: none"> The existing Belmore station entry should be retained as an operational metro station entry. And the proposed new station entry should be configured to allow unpaid access across the rail corridor. Redesign station so the entry and plazas better focus activity to Burwood Road rather than the side streets. A master plan that demonstrates the capacity to develop a mixed-use station plaza that positively defines and activates new public space, connects seamlessly with the existing town centre, provides continuous weather protection and delivers customers to the new and existing station entries. 	Section 8 – Table 8.7	14(1)-14(4)



8.1 Belmore Station – Key Issues/Opportunities and Preferred Outcomes

2	Connection to stadium - active transport corridor should be delivered first.	A note added to Figure 8.12 shows the Tobruk Avenue works, including the signalised intersection and active transport link to be constructed as 'early works' to allow the construction zone boundary to then be moved north of this area.	<ul style="list-style-type: none"> The Tobruk Avenue works, including the signalised intersection and active transport link to be constructed as 'early works'. 	<ul style="list-style-type: none"> The Tobruk Avenue active transport link to be constructed as 'early works' 	EIS: Table 8.7, Figure 8.12; TT&A Paper Section 8.8	13(2)
3	Rethink transport mode connections to station - kiss and ride too small, accessible parking location and bike parking removed from the station to the North	Show additional 'kiss and ride' bays on the southern side of the station potentially by converting the parallel bays to angled bays and accordingly slightly reducing the plaza area. Show bike parking on Figure 8.12 in the plaza area but also in the northern area of the station. This will also reduce the risk of vehicles queueing back out into Burwood Road because entering and exiting 'kiss n ride' bays will be easier/faster without potential reverse-and reduced risks with double parking.	<ul style="list-style-type: none"> Additional 'kiss n ride' bays off Tobruk Avenue and bicycle storage on the northern side of the station as well as the secure facilities proposed in the plaza area. 	<ul style="list-style-type: none"> Additional 'kiss n ride' bays off Tobruk Avenue by converting these bays to angled parking instead of parallel bays. 	EIS: Table 8.7, Figure 8.12; TT&A Paper Section 8.8	13(2)
4	Crossing required at Redman Parade in line with station entry	Include a pedestrian refuge, or road narrowing with pedestrian crossing or zebra crossing in EIS Figure 8.12 'to be delivered as part of the project'	<ul style="list-style-type: none"> Blister islands and a zebra crossing in Redman Parade aligned with the Metro station entry point 	<ul style="list-style-type: none"> A pedestrian refuge/crossing facility in Redman Parade aligned with the Metro station entry point 	EIS: Table 8.7, Figure 8.12; TT&A Paper Section 8.8	13(2)



8.1 Belmore Station – Key Issues/Opportunities and Preferred Outcomes

5	Reconfigure pedestrian crossings with additional at Burwood Rd/Redman Parade. Retain access to Bridge Road and PCYC.	Identify how pedestrians in the north-western catchment can safely and conveniently access the station platform, compared to current pedestrian routes/facilities	<ul style="list-style-type: none"> Signalise the intersection of Burwood Road and Redman Parade as part of the project 	<ul style="list-style-type: none"> Provide a pedestrian crossing facility across Burwood Road near Redman Parade (or even to the north of the bus stop) as part of the project 	EIS: Table 8.7, Figure 8.12; TT&A Paper Section 8.8	13(2)
6	Rethink station plaza - retain trees and consider retail size <i>Submission Report Part 2 – Creating Better Centres: Opportunities for our Metro Stations</i>	Each station precinct needs a credible, well-coordinated master plan to describe the extent, configuration and connectivity of proposed new development and public space.	<ul style="list-style-type: none"> A well-designed, mixed-use station plaza that positively defines and activates new public space, connects seamlessly with the existing town centre, provides continuous weather protection and delivers customers to the new and existing station entries. 	<ul style="list-style-type: none"> A master plan that demonstrates the capacity to develop a mixed-use station plaza that positively defines and activates new public space, connects seamlessly with the existing town centre, provides continuous weather protection and delivers customers to the new and existing station entries. 	EIS: Section 8, Table 8.7	14(1)-14(4)
7	Connect heritage within a landscaped area <i>Refer to Submission Report Part 2 – Creating Better Centres: Opportunities for our Metro Stations</i>	Each station precinct needs a credible, well-coordinated master plan to describe the extent, configuration and connectivity of proposed new development and public space, and must incorporate retained heritage items in a manner that ensures their ongoing use.	<ul style="list-style-type: none"> A well-designed, mixed-use station precinct that positively defines and activates new public space, connects seamlessly with the existing town centre, incorporates existing heritage items, provides continuous weather protection and delivers customers to the new and existing station entries. 	<ul style="list-style-type: none"> A master plan that demonstrates the capacity to develop a mixed-use station precinct that positively defines and activates new public space, connects seamlessly with the existing town centre, incorporates existing heritage items, provides continuous weather protection and delivers customers to the new and existing station entries. 	EIS: Section 8, Table 8.7	14.1-14.4
8	Opportunities for Council's buildings/property <i>Refer to Refer to Submission Report Part 2 – Creating Better Centres: Opportunities for our Metro Stations</i>	The future of existing Council facilities is being investigated. Ensure the station design is integrated and designed to accommodate this future urban form.	<ul style="list-style-type: none"> Station design is integrated with future development sites and the Council is actively involved in this design 	<ul style="list-style-type: none"> Station design is integrated with future development sites 	EIS: Section 8, Table 8.7	10 (1) – 10(2)



8.1 Belmore Station – Key Issues/Opportunities and Preferred Outcomes

9	Opportunity for separated cycleway from Redman Parade to Greenway South West cycleway, via the overbridge and connecting both sides of the station.	Plan for movements from non-Metro cyclists and pedestrians that will be improved or at least allowed for in the future.	<ul style="list-style-type: none"> A second or immediately-adjacent pedestrian/cyclist overpass to connect across the rail line for walking and cycling trips not associated with the Metro 	<ul style="list-style-type: none"> Provision for a future second or immediately-adjacent pedestrian/cyclist overpass to connect across the rail line for walking and cycling trips not associated with the Metro 	EIS: Table 8.7, Figure 8.12; TT&A Paper Section 8.8	13(2)
10	Opportunity to create detention storage within Belmore triangle to provide relief to properties in Lark and Hall Streets	Investigate and improve the existing drainage and flooding issues in Lark and Hall Streets through detention storage. 2D flood modelling to be undertaken for the centre.	<ul style="list-style-type: none"> Improvement to existing drainage and flooding issues. 	<ul style="list-style-type: none"> No deterioration to existing drainage and flooding issues. 	EIS: Table 21.2	6 (1) – (4)
11	Opportunity to increase pipe capacities through rail corridor to reduce/minimise flow through the pedestrian underpass near Belmore Oval.	Increase stormwater management capacity in the underpass.	<ul style="list-style-type: none"> Improvement to existing drainage and flooding issues. 	<ul style="list-style-type: none"> No deterioration to existing drainage and flooding issues. 	EIS: Table 21.2	6 (1) – (4)
12	Lighting on rail bridge, Burwood Road	Improved lighting on Burwood Road overbridge for pedestrians. Widen footpath for pedestrian safety during the day and night time periods in response to CPTED. Increased pedestrian safety to meet needs of future centre population is essential.	<ul style="list-style-type: none"> Widened footpath on Burwood Road overpass with suitable lighting for day and night time safety 	<ul style="list-style-type: none"> Additional lighting on Burwood Road overpass 		13 (1) (e)



10. Campsie Station

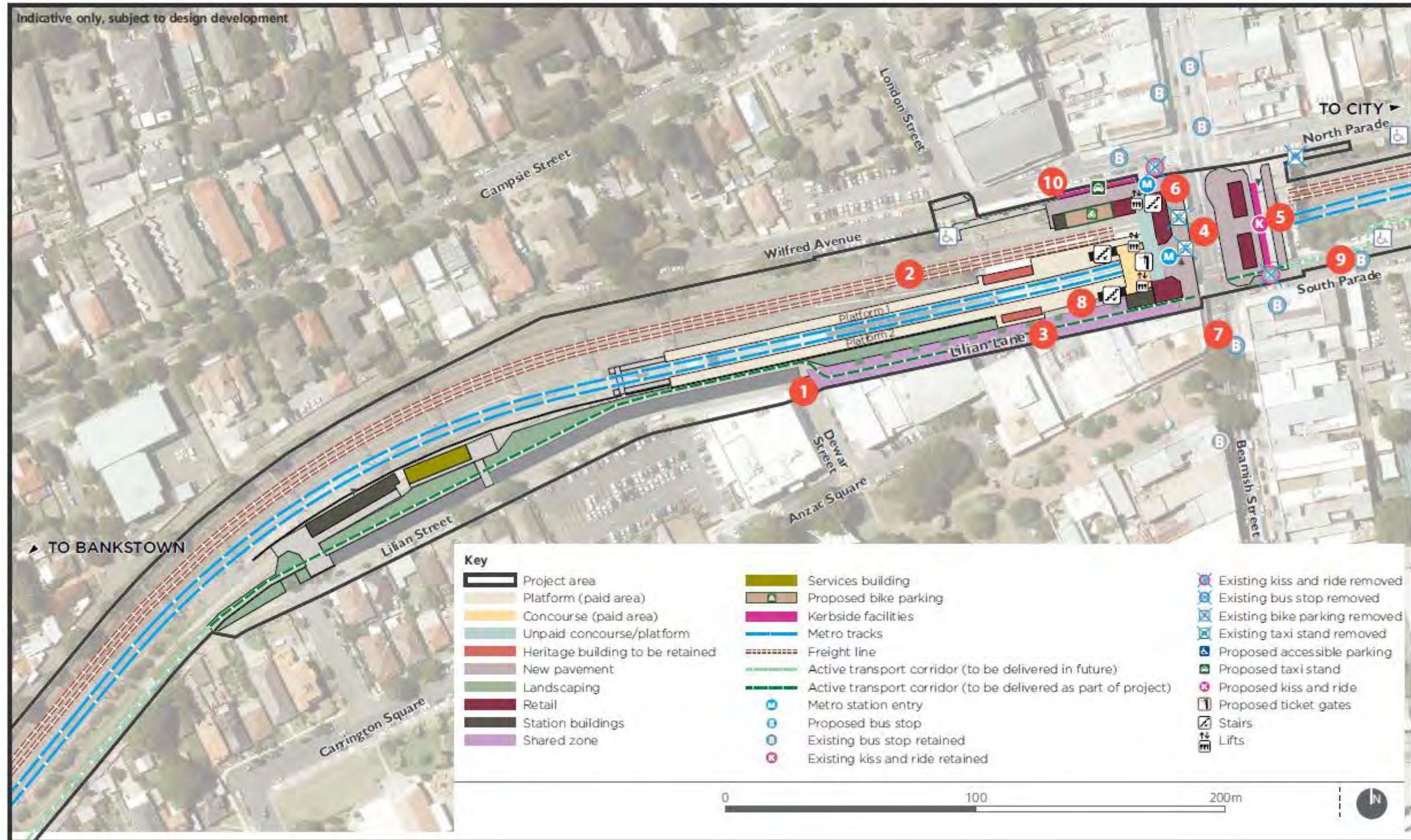


Figure 6: TfNSW EIS Concept Plan for Campsie Station; annotated by Canterbury-Bankstown Council:



10.1 Campsie Station – Key Issues/Opportunities and Preferred Outcomes

Map Reference	Opportunity/ issue	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
1	<p>Deliver an additional concourse and station entry on the alignment of Assets Street and Dewar Street</p> <p><i>Refer to Submission Report Part 2 - Creating Better Places: Opportunities for our Metro Centres – Campsie Section for an illustration of the increased connection</i></p>	<p>Delivering an additional pedestrian overbridge in the alignment of Asset Street to Dewar Street will provide significantly increased permeability across the centre. This is particularly vital as this centre is experiencing and will continue to experience significant growth.</p> <p>The additional overpass will provide excellent integration of the key social and economic heart of the centre with Campsie Station. Under the Sydenham to Bankstown Urban Renewal Corridor Strategy, significant high and medium rise housing is being planned for the northern side of the rail corridor. This additional overpass will provide much more integration with this densification of development. This should be delivered with unpaid access for connectivity.</p>	<ul style="list-style-type: none"> • Deliver the additional unpaid concourse on the alignment of Assets and Dewar Streets. 	<ul style="list-style-type: none"> • Deliver the additional unpaid concourse on the alignment of Assets and Dewar Streets • 	EIS: Table 8.6, Figure 8.10; TT&A Paper Section 8.7	14 (1) –(2)
2	Examine the noise attenuation issues - especially consider freight line	Combination of acoustic treatment at receivers (façade treatment) and use of 2m high barrier (path).	<ul style="list-style-type: none"> • Improve the efficiency, length and height of the proposed barrier in order to decrease the noise levels from Freight Trains 	<ul style="list-style-type: none"> • Better level of noise attenuation for the residents located along the freight line and longer barriers past the station 	Section 4.1.9.5 of the SLR Report	8 (1)
3	Proposed shared zone - Lillian Lane currently insufficient space. Businesses face Anzac Square with service access delivery and waste on Lillian Lane.	<p>Review the design of Lillian Lane - this may require widening or realignment of paths and active transport corridor. Widen Lillian Lane on rail corridor land (northern side).</p> <p>Council to consider increasing building setbacks on the southern side as part of the Corridor Strategy for future development with the long-term goal of improving serviceability and passive surveillance.</p> <p>Ensure lane width can accommodate vehicles standing while carrying out services. Investigate use of bollards to demarcate safe zones for active transport corridor.</p> <p>Lillian Lane/Beamish St junction is unsafe. Needs considerable improvement and upgrading.</p>	<ul style="list-style-type: none"> • Widening Lillian Lane into the rail corridor between Beamish Street and Dewar Street to provide a shared path along its northern side, separated from traffic and with improved lighting and passive surveillance from the Metro Station also enabled. • Services provided to the rear of businesses at Lillian Lane are enhanced with safe passage for pedestrians and cyclists. One way traffic flow continues to east. 	<ul style="list-style-type: none"> • Safe passage for all proposed new users of the upgraded lane. • Sufficient space for active transport corridor without conflicts with cars and delivery vehicles 	<p>Sydney Metro City & Southwest Sydenham to Bankstown upgrade – Technical Paper 1 - Traffic section 3.6</p> <p>EIS: Table 8.6, Figure 8.10; TT&A Paper Section 8.7</p>	13(2)



10.1 Campsie Station – Key Issues/Opportunities and Preferred Outcomes

			<ul style="list-style-type: none"> • Sufficient space for active transport corridor without conflicts with cars and delivery vehicles • Concept design amendment: provide additional options for ATC through Campsie. 			
4	<p>Beamish Street is a Pedestrian priority street. Slow the traffic on Beamish Street (with Campsie Bypass partly funded by State Infrastructure Contributions (SIC)) with the opportunity for scramble crossing on Beamish Street between North and South Parades. Provide pedestrian priority on North Parade</p>	<p>Include discussion and impact assessment and mitigation measures for the Wilfred Avenue access point and associated pedestrian connections across Beamish Street</p>	<ul style="list-style-type: none"> • Signalised intersection of Beamish/Wilfred/North and scramble pedestrian crossing at this intersection and Beamish/South Parade and Lilian Lane intersection as part of the project • Concept design amendment: Add scramble crossing on Beamish Street between North and South parades. 	<p>New signalised pedestrian crossing across Beamish Street north of Wilfred Avenue as part of the project</p>	<p>EIS: Table 8.6, Figure 8.10; TT&A Paper Section 8.7</p>	<p>13(2)</p>
5	<p>Bus interchange location (7 bus routes with high patronage via Beamish Street) opportunity in proposed location for retail space and kiss-and-ride. Also, consider taxis / uber / car share spaces required.</p>	<p>Further, investigate new over-track platform space usage Enhance Campsie's role as an important transport interchange.</p>	<ul style="list-style-type: none"> • Subject to further investigations: Potential to create bus interchange where new over-track platform is proposed • Concept design amendment: integrate bus interchange into the design for over track platform. 	<ul style="list-style-type: none"> • Subject to further investigations: Potential to create bus interchange where new over-track platform is proposed • Concept design amendment: integrate bus interchange into the design for over track platform. 	<p>EIS: Table 8.6, Figure 8.10; TT&A Paper Section 8.7</p>	<p>13(2)</p>
6	<p>Larger public space / widened footpath required due to significant dwelling growth (including deep planter boxes to accommodate trees)</p>	<p>Redesign station with larger public space / widened footpath fronting Beamish St. Refer to Submission Report Part 2 Campsie Station for potential reconfiguration of retail and reconfigured public domain space. Each station precinct needs a credible, well-coordinated master plan to describe the extent,</p>	<ul style="list-style-type: none"> • Provide a larger public area / widened footpaths fronting Beamish Street • A well-designed, safe and active station precinct that positively defines public space, connects 	<ul style="list-style-type: none"> • Provide a larger public area / widened footpaths fronting Beamish Street • A well-designed, safe and active station precinct that positively defines public space, connects 	<p>EIS: Table 8.6, Figure 8.10</p>	<p>14(1)-14(4)</p>



10.1 Campsie Station – Key Issues/Opportunities and Preferred Outcomes

		configuration and connectivity of proposed new development and public space.	seamlessly with the existing high street, providing continuous weather protection and delivering customers to the upgraded existing station entry.	seamlessly with the existing high street, providing continuous weather protection and delivering customers to the upgraded existing station entry.		
7	Provide north/south cycle connections	<p>Ideally would be delivered on Beamish Street. Additionally, investigate other alternatives to provide a new connection across the railway corridor.</p> <p>Increased transport options for future population in high growth area. Whilst the Metro itself does not create an impact which is mitigated by a Dewar Street to Assets Street active transport crossing, the works provide an opportunity to construct this link; to provide a cross-rail active transport connection that is constrained along Beamish Street with the nearest alternative crossing at Loch Street, some distance away.</p> <p>Discuss the benefits for this connection in the EIS</p> <p>Increase connections to and from station for pedestrians and cyclists</p>	<ul style="list-style-type: none"> • Deliver the additional concourse as unpaid access. • Provide additional space for cycle paths at Beamish Street. 	<ul style="list-style-type: none"> • Deliver the additional concourse as unpaid access • If the cycle path is not possible on Beamish Street then make the new additional concourse a cycling connection. 	EIS: Table 8.6, Figure 8.10; TT&A Paper Section 8.7	13(2)
8	Need for additional secure bike parking - consider Lillian Lane.	Add the bicycle parking location near Lillian Lane to the station plan	<ul style="list-style-type: none"> • Secure bicycle parking near the station entrance off Lillian Lane 	<ul style="list-style-type: none"> • Bicycle parking near the station entrance off Lillian Lane 	EIS: Table 8.6, Figure 8.10; TT&A Paper Section 8.7	13(2)
9	Opportunity to Extend the Existing Cycle Path to Campsie Metro Station extend the existing cycle path along the Cooks River, ending at Tasker Park, by creating a dedicated Cycleway on South Parade from Wairoa Street to Beamish Street, including in front of the existing commuter car park	The cycle path will extend the existing active transport route to Campsie Station. The cycleway can be created in front of the commuter car park, and including water sensitive urban design into new landscaping features.	<ul style="list-style-type: none"> • Increase connections to existing cycleway 	<ul style="list-style-type: none"> • Increase connections to existing cycleway 	EIS: Table 8.6, Figure 8.10; TT&A Paper Section 8.7	13 (1)



10.1 Campsie Station – Key Issues/Opportunities and Preferred Outcomes

10	Relocate kiss-and-ride to Wilfred Ave	Relocate kiss-and-ride to a logical location that is easy to see near station entry	<ul style="list-style-type: none">Relocate kiss-and-ride to a logical location that is easy to see near station entry	EIS: Table 8.6, Figure 8.10; TT&A Paper Section 8.7	13 (2)
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12. Canterbury

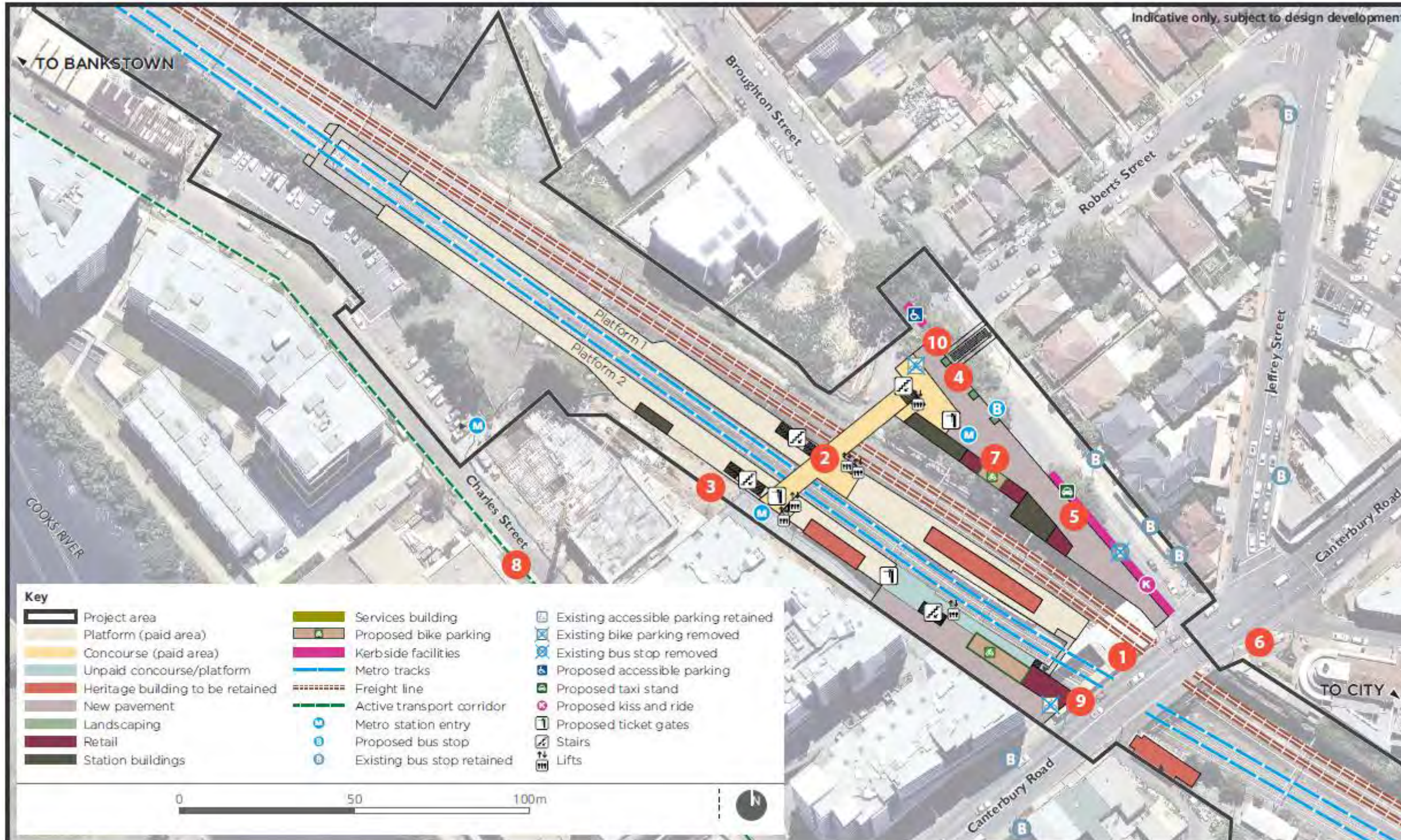


Figure 7: TfNSW EIS Concept Plan for Canterbury Station; annotated by Canterbury-Bankstown Council



12.1 Canterbury Station – Key Issues/Opportunities and Preferred Outcomes

Map Reference	Opportunity/ issue	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
1	Relocation of entry - retain existing entry as well Second entrance to align with Roberts Street and connection to Charles Street and delivered as an unpaid concourse <i>Refer to Submission Report Part 2 – Creating Better Places: Opportunities for our Metro Centres</i>	Existing station entry should be maintained. New metro station entries should be configured as additional, rather than alternative, access points. Amend to design to retain existing entry in an upgraded building ideally with over station development	<ul style="list-style-type: none"> The existing Canterbury station entry should be retained as an operational metro station entry, with supplementary retail uses included within any new station building. Amend to design to retain existing entry The proposed new station concourse should be configured to allow unpaid access across the rail corridor. 		EIS: Table 8.5, Figure 8.8	14 (1)-14 (4)
2	Allow for unpaid concourse between Charles St and Roberts St	The EIS should develop a credible alternative alignment for the new western concourse at Canterbury station, to coincide with the alignment of Roberts Street and allowing for an unpaid concourse to improve local permeability. Review station design to provide free access to new overbridge and relocate Opal readers to top of overbridge	<ul style="list-style-type: none"> In addition to the maintenance of the existing Canterbury station entry, an additional, new western concourse to coincide with the alignment of Roberts Street and allowing for an unpaid concourse to improve local permeability. Provide free access to new overbridge 		EIS: Table 8.5, Figure 8.8	14 (1)-14 (4)
3	Build Charles St future entry now <i>Refer to Submission Report Part 2 – Creating Better</i>	Design and include the station access Charles St in the current EIS. The EIS should include access scenarios and improved linkages for renewal sites around the	<ul style="list-style-type: none"> The Charles Street access works constructed as part of the project Lock in additional connection to Station. 	<ul style="list-style-type: none"> Reasoning provided as to why the Charles Street access works cannot be included as part of the project. 	EIS: Table 8.5, Figure 8.8; TT&A Paper Section 8.6	13(2) 14 (1)-14 (4)



12.1 Canterbury Station – Key Issues/Opportunities and Preferred Outcomes

	<i>Places: Opportunities for our Metro Centres</i>	station precinct and towards Canterbury Racecourse.	<ul style="list-style-type: none"> • Construct the access to Charles St • A well-designed station precinct that positively defines and activates new public space, connects seamlessly with the adjacent urban structure, provides continuous weather protection and delivers customers to both new and existing station entries. 	<ul style="list-style-type: none"> • Concept design amendment: Include additional Charles Street on concept plans 		
4	<p>Opportunity to improve station design and Broughton St entry/use</p> <p><i>Refer to Submission Report Part 2 – Creating Better Places: Opportunities for our Metro Centres</i></p>	<p>Redesign overbridge egress to enable pedestrian flow directly out across a zebra crossing on Broughton St without deviation around walls.</p> <p>The EIS should include access scenarios and improved linkages for renewal sites along Broughton Street to the north of the proposed station concourse.</p> <p>Concept design amendment: relocate accessible parking. Current location inappropriate.</p>	<ul style="list-style-type: none"> • Redesign overbridge egress to enable pedestrian flow directly out across a zebra crossing on Broughton St without deviation around walls. • A well-designed, potentially mixed-use, station precinct that positively defines and activates new public space, connects seamlessly with the adjacent urban structure, provides continuous weather protection and delivers customers to both new and existing station entries. 	<ul style="list-style-type: none"> • Redesign overbridge egress to enable pedestrian flow directly out across a zebra crossing on Broughton St without deviation around walls. • North-south connection should be publicly accessible as previously identified in the Canterbury Town Centre Masterplan/DCP/Section 94 Plan. • A master plan for the future delivery of a well-designed, potentially mixed-use, station precinct that positively defines and activates new public space, connects seamlessly with the adjacent urban structure, provides continuous weather protection and delivers customers to both new and existing station entries. 	EIS: Table 8.5, Figure 8.8; TT&A Paper Section 8.6	14 (1)-14 (4)



12.1 Canterbury Station – Key Issues/Opportunities and Preferred Outcomes

5	Retain large mature trees or replace with street tree plantings of similar scale in the centre.	Tree management strategy and street tree planting plan needs to be developed with Council, any proposed biodiversity credit offsets should be purchased and retained within the Canterbury Bankstown LGA and within the corridor.	<ul style="list-style-type: none"> Tree management strategy and street tree planting plan needs to be developed with council, any proposed bio credit offsets should be purchased and retained within the Canterbury Bankstown LGA 	<ul style="list-style-type: none"> 3:1 tree replacement that achieves visual, landscape and environmental outcomes higher than existing. Biodiversity offsets are purchased and retained within the Canterbury Bankstown LGA 		
6	Redesign Station Heritage hub to strengthen the heritage values on Canterbury Rd.	<p>The existing station entry should be maintained, and built form should mark this important intersection to signify the presence of the station. New metro station entries should be configured as additional, rather than alternative, access points.</p> <p>Integrate Inter-War toilet block in overall planning.</p>	<ul style="list-style-type: none"> A well-designed station building on the site of the existing station entry, that positively defines and activates this intersection, connects seamlessly with the adjacent urban structure, provides continuous weather protection and delivers customers to both new and existing station entries. Retain Inter-War toilet block 	<ul style="list-style-type: none"> The retention and upgrade of the existing station building to reinforce the important intersection. Retain Inter-War toilet block 	EIS: Table 8.5, Figure 8.8	14 (1)-14 (4)
7	Awnings and weather protection	<p>The EIS must include an acceptable minimum level of weather protection to deliver customers to the station entry.</p> <p>Awnings should be provided along the full length of the platforms, and from the station entries to Canterbury Road.</p>	<ul style="list-style-type: none"> A well-designed station building on the site of the existing station entry, that positively defines and activates this intersection, connects seamlessly with the adjacent urban structure, provides continuous weather protection and delivers customers to both new and existing station entries. Continuous awnings provided the full length of the platforms, and from the station entries to Canterbury Road. 	<ul style="list-style-type: none"> The retention and upgrade of the existing station building to reinforce the important intersection and including a continuous line of weather protection to the new southern station entry and both the northern and southern entries to the western paid concourse. Predominantly continuous awnings provided the full length of the platforms, and from the station entries to Canterbury Road. 	EIS: Table 8.5, Figure 8.8	14 (1)-14 (4)



12.1 Canterbury Station – Key Issues/Opportunities and Preferred Outcomes

8	Cycleway – plan for a cycleway connection north/south	Cycleway – plan for a cycleway connection north/south linking Cooks River Cycleway, Active Transport Corridor associated with the Metro, the new (unpaid) connection over the bridge, and connecting with significant urban renewal at Canterbury Racecourse	<ul style="list-style-type: none"> Construct the Charles Street access works as part of the project. Concept plan amendment: linkage from Canterbury Racecourse via unpaid concourse to Active Transport Corridor and link with Cooks River Cycleway 	<ul style="list-style-type: none"> Identify a safe alternative for cyclist access to the station from the Cooks River cycleway. 	EIS: Table 8.5, Figure 8.8	13 (1) (g)
9	Investigate opportunities to boost economic activity along Canterbury Rd - pop up retail	More detail required on placemaking strategies and adequate space provided for community meeting spaces/pop up opportunities etc. Consideration be given to reactivating enterprise along Canterbury Road (a situation that would be considerably worsened by closure of existing station entry due to reduced potential customers)	<ul style="list-style-type: none"> Resources and space provided and detailed in the plan of each station precinct for placemaking/ community meeting and activity beyond retail opportunities 	<ul style="list-style-type: none"> Each station has designated safe, child-friendly meeting space for community engagement e.g. weekend market Strengthen and enhance safety for pedestrians on Canterbury Road 	EIS: Table 8.5, Figure 8.8	14 (1) -14 (4)
10	Opportunity to Improve Flood Impacts at Canterbury Station / Town Centre	A comprehensive flood impact assessment using models obtained from Council is necessary to evaluate impacts from the project and potential and preferred mitigation options.	<ul style="list-style-type: none"> A comprehensive flood impact assessment using models obtained from Council is necessary to evaluate impacts from the project and potential and preferred mitigation options. Preferred mitigation options are implemented 	<ul style="list-style-type: none"> A comprehensive flood impact assessment using models obtained from Council is necessary to evaluate impacts from the project and potential and preferred mitigation options. Preferred mitigation options are implemented 	Technical Paper 8 – Section 5.2	6 (1) (b)



13. Hurlstone Park

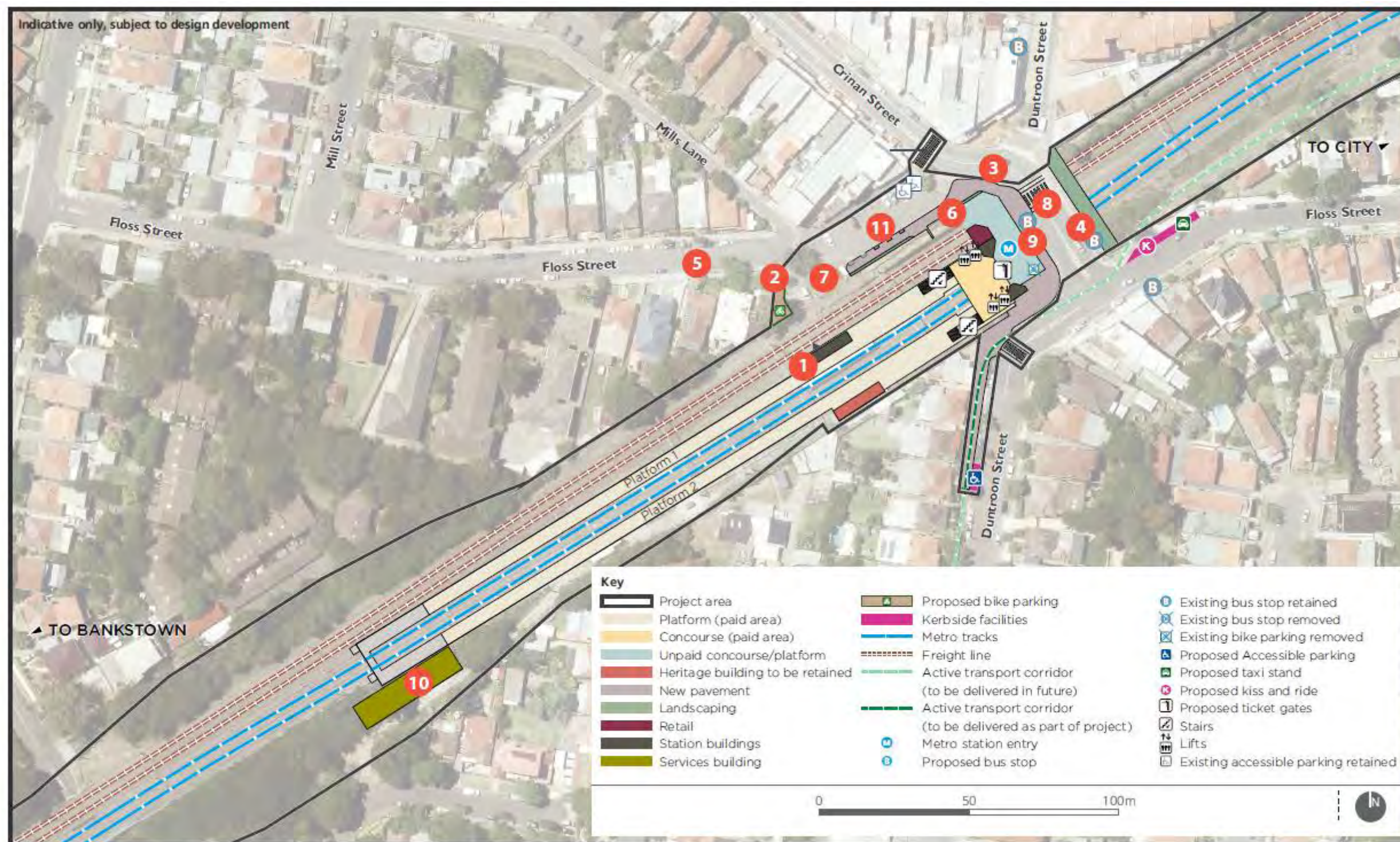


Figure 8: TINSW EIS Concept Plan for Hurlstone Park Station; annotated by Canterbury-Bankstown Council



13.1 Hurlstone Park – Key Issues/Opportunities and Preferred Outcomes

Map Reference	Opportunity/ principle	Recommended actions for EIS	Preferred Outcome	Minimum outcome	References in EIS	Reference in SEARs
1	Validity of removing State heritage building on platform (EIS states removal to straighten line) Heritage Issue - Fernhill Station	EIS to review entry arrangements to see if a better outcome can be achieved to retain heritage buildings. Explore opportunities for new works east of the Crinan St overbridge. Consider the visual impacts on the draft Crinan St Shops Heritage Conservation Area (HCA), Floss St Heritage Conservation Area draft & draft Heritage item (station masters residence)	<ul style="list-style-type: none"> No removal of heritage buildings. Minimal impact on visual curtilage of draft HCAs 	<ul style="list-style-type: none"> Adequate justification as to why the building must be removed. Minimal impact on visual curtilage of draft HCAs 	Table 7.3 – Part 1A EIS	Key Issue #7 - Heritage
2	Bike parking location serviceability	Review design to locate bike parking at the station entry	<ul style="list-style-type: none"> Additional parking required southern side Bike parking located at station entry 	<ul style="list-style-type: none"> Bike parking located at station entry 	Table 8.4, Figure 8.6	13 (2)
3	Provide a more integrated pedestrian environment connecting Crinan St to Floss Street and Duntroon Streets. Pedestrian priority in front of the station on Crinan Street. <i>Refer to Submission Report Part 2 – Creating Better Places: Opportunities for our Metro Centres</i>	Potential to better connect existing Crinan Street high street and station. Remove proposed additional pedestrian crossings across Crinan Street and Duntroon Street.	<ul style="list-style-type: none"> Refer to Submission Report Part 2 – Creating Better Places: Opportunities for our Metro Centres 	<ul style="list-style-type: none"> Remove Additional pedestrian crossing across Crinan Street from Station EIS plan 	Table 8.4, Figure 8.6	13 (2)
4	Relocate bus bays with bridge widening or indent bus bays into the widened bridge	Clarify in text that there is sufficient bridge width for two parked buses and traffic in each direction at the same time.	<ul style="list-style-type: none"> Clarify in text that there is sufficient bridge width for two parked buses and traffic in each direction at the same time 		Table 8.4, Figure 8.6	13 (2)
5	Flooding issues north of line when area paved - along freight line / Floss St (unofficial channel)	2D flood modelling should be undertaken for the entire length of the works, not focused on one single station (Marrickville only).	<ul style="list-style-type: none"> 2D flood modelling of the entire area impacted. Investigation of Floss Street (unofficial channel). 		Technical paper 8 - Hydrology, flooding and water quality assessment.	Key Issue #6 - Flooding and Hydrology



6	Centre requires masterplan for functionality - rethink car park land use	<p>Promote continuity of land uses within the town centre.</p> <p>Review in more detail how to better integrate the station with the town centre and utilise rail corridor land more effectively.</p>	<ul style="list-style-type: none"> Identify development sites within the rail corridor fronting Floss St and provide enabling infrastructure for these sites (power, water, sewer etc.) as part of EIS 	<ul style="list-style-type: none"> Identify development sites within the rail corridor fronting Floss St as part of EIS 	Table 8.4, Figure 8.6	
7	Location and capacity of accessible parking and bike parking	<p>On the station plan, re-instate the bike parking to where it is currently located and relocate the accessible parking bay further to the east on Duntroon Street.</p> <p>With the pedestrian refuge being replaced with an adjacent pedestrian crossing, the accessible bay may be able to be located east of the new zebra crossing if the cycleway was to stay within the project boundary all the way to the intersection on Duntroon Street with Floss Street.</p>	<ul style="list-style-type: none"> Re-instate the bike parking to where it is currently located on the corner of Duntroon/Floss. Show the pedestrian refuge being removed due to the new adjacent zebra crossing and show the cycleway within the project boundary all the way to the intersection of Duntroon Street with Floss Street. Move the accessible bay to the east of the new zebra crossing. 	<ul style="list-style-type: none"> Re-instate the bike parking to where it is currently located on the corner of Duntroon/Floss. Move the accessible bay as far east on Duntroon Street as possible. 	Table 8.4, Figure 8.6	14 (1)
8	Design of bridge - support community space function, reduce bus stop bottleneck, add landscaping	<p>More detail required on placemaking strategies and adequate space provided for community meeting spaces/pop up opportunities etc. Promote safety and connectivity from north to south connections.</p> <p>The road design, including provision for buses and cyclists, as well as addition of trees and plants to the streetscape should be included in the EIS</p>	<ul style="list-style-type: none"> Resources and space provided and detailed in the plan of each station precinct for placemaking/ community meeting and activity beyond retail opportunities An integrated streetscape upgrade in front of the station with any necessary overbridge improvements including separated cycle lanes and satisfactorily wide footpaths. A well-designed, safe and active station precinct that positively defines public space, connects seamlessly with the existing local centre, providing continuous weather protection and delivering customers to the upgraded existing station entry. 	<ul style="list-style-type: none"> An integrated streetscape upgrade in front of the station with any necessary overbridge improvements A well-designed, safe and active station precinct that positively defines public space, connects seamlessly with the existing local centre, providing continuous weather protection and delivering customers to the upgraded existing station entry. 	Table 8.4, Figure 8.6	14(1)-14(4)



9	Awnings and weather protection - in front of station and on bridge	Each station precinct needs a credible, well-coordinated master plan to describe the extent, configuration and connectivity of proposed new development and public space. The EIS should be reviewed to ensure there is weather protection from platforms to the interchange areas - the bike parking, the kiss-and-ride, and taxi zones	<ul style="list-style-type: none"> • A well-designed, safe and active station precinct that positively defines public space, connects seamlessly with the existing local centre, providing continuous weather protection and delivering customers to the upgraded existing station entry. • Continuous weather protection provided from the platform to the town centre 	<ul style="list-style-type: none"> • Predominantly continuous weather protection provided from the platform to the town centre 	Table 8.4, Figure 8.6	14(1)-14(4)
10	Service building and parking impacts and minimise tree loss <i>Refer to Submission Report Part 2 – Creating Better Places: Opportunities for our Metro Centres</i>	Better locate service buildings and parking. Discretely position services buildings within landscape corridors retaining as many trees as possible.	<ul style="list-style-type: none"> • Minimise any tree loss • Discretely position services building in landscaping • Provide a landscape parking environment including trees 		Table 8.4, Figure 8.6	14(1)-14(4)
11	Convert Floss Street into a shareway and locate kiss and ride her north of the station	Relocate kiss-and-ride from the southern side of the station to the north.	<ul style="list-style-type: none"> • Create a shareway environment on Floss Street. • Relocate kiss and ride to shareway 	<ul style="list-style-type: none"> • Relocate kiss and ride to the carpark on the north side of the station. 	Table 8.4, Figure 8.6	13 (2)

