

SYDENHAM TO BANKSTOWN

SUBMISSIONS AND PREFERRED INFRASTRUCTURE REPORT

> Appendix G – Landscape and visual
impact assessment



Sydney Metro, City & Southwest

Sydenham to Bankstown Upgrade

Submissions and Preferred Infrastructure Report

Landscape and Visual Impact Assessment

June 2018

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1. Introduction

1.1. Approach and structure

This report considers the landscape and visual impacts of the preferred project. It identifies the landscape and visual impacts of the exhibited project and the changes in landscape and visual impact resulting from the preferred project.

This includes the re-assessment of landscapes and views previously assessed for the exhibited project, which require reconsideration in light of the changes incorporated into the preferred project.

This report includes an assessment of the landscape impact, daytime visual impact, night time visual impact and a summary of impact for each station and the corridor works. Bankstown Station has not been included in this assessment as there would be no changes from the exhibited project at this station.

1.2. Methodology

The methodology for the assessment of landscape and visual impacts is detailed in the Environmental Impact Statement (August 2017), Technical Paper 7: Landscape and Visual Impact Assessment, at pages 20-25. It includes the following key steps:

- identification of the existing environment
- identification of the landscape and visual sensitivity of key receptors
- an assessment of landscape impact during construction and operation
- an assessment of the daytime visual impact during construction and operation
- a general assessment of night time visual impact during construction and operation
- identification of mitigation measures.

The components of the preferred project during construction and operations, are described in Appendix B of the Submissions and Preferred Infrastructure Report.

2. Marrickville Station

2.1. Landscape character

2.1.1. Landscape character impacts of the exhibited project

A **minor adverse** landscape impact during construction was identified for the Marrickville Station precinct, given an expected reduction in precinct accessibility and legibility with the diversion of passengers around construction works, and a reduced level of comfort due to the removal of trees.

This station has recently been upgraded by a Transport Access Program (TAP) project. However, due to the changes proposed for the exhibited project, a further **minor beneficial** landscape impact was identified during operation. This was due to further improvements to station accessibility including the provision of a new ramp from Illawarra Road and upgrades to the Station Street entrance including a widened plaza, 'shared zone' and interchange.

2.1.2. Landscape character impacts of the preferred project

The preferred project would require less construction activity at the Marrickville Station and station precinct. The re-levelling of the platforms would be the main source of impact for users of the station, reducing accessibility and legibility with the station during these works. There would be minor works undertaken in the precinct and works to construct the services building would have a limited impact on access to the station and transport interchange facilities. Trees within the precinct, including along the southern rail corridor boundary, on the corner of Leofrene Avenue and beside the Station Street entrance would be retained. Overall, due to the works required within the station there would be a noticeable reduction in the landscape quality and functioning of this precinct, which is of local sensitivity. This would result in a **minor adverse** landscape impact during construction.

During operation, the preferred project would maintain the quality of the existing interchange facilities and station access. The new services building would be located within the corridor and not impact access or use of the station or precinct. Overall, this would result in no perceived change in the landscape quality and functioning of this precinct, which is of local sensitivity, and a **negligible** landscape impact during operation.

2.1.3. Change to landscape character impacts

There would be no change to the landscape impact during construction, which would remain as **minor adverse**. This impact would, however, be experienced for a shorter duration and over a reduced area.

During operation, the **minor beneficial** landscape impacts identified for the exhibited project would be reduced to a **negligible** landscape impact as the degree of intervention at the station and across the precinct is lessened. The accessibility and legibility of this station has been improved through the recent TAP project and would remain unaffected by the preferred project.

Table 2-1 includes a summary of these landscape character impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 2-1 Marrickville Station – landscape character impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Marrickville Station precinct	Local	Minor adverse	Minor adverse	Minor beneficial	Negligible

2.2. Daytime visual amenity

2.2.1. Daytime visual amenity impacts of the exhibited project

The following viewpoints were selected as representative of views to the Marrickville Station site:

- view south-east from Illawarra Road
- view south-west from O'Hara Street playground
- view north from Riverdale Avenue
- view north from Schwebel Street
- view north from Station Street.

During construction, the assessment of the exhibited project identified that a potential **minor adverse** visual impact would be experienced for views from surrounding residential areas including Victoria Road, Schwebel and Station streets in the south, and from the O'Hara Street playground in the north, due to the extent of works in Station Street and at the proposed location of the services building. There was also a potential **minor adverse** visual impact from the medium rise apartments on Byrnes Street in the north which overlook the station and site of the proposed services building.

The assessment of the exhibited project also identified a **moderate adverse** visual impact in views from Illawarra Road to the project during construction, given the increased sensitivity of Illawarra Road as a more frequently used route to access the station, and views from the Marrickville commercial precinct, combined with the extent of work proposed at the station entry.

During operation, a **negligible** visual impact was identified in all views to the station owing to the improved finishes and the creation of a plaza and 'shared zone' in Station Street, and consistency of the proposed works with the character of the existing station.

2.2.2. Daytime visual amenity impacts of the preferred project

There would not be any alterations to the station entry and therefore in views from Illawarra Road, there would be no perceived change in the amenity of these views which are of local sensitivity and a **negligible** visual impact. (Refer to Table 2-2, Viewpoint 1).

Views from elevated residential areas to the north of the station, including the apartments on Byrnes Street and houses on O'Hara Street would have some visibility of construction as the platform works are undertaken within the station. These areas, as well as the playground and footpath east of O'Hara Street would also have views to the construction of the services building, located within the rail corridor, between the Metropolitan Goods Line and the station. This work would be seen in the context of the existing station and rail corridor. This would result in a considerable reduction in the amenity of these

views which are of neighbourhood sensitivity and a **minor adverse** visual impact during construction. (Refer to Table 2-2, Viewpoint 2).

The extent of works required for the preferred project would be largely contained within the station and rail corridor. As a result, views to the construction activity would be limited from properties on Victoria Road, Riverdale Avenue and Schwebel Street, resulting in there being no perceived change in amenity of these views and a **negligible** visual impact during construction. Where views of construction activities on the existing platforms and the rail corridor are possible from a section of the footpath along the southern boundary of the rail corridor, and from the rear of a small number of properties on Leofrene Avenue, there would be a noticeable reduction in the amenity of views, which are of neighbourhood sensitivity. This would result in a **minor adverse** visual impact during construction. (Refer to Table 2-2, Viewpoint 3).

There would be minimal works expected in Station Street, apart from some intermittent construction vehicle access and support site activities. During these works there would be a noticeable reduction in the amenity of views along Station Street, which are of local and neighbourhood sensitivity and a **negligible** visual impact during construction. (Refer to Table 2-2, Viewpoint 4 and 5).

Following construction, the preferred project would substantially reduce the extent of change in views to the station, with works largely contained within the station itself except for the services building located in the rail corridor between the Metropolitan Goods Line and the station. As a result, there would be no perceived change in the amenity of views from Schwebel Street, Riverdale and Leofrene avenues, and the footpath to the south of the corridor. These views are of neighbourhood sensitivity and as the new platform works and services building would be largely absorbed into the character of the station precinct, there would be a **negligible** visual impact during operation. (Refer to Table 2-2, Viewpoint 3).

There would be no perceived change in the amenity of views from Illawarra Road and along Station Street which are of local and neighbourhood sensitivity, as there would be no changes to the station entry, affording a negligible visual impact during operation. (Refer to Table 2-2 Viewpoint 1 and 4 and 5 and Figure 2-1 View southeast from Illawarra Road).

Views from residential areas to the north of the station, including the apartments on Byrnes Street and terrace houses and playground on O'Hara Street, would include the new platforms and the services building. Whilst the platform works would be absorbed into the view, the new services building would be visually prominent and would result in a noticeable reduction in the amenity of these views which are of neighbourhood sensitivity and a **negligible** visual impact during operation. (Refer to Table 2-2, Viewpoint 2 and Figure 2-2 View southwest from O'Hara Street playground to site of proposed services building).



Figure 2-1 View southeast from Illawarra Road



Figure 2-2 View southwest from O'Hara Street Playground to site of proposed services building

2.2.3. Change to daytime visual amenity impacts

As there would no longer be extensive works in Station Street and the platforms would not be extended to the east, impacts to views from surrounding residential areas in the south including Victoria Road, Schwebel and Station streets would be reduced from a **minor adverse** to a **negligible** visual impact during construction. Although there would be some **minor adverse** visual impacts experienced from the footpath along the southern boundary of the rail corridor, and from the rear of properties on Leofrene Avenue, this would be in a more compact area.

There would be a reduced impact in views from the medium rise apartments on Byrnes Street in the north which overlook the station from **moderate adverse** to a **minor adverse** visual impact. There would continue to be a **minor adverse** impact on views to the services building, from O'Hara Street and the playground as the preferred project has not changed in this area.

In views from Illawarra Road, the **moderate adverse** visual impact would be reduced to a **negligible** visual impact as views to the station entry and concourse building would no longer be changed by the project. Similarly, in views from Station Street, the impact of the preferred project would be reduced from **minor adverse** to **negligible** visual impact during construction.

The preferred project would result in no perceived change in views to the station during operation. The works to the platforms within the station and services building would have limited visibility beyond the immediate station surrounds and these elements would be visually absorbed into the existing station and rail corridor character. Overall the visual impact levels for all views to the site would remain as identified in the exhibited project as a **negligible** visual impact.

Table 2-2 includes all impacts identified for the exhibited project as well as the assessment of the preferred project. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 2-2 Marrickville Station – daytime visual amenity impacts

	Viewpoint	Sensitivity rating	Construction impact		Operation impact	
			Exhibited project	Preferred project	Exhibited project	Preferred project
1	View south-east from Illawarra Road	Local	Moderate adverse	Negligible	Negligible	Negligible
2	View south-west from O'Hara Street playground	Neighbourhood	Minor adverse	Minor adverse	Negligible	Negligible
3	View north from Riverdale Avenue	Neighbourhood	Minor adverse	Minor adverse	Negligible	Negligible
4	View north from Schwebel Street	Neighbourhood	Minor adverse	Negligible	Negligible	Negligible
5	View north from Station Street	Neighbourhood	Minor adverse	Negligible	Negligible	Negligible

2.3. Night-time visual amenity

2.3.1. Night-time visual impacts of the exhibited project

At night there would be a **minor adverse** visual impact during construction with the introduction of night works in close proximity to residential areas, particularly at Leofrene, Riverdale and Charlotte avenues in the south, and O'Hara, Cavey and Queen Streets in the north. There would also be elevated views over the construction compounds and worksites from residential units on Byrnes Street.

During operation there would be a **minor adverse** visual impact from adjacent residential streets in the southeast with the increased intensity of lighting created by the active transport corridor and extended platforms, located near residential properties particularly to the south of the rail corridor (including Leofrene Avenue, Riverdale Avenue, Byrnes and O'Hara streets).

2.3.2. Night-time visual amenity impacts of the preferred project

The preferred project would require night works to minimise impact on the operations of the rail network. Night works in close proximity to residential areas adjacent to the station platforms, including properties on Leofrene, Riverdale and Charlotte avenues in the south, and O'Hara Street in the north, would have a **minor adverse** visual impact. There would also be elevated views over the construction compounds and worksites from residential units on Byrnes Street.

When operational, the preferred project would have a consistent character to the existing station and setting at night which is of E3: Medium district brightness, resulting in a **negligible** visual impact to views at night.

2.3.3. Change to night-time visual amenity impacts

Whilst the preferred project would give rise to some **minor adverse** visual impacts where night works are required, these impacts would be experienced across a substantially reduced area and over a shorter duration.

During operation at night the visual impact would be reduced from a **minor adverse** visual impact to a **negligible** visual impact. By not extending the platforms to the east, the potential night time visual impact on adjacent residential areas to the north and south of the rail corridor would be lessened.

Table 2-3 includes a summary of these night-time visual amenity impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 2-3 Marrickville Station – night-time visual amenity impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Marrickville Station precinct	E3: Medium district brightness	Minor adverse	Negligible	Minor adverse	Negligible

3. Dulwich Hill Station

3.1. Landscape character

3.1.1. Landscape character impacts of the exhibited project

A **moderate adverse** landscape impact was identified during construction because of the extent of works which was to include the construction of a new footbridge with station entrances at Bedford Crescent and Ewart Lane, and the demolition of the existing concourse building. These works would have required several changes to station access, the removal of approximately 4-6 trees, closure of car parks, and the temporary diversion of pedestrian pathways, reducing the connectivity, legibility and amenity of the station precinct. These impacts would extend from Bedford Crescent in the north to Ewart Lane in the south, and from Wardell Road in the east towards Ewart Street and the Dulwich Hill light rail stop and Jack Shanahan Park in the west.

During operation of the exhibited project a **minor beneficial** landscape impact was identified for the station and station precinct. Accessibility and legibility of the station entry would be considerably improved by the new footbridge, station entries, plaza along Ewart Lane and consolidated interchange facilities. The canopies over the footbridge, stairs along the platforms would improve the level of comfort at the stations.

3.1.2. Landscape character impacts of the preferred project

Construction of a new footbridge would extend from the existing light rail lift and stairs at Bedford Crescent to the central platform and works to re-level the platform level would extend across the central platform. These activities would temporarily reduce accessibility and legibility to the station at times. There would be construction activity in Bedford Crescent and a compound in Ewart Lane. In addition, there would be works to reconfigure of the carpark and plaza space at Bedford Crescent, construct the services building and reconfigure the commuter carpark on Ewart Lane following the footbridge construction. Although the light rail access lift and stair would remain open, this construction activity would reduce the legibility of the interchange between transport modes during these works. Some trees would be removed, including two street trees on Bedford Crescent, and several trees within the rail corridor at the location of the proposed footbridge. Overall, due to the extent and nature of works required within the station and in adjacent precinct areas, there would be a noticeable reduction in the landscape quality and functioning of this precinct, which is of local sensitivity. This would result in a **moderate adverse** landscape impact.

The preferred project would retain the existing concourse building and station access on Wardell Road, maintaining the current level of access and legibility of the station when accessed from Wardell Road. The new footbridge would connect the existing light rail lift and stair with the central platform of the station. This footbridge would facilitate accessible interchange between these two modes. The services building, to the south of the station, would be located on Ewart Lane and be aligned to create a 'V' shape to enable service access from the existing carpark. The shape and location of this services building has the potential to reduce the opportunity for surveillance from the station and along the lane between Ewart Lane and Wardell Road. The preferred project includes the upgrade of the lane between Ewart Street and Wardell Road including improved lighting. CPTED principles would need to be further considered during detailed design of the laneway and services building.

There would be several additional trees retained on the rail corridor. Kerbside facilities would be improved with minor reconfigurations on Bedford Crescent including improved lighting along the pathway to Keith Lane. Additional trees and planting would be provided around the station to replace the trees removed during construction. Overall, the works would result in a noticeable improvement in the landscape quality and functioning of this precinct, which is of local sensitivity, and a **minor beneficial** landscape impact during operation.

3.1.3. Change to landscape character impacts

The construction impacts of the preferred project would remain as a **moderate adverse** impact during construction. Whilst the preferred project footprint would be revised and work in Ewart Lane and in the vicinity of the existing station concourse building in particular, the works to construct the proposed new footbridge and works to re-level the platforms would result in reduced legibility and accessibility within the precinct.

During operation the preferred project provides less north to south connectivity for the precinct and less shade within the station itself. However, improved interchange between the metro and light rail would be achieved with the new footbridge, and there would be improved kerbside facilities on Bedford Crescent, and a reconfigured carpark on Ewart lane. The **minor benefit** identified for the exhibited project would remain however, the accessibility and connectivity benefits proposed for the exhibited project would not be fully realised.

Table 3-1 includes a summary of these landscape character impacts.

Table 3-1 Dulwich Hill Station – landscape character impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Dulwich Hill Station precinct	Local	Moderate adverse	Moderate adverse	Minor beneficial	Minor beneficial

3.2. Daytime visual amenity

3.2.1. Daytime visual amenity impacts of the exhibited project

The following viewpoints were selected as representative of views to the Dulwich Hill Station site:

- view south from Jack Shanahan Reserve
- view southeast from Dulwich Hill light rail stop
- view south from Bedford Crescent to Dulwich Hill light rail stop entrance
- view west to Dulwich Hill Station from Wardell Road bridge
- view west from corner of Wardell Road and Dudley Street
- view southeast from Ewart Lane.

The assessment of the exhibited project identified a potential minor to **moderate adverse** visual impact in views to the project during construction. This was due to the extent of the works located near to residential areas, and the extent of works in Ewart Lane and Bedford Crescent. This would include a **moderate adverse** visual impact in views from the Wardell Road bridge.

During operation there would be **minor beneficial** visual impact in views from Ewart Lane owing to the public realm improvements and quality of the architecture. However, the view from Wardell Road would present a **minor adverse** visual impact due to the obstruction and enclosure of the heritage platform buildings and district views currently appreciated from this location.

3.2.2. Daytime visual amenity impacts of the preferred project

In views from Jack Shanahan Park during construction, there would be less work visible as the platforms would not be extended to the west and the corridor would not be widened. Most of the construction works for the footbridge would be out of view and the compound on Ewart Lane would be seen in the background of this view. This would result in no perceived change in the amenity of these views and a **negligible** visual impact. (Refer to Table 3-2, Viewpoint 1).

In views from the Dulwich Hill light rail stop, works to construct the new footbridge would be visible in the middle ground of the view, extending from the existing light rail stair and lift to the central platform of the station. There would also be some visibility of the construction compound on Ewart Lane in the background. Although the extent of bridge construction would be revised, the works closest to the viewer would be required. Overall, there would be a noticeable reduction in the amenity of this view, which is of local sensitivity resulting a **minor adverse** visual impact during construction (Refer to Table 3-2, Viewpoint 2 and Figure 3-1 View southeast from Dulwich Hill light rail stop).



Figure 3-1 View southeast from Dulwich Hill light rail stop

From Bedford Crescent, views to construction of the new footbridge would be visible prominently in the middle ground of this view, alongside the existing light rail lift and stair. As the station is in cutting, works on the platform and below street level would not be visible from this location. However, the nature and proximity of this work would result in a noticeable reduction in the amenity of this view which is of local sensitivity. This results in a **minor adverse** visual impact during construction. (Refer to Table 3-2, Viewpoint 3).

From the Wardell Road bridge, the construction of the footbridge, lifts and stairs would be visible in the middle ground, and a compound on Ewart Lane would be visible in the background. At the intersection with Dudley Street, the retained station entry building would partly obstruct views to these construction works. Where it is visible, views to the footbridge construction would partly obstruct district views to the west. As the existing station concourse building would be retained, there would be no construction activity in the middle and foreground of this view. This would result in a noticeable reduction in the amenity of this view which is of local sensitivity and a **minor adverse** visual impact during construction (Refer to Table 3-2, Viewpoint 4 and 5, and Figure 3-2 View west from the corner of Wardell Road and Dudley Street).



Figure 3-2 View west from the corner of Wardell Road and Dudley Street

From Ewart Lane and residential properties to the south and southwest there would be a considerable reduction in the amenity of views during construction. This is due to the extent of the works, which would include a construction compound in the fore and middle ground, and the works to construct the footbridge in the middle and background. As these views are of neighbourhood sensitivity, this would result in a **minor adverse** visual impact during construction. The extent of works would be revised within the lane and the footbridge would not extend from the central platform to Ewart Lane, so that the area over which this impact would be experienced would be reduced. (Refer to Table 3.2, Viewpoint 6).

During operation there would be limited visibility of the project from areas to the west including Jack Shanahan Park and the residential areas on Ewart Lane, resulting in a **negligible** visual impact. Views from the light rail stop would include the new footbridge, however these new structures would be consistent with the character of the surrounding rail and light rail infrastructure. This would not result in a perceived change in the amenity this view, which is of local sensitivity, and a **negligible** visual impact during operation. (Refer to Table 3-2, Viewpoint 1 and 2).

In views from residential properties on Bedford Crescent, the new footbridge would be seen rising above the existing built form and in the context of the existing light rail station structures. The project would create a noticeable reduction in the amenity of this view, which is of local sensitivity, resulting in a **minor adverse** visual impact during operation. (Refer to Table 3-2, Viewpoint 3).

The existing station buildings would be retained, and the new footbridge would be seen in the middle ground of the view from Wardell Road. The visually lighter weight and smaller footbridge would be less visually dominant behind the heritage platform building. Some of this structure would rise above the horizon, obstructing part of the longer distance views over the surrounding district. Overall, it is expected

that the functional character of the station and rail corridor would allow the project to be absorbed into the view, and that the project would not detract from character or visibility of the existing station architecture. Therefore, the project would create no perceived change in the amenity this view, which is of local sensitivity, resulting in a **negligible** visual impact during operation (Refer to Table 3-2, Viewpoint 4 and 5, and Figure 3-3 View west to Dulwich Hill Station from Wardell Road bridge).



Figure 3-3 View west to Dulwich Hill Station from Wardell Road bridge

In views from Ewart Lane the new footbridge would be seen in the middle ground of views and seen against the existing cutting. It would be compatible with the existing light rail and station structures. The new services building would be located within the middle ground of these views and reinforce the 'back of house' character of this lane. However, upgrades to the lane, including new lighting and fencing, would be seen in the foreground of this view would provide some improvement to the view. Overall, there would be no perceived change in the amenity of these views due to this visual consistency and distance. This view is of neighbourhood sensitivity and there would be a **negligible** visual impact during operation. (Refer to Table 3-2, Viewpoint 6).

3.2.3. Change to daytime visual amenity impacts

During construction views from Jack Shanahan Reserve in the west would have a **negligible** visual impact which is reduced from a **minor adverse** visual impact identified for the exhibited project. This is because the platforms would not be extended, and the works to widen the corridor (including retaining walls) would not be required. The visual impact in views from the light rail station would remain as **minor adverse** as although the footbridge would be reduced in length, and there would be less construction activity visible, the character of the middle ground would continue to be dominated by construction of the footbridge.

The impact on views from residential properties on Bedford Crescent would also remain as **minor adverse** during construction as the works in the middle ground of these views would be largely unchanged.

During construction, the impact in views from Wardell Road would reduce from a **moderate** to **minor adverse**, and from **minor adverse** to **negligible** in views from the corner of Wardell and Dudley Street. This is because the preferred project does not propose the demolition of the existing concourse building.

Views from Ewart Lane and adjacent residential areas to the south would continue to have a **minor adverse** visual impact during construction with a compound required in the adjacent rail corridor. Whilst these impacts would be of the same level, they would extend to fewer viewers due to the revised footprint of the construction works on the lane itself and the footbridge works would not extend as close to these viewers.

During operation, as the platforms would not be extended to the west, the impact on views from surrounding residential areas in the south from Ewart Street, and in the north from Jack Shanahan Reserve, would be remain as **negligible**.

As the new footbridge structure would be similar to the exhibited project in views from the light rail stop and from residential properties on Bedford Crescent, the impact would remain **negligible** and **minor adverse** respectively during operation.

The impact on views from Wardell Road would be reduced from **minor adverse** to **negligible** as the existing station entry would remain in place and the footbridge would be more readily absorbed into the view.

As there would no longer be extensive changes in Ewart Lane, the **minor beneficial** visual impacts identified in views from the corner of Wardell Road and Dudley Street would be reduced to a **negligible** visual impact.

Table 3-2 includes all impacts identified for the exhibited project as well as the assessment of the preferred project. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 3-2 Dulwich Hill Station – daytime visual amenity impacts

	Viewpoint	Sensitivity rating	Construction impact		Operation impact	
			Exhibited project	Preferred project	Exhibited project	Preferred project
1	View south from Jack Shanahan Reserve	Local	Minor adverse	Negligible	Negligible	Negligible
2	View southeast from Dulwich Hill light rail Stop	Local	Minor adverse	Minor adverse	Negligible	Negligible
3	View south from Bedford Crescent to Dulwich Hill light rail stop entrance	Local	Minor adverse	Minor adverse	Minor adverse	Minor adverse
4	View west to Dulwich Hill Station from Wardell Road bridge	Local	Moderate adverse	Minor adverse	Minor adverse	Negligible
5	View west from corner of Wardell Road and Dudley Street	Local	Minor adverse	Negligible	Minor beneficial	Negligible
6	View southeast from Ewart Lane	Neighbourhood	Minor adverse	Minor adverse	Negligible	Negligible

3.3. Night-time visual amenity

3.3.1. Night-time visual amenity impacts of the exhibited project

The assessment of the exhibited project identified a **minor adverse** visual impact at night during construction with the introduction of night works in close proximity to residential areas, particularly at Bedford Crescent in the north and Ewart Lane and Street in the south. There would also be additional lighting visible in elevated views over the construction compounds and worksites from residential units on Wardell Road in the south.

During operation there would be a **minor adverse** visual impact in views at night from adjacent residential streets to the southeast, due to the increased intensity of lighting from the station in proximity to residential properties (including properties on Bedford Crescent, Wardell Road and Ewart Lane).

3.3.2. Night-time visual amenity impacts of the preferred project

The preferred project would require night works during construction to minimise interruptions to the operation of the rail network. Night works would be undertaken in close proximity to residential areas to the north, including properties on Bedford Crescent, and to the south on Ewart Lane, Ewart Street, and residential units on Wardell Road. Although the extent of works would be revised, these views would have a considerable reduction in amenity during these times and a **minor adverse** visual impact.

During operations, views to the preferred project would include a lit footbridge and station entry on Bedford Crescent as well as an increased frequency of trains with headlights passing through the station. This would result in additional lighting near Bedford Crescent, including the new footbridge, station entry plaza, and interchange areas which would be brightly lit. This brings additional lighting near to residential properties on Bedford Crescent. The lighting would be at a greater distance from Ewart Lane so that the lighting would be more easily absorbed into these views. Overall, it is expected that during operation the lighting of the project would create a noticeable reduction in visual amenity, particularly from adjacent residential properties on Bedford Crescent. As this is a medium district brightness environment, the project would give rise to a **minor adverse** visual impact at night.

3.3.3. Change to night-time visual amenity impacts

The **minor adverse** visual impacts identified in the assessment of the exhibited project would remain with the construction of the preferred project where night works are required. This impact level would be unchanged due to the consistent nature of the works however, these impacts would be experienced across a smaller area and for a shorter duration.

During operation the visual impact would remain as a **minor adverse** at night, as by not extending the platforms (with lighting) to the east, the potential night time visual impact on adjacent residential areas to the west and south of the rail corridor would be reduced. Similarly, by not extending the footbridge from the station to Ewart Lane, the level of lighting viewed from residential areas in the south would reduce. However, there would be some visual impact experienced in views from Bedford Crescent in the north as a result of the new footbridge.

Table 3-3 includes a summary of these night time visual amenity impacts.

Table 3-3 Dulwich Hill Station – night-time visual amenity impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Dulwich Hill Station precinct	E3: Medium district brightness	Minor adverse	Minor adverse	Minor adverse	Minor adverse

4. Hurlstone Park Station

4.1. Landscape Character

4.1.1. Landscape character impacts of the exhibited project

There would be a **moderate adverse** landscape impact at the Hurlstone Park Station precinct during construction due to a reduction in the legibility and accessibility as the existing station would be demolished and a new station built, and due to the removal of vegetation to the south of the rail corridor.

During operation, there would be a **moderate beneficial** landscape impact as station accessibility would be improved with a larger and more spacious station entry and concourse addressing the Duntroon Street bridge and improved interchange facilities.

4.1.2. Landscape character impacts of the preferred project

The preferred project would require less construction activities at Hurlstone Park Station and station precinct. The construction of two new lift shafts and replacement of the existing stairs, as well as the re-leveling of the platforms would be the main source of impact for users of the station, reducing the legibility and accessibility of the station during these works. There would be minor works undertaken in the precinct on Floss street to the west of the station in the commuter carpark and also on Floss Street to the east of the station. Works to construct the services building and construction of the emergency egress stairs at the end of the platforms would have a limited impact on access to the station and transport interchange facilities. Several additional trees within the precinct would also be retained, improving the provision of shade and comfort. Overall, due to the works required within the station there would be a noticeable reduction in the landscape quality and functioning of this precinct during construction. The station precinct is of local landscape sensitivity, resulting in a **minor adverse** landscape impact.

During operation, the quality of the interchange facilities and station access would be improved by the new lifts and stairs at the station and with the provision of kerbside facilities. The new services building would be located within the corridor and not impact access or use of the station or precinct. Additional trees and planting would be provided around the station to replace the trees removed during construction. Overall, this would result in no perceived change in the landscape quality and functioning of this precinct, which is of local sensitivity, and a **negligible** landscape impact during operation.

4.1.3. Change to landscape character impacts

The construction impacts of the preferred project would reduce from a **moderate adverse** to a **minor adverse** landscape impact during construction. The preferred project includes the retention of the existing station entry building and would result in less impact on legibility and accessibility within the precinct.

During operation, the **minor beneficial** landscape impacts identified for the exhibited project would be reduced to a **negligible** landscape impact as the degree of intervention at the station and across the precinct would be less. Whilst the legibility and accessibility of the station would be improved with the new lifts, stairs, and improved kerbside facilities on Floss Street, the benefits proposed for the exhibited project would not be fully realised.

Table 4-1 includes a summary of these landscape character impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 4-1 Hurlstone Park Station – landscape character impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Hurlstone Park Station precinct	Local	Moderate adverse	Minor adverse	Minor beneficial	Negligible

4.2. Daytime visual amenity

4.2.1. Daytime visual amenity impacts of the exhibited project

The following viewpoints were selected as representative of views to the Hurlstone Park Station site:

- view southwest from the Floss Street commuter car park
- view southwest across Floss Street
- view southwest from the Duntroon Street bridge
- view north from Commons Street
- view from Railway Street.

During construction, there would be a **minor** to **moderate adverse** visual impact in views to the exhibited project given the magnitude of the works, located near to residential areas in the south and commercial areas on Floss Street in the north.

During operation of the exhibited project there would be a **minor adverse** visual impact in views from Railway Street from the removal of vegetation and introduction of a services building within the corridor and from residential properties directly adjacent to the station given the proximity of the buildings. There was also a **moderate adverse** visual impact identified in views from the Duntroon Street bridge due to the size of the proposed new station entry building.

4.2.2. Daytime visual amenity impacts of the preferred project

As the existing station entry building would be retained on Floss Street, there would be substantially less construction activity seen in views from the Floss Street Commuter car park, the commercial areas on Floss Street, and the Duntroon Street bridge. A construction compound would be established on the Floss Street commuter carpark and would result in a considerable reduction in the amenity of views from this location, which are of local sensitivity, and a **moderate adverse** visual impact during construction. (Refer to Table 4-2, Viewpoint 1).

Works to upgrade the station entry building and the construction of two lifts would be visible in the foreground and middle ground of views from the Duntroon Street Bridge and Floss Street, and would include site hoarding and fencing, and vehicles accessing the site. During construction, there would be a noticeable reduction in the amenity of these views, which are of local visual sensitivity, and a **minor adverse** visual impact in views to the project. (Refer to Table 4-2, Viewpoint 2 and 3).

As the platforms would not be lengthened to the west, and the existing heritage buildings would be retained at the station, the extent of construction activity that would be seen in views from residences on

Commons Street, to the south of the site, would be reduced. Views of works to re-level the platforms and installation of the lifts and replaced stairs at the rear of the station entry building would be seen to varying degrees. This would result in a noticeable reduction in the amenity of these views, which are of neighbourhood sensitivity, and a **negligible** visual impact. (Refer to Table 4-2, Viewpoint 4).

In views from residential areas to the southwest of the site, including properties on Railway Street, construction of the services building would remain unchanged from the exhibited project. This would include the removal of trees along the rail corridor and establishment of a worksite to construct a services building between the permanent way and Railway Street. This would result in a considerable reduction in the amenity of these views, and a **minor adverse** visual impact during construction. (Refer to Table 4-2, Viewpoint 5 and Figure 4-1 View from Railway Street).



Figure 4-1 View from Railway Street

During operation of the project the Floss Street commuter carpark would be reinstated, and the existing station would be seen through new perimeter security fencing. The re-levelled platforms, new lifts and stairs may be seen in the middle ground, within the context of the retained heritage station buildings. There would be no perceived change in the amenity of this view, which is of local sensitivity, and a **negligible** visual impact. (Refer to Table 4-2, Viewpoint 1).



Figure 4-2 View south from Duntroon Street

The newly renovated heritage station entry building would be seen in the fore and middle ground of views from Duntroon and Floss streets. These views would include two new lift shafts rising from the rear of the building. These lifts would rise above the flat roofline of the existing station building. They would have contemporary materials and finishes that complement the heritage building but would be clearly differentiated as a new addition. The addition of these structures would increase the prominence of the station entry in these views. Although these additions would be clearly visible, they would not detract from the amenity of these views. Therefore, there would be no perceived change in the amenity of these views, which are of local sensitivity, and a **negligible** visual impact. (Refer to Figure 4-2, Viewpoint 2 and 3, and Figure 4-2 View south from Duntroon Street).

Views from residential areas in the south, including properties on Commons and Duntroon streets, would include the re-levelled platforms, new lifts and stairs at the rear of the existing station entry building, and new emergency egress at the end of the existing station platforms. As the station would only include minimal changes, which would be consistent with the character of the existing station, there would be no perceived change in the amenity of these views. From these locations, which are of neighbourhood sensitivity, there would be a **negligible** visual impact during operation. (Refer to Table 4-2, Viewpoint 4).

Further to the southwest, residential properties on Railway Street would have views to the new services building. Views to the rail corridor would be somewhat opened-up by the removal of trees, however, as the platforms would not be extended to the west the only change seen in these views would be to system segregation fencing along the metro track. The proximity of these new structures to residents would contrast with the surrounding leafy street and would create a considerable reduction in the amenity of this view. The view has neighbourhood sensitivity, resulting in a **minor adverse** visual impact during operation. (Refer to Table 4-2, Viewpoint 5).

4.2.3. Change to daytime visual amenity impacts

During construction a **moderate adverse** visual impact would remain in views from the Floss Street commuter carpark as the site would be required as a construction compound. As the preferred project would retain the existing heritage buildings at the station, there would be a revised level of construction seen in views from Floss and Duntroon streets to the station entry. Accordingly, the potential visual impact would reduce from the **moderate adverse** visual impact identified for the exhibited project to a **minor adverse** visual impact. Views from residential areas to the south and west of the site as a result of the preferred project would reduce the impact from the **minor adverse** visual impact identified for the exhibited project, to a **negligible** visual impact.

During operation, views from the Floss Street commuter carpark, Floss and Duntroon streets to the station entry would remain as a **negligible** visual impact during operation. For the exhibited project, the reason for this impact level was the compatibility of a prominent station entry in this location. Whereas in the preferred project, the rationale for this impact level arises as the alterations to the station entry do not detract from the character of the retained heritage station entry building. In closer range views, such as the view southwest from the Duntroon Street bridge, the **moderate adverse** visual impact identified for the exhibited project, due to the proximity to the adjacent building, would be reduced to a **negligible** visual impact as the station entry building would be largely unchanged.

Views from residential areas to the south and west of the site would have a reduced visual impact from the **minor adverse** visual impact identified for the exhibited project, to a **negligible** visual impact in Commons Street. This is due to the existing station being retained and the platforms not being extended to the west. From Railway Street, however, the services building would be unchanged and there would continue to be a **minor adverse** visual impact during operation.

Table 4-2 includes all impacts identified for the exhibited project as well as the assessment of the preferred project. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 4-2 Hurlstone Park Station – daytime visual amenity impacts

	Viewpoint	Sensitivity rating	Construction impact		Operation impact	
			Exhibited project	Preferred project	Exhibited project	Preferred project
1	View southwest from the Floss Street commuter carpark	Local	Moderate adverse	Moderate adverse	Negligible	Negligible
2	View southwest across Floss Street	Local	Moderate adverse	Minor adverse	Negligible	Negligible
3	View southwest from the Duntroon Street bridge	Local	Moderate adverse	Minor adverse	Moderate adverse	Negligible
4	View north from Commons Street	Neighbourhood	Minor adverse	Negligible	Minor adverse	Negligible
5	View from Railway Street	Neighbourhood	Minor adverse	Minor adverse	Minor adverse	Minor adverse

4.3. Night-time visual amenity

4.3.1. Night-time visual amenity impacts of the exhibited project

At night, a **minor adverse** visual impact during construction was identified for the exhibited project, as night construction activity would occur in close proximity to residential areas, including properties on Floss, Duntroon, Commons, Hopetoun and Railway streets.

Similarly, there was a potential **minor adverse** visual impact identified at night during operation due to the increased intensity of lighting created by the proposed station works near these residential areas.

4.3.2. Night-time visual amenity impacts of the preferred project

There would be night works required to construct the preferred project to minimise impact on the operations of the rail network. Night works would be undertaken in close proximity to residential areas to the south, including properties on Duntroon, Commons, Hopetoun and Railway streets. As the platforms would not be extended to the west, the extent of this impact would be reduced. Overall, these views would have a considerable reduction in amenity, and a **minor adverse** visual impact during construction.

During operations, views to the preferred project would include minor changes to the station entry building including the addition of two lift structures. There would also be new kerbside facilities on Floss Street to the north of the station and bicycle parking to the west in the existing commuter carpark. These structures and kerbside facilities would be lit, increasing the amount of lighting near commercial and residential properties on Floss Street, Duntroon and Commons streets. Overall, during operation the lighting of the project would be largely absorbed into the existing station setting, a medium district brightness environment, giving rise to a **negligible** visual impact at night.

4.3.3. Change to night-time visual amenity impacts

At Hurlstone Park, there would be a **minor adverse** visual impact experienced in residential areas surrounding the site which is unchanged from the exhibited project. These impacts would be experienced across a substantially reduced area and over a shorter duration.

During operation the visual impact would be reduced from a **minor adverse** visual impact at night to **negligible** as a result of the preferred project. By not extending the platforms to the east, and not replacing the station entry building with a new concourse, the potential additional lighting seen from adjacent residential areas to the north and south would be minimal.

Table 4-3 includes a summary of these landscape character impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 4-3 Hurlstone Park Station – night-time visual amenity impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Hurlstone Park Station precinct	E3: Medium district brightness	Minor adverse	Minor adverse	Minor adverse	Negligible

5. Canterbury Station

5.1. Landscape character

5.1.1. Landscape character impacts of the exhibited project

The assessment of the exhibited project identified a potential **moderate adverse** landscape impact at the Canterbury Station precinct during construction owing to a reduction in legibility and accessibility as work would transition from construction at the site of the new station, to demolition of the existing concourse, and removal of vegetation. This vegetation included trees to the southwest of the corridor and along Broughton Street in the northwest.

During operation, there would be a **moderate beneficial** landscape impact, as station accessibility would be improved with a new east and west entry, set back from the constrained environment of Canterbury Road, with new plazas and improved interchange facilities.

5.1.2. Landscape character impacts of the preferred project

The preferred project would require less construction activity at Canterbury Station and station precinct. Worksites would be established to the southwest of the rail corridor on Charles street and to the north of the station on Broughton Street. The worksite to the north of the station would be reduced in size and the existing street trees and Art Deco amenities building on Broughton Street would be retained.

The existing heritage station entry building on Canterbury Road would be retained and there would be works at the station entry to construct a new ramp and remove brick walls to improve station access and legibility. There would be two new lift shafts constructed at the station entry building, the existing stairs would be replaced, and the platforms would be re-levelled. This work would reduce the legibility and accessibility of the station during construction.

The services building would be constructed on land to the northwest of the station. This activity, as well as works to construct the emergency egress stairs at the end of the existing platforms, would have a limited impact on access to the station and transport interchange facilities. Trees would be removed for the footprint of construction, however, due to the reduced footprint of construction, several additional trees would be retained. Overall, due to the works required within the station, there would be a noticeable reduction in the landscape quality and functioning of this precinct during construction. The station precinct is of local landscape sensitivity, resulting in a **minor adverse** landscape impact.

During operation, the quality of the interchange facilities and station access would be improved by the new lifts and stairs at the station and kerbside facilities on Broughton Street. The new services building would be located within the corridor and not impact access or use of the station or station precinct. . Additional trees and planting would be provided around the station to replace the trees removed during construction. Overall, this would result in a noticeable improvement in the landscape quality and functioning of this precinct, which is of local sensitivity, and a **minor beneficial** landscape impact during operation.

5.1.3. Change to landscape character impacts

The construction impacts of the preferred project would reduce from a **moderate adverse** to **minor adverse** landscape impact during construction. The preferred project includes the retention of the existing station entry building. This would result in less impacts on trees, legibility and accessibility within the precinct.

During operation, the **moderate beneficial** landscape impacts of the exhibited project would be reduced to **minor beneficial**. While the existing station would be retained and upgraded, the station building would continue to be constrained by the proximity of the station entry to the busy Canterbury Road. The preferred project would not achieve the improvements to connectivity and accessibility offered by the exhibited project whereby the station was relocated to the west and provided an additional northeast to southwest pedestrian connection across the railway corridor. Although the legibility and accessibility of the station would be improved with the new lifts, stairs, and improved kerbside facilities on Broughton Street, the same degree of improvement would not be achieved by the preferred project.

Table 5-1 includes a summary of these landscape character impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 5-1 Canterbury Station – landscape character impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Canterbury Station precinct	Local	Moderate adverse	Minor adverse	Moderate beneficial	Minor beneficial

5.2. Daytime visual amenity

5.2.1. Daytime visual amenity impacts of the exhibited project

The following viewpoints were selected as representative of views to the Canterbury Station site:

- view southwest from Robert Street
- view northwest from Broughton Street
- view southwest from corner of Broughton Street and Canterbury Road
- view northeast from Charles Street.

During construction, a minor to **moderate adverse** visual impact was identified for the exhibited project due to the extent of the works, and removal of mature trees. The works would be overlooked by residential properties on Broughton Street to the northeast, and from elevated residential apartments on Charles Street to the southwest.

When operational, there would be a **negligible** visual impact in views to the station, as the new built form would be largely absorbed into the surrounding, dense urban townscape.

5.2.2. Daytime visual amenity impacts of the preferred project

There would be a construction compound established on Broughton Street, visible in the middle ground of views from Robert Street, and foreground of views from Broughton Street. In these views, works to upgrade the kerbside facilities along Broughton Street and construction vehicles accessing the compound

site would be seen. Whilst the mature street trees and Art Deco amenities building on Broughton Street would be retained, there would be trees removed to accommodate the construction compound on the land between Broughton Street and the rail corridor. This would result in a noticeable reduction in the amenity in views from Robert and Broughton streets, which are of neighbourhood and local sensitivity, and a **negligible** and **minor adverse** visual impact respectively. (Refer to Table 5-2 Viewpoint 1 and 2).

Works to upgrade the station entry building, including works to incorporate a ramp from Broughton Street into the entry, and the construction of two lifts behind the station entry building would be visible in the foreground and middle ground of views from Broughton Street and Canterbury Road. This would create a noticeable reduction in the amenity of these views, which are of local visual sensitivity and the preferred project would have a **minor adverse** visual impact in views towards the station entry. (Refer to Table 5-2 Viewpoint 3).

There would be views to the preferred project from the southwest including from Charles Street, elevated residential properties on Charles Street, and the laneway to the south of the corridor. These views would include works to re-level the platforms and installation of the lifts and replaced stairs at the rear of the station entry building. The extent and nature of this work would be relatively small and would be visible to varying degrees from different properties depending on the orientation of the balcony or window and viewing height. Overall, this would result in a noticeable reduction in the amenity of these views, which are of local and neighbourhood sensitivity, and a negligible and **minor adverse** visual impact. (Refer to Figure 5-1 Viewpoint 5: View from Laneway south of Canterbury Station, Refer to Table 5-2 Viewpoint 4 and 5).



Figure 5-1 Viewpoint 5: View from laneway south of Canterbury Station

Further to the northwest, there would be views from residential properties which overlook the rail corridor, including those on Charles Street and Broughton Street, to works to construct a new services building. This services building would be located on a parcel of land to the north of the railway line. There

would be middle and foreground views from the adjacent mid-rise apartments, however, views from the older apartments are enclosed somewhat by dense trees, and the newer apartments have smaller windows oriented towards the rail corridor. This work would result in a noticeable reduction in the amenity of view, which is of neighbourhood sensitivity, resulting in a **negligible** visual impact during construction. (Refer to Table 5-2 Viewpoint 6).

During operation there would be minor changes visible in views from the north. This would include upgraded kerbside facilities along Broughton Street visible alongside the existing retained mature streets trees and Art Deco amenities building, which would be retained. There would be additional trees to replace those removed during construction. This would result in no perceived change in the amenity of views from Robert and Broughton streets, which are of neighbourhood and local sensitivity, and a **negligible** visual impact. (Refer to Table 5-2 Viewpoint 1 and 2).

The newly upgraded heritage station entry building would be seen in the fore and middle ground of views from Broughton Street and Canterbury Road. These views would include two new lift shafts rising above the roofline of the existing station entry building and located at the rear and southwest of the building. These structures would have contemporary materials and finishes that complement the heritage building that would clearly differentiate them as new additions. Whilst the lifts would contrast with the distinctive roofline of the existing station building, adding to the mix of architectural elements in this view, the lifts would be seen against a backdrop of contemporary medium rise development. The addition of these structures would increase the prominence of the station entry in these views somewhat. Although these additions would be visible they would not detract from the amenity of these views. Therefore, there would be no perceived change in the amenity of these views, and a **negligible** visual impact. (Refer to Figure 5-2 and Figure 5-3, and Table 5-2 Viewpoint 3).

In views to the preferred project from residential areas and the laneway in the south, there would be little change visible. These views would include works to re-level the platforms, install the lifts and replace the stairs at the rear and southwest of the station entry building. The new lifts would be seen in the context of the busy Canterbury Road and not obstruct views to the existing heritage platform buildings. This would result in a noticeable reduction in the amenity of these views, which are of neighbourhood sensitivity, and a **negligible** visual impact. (Refer to Figure 5-2 Viewpoint 5).

In views from residential areas in the southwest, on Charles Street, the new services building would be visible in the middle ground. Whilst the platforms would not be extended to the west, emergency egress stairs would be located at the end of the existing platforms, and there would be new system segregation fencing visible along the metro track. The character of these new elements would be largely consistent with the surrounding highly developed urban landscape and existing rail corridor. Overall, there would be a noticeable reduction in the amenity of these views, which are of neighbourhood sensitivity, resulting in a **negligible** visual impact during operation. (Refer to Figure 5-2 Viewpoint 4).



Figure 5-2 View southwest from Broughton Street

5.2.3. Change to daytime visual amenity impacts

During construction, views from Robert and Broughton streets would decrease from **minor adverse** to **negligible** as the construction of a new concourse and footbridge would no longer be required, and work within Broughton Street would be substantially reduced.

The visual impact of the preferred project would be reduced from **moderate** to **minor adverse** during construction in views from Broughton Street and Canterbury Road. This is because the existing station buildings would not be demolished and would be refreshed, requiring less construction activity.

The views from residential properties to the northwest of the station, on Charles Street, would remain as negligible as the services building would be absorbed into the developed character of the rail corridor.

During operation the impacts would remain **negligible**, this is because the existing station entry building on Canterbury Road would be retained and refreshed, and additional trees would be retained. The services building would also be absorbed into the character of views from adjacent residential properties.

Table 5-2 includes all impacts identified for the exhibited project as well as the assessment of the preferred project. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold. One additional view, Viewpoint 5, has been added to cover a new area of potential visual impact.

Table 5-2 Canterbury Station – daytime visual amenity impacts

	Viewpoint	Sensitivity rating	Construction impact		Operation impact	
			Exhibited project	Preferred project	Exhibited project	Preferred project
1	View southwest from Robert Street	Neighbourhood	Minor adverse	Negligible	Negligible	Negligible
2	View northwest from Broughton Street	Local	Moderate adverse	Minor adverse	Negligible	Negligible
3	View southwest from corner of Broughton Street and Canterbury Road	Local	Moderate adverse	Minor adverse	Negligible	Negligible
4	View northeast from Charles Street	Neighbourhood	Negligible	Negligible	Negligible	Negligible
5	View from the lane south of Canterbury Station	Local	N/A	Minor adverse	N/A	Negligible

5.3. Night-time visual amenity

5.3.1. Night-time visual amenity impacts of the exhibited project

At night there would be a **minor adverse** visual impact during construction due to the introduction of night construction activity in close proximity to residential areas including properties on Broughton and Charles streets.

There would also be a **minor adverse** visual impact in views at night during operation. This would be due to the increased intensity of lighting that would be created by the station, brought closer to residential properties on Charles and Broughton streets.

5.3.2. Night-time visual amenity impacts of the preferred project

There would be night works required to construct the preferred project to minimise impact on the operations of the rail network. Night works would be undertaken in close proximity to residential areas to the northwest and southwest, including residential properties on Broughton and Charles streets. The preferred project would lessen the extent and magnitude of this night work. These views would have a noticeable reduction in amenity, in a landscape which is of medium district brightness, and there would be a **negligible** visual impact during construction.

During operations, views to the preferred project would include minor changes to the station entry building including the addition of two lift structures. There would also be new kerbside facilities on Broughton Street to the northwest of the station. These structures and kerbside facilities would be lit, increasing the amount of lighting near adjacent residential properties on Charles and Broughton streets. Overall, during operation the lighting of the project would be largely absorbed into the existing station setting, a medium district brightness environment, giving rise to a **negligible** visual impact at night.

5.3.3. Change to night-time visual amenity impacts

There would be a **negligible** visual impact experienced in residential areas surrounding the site which is a decrease from the **minor adverse** impact for the exhibited project. This is because a new elevated

concourse building would no longer be constructed, and the platforms would not be extended to the northwest. These impacts would be experienced across a reduced area and over a shorter duration.

During operation the visual impact would be reduced from a **minor adverse** visual impact at night to **negligible** due to the preferred project. By not extending the platforms to the east, and not replacing the station entry building with a new elevated concourse, the potential additional lighting seen from adjacent residential areas to the northwest and southwest would be minimal.

Table 5-3 includes a summary of these landscape character impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 5-3 Canterbury Station – night-time visual amenity impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Canterbury Station precinct	E3: Medium district brightness	Minor adverse	Negligible	Minor adverse	Negligible

6. Campsie Station

6.1. Landscape character

6.1.1. Landscape character impacts of the exhibited project

There would be a **moderate adverse** landscape impact at the Campsie Station precinct during construction due a reduction in the legibility and accessibility as work is staged and customer access is diverted to a temporary access structure during demolition works and construction of the new station concourse and vertical transport structures.

During operation, there would be a **minor beneficial** landscape impact, as a broader more open station entry concourse is created, set back from the constrained footpath environment of Beamish Street.

6.1.2. Landscape character impacts of the preferred project

During construction, the preferred project would require less construction activity at Campsie Station and station precinct. A construction compound would be established to the north of the rail corridor on North Parade. The existing station would be refreshed, the platforms re-levelled, and emergency egress stairs constructed at the end of the existing platforms. There would be some minor adjustments to North Parade to construct bicycle parking and kerbside facilities. Several trees between the station and North Parade would be retained. This work would reduce the legibility and accessibility of the station during construction. A services building and traction substation would be constructed on Lilian Street to the south of the rail corridor and west of the station. This activity would have a limited impact on access to the station and transport interchange facilities as this site is located outside the station precinct. Trees would be removed for the footprint of these buildings. Overall, due to the works required within the station, there would be a noticeable reduction in the landscape quality and functioning of this precinct during construction. The station precinct is of local landscape sensitivity, resulting in a **minor adverse** landscape impact.

During operation, there would be minor improvements to the kerbside facilities including additional bicycle parking, kiss and ride, and taxi rank on the southern side of North Parade. There would also be additional trees retained. The new services building would be located out of the station precinct and not impact access or use of the station. Overall, this would result in no perceived change in the landscape quality and functioning of this precinct, which is of local sensitivity, and a **negligible** landscape impact during operation.

6.1.3. Change to landscape character impacts

During construction the landscape character impacts would reduce from a **moderate adverse** to **minor adverse** during construction. This is because the preferred project would retain the existing station entry building, the platforms would not be extended to the west, and there would not be works to demolish and rebuild the buildings to the east of Beamish Street.

The **minor beneficial** landscape impacts identified in the exhibited project assessment during operation would be reduced to a **negligible** impact with the preferred project. The preferred project would not achieve the precinct improvements offered by the exhibited project. In the exhibited project, the station was rebuilt with a less constrained entry to Beamish Street and kerbside facilities were to be provided alongside over rail retail buildings along Beamish Street to the east of the Beamish Street Bridge.

Table 6-1 includes a summary of these landscape character impacts. Where the assessment of impact has changed from the exhibited project, the impact has been highlighted in bold.

Table 6-1 Campsie Station – landscape character impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Campsie Station precinct	Local	Moderate adverse	Minor adverse	Minor beneficial	Negligible

6.2. Daytime visual amenity

6.2.1. Daytime visual amenity impacts of the exhibited project

The following viewpoints were selected as representative of views to the Campsie Station site:

- view southeast from corner of Wilfred Avenue and London Street
- view west along North Parade
- view southwest from Beamish Street
- view northeast from Lilian Lane
- view west from Lilian Street
- view east from Lilian Street.

During construction, there would be a **minor adverse** visual impact on views from Beamish Street where the works are located in close proximity to the local commercial centre. There would also be a **minor adverse** visual impact on views to the project works from Lilian Street and Lane, to the south of the corridor. This impact is due to the extent and nature of the works and establishment of a construction compound, overlooked by residential properties. Similarly, there would be **minor adverse** visual impact from Wilfred Avenue and North Parade, where demolition and reconstruction of the station and over rail retail buildings along Beamish Street would be seen.

During operation of the project there would be a **minor beneficial** visual impact in views from Beamish Street, where the increased dimensions and more open form of the new station structures would provide a level of prominence which marks it as an entry to the station. The station architecture would be visually consistent with the character of the surrounding commercial precinct.

6.2.2. Daytime visual amenity impacts of the preferred project

There would be a construction compound established on North Parade, visible in the middle ground of views from Wilfred Avenue, and foreground of views from North Parade. In these views, works to upgrade the kerbside facilities along North Parade and construction vehicles accessing the compound site would be seen. Works would avoid the existing trees on North Parade so that several additional trees would be retained. There may also be glimpses to works associated with the re-levelling of the station platforms, viewed beyond the construction compound. Overall, this would result in a noticeable reduction in the amenity in views from Wilfred Avenue and North Parade, which are of neighbourhood sensitivity, and a **negligible** visual impact during construction. (Refer to Figure 6-2 Viewpoint 1).



Figure 6-1 View southwest from Beamish Street



Figure 6-2 View northeast from Lilian Lane

In views from North Parade, east of Beamish Street, there would not be any works visible as the demolition and reconstruction of the station and retail on the Beamish Street rail bridge would not be a

part of the preferred project. This would result in no perceived change in the amenity of views from this area, which are of neighbourhood visual sensitivity, and a **negligible** visual impact during construction. (Refer to Figure 6-1 View southwest from Beamish Street and Table 6-2 Viewpoint 2).

The preferred project would include minor upgrades to the existing station entry building on Beamish Street. With the preferred project, there would be very little construction activity seen in this view. This would result in no perceived change in the amenity of this view, which are of local visual sensitivity, and a **negligible** visual impact in views towards the station entry. (Refer to Table 6-2 Viewpoint 3).

Lilian Lane would not be required for construction and would remain open during construction. The existing vegetation along the rail embankment would be retained and views to the existing heritage platform buildings would remain visible through the perimeter security fencing. From some locations on Lilian Lane there would be glimpses through the rail corridor fencing to works to re-level the station. This work would result in no perceived change in the amenity of these views, which are of neighbourhood sensitivity, and a **negligible** visual impact. (Refer to Figure 6-2 View northeast from Lilian Lane and Table 6-2 Viewpoint 4)

To the west of the station works to construct a traction power station and services building would be seen from residential properties on Lilian Lane and Street which overlook the rail corridor. In these views, several existing buildings and existing trees would be removed, and a construction compound would be established on rail land and extending across the existing car park. This compound would be enclosed by temporary security fencing and hoarding, which would be seen along the road in the middle ground and enclosing these views. Construction of a service building would be seen in the middle and background of views, rising above the hoarding. This would result in a considerable reduction in the amenity of these views, which are of neighbourhood sensitivity, resulting in a **minor adverse** visual impact during construction. (Refer to Table 6-2 Viewpoint 5 and 6).

There would be minor changes in the foreground of views from North Parade and Wilfred Avenue with the improved kerbside facilities on the southern verge of North Parade. The existing trees would be retained. In the middle ground of these views, glimpses of the station platforms would now include glass screen doors, partly obstructing views to the existing heritage platform buildings. These elements would be consistent with the character of the station, and there would be no perceived change in the amenity of views from North Parade and Wilfred Avenue. As these views are of neighbourhood sensitivity, this would result in a **negligible** visual impact. (Refer to Table 6-2 Viewpoint 1).

In views from North Parade, east of Beamish Street, there would not be any additional elements of the project visible as the existing station entry building and retail on the Beamish Street rail bridge would remain. This would result in no perceived change in the amenity of views from this area, which are of neighbourhood visual sensitivity, and a **negligible** visual impact during operation. (Refer to Figure 6-1 View southwest from Beamish Street and Table 6-2 Viewpoint 2).

The minor upgrades to the existing station entry building on Beamish Street would not be visible in views from Beamish Street. Given this, there would be no perceived change in the amenity of this view, which is of local visual sensitivity, and a **negligible** visual impact in views towards the station entry. (Refer to Table 6-2 Viewpoint 3).

Lilian Lane would not be altered in the preferred project. The existing vegetation along the rail embankment would be seen as would the existing heritage platform buildings through the existing security fencing. The new platform screen doors may be seen on the platforms, but these would not be prominent in the view from Lilian Lane. Overall there would be no perceived change in the amenity of

these views, which are of neighbourhood sensitivity, and a **negligible** visual impact during operation. (Refer to Table 6-2 Viewpoint 4).

During operation views to the open rail corridor and linear carpark along the rail corridor would be replaced by a services building and traction power substation. These buildings would be prominent new structures in these views, obstructing views to the rail corridor and residential areas to the north. These buildings would be seen filtered through existing mature trees on the road verge. The buildings would also be seen in this view, creating a built edge along the northern side of Lilian Street. These changes would be generally consistent in character with the mix of residential and commercial development along the rail corridor. Overall, there would be no perceived change in the amenity of these views, which are of neighbourhood sensitivity, resulting in a **negligible** visual impact during operation. (Refer to Table 6-2 Viewpoint 5 and 6).

6.2.3. Change to daytime visual amenity impacts

During construction, views from Wilfred Avenue and North Parade would be reduced from **minor adverse** to **negligible** as the construction of a new concourse and footbridge would no longer be required. The visual impact of the preferred project would be reduced from **minor adverse** to negligible during construction in views from North Parade, east of Beamish Street. This is because the preferred project would not include the demolition of the retail east of the Beamish Street bridge, and construction of kerbside facilities over the rail corridor in this location. In views from Beamish Street to the existing station entry, the visual impact would reduce from **moderate adverse** to **negligible** as the existing station buildings would not be demolished and would be refreshed, requiring only minor construction activity. Similarly, the preferred project would no longer include works in Lilian Lane, and therefore the visual impact would reduce from **minor adverse** to **negligible**. The **minor adverse** visual impact in views from Lilian Street to the traction power station and services building, however, would remain as the preferred project would be unchanged in this location from the exhibited project.

During operation the impact in views from Wilfred Avenue, North Parade and Lilian Lane would all remain as **negligible** visual impact. For the exhibited project this impact level was due to the compatibility of the new station entry building and substantial precinct works with the urban setting. Whereas the preferred project would either not change these views or would be absorbed into the existing view. In views from Beamish Street, the **minor beneficial** visual impact identified for the exhibited project would not be achieved as the existing station building would be retained. This impact would reduce to **negligible** due to there being no change in this existing view. In views from Lilian Street, the impacts would remain as **negligible** as the preferred project would be unchanged in this view from the exhibited project.

Table 6-2 includes all impacts identified for the exhibited project as well as the assessment of the preferred project. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 6-2 Campsie Station – daytime visual amenity impacts

	Viewpoint	Sensitivity rating	Construction impact		Operation impact	
			Exhibited project	Preferred project	Exhibited project	Preferred project
1	View southeast from corner of Wilfred Avenue and London Street	Neighbourhood	Minor adverse	Negligible	Negligible	Negligible
2	View west along North Parade	Neighbourhood	Minor adverse	Negligible	Negligible	Negligible
3	View southwest from Beamish Street	Local	Moderate adverse	Negligible	Minor beneficial	Negligible
4	Northeast from Lilian Lane	Neighbourhood	Minor adverse	Negligible	Negligible	Negligible
5	View west from Lilian Street	Neighbourhood	Minor adverse	Minor adverse	Negligible	Negligible
6	View east from Lilian Street	Neighbourhood	Minor adverse	Minor adverse	Negligible	Negligible

6.3. Night-time visual amenity

6.3.1. Night-time visual amenity impacts of the exhibited project

At night there would be a **minor adverse** visual impact during construction due to the introduction of night construction activity in close proximity to residential areas, particularly on Lilian Street.

There would also be a **minor adverse** visual impact in views at night during operation with the increased intensity of lighting created by the station, and extending along the platforms to the west, bringing this light closer to residential properties on Lilian Street and Wilfred Avenue.

6.3.2. Night-time visual amenity impacts of the preferred project

There would be some night works required to construct the preferred project to minimise impact on the operations of the rail network. The preferred project would lessen the extent of this night work. This work would be largely contained within the station and not in close proximity to nearby residential areas. There would be no perceived change in the amenity of the station and station precinct during these times, and there would be a **negligible** visual impact during construction.

During operations, the lighting levels at the station would remain unchanged and not be extended as the platforms would not be extended to the west. There would be some additional lighting at the new kerbside facilities on North Parade and Wilfred Avenue, increasing the amount of lighting near commercial and residential properties on North Parade and Wilfred Avenue. Overall, during operation, the lighting of the project would be largely absorbed into the existing station setting, a medium district brightness environment, giving rise to a **negligible** visual impact at night.

6.3.3. Change to night-time visual amenity impacts

During construction the impact at night would reduce from a **minor adverse** visual impact to **negligible** due to the reduction in night construction activity required, particularly in the vicinity of Lilian Street.

The visual impact at night during operation would also reduce from a **minor adverse** visual impact to negligible. With the preferred project, there would be limited areas where there would be an increased intensity of lighting, the platforms would not be extended to the west, and there would not be additional lighting closer to residential properties on Lilian Street and Wilfred Avenue.

Table 6-3 includes a summary of these night-time visual amenity impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 6-3 Campsie Station – night-time visual amenity impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Campsie Station precinct	E3: Medium district brightness	Minor adverse	Negligible	Minor adverse	Negligible

7. Belmore Station

7.1. Landscape character

7.1.1. Landscape character impacts of the exhibited project

There would be a **moderate adverse** landscape impact at the Belmore Station precinct during construction due to a reduction in the legibility and accessibility as work is staged and construction compounds are established to the north and south of the station. There would also be a direct impact on vegetation which would be removed from the reserve at Tobruk Avenue.

During operation, there would be a **minor beneficial** landscape impact, as the open spaces are reinstated and refreshed, a new southern plaza and shared zone would be established, improving accessibility, legibility and the amenity of the precinct.

7.1.2. Landscape character impacts of the preferred project

The preferred project would require less construction activity at Belmore Station and station precinct, however compounds would be established on the public carpark to the north of the station on Redmond Parade, and south on Tobruk Avenue. More trees would be retained and the heritage Art Deco buildings on Redmond Parade would be retained. These compounds would impact on the legibility and accessibility of the station in some areas as the commuter car parks would be temporarily closed. There would be a direct impact on the public reserve on Tobruk Avenue and the park and trees located to the south of the rail corridor to allow for the construction of a services building at Myall Street. This work may require temporary diversions of the shared path which leads to the Terry Lamb Reserve in the south east. Several additional trees would be retained. Overall, due to the works required within the station, there would be a noticeable reduction in the landscape quality and functioning of this precinct during construction. The station precinct is of local landscape sensitivity, resulting in a **minor adverse** landscape impact.

During operation, the quality of the interchange facilities and station access would be improved by the new kerbside facilities on Tobruk Avenue. The new services building would be located within the corridor and not impact access or use of the station or station precinct. Additional trees and planting would be provided around the station to replace the trees removed during construction. Overall, this would result in no perceived change in the landscape quality and functioning of this precinct, which is of local sensitivity, and a **negligible** landscape impact during operation.

7.1.3. Change to landscape character impacts

The construction impacts of the preferred project would reduce from a **moderate adverse** to **minor adverse** landscape impact during construction. As the existing station buildings would be retained, and the new station concourse building would no longer be built, the preferred project would result in substantially less construction activity. Consequently, there would be less of an impact on trees, legibility and accessibility within the precinct.

During operation, the **minor beneficial** landscape impacts identified for the exhibited project would be reduced to **negligible** as the existing station would be retained and upgraded. Whilst there would be some improvement to kerbside facilities, the improved north to south connectivity achieved in the exhibited project which set the station east of Burwood Road, would not be achieved by the preferred project.

Table 7-1 includes a summary of these landscape character impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 7-1 Belmore Station – landscape character impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Belmore Station precinct	Local	Moderate adverse	Minor adverse	Minor beneficial	Negligible

7.2. Daytime visual amenity

7.2.1. Daytime visual amenity impacts of the exhibited project

The following viewpoints were selected as representative of views to the Belmore Station site:

- view east from Burwood Road overbridge
- view northeast from Tobruk Avenue
- view northwest from shared path linking to the Terry Lamb Reserve
- view west from the Terry Lamb Reserve
- view southwest from Redman Parade.

During construction, there would be a **moderate adverse** impact on views to the project works from the Burwood Road overbridge, Tobruk Avenue and Redman Parade, given the extent of the works including the establishment of construction compounds and retaining wall construction in close proximity to public realm areas. There would also be a **minor adverse** impact on views from residential areas to the south of the station on Acacia Lane and Street.

During operation of the project there would be a **minor adverse** impact in views from Burwood Road overbridge as the elevated concourse and canopy structure would rise above the existing heritage platform building and given the intensification of built development to views within the station.

There would also be a **minor adverse** impact in views from the Terry Lamb Reserve with the introduction of the services building within a parkland setting. However, there would be a **minor beneficial** impact in views to the new southern station entry and plaza on Tobruk Avenue, as although some mature trees would be removed, there would be improved amenity with a new plaza and park treatment. The setting of the northern station entry, viewed from Redman Parade, would have the capacity to absorb the new station buildings.

7.2.2. Daytime visual amenity impacts of the preferred project

In the view from the Burwood Road overbridge works to re-level the station platforms would be visible, however, the remainder of the station would be largely unchanged as the existing station would be retained. There would be glimpses to a construction compound on the carpark to the south of the corridor (right of view). Overall, this work would result in a noticeable reduction in the amenity in views from the Burwood Road overbridge, which is of local sensitivity, and a **minor adverse** visual impact during construction. (Refer to Table 7-2 Viewpoint 1 and Figure 7-1 View east from Burwood Road overbridge).



Figure 7-1 View east from Burwood Road overbridge



Figure 7-2 View northeast from Tobruk Avenue

In views from Tobruk Avenue a construction compound would be seen on the site of the existing carpark. Existing trees would be removed within the carpark, and site fencing erected and construction vehicle

access provided via Tobruk Avenue. This would result in a noticeable reduction in the amenity of these views, which are of local sensitivity, and a **minor adverse** visual impact during construction. (Refer to Table 7-2 Viewpoint 2 and Figure 7-2 View northeast from Tobruk Avenue).

In views from the southeast, along the shared path linking to the Terry Lamb Reserve and adjacent residential properties, there would be views to a construction compound which would be established on the existing carpark. This work would require the removal of trees and would be enclosed by site fencing. Haulage vehicles may be visible along Tobruk Avenue, with site access at the eastern end of the commuter car park. Due to the removal of vegetation and introduction of construction activity into an area of open space, these works would create a considerable reduction in the amenity of this view, which is of neighbourhood sensitivity, resulting in a **minor adverse** visual impact during construction. (Refer to Table 7-2 Viewpoint 3).

In views from the Terry Lamb Reserve and adjacent residential properties, work to construct the services building would be seen. This would include unobstructed views to a worksite which would be established along the rail corridor and within this linear section of park. This work would require the removal of trees and would be enclosed by site fencing. (Refer to Table 7-2 Viewpoint 4).

In views from Redman Parade, to the north of the station, the existing car park would be replaced with a construction compound and enclosed by temporary security fencing and hoarding. Construction vehicle movement and site access would be seen on Redman Parade. Removal of vegetation along the railway corridor would be seen. Due to the extent and proximity of the works in views from Redman Parade, this would create a considerable reduction in the amenity of this view, which is of local sensitivity, resulting in a **moderate adverse** visual impact during construction. (Refer Table 7-2 Viewpoint 5).

Once operational, in views from the Burwood Road overbridge, the re-levelled platforms and platform screen doors would be visible, however, the remainder of the station would be largely unchanged. These changes would be largely absorbed into the character of the existing station. Overall, there would be no perceived change in the amenity in views from the Burwood Road overbridge, which is of local sensitivity, and a **negligible** visual impact during operation. (Refer to Table 7-2 Viewpoint 1).

From Tobruk Avenue new kerbside facilities would be visible alongside the reinstated commuter carpark along with new tree planting. This would result in no perceived change in the amenity of these views, which are of local sensitivity, and a **negligible** visual impact during operation. (Refer to Table 7-2 Viewpoint 2).

In views from the southeast, along the shared path linking to the Terry Lamb Reserve and adjacent residential properties, the existing carpark would be reinstated with new trees replacing those which were removed for construction. This would result in no perceived change in the amenity of this view, which is of neighbourhood sensitivity, resulting in a **negligible** visual impact during operation. (Refer to Table 7-2 Viewpoint 3).

From the Terry Lamb Reserve and adjacent residential properties, the new services building would be visible. The new services building would obstruct views to the rail corridor. A new entry road would be seen, extending between the services building and Myall Street, across the existing path, to a gated hardstand area surrounding the building. The services building would be slightly larger than the adjacent residential dwellings, however, there would be some visual separation provided by the open space and additional trees along the existing path. The removal of vegetation and introduction of new built form

would result in a considerable reduction in the amenity of this view, which is of neighbourhood sensitivity, resulting in a **minor adverse** visual impact during operation. (Refer to Table 7-2 Viewpoint 4).

In views from Redman Parade, to the north of the station, the car park would be reinstated. Much of the existing vegetation would be retained, and therefore this would result in little change in the view. Overall, the project would create no perceived change in the amenity of this view, which is of local sensitivity, resulting in a **negligible** visual impact during operation. (Refer to Table 7-2 Viewpoint 5).

7.2.3. Change to daytime visual amenity impacts

During construction, in views from Burwood Road into the station and from Tobruk Avenue, the visual impact would reduce from **moderate adverse** to **minor adverse**, as the extent of work required at the station and within the precinct has been refined for the preferred project.

Minor adverse visual impacts would continue to be experienced in views from the southeast from the shared path linking to the Terry Lamb Reserve, as a construction compound would be established on the existing carpark. In views from the southeast from the shared path linking to the Terry Lamb Reserve, the impact would remain as a **minor adverse** visual impact, as works to construct the services building would be unchanged from the exhibited project.

Views southwest from Redman Parade would also remain as a **minor adverse** visual impact, as a construction compound would be established on the Redman Parade commuter carpark.

During operation, the impact on views from Burwood Road and across the station would reduce from **minor adverse** to **negligible**, as the construction of a new concourse and footbridge would no longer be required.

In views from Tobruk Avenue the level of impact would reduce from **minor beneficial** to **negligible** as the new plaza as part of the exhibited project would not be part of the preferred project, and the works to upgrade the kerbside facilities would be consistent in character with the existing view.

The shared path linking to the Terry Lamb Reserve, and adjacent residential areas, to the southeast of the station, would have a visual impact which is reduced from a **minor adverse** to **negligible**. This is because the new concourse and footbridge proposed in the exhibited project would not be installed and the view would be largely unchanged. Views from the Terry Lamb Reserve and adjacent areas would remain as **minor adverse**, as the new services building would remain as shown in the exhibited project.

View southwest from Redman Parade to the preferred project would remain as a **negligible** visual impact, as the commuter carpark would be reinstated.

Table 7-2 includes all impacts identified in the exhibited project as well as the assessment of the preferred project. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 7-2 Belmore Station – daytime visual amenity impacts

	Viewpoint	Sensitivity rating	Construction impact		Operation impact	
			Exhibited project	Preferred project	Exhibited project	Preferred project
1	View east from Burwood Road overbridge	Local	Moderate adverse	Minor adverse	Minor adverse	Negligible
2	View northeast from Tobruk Avenue	Local	Moderate adverse	Minor adverse	Minor beneficial	Negligible
3	View northwest from shared path linking to the Terry Lamb Reserve	Neighbourhood	Minor adverse	Minor adverse	Minor adverse	Negligible
4	View west from the Terry Lamb Reserve	Neighbourhood	Minor adverse	Minor adverse	Minor adverse	Minor adverse
5	View southwest from Redman Parade	Local	Moderate adverse	Minor adverse	Negligible	Negligible

7.3. Night-time visual amenity

7.3.1. Night-time visual amenity impacts of the exhibited project

At night there would be a **minor adverse** visual impact during construction due to a reduction in the amenity of views from residential properties in Redman Parade, upper Acacia Lane and Acacia Street, and Myall Street.

There would also be a **minor adverse** visual impact in views at night during operation, particularly from adjacent residential properties, due to the intensification and greater area of lighting, seen in close proximity.

7.3.2. Night-time visual amenity impacts of the preferred project

There would be night works required to construct the preferred project to minimise impact on the operations of the station. This work would be contained mainly within the station. However, there would also be night activity in the construction compounds which are in close proximity to residential areas in the north on Redman Parade, and Acacia Street and Lane to the south. As the platforms would not be extended to the east, the extent of this impact would be reduced. These views would have a noticeable reduction in amenity at night, and there would be a **negligible** visual impact during construction.

During operations, the preferred project would include new kerbside facilities on Tobruk Avenue which would require additional lighting. There would also be new bicycle facilities to the north on Redman Avenue. During operation, the lighting of the project would be largely absorbed into the existing station setting, a medium district brightness environment, giving rise to a **negligible** visual impact at night.

7.3.3. Change to night-time visual amenity impacts

During construction, at night the **minor adverse** visual impact identified for the exhibited project would reduce to **negligible**. Whilst there would be some night works seen, the extent of night works would be reduced with the preferred project. This impact would also be experienced for a shorter duration.

During operation, at night the **minor adverse** visual impact identified for the exhibited project would reduce to **negligible**. This is due to the revised extent of precinct works, which would not be near adjacent residential areas.

Table 7-3 includes a summary of these night-time visual amenity impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 7-3 Belmore Station – night-time visual amenity impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Belmore Station precinct	E3: Medium brightness district	Minor adverse	Negligible	Minor adverse	Negligible

8. Lakemba Station

8.1. Landscape character

8.1.1. Landscape character impacts of the exhibited project

There would be a **moderate adverse landscape impact** at the Lakemba Station precinct during construction due to a reduction in the legibility and accessibility as work is staged and customer access is diverted to a temporary access structure, during demolition works and construction of the new station.

During operation, there would be a **negligible landscape impact**, as the open space and public realm and interchange facilities are reinstated.

8.1.2. Landscape character impacts of the preferred project

The preferred project would require less construction activity at Lakemba Station and station precinct. Construction compounds would be established to the north and south of the rail corridor, on Railway Parade and The Boulevarde. Most of the trees within the precinct would be retained including several mature gum trees along Railway Parade. There would be work undertaken within the station to re-level the station platforms. New kerbside facilities would be constructed on the southern side of Railway Parade, and new taxi kerbside facilities on the northern side of The Boulevarde. This work would reduce the legibility and accessibility of the station during construction. A services building would be constructed along the rail corridor to the southwest of the station. This activity, as well as works to construct the emergency egress stairs at the end of the existing platforms, would have a limited impact on access to the station and transport interchange facilities. Overall, due to the works required within the station, there would be a noticeable reduction in the landscape quality and functioning of this precinct during construction. The station precinct is of local landscape sensitivity, resulting in a **minor adverse** landscape impact.

During operation, the preferred project would alter a smaller area as Lakemba Station has recently been upgraded as a part of the Transport Access Program (TAP) and has a new station concourse building. New bike parking and new kiss and ride kerbside facilities on the southern side of Railway Parade, and new taxi kerbside facilities on The Boulevarde would improve the accessibility of the station precinct. Most trees within the precinct would remain, as would the Lakemba War Memorial. Any impact on the surrounding gardens would have been reinstated and additional trees and planting would be provided to replace any trees removed during construction. The new services building would be located within the corridor, beyond the immediate environs of the station, and not impact access or use of the station or station precinct. Overall, this would result in no perceived change in the landscape quality and functioning of this precinct, which is of local sensitivity, and a **negligible** landscape impact during operation.

8.1.3. Change to landscape character impacts

The construction impacts of the preferred project would reduce from a **moderate adverse** to **minor adverse** landscape impact during construction as there would be less work at the station due to the retention of the existing station entry building. This would result in less impact on trees, legibility and accessibility within the precinct during construction.

During operation, the **minor beneficial** landscape impacts identified for the exhibited project would be reduced to a **negligible** landscape impact as the existing station would be retained. The Lakemba Station

has been recently upgraded by a Transport Access Program (TAP) project and the proposed additional kerbside facilities would further improve the existing accessibility of the station and station precinct.

Table 8-1 includes a summary of these landscape character impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 8-1 Lakemba Station – landscape character impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Lakemba Station precinct	Local	Moderate adverse	Minor adverse	Minor beneficial	Negligible

8.2. Daytime visual amenity impacts

8.2.1. Daytime visual amenity impacts of the exhibited project

The following viewpoints were selected as representative of views to the Lakemba Station site:

- view northeast from Railway Parade
- view southwest along The Boulevard
- view southwest from The Boulevard commuter car park
- view southeast from Jubilee Reserve.

During construction, there would be a **moderate adverse** visual impact on views to the project works from Railway Parade and The Boulevard. There would also be **minor adverse** impact on views to the project works from Jubilee Reserve and areas within The Boulevard car park, beyond the immediate setting of the station. This is due to the extent and nature of the construction activity, including construction compounds and temporary station access structures, as well as demolition and station construction works.

During operation, there would be a **minor adverse** impact in views towards the station from Railway Parade as the existing mature eucalypts would be lost, altering the nature and amenity of the view. However, there would be a **minor beneficial** impact in views from The Boulevard as the strong architectural statement highlights the station entry, alongside a reinstated parkland setting.

8.2.2. Daytime visual amenity impacts of the preferred project

In views from Railway Parade, during construction, a worksite would be seen established along Railway Parade. The existing mature gum trees would be retained. Construction works to re-level the platforms, install fencing and kerbside facilities, would be seen to the west of the station concourse building (right of view). Construction vehicles would be seen accessing the worksite via Railway Parade. These works would create a noticeable reduction in the amenity of this view, which is of local visual sensitivity, resulting in a **minor adverse** visual impact during construction. (Refer to Table 8-2 Viewpoint 1 and Figure 8-1 View northeast from Railway Parade).



Figure 8-1 View northeast from Railway Parade

View southwest along The Boulevard would include some activity to construct kerbside facilities on the northern verge. The extent of this work would be minor and not result in a perceived change in amenity during construction. Overall, as this view is of local visual sensitivity, there would be a **negligible** visual impact. (Refer to Table 8-2 Viewpoint 2).

The view from The Boulevard commuter car park would include a construction compound in the centre of this view, established across the rail corridor and adjacent car parking area. All vegetation within the compound area along the corridor fence line would be removed. The worksite and compound would be enclosed by site perimeter hoarding, obstructing views to the rail corridor from this viewpoint and from adjacent residences. Construction vehicles would be seen accessing the compound via The Boulevard. It is expected that the project would create a considerable reduction in the amenity of this view, which is of neighbourhood visual sensitivity, resulting in a **minor adverse** visual impact during construction. (Refer to Table 8-2 Viewpoint 3).

As the platforms would not be extended to the west, there would be no works visible in the fore and middle ground of views from the Jubilee Reserve during construction. In the background of the view, beyond the rail corridor, the vegetation in the background of this view, on the southern side of the rail corridor, would be removed for the construction compound. This change would result in no perceived change in the amenity of this view, which is of neighbourhood visual sensitivity, resulting in **negligible** visual impact during construction. (Refer to Table 8-2 Viewpoint 4).

During operation in views from Railway Parade, the large existing gum trees would be retained, filtering views to the existing concourse building and retained heritage platform buildings. There would be glimpses of the station platforms which would have been re-levelled, and platform screen doors. Overall, it is expected that there would be no perceived change in the amenity of this view, as the works would be

absorbed into the view. This view is of local visual sensitivity, resulting in **negligible** visual impact during operation. (Refer to Table 8-2 Viewpoint 1).

In views from The Boulevarde, the existing station building, war memorial and gardens would remain, and there would be additional kerbside facilities established along the northern verge. Due to the minor changes in this view, and consistency with the urban character of the station, this would result in no perceived change in the amenity of this view, which is of local visual sensitivity, and a **negligible** visual impact during operation. (Refer to Table 8-2 Viewpoint 2).

During operation, a reconfigured commuter car park would be visible in the fore and middle ground of views from The Boulevarde in the vicinity of the carpark. A new single storey services building would be visible at the western end of the carpark, in the background. It would be set at street level, and partly enclosed by the adjacent rail embankment. The removal of trees along the rail corridor would open-up views to the rail corridor, including new corridor segregation fencing and signalling equipment. This would result in a noticeable reduction in the amenity of this view, which is of neighbourhood visual sensitivity, and a **negligible** visual impact during operation. (Refer to Table 8-2 Viewpoint 3).

From Jubilee Reserve there would be segregation fencing and signalling equipment visible along the rail corridor, in the middle ground of the view. It is expected that the services building, west of the station, would also be seen rising above the rail corridor embankment in the background of the view. These elements would be absorbed into the character of the existing rail corridor. This would result in no perceived change in the amenity of this view, which is of neighbourhood sensitivity resulting in a **negligible** visual impact during operation. (Refer to Table 8-2 Viewpoint 4 and Figure 8-2 View southeast from Jubilee Reserve).



Figure 8-2 View southeast from Jubilee Reserve

8.2.3. Change to daytime visual amenity impacts

During construction, the impact on views from Railway Parade would remain as **minor adverse**. Whilst the demolition of the existing concourse and construction of a new station entry building would not be a part of the preferred project, the establishment of a construction compound and the removal of the mature eucalypt trees would continue to have an adverse effect on the amenity of these views.

Views from The Boulevarde in the vicinity of the station entry, would have a reduced visual impact from **moderate adverse** to **negligible**. This is because the existing station buildings would not be demolished and rebuilt, requiring substantially less construction activity.

The construction of the services building, as seen in views from The Boulevarde and adjacent residential areas, would remain as a **minor adverse** visual impact, as the preferred project is unchanged from the exhibited project.

From the Jubilee Reserve the extent of construction works has been refined so that the station platforms would not be extended west and there would be no major retaining walls required. The preferred project would have a **negligible** visual impact in views from this location, reduced from a **minor adverse** visual impact identified for the exhibited project.

During operation the impacts would remain **minor adverse** in views from Railway Parade mainly due to the removal of the mature trees. In views from The Boulevarde in the vicinity of the station, the visual impact would reduce from **minor beneficial** to **negligible**, this is because the improvements envisaged in the exhibited project would not be achieved by the preferred project. In views from The Boulevarde commuter car park, the visual impact of the preferred project would remain as **negligible**. From the Jubilee Reserve, the visual impact would also remain as **negligible**. However, in the exhibited project the negligible visual impact was due to the consistency between the station and existing rail corridor setting, whereas the preferred project proposes a lower level of modification to the view, with the station platforms no longer being extended to the west.

Table 8-2 includes all impacts identified in the exhibited project as well as the assessment of the preferred project. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 8-2 Lakemba Station – daytime visual amenity impacts

	Viewpoint	Sensitivity rating	Construction impact		Operation impact	
			Exhibited assessment	Preferred project	Exhibited assessment	Preferred project
1	View northeast from Railway Parade	Local	Minor adverse	Minor adverse	Minor adverse	Negligible
2	View southwest along The Boulevarde	Local	Moderate adverse	Negligible	Minor beneficial	Negligible
3	View southwest from The Boulevarde commuter car park	Neighbourhood	Minor adverse	Minor adverse	Negligible	Negligible
4	View southeast from Jubilee Reserve	Neighbourhood	Minor adverse	Negligible	Negligible	Negligible

8.3. Night-time visual amenity

8.3.1. Night-time visual amenity impacts of the exhibited project

At night there would be a **minor adverse** visual impact during construction relating to the impacts on the amenity of views from residential properties adjacent to the rail corridor in Railway Parade, and The Boulevarde. There would also be a **minor adverse** visual impact in views at night during operation, as the new metro platforms would extend lighting to the west, and within close proximity to residential areas.

8.3.2. Night-time visual amenity impacts of the preferred project

There would be night works required to construct the preferred project to minimise impact on the operations of the rail network. Much of the night works would occur within the station and adjacent areas including the construction compounds southeast of the station on The Boulevarde, and northwest of the station on Railway Parade. This construction activity may result in some additional light seen in views from residential properties on Railway Parade and The Boulevarde. Overall, it is expected that this lighting would create a noticeable reduction in the amenity of these views and a **minor adverse** visual impact at night.

During operations, views to the preferred project would include minor changes to the kerbside facilities on the northern verge of The Boulevarde and the southern verge of Railway Parade which would be lit, increasing the amount of lighting near adjacent commercial and residential properties. There would also be headlights seen on the additional metro trains using the station. Overall, this lighting would be generally consistent with the surrounding medium district brightness environment, and there would be no perceived change in amenity, resulting in a **negligible** visual impact at night.

8.3.3. Change to night-time visual amenity impacts

At night the visual impact during construction would remain as a **minor adverse** visual impact during construction as there would be construction activity introducing light into areas adjacent to residential properties on Railway Parade and The Boulevarde. However, the duration and area over which this impact would be experienced, would be less for the preferred project.

During operation the **minor adverse** visual impact would be reduced to a **negligible** visual impact at night. This is due to the revised nature of works, including the platforms not being extended to the west, so that there is less additional lighting near residential properties.

Table 8-3 includes a summary of these night-time visual amenity impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 8-3 Lakemba Station – night-time visual amenity impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Lakemba Station precinct	E3: Medium district brightness	Minor adverse	Minor adverse	Minor adverse	Negligible

9. Wiley Park Station

9.1. Landscape character

9.1.1. Landscape character impacts of the exhibited project

Construction works in the Wiley Park Station precinct have a **minor adverse** landscape impact. This is due to a reduction in the legibility and accessibility of the precinct as work is staged and customer access is diverted to a temporary access structure during demolition works and the new station is constructed.

During operation, there would be a **minor beneficial** landscape impact, as the public realm and interchange enhancements provide improved legibility, connectivity, and amenity. These improvements would be a catalyst for urban renewal within the precinct.

9.1.2. Landscape character impacts of the preferred project

The preferred project would require less construction activity at Wiley Park Station and station precinct. Construction compounds would be established to the west of the rail corridor on Stanlea Parade to the north of the station and The Boulevarde to the south. The worksite to the east of the station would be reduced in size and the existing street trees along The Boulevarde and on the rail corridor cuttings would be retained. The existing heritage listed station entry building would be retained, however, the retail building and disused premises at the station entrance on King Georges Road would be demolished. Two new lifts and two new stairs would be constructed at the rear of the station entry building. The existing ramps to the platforms would be retained and the heritage listed platform buildings would be retained and work would be undertaken to re-level the platforms. This activity would be spread across the station and precinct and would have minor impacts on access to the station. Overall, there would be a noticeable reduction in the landscape quality and functioning of this precinct during construction. The station precinct is of local landscape sensitivity, resulting in a **minor adverse** landscape impact.

During operation, the quality of the interchange facilities and station access would be improved by the new lifts and stairs at the station and kerbside facilities on The Boulevarde. There would be improvements to the lane between King Georges Road and Stanlea Parade including lighting and landscaping. There would also be additional trees provided around the station to replace the trees removed during construction. Overall, this would result in no perceived change in the landscape quality and functioning of this precinct, which is of local sensitivity, and a **negligible** landscape impact during operation.

9.1.3. Change to landscape character impacts

Although the existing station entry building would be retained, there would be works spread across the precinct and some demolition and construction works within the existing station entry building. Therefore, there would be a noticeable reduction in the landscape quality and functioning of this precinct during construction, and the impact of the preferred project would remain as a **minor adverse** landscape impact.

During operation, the **minor beneficial** landscape impacts identified for the exhibited project would be reduced to **negligible**. The existing station entrance would be retained and upgraded, and the existing retail building and disused premises, which flank the heritage station building, would be removed. This would improve the visual prominence and therefore the legibility of the station entry, however, the station would continue to be constrained by the proximity of the entry to King Georges Road. Whilst the

preferred project would not achieve the level of improvement to connectivity and accessibility of the exhibited project, which proposed to set the station entry back from King Georges Road, the legibility and accessibility of the station would be improved by the new lifts and stairs at the station, additional lighting and landscape treatment to Stanlea Parade, and additional kerbside facilities on The Boulevarde

Table 9-1 includes a summary of these landscape character impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 9-1 Wiley Park Station – landscape character impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Wiley Park Station precinct	Local	Minor adverse	Minor adverse	Minor beneficial	Negligible

9.2. Daytime visual amenity

9.2.1. Daytime visual amenity impacts of the exhibited project

The following viewpoints were selected as representative of views to the Wiley Park Station site:

- view southwest from laneway at King Georges Road
- view northwest across King Georges Road
- view northwest along The Boulevarde
- view northeast from The Boulevarde.

During construction, there would be a **moderate adverse** visual impact on views to the project works from adjacent streets, residential areas and schools to the north and south of the rail corridor, and from King Georges Road. This is due to the extent and nature of the works including construction compounds, temporary access structures and proximity of the construction works from these locations.

During operation, there would be a **minor adverse** visual impact in views towards the station from residential properties to the north of the station as the character would be different from the existing station character, with the station buildings having an increased scale and extending west of the existing station footprint, in closer proximity to adjacent residential properties. However, there would be a minor beneficial visual impact in views from King Georges Road as the new station architecture would improve the visual prominence of the station entry and be visually appropriate within the commercial setting.

9.2.2. Daytime visual amenity impacts of the preferred project

In views from the laneway at King Georges Road, and adjacent residential areas along Stanlea Parade, the establishment of a construction compound site along the rail corridor, the removal of several trees and construction vehicles accessing the compound site would be visible. Whilst the station entry building and platform access ramps would be retained, works to demolish the retail building and disused premises, either side of the station, construction of two new lift shafts and stairs, and re-levelling of the platforms at the station would be visible. This would create a considerable reduction the amenity of views from this area, which are of neighbourhood visual sensitivity, resulting in a **minor adverse** visual impact during construction. (Refer to Table 9-2, Viewpoint 1).

From King Georges Road, works to demolish the retail building and disused premises either side of the station building, and the removal of several trees would be seen. Construction of the lifts at the rear of the station building would be seen, rising above the roofline of the retained heritage station entry building. This would result in a noticeable reduction in the amenity of this view, which is of local visual sensitivity, and a **minor adverse** visual impact during construction. (Refer to Table 9-2, Viewpoint 2).



Figure 9-1 View northwest across King Georges Road

During construction, views from The Boulevard to the station would include works to the rear of the station entry building, including demolition of the existing disused premises at the corner with King Georges Road, and works to construct two new lift shafts and stairs. Work to re-level the platforms within the station would also be visible in the middle ground of this view. This work would extend across much of the existing view to the station and would result in a noticeable reduction in the amenity of views from the Boulevard, which are of neighbourhood visual sensitivity, and a **negligible** visual impact during construction. (Refer to Table 9-2, Viewpoint 3).

In views northeast from The Boulevard a construction compound would be established along the northern road verge, west of the station. This would include the removal of mature trees and vegetation along the rail corridor, opening-up views to the rail corridor. Construction vehicles would be seen accessing the worksite as would works to construct the services building. This would result in a considerable reduction in the amenity of views from the Boulevard, which are of neighbourhood visual sensitivity, and a **minor adverse** visual impact during construction. (Refer to Table 9-2, Viewpoint 4).

During operation, in views from the laneway at King Georges Road and residential areas to the north of the station, new finishes including lighting and landscaping on the lane would improve the amenity of the foreground. The new lifts and stairs would be seen adjacent to the existing station entry building. Within the station the view would include re-levelled platforms and screen doors. The improvements to the precinct would balance the additional built elements that would be visible adjacent to the existing station

buildings, and result in no perceived change in the amenity of views from this area, which are of local visual sensitivity, resulting in a **negligible** visual impact. (Refer to Table 9-2, Viewpoint 1).

In views from King Georges Road, the station entry would be less cluttered as the existing retail building and disused premises, either side of the station entry, would have been removed. The new lift structures would be glimpsed above the existing heritage listed station entry building. These lifts would have contemporary materials and finishes that complement the existing heritage building. The addition of these structures and removal of retail and disused premises around the station entry would somewhat increase the prominence of the station entry in these views. Although these additions would be visible, they would not detract from the amenity of these views. Therefore, there would be no perceived change in the amenity of this view, which is of local visual sensitivity, and a **negligible** visual impact during operation. (Refer to Table 9-2, Figure 9-1 View northwest across King Georges Road).

In views from The Boulevard to the station, the new lifts and stairs would be seen to the rear of the existing station entry building and there would also be glimpses to the re-levelled station platforms and the platform screen doors. These new elements would be largely absorbed into the character of the existing station. It would therefore result in no perceived change in the amenity of views from the Boulevard, which are of neighbourhood visual sensitivity, and a **negligible** visual impact during operation. (Refer to Table 2-2 Viewpoint 3 and Figure 9-2 View northeast from The Boulevard).



Figure 9-2 View northeast from The Boulevard

A new single storey services building would be seen in the middle ground of north-easterly views from the Boulevard, alongside the commuter carpark. The removal of existing trees would open-up views to the new rail corridor and residential areas to the north of the station. This view of the corridor would include new corridor segregation fencing, signalling equipment, overhead wires and catenary structures. The re-levelled platforms and platform screen doors would be seen along the length of the existing platform. It is expected, the preferred project would result in a noticeable reduction in visual amenity of

this view, which is of neighbourhood visual sensitivity, resulting in **negligible** visual impact during operation. (Refer to Table 9-2, Viewpoint 4: View northeast along The Boulevarde).

9.2.3. Change to daytime visual amenity impacts

During construction a **minor adverse** visual impact would remain in views from the laneway at King Georges Road, as there would be a construction compound established along the northern side of the rail corridor and there would be works across the station. The preferred project would retain the existing heritage buildings at the station, resulting in less construction seen in this view and the impact would be experienced for a shorter duration.

Similarly, in views from King Georges Road, the **minor adverse** visual impact would remain as although the existing station would be retained, there would be works to demolish the existing retail building and disused premises, either side of the station entry, and the construction of new lifts would be seen.

Views from The Boulevarde towards the station would remain as **minor adverse** during construction as although changes have been made to the exhibited project, there would be construction activity undertaken across the station for the preferred project that would be seen in this view. The duration of this impact would be reduced as the extent of work at the station has been revised.

Views from The Boulevarde to the construction compound at the location of the services building construction works would remain **negligible**, as although the station platforms would not be extended to the west in the preferred project, the works for the construction compound would remain.

During operation the impact on views from the laneway between King Georges Road and Stanlea Parade would reduce from **minor adverse** to **negligible**, as the existing station buildings would be retained, there would be upgrades to the laneway, and works to the station platforms would be absorbed into the view.

The impact on views from King Georges Road would be reduced from a **minor benefit** to **negligible**. This is because the existing station entry building on King Georges Road would be retained and refreshed, and the benefits offered by the proposed new station building in the exhibited project would not be achieved.

Views from The Boulevarde during operation would remain as a **negligible** visual impact, as the location and layout of the services building would remain unchanged, and the works to the station would be consistent in character with the existing station.

Table 9-2 includes all impacts identified in the exhibited project as well as the assessment of the preferred project. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 9-2 Wiley Park Station – daytime visual amenity impacts

	Viewpoint	Sensitivity rating	Construction impact		Operation impact	
			Exhibited project	Preferred project	Exhibited project	Preferred project
1	View southwest from laneway at King Georges Road	Local	Minor adverse	Minor adverse	Minor adverse	Negligible
2	View northwest across King Georges Road	Local	Minor adverse	Minor adverse	Minor beneficial	Negligible
3	View northwest along The Boulevarde	Neighbourhood	Negligible	Negligible	Negligible	Negligible
4	View northeast from The Boulevarde	Neighbourhood	Minor adverse	Minor adverse	Negligible	Negligible

9.3. Night-time visual amenity

9.3.1. Night-time visual amenity impacts of the exhibited project

At night there would be a **minor adverse** visual impact during construction due to the impacts on the amenity of views from nearby residential properties adjacent to the rail corridor in The Boulevard, Stanlea Parade, Lane at King Georges Road, Shadforth Street and Urunga Parade.

During operation the level of lighting during operation would be consistent with development along King Georges Road, the lit platforms, extending west, would create a **minor adverse** visual impact at night, from residential properties to the north and south of the rail corridor.

9.3.2. Night-time visual amenity impacts of the preferred project

There would be night works required to construct the preferred project to minimise impact on the operations of the rail network. Night works would be undertaken in close proximity to residential areas to the north and south of the corridor, including properties on The Boulevard, Stanlea Parade, Lane at King Georges Road and King Georges Road. As the platforms would not be extended to the west, the extent of this impact would be reduced. These views would have a considerable reduction in amenity during these times, and there would be a **minor adverse** visual impact during construction.

During operations, views to the preferred project would include minor changes to the station entry building including the addition of two lift structures. There would also be new kerbside facilities and accessible parking on The Boulevard, to the east of King Georges Road. These structures and kerbside facilities would be lit, increasing the amount of lighting near residential properties on The Boulevard, Stanlea Parade, Lane at King Georges Road and King Georges Road. Overall, during operation the lighting of the project would be largely absorbed into the existing station setting, a medium district brightness environment, resulting in a **negligible** visual impact at night.

9.3.3. Change to night-time visual amenity

A **minor adverse** visual impact would remain at night during construction due to the introduction of night construction activity in close proximity to residential areas, particularly on The Boulevard, where tree removal would open up views to the corridor.

During operation, the visual impact on views at night would reduce from **minor adverse** to **negligible**, due to the preferred project.

Table 9-3 includes a summary of these night-time visual amenity impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 9-3 Wiley Park Station – night-time visual amenity impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Wiley Park Station precinct	E3: Medium district brightness	Minor adverse	Minor adverse	Minor adverse	Negligible

10. Punchbowl Station

10.1. Landscape character

10.1.1. Landscape character impacts of the exhibited project

There would be a **moderate adverse** landscape impact at the Punchbowl Station precinct during construction due to a reduction in legibility and accessibility, and the introduction of construction compounds within the Warren Reserve and commuter car parks, to the north and south of the station.

During operation, there would be a **moderate beneficial** landscape impact, as the public realm and interchange enhancements provide an improvement to the legibility, connectivity, safety and amenity of the station precinct.

10.1.2. Landscape character impacts of the preferred project

The preferred project would require less construction activity at Punchbowl Station and station precinct. Construction compounds would be established to the north and south of the rail corridor, within Warren Reserve and commuter car park. However, the footprint of construction works has been refined in size and the existing street trees on Urunga Parade and The Boulevard would be retained. The existing station entrances would be retained and upgraded, and there would be works at the station entry to construct three new lifts, and a footbridge with two new stairs. The existing heritage listed platform would be re-levelled. This work would reduce the legibility and accessibility of the station during construction. Trees would be removed for the footprint of construction, however, due to the refined construction footprint, several additional trees would be retained. Overall, due to the works required within the station, there would be a noticeable reduction in the landscape quality and functioning of this precinct during construction. The station precinct is of local landscape sensitivity, resulting in a **minor adverse** landscape impact.

During operation, the preferred project would improve accessibility as station access would include new lifts, footbridge and stairs at the station and kerbside facilities on The Boulevard. New bike parking would be provided at the northern and southern station entrances and there would be a new signalised pedestrian crossing to the north of the station on Punchbowl Road. However, the legibility of the existing station building would not be improved by the preferred project, as the existing station remains tucked in behind retail development on The Boulevard and within Warren Reserve and is not achieving the same level of improvement for CPTED. Additional trees and planting would be provided around the station to replace the trees removed during construction. Overall, during operations there would be a noticeable improvement in the landscape quality and functioning of this precinct, which is of local sensitivity, and a **minor beneficial** landscape impact during operation.

10.1.3. Change to landscape character impacts

The construction impacts of the preferred project would reduce from a **moderate adverse** to **minor adverse** landscape impact during construction. Work at the station and station precinct as part of the preferred project, including retention of the existing station buildings and overhead booking office, and less works in Warren Reserve for the construction compound, would result in the removal of fewer trees, and improved accessibility within the precinct.

During operation, the **moderate beneficial** landscape impacts identified for the exhibited project would be reduced to **minor beneficial**. Although the existing station would be retained and upgraded, the new

overhead footbridge with spacious northern and southern station entry plazas would not be delivered. Furthermore, the preferred project would not achieve the improvements to public realm and kerbside facilities offered by the exhibited project, at the station interface with Warren Reserve and The Boulevarde. Furthermore, whilst the legibility and accessibility of the station would be improved with the new lifts, stairs, and improved kerbside facilities on The Boulevarde, the same degree of improvement would not be achieved by the preferred project. Notwithstanding the preferred project would have a **minor beneficial** impact during operation.

Table 10-1 includes a summary of these landscape character impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 10-1 Punchbowl Station – landscape character impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Punchbowl Station precinct	Local	Moderate adverse	Minor adverse	Moderate beneficial	Minor beneficial

10.2. Daytime visual amenity

10.2.1. Daytime visual amenity impacts of the exhibited project

The following viewpoints were selected as representative of views to the Punchbowl Station site:

- view south from Warren Reserve
- view east along Urunga Parade
- view west along The Boulevarde at Matthew Street
- view north from The Boulevarde.

During construction there would be a **minor adverse** impact on views to the project works from residential properties on adjacent residential areas on Urunga Parade, Warren Reserve and surrounding streets and public realm areas. This is due to the extent and nature of the works, including construction compounds, in close proximity to these locations.

During operation, there would be a **minor beneficial** impact in views from the Warren Reserve, as the new station buildings would create a strong architectural statement, highlighting the northern station entry. A new northern plaza would also improve the amenity of the rail side interface with the reserve. However, there would be a **minor adverse** impact in views from residential properties on Urunga Parade, given the intensification of rail infrastructure and removal of vegetation within the corridor.

10.2.2. Daytime visual amenity impacts of the preferred project

During construction, in views from south from Warren Reserve, there would be construction activity seen to the north of the rail corridor, extending into Warren Reserve. Some trees in this area within Warren Reserve would be removed. Works to upgrade the station entry building, including extension of the existing concourse footbridge to accommodate new lifts and stairs would be visible in the foreground and middle ground of views from the reserve. This activity would create a noticeable reduction in the amenity of this view, which is of local visual sensitivity, and a **minor adverse** impact in views towards the station entry. (Refer to Table 10-2, Viewpoint 1 and Figure 10-1 View south from Warren Reserve).

Views to the station works from the northeast, including residential properties on Urunga Parade, would be limited during construction as vegetation alongside the rail corridor and in Warren Reserve would be retained, screening views to the station entry upgrade works. There would be, however, a construction compound established to the east of the station for construction of a services building. This work would require the removal of trees within this area, also opening up views to work within and south of the corridor. Overall, there would be a noticeable reduction in the amenity of these views, which are of neighbourhood sensitivity, and a **negligible** visual impact. (Refer to Table 10-2 Viewpoint 2).

In views from the south, along The Boulevarde there would be a construction compound established on an existing commuter car park along the rail corridor. Whilst some trees along the rail corridor would be removed, the street trees and existing commercial buildings along The Boulevarde would be retained. Works to upgrade the station entry building, including extension of the existing concourse footbridge to accommodate new lifts and stairs would be visible in the foreground and middle ground of views and glimpsed through gaps between the existing retail buildings. Minor works for the construction of the kerbside facilities would be seen in the foreground of views along The Boulevarde. This activity would create a noticeable reduction in the amenity of views along The Boulevarde, which are of local visual sensitivity, and a **minor adverse** visual impact. (Refer to Table 10-2, Viewpoints 3 and 4).

During operation there would be minor changes visible in views from Warren Reserve to the north of the station. The existing station entrance would be retained and upgraded. The existing concourse footbridge would be extended to the north, and new lift and stairs would be seen. The lift structures would rise above the existing station roofline and increase the overall size of the station entry in this view. However, these elements would be consistent in size with the existing heritage listed station and be clearly differentiated as contemporary additions through the selection of materials. Overall there would be no perceived change in the amenity of views from Warren Reserve, which is a view of local sensitivity, resulting in a **negligible** visual impact during operation. (Refer to Table 10-2 Viewpoint 1 and Figure 10-2 View to station entry from Warren Reserve).

In views to the preferred project from residential areas to the northeast and along Urunga Parade, there would be limited views to works at the station which would be mostly concealed behind vegetation alongside the rail corridor and in Warren Reserve. There would, however, be views to the services building to the east of the station, which would be visible in the middle ground of these views. The removal of vegetation would open up views to the rail corridor. This would result in a noticeable reduction in the amenity of these views, which are of neighbourhood sensitivity, and a **negligible** visual impact. (Refer to Table 10-2, Viewpoint 2).

Views north from The Boulevarde, would include an extended concourse footbridge and stairs, extending south towards the viewer, and filling the gap between the existing commercial buildings facing The Boulevarde. Beyond this, views to the station upgrade would be minor with glimpses of the lift structures possible. However, much of the station and preferred project would be concealed behind the existing retail buildings along The Boulevarde. In the foreground of these views there would be upgraded kerbside facilities on The Boulevarde and the street trees removed during construction would be reinstated, visually softening the additional built elements. Overall this work would be largely consistent in character with this dense urban area and there would be no perceived change in the amenity of these views, which are of local sensitivity, resulting in a **negligible** visual impact during operation. (Refer to Table 10-2, Viewpoint 3 and 4 and Figure 10-2 View north from The Boulevarde).



Figure 10-1 View to station entry from Warren Reserve



Figure 10-2 View north from The Boulevard

10.2.3. Change to daytime visual amenity impacts

During construction, views from Warren Reserve and The Boulevarde would remain as **minor adverse** visual impact as although a new concourse and footbridge located to the east of the existing station would no longer be required, there would be substantial construction work required at the station entry including the removal of several trees.

The visual impact of the preferred project on views from Urunga Parade would be reduced from **minor adverse** to **negligible** during construction. The removal of vegetation within the worksite and along Urunga Parade for the construction of a new station concourse building would no longer be required. The platforms would also not be extended to the east and the retaining walls would also no longer be required.

Views from The Boulevarde would remain as a **minor adverse** visual impact. Although the new station would not be constructed to the east of the existing station, and existing retail buildings would not be demolished, there would be a construction compound required on The Boulevarde and work would extend from the existing station towards the Boulevarde. As the extent and nature of this work would be less, this impact would be experienced for a shorter duration.

During operation the impact of the preferred project on views from Warren Reserve would reduce from **minor beneficial** to **negligible**, as the improvements to the character and visual prominence of the station entry envisaged in the exhibited project would not be achieved by the renovation of the existing station.

In Urunga Parade, the visual impact of the preferred project on views from this residential area would reduce from **minor adverse** to **negligible**, as the proposed new station buildings to the east of the existing station, and closer to these viewers, would no longer be constructed and the existing vegetation in this area would be retained. There would be a new services building and vegetation removed along the southern verge of the Urunga Parade, however this impact would be limited due to the lower sensitivity of this viewing area.

In views from The Boulevarde the visual impact during operations would be reduced from **moderate beneficial** and **negligible** to **negligible**. The improvements to the prominence of the station entry achieved by the exhibited project would not be achieved by the preferred project, as the upgraded existing station entrance would be concealed amongst the existing retail buildings along The Boulevarde.

Table 10-2 includes all impacts identified for the exhibited project as well as the assessment of the preferred project. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 10-2 Punchbowl Station – daytime visual amenity impacts

	Viewpoint	Sensitivity rating	Construction impact		Operation impact	
			Exhibited project	Preferred project	Exhibited project	Preferred project
1	View south from Warren Reserve	Local	Minor adverse	Minor adverse	Minor beneficial	Negligible
2	View east along Urunga Parade	Neighbourhood	Minor adverse	Negligible	Minor adverse	Negligible
3	View west along The Boulevarde at Matthew Street	Local	Minor adverse	Minor adverse	Moderate beneficial	Negligible
4	View north from The Boulevarde	Local	Minor adverse	Minor adverse	Negligible	Negligible

10.3. Night-time visual amenity

10.4. Night-time visual amenity impacts of the exhibited project

At night there would be a **minor adverse** visual impact during construction owing to the impacts on the amenity of views from residential properties to the north of the rail corridor on Urunga Parade. Although during operation, lighting would be consistent with development along The Boulevarde, the lit platforms, extending west, would create a **minor adverse** visual impact at night, from residential properties to the north of the corridor.

10.4.1. Night-time visual amenity impacts of the preferred project

There would be night works required to construct the preferred project to minimise impact on the operations of the rail network. Night works would be undertaken in close proximity to commercial and recreational areas to the north and south of the existing station, including properties on The Boulevarde and Punchbowl Road. As the platforms would not be extended to the east and a new station building would no longer be constructed, the extent of this impact would be reduced. There would, however, be some works undertaken for the construction of the services building, in close proximity to residential areas north of Urunga Parade. These views would result in a noticeable reduction in amenity during these times, and a **minor adverse** visual impact during construction.

During operations, views to the preferred project would include changes to the station entry building including extending the brightly lit station environment north into Warren Reserve and south towards The Boulevarde. There would also be new kerbside facilities on The Boulevarde and bicycle parking at the northern and southern station entrances. These structures and kerbside facilities would be well lit, increasing the amount of lighting near commercial properties on The Boulevarde and Punchbowl Road, where it would be absorbed into the existing brightly lit setting. Overall, during operation, the lighting of the project would be consistent with the existing station setting, a medium district brightness environment, giving rise to a **negligible visual** impact at night.

10.4.2. Change to night-time visual amenity impacts

The visual impact of construction works at night would remain as **minor adverse**, due to the introduction of night construction activity in close proximity to residential, commercial and recreational areas and given the impact would be experienced over a shorter duration.

During operation the visual impact in views at night would reduce from **minor adverse** to **negligible**, with the decreased extent and intensity of lighting created by the preferred project which remains located adjacent to the commercial area rather than being closer to residential areas to the northeast.

Table 10-3 includes a summary of these night-time visual amenity impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 10-3 Punchbowl Station – night-time visual amenity impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Punchbowl Station precinct	E3: Medium district brightness	Minor adverse	Minor adverse	Minor adverse	Negligible

11. Ancillary Works - Rail corridor

11.1. Landscape character impacts

11.1.1. Landscape character impacts of the exhibited project

The ancillary works would give rise to a **minor adverse** landscape impact along most of the corridor during construction, between Dulwich Hill Station to Bankstown Station, and in areas west of Bankstown Station. This would be due to the establishment of construction compounds and worksites, particularly to the south of the corridor, the clearance of vegetation and major earthworks.

There would be a **moderate adverse** landscape impact, however, between Marrickville and Dulwich Hill stations from the extension of construction activity into a portion of McNeilly Park in Marrickville, creating a direct impact on this park and temporarily reducing access for recreation.

During operation, there would be a **minor adverse** landscape impact experienced along all sections of the rail corridor, between Marrickville Station and Bankstown Station, and in areas west of the Bankstown. This is because removed trees would not be reinstated along much of the corridor and there would be an intensification of rail corridor infrastructure, including new retaining walls, embankments, drainage swales, noise barriers, overhead lines and support structures, signalling equipment, telecommunication masts, segregation fencing, and other operational infrastructure, reinforcing the corridor as a physical and visual barrier within the landscape.

11.1.2. Landscape character impacts of the preferred project

The following rail corridor sections were assessed:

- Marrickville Station to Dulwich Hill Station
- Dulwich Hill Station to Hurlstone Park Station
- Hurlstone Park Station to Canterbury Station
- Canterbury Station to Campsie Station
- Power supply feeder south of Canterbury
- Campsie Station to Belmore Station
- Belmore Station to Lakemba Station
- Lakemba Station to Wiley Park Station
- Wiley Park Station to Punchbowl Station
- Punchbowl Station to Bankstown Station
- Areas west of Bankstown Station.

Rail corridor - Marrickville Station to Dulwich Hill Station

During construction, compounds and worksites would be established within the corridor and on the southern side of the tracks. This would require the removal of some corridor vegetation. However, the drainage works would not be required so that there would not be works in McNeilly Park west of Marrickville Station or on School Parade and Dudley Street east of Dulwich Hill station. In addition, throw screens would be installed on the Abermarle Bridge rather than the bridge being replaced. Works to construct the power supply route and construction of the traction power station on Randall Street would be undertaken. Overall, it is expected that there would be a noticeable reduction in the landscape quality of the corridor between Marrickville and Dulwich Hill Station, due particularly to impacts on trees and

works to upgrade services. This section of the rail corridor is of local sensitivity, resulting in a **minor adverse** landscape impact during construction.

During operation, the replacement of open space with a traction power station on Randall Street, removed vegetation and increased infrastructure within the corridor would result in a noticeable reduction in the landscape quality of this section of the rail corridor, which is of local sensitivity, resulting in a **minor adverse** landscape impact during operation.

Rail corridor - Dulwich Hill Station to Campsie Station

Compounds and worksites would be established within the corridor and on the southern side of the tracks requiring some corridor vegetation to be removed during construction. Construction support works would occur outside the rail corridor on land at Garnet Street / The Parade, Dulwich Hill; Melford Street / Canberra Street, Hurlstone Park and on Close Street Canterbury. Works to upgrade and replace road bridges and underpasses has been refined for the preferred project and is limited to work to providing enhanced protection to existing bridge piers, installation of anti-throw screens, vertical protection screens, vehicle collision barriers and general maintenance work, as required. There would be some trackwork to create a crossover east of Campsie Station, however, this work would be contained within the corridor. Overall, it is expected that there would be a noticeable reduction in the landscape quality of the corridor between Dulwich Hill Station and Campsie Station, due particularly to impacts on trees and works to upgrade services. This section of the rail corridor is of local sensitivity, resulting in a **minor adverse** landscape impact during construction.

During operation, whilst the worksites would be reinstated, the removed vegetation would generally not be replaced on the corridor. There would also be increased infrastructure within the corridor. This would result in a noticeable reduction in the landscape quality of this section of the rail corridor, which is of local sensitivity, resulting in a **minor adverse** landscape impact during operation.

Power supply feeder south of Canterbury Station

The substation connection would require temporary works within the road corridors along which it is proposed to pass. There would potentially be street trees removed as a part of the works. The alignment would change for the preferred project so that it would no longer traverse Hughes Park and would instead follow Westfield Street. This would result in a noticeable reduction in the amenity of the corridor which is of local sensitivity, and a **minor adverse** landscape impact during construction.

There would be no permanent aboveground elements, and there would be no perceived change in the quality of this landscape, which is of local sensitivity, resulting in a **negligible** landscape impact during operation.

Rail corridor – Campsie Station to Belmore Station

There would be changes to the existing track between Campsie and Belmore Station. This would require additional construction activity and may give rise to an increased landscape impact in these sections of the corridor with increased tree removal potentially required in these areas. There would also be works to construct the traction substation at Lilian Street. However, upgrades to the drainage works in Lilian Street would not be required. This would result in a noticeable reduction in the amenity of the corridor, which is of local sensitivity and a **minor adverse** visual impact during construction.

During operation, an area of open space would be replaced with a traction power station at Lillian Street, there would be changes to the rail alignment requiring additional vegetation to be removed and increased infrastructure within the corridor. This would result in a noticeable reduction in the landscape

quality of this section of the rail corridor, which is of local sensitivity, resulting in a **minor adverse** landscape impact during operation.

Rail corridor – Belmore Station to Wiley Park Station

Compounds and worksites would be established within the corridor and on the southern side of the tracks requiring some corridor vegetation to be removed. Works to upgrade and replace road bridges and underpasses has been refined for the preferred project and is limited to work to providing enhanced protection to existing bridge piers, installation of anti-throw screens, vertical protection screens, vehicle collision barriers and general maintenance work, as required. Further, no retaining walls would be built. There would, however, be works to construct power upgrades along the corridor and a traction substation at Lakemba. Overall, it is expected that there would be a noticeable reduction in the landscape quality of the corridor between Belmore Station and Wiley Park Station, due particularly to impacts on trees and works to upgrade services. This section of the rail corridor is of local sensitivity, resulting in a **minor adverse** landscape impact during construction.

During operation, whilst the worksites would be reinstated the removed vegetation would generally not be replaced in the corridor. There would also be increased infrastructure within the corridor including a traction substation at Lakemba. This would result in a noticeable reduction in the landscape quality of this section of the rail corridor, which is of local sensitivity, resulting in a **minor adverse** landscape impact during operation.

Rail corridor - Wiley Park Station to Punchbowl Station

The compounds and worksites would be established within the corridor and on the southern side of the tracks. This would require the removal of some corridor vegetation. Road bridges and underpasses would not be replaced. Overall, it is expected that there would be a noticeable reduction in the landscape quality of the corridor due to impacts on trees and works to upgrade services. This section of the rail corridor is of local sensitivity, resulting in a **minor adverse** landscape impact during construction.

The removed vegetation and increased infrastructure within the corridor would result in a noticeable reduction in the landscape quality of this section of the rail corridor, which is of local sensitivity, resulting in a **minor adverse** landscape impact during operation.

Rail corridor – Punchbowl Station to areas west of Bankstown Station

There would be changes to the existing track at Bankstown, services upgrades and a traction substation constructed at Punchbowl. This would require additional construction activity and may give rise to an increased landscape impact in these sections of the corridor with increased tree removal possible. Due to impacts on trees and works to upgrade services there would be a noticeable reduction in the landscape quality of this section of the rail corridor, which is of local sensitivity, resulting in a **minor adverse** landscape impact during construction.

During operation, an area of open space would be replaced with a traction power station at Punchbowl. Whilst the protected vegetation would be retained within the corridor, there would be trees removed and increased infrastructure introduced to the corridor. This would result in a noticeable reduction in the landscape quality of this section of the rail corridor, which is of local sensitivity, resulting in a **minor adverse** landscape impact during operation.

11.1.3. Change to landscape character impacts

The landscape character impact of the preferred project on the rail corridor between Marrickville Station and Dulwich Hill Station would reduce from **moderate adverse** to **minor adverse**. This is because works would not extend into McNeilly Park and the Albermarle Bridge would not be replaced. The retention of the existing track alignment including no change to existing embankments and cuttings would also allow for more vegetation to be retained.

All of the other sections of the corridor would continue to have **minor adverse** landscape character impacts for the preferred project. This is because works would be required for power upgrades, the construction of substations, noise barriers, security and segregation fencing and there would be some tree removal in various locations along the corridor.

During operation the landscape impact would remain as **minor adverse** along the corridor, and a **negligible** landscape impact on the power supply feeder south of Canterbury, which is unchanged from the exhibited project.

Table 11-1 includes a summary of these landscape character impacts.

Table 11-1 Ancillary Works – landscape character impacts

	Viewpoint	Sensitivity rating	Construction impact		Operation impact	
			Exhibited project	Preferred project	Exhibited project	Preferred project
1	Rail corridor – Marrickville Station to Dulwich Hill Station	Local	Moderate adverse	Minor adverse	Minor adverse	Minor adverse
2	Rail corridor –Dulwich Hill Station to Hurlstone Park Station	Local	Minor adverse	Minor adverse	Minor adverse	Minor adverse
3	Rail corridor –Hurlstone Park Station to Canterbury Station	Local	Minor adverse	Minor adverse	Minor adverse	Minor adverse
4	Rail corridor –Canterbury Station to Campsie Station	Local	Minor adverse	Minor adverse	Minor adverse	Minor adverse
5	Power supply feeder south of Canterbury	Local	Minor adverse	Minor adverse	Negligible	Negligible
6	Rail corridor –Campsie Station to Belmore Station	Local	Minor adverse	Minor adverse	Minor adverse	Minor adverse
7	Rail corridor –Belmore Station to Lakemba Station	Local	Minor adverse	Minor adverse	Minor adverse	Minor adverse
8	Rail corridor –Lakemba Station to Wiley Park Station	Local	Minor adverse	Minor adverse	Minor adverse	Minor adverse
9	Rail corridor –Wiley Park Station to Punchbowl Station	Local	Minor adverse	Minor adverse	Minor adverse	Minor adverse
10	Rail corridor –Punchbowl Station to Bankstown Station	Local	Minor adverse	Minor adverse	Minor adverse	Minor adverse
11	Areas west of Bankstown Station	Local	Minor adverse	Minor adverse	Minor adverse	Minor adverse

11.2. Daytime visual amenity impacts

11.2.1. Daytime visual amenity impacts of the exhibited project

The following viewpoints were selected as representative of views to ancillary works and along the corridor site:

- view northwest in McNeilly Park, Marrickville
- view west from the Livingstone Road rail bridge, Marrickville
- view east from Challis Avenue, Dulwich Hill
- view east from Wardell Road overbridge, Dulwich Hill
- view north from Foord Avenue, Hurlstone Park
- view northeast from Sawyer Reserve, Hurlstone Park
- view west along Hutton Street, Hurlstone Park
- view south from Church Street Park, Hurlstone Park
- view northeast from Close Street, Canterbury
- view east from the Terry Lamb Reserve, Belmore
- view northeast from The Boulevarde, Lakemba
- view east from Scott Street, Punchbowl
- view north from the Bankstown Arts Centre courtyard
- general passenger views from a train.

During construction, there would be a **moderate adverse** visual impact on views to the exhibited project works at McNeilly Park in Marrickville, and Close Street, Canterbury, where the construction footprint expands into areas of open space adjacent to the rail corridor. There would also be a **minor adverse** visual impact on views to the project from areas of Marrickville, Dulwich Hill, Hurlstone Park, Belmore, Lakemba and Punchbowl due to the removal of vegetation within the corridor, and extent of the works including construction compounds and worksites in close proximity to residential areas and parks.

During operation, there would be mainly **minor adverse** visual impacts to views from surrounding streets and residential properties including areas of Marrickville, Dulwich Hill, Hurlstone Park, Canterbury, and Lakemba, where vegetation is generally not replaced in the corridor and the intensification of rail corridor infrastructure, including new retaining walls, embankments, drainage swales, noise barriers, overhead lines and support structures, signalling equipment, telecommunication masts, segregation fencing, and other operational infrastructure would be seen in close proximity.

11.2.2. Daytime visual amenity impacts of the preferred project

During construction the visual impacts as a result of the preferred project would be reduced from that assessed in the exhibited project where impacts were derived from track works (all areas excluding Bankstown and Campsie where track work would be undertaken), the construction of retaining walls, drainage works, pedestrian and road bridge and underpass upgrades. The impacts would not be changed where the impact is derived by the construction compound sites, power upgrades and at traction power stations, installation of noise barriers, security and segregation fencing, which are assumed to remain the same as for the exhibited project.

During operation, the impact in views would reduce where trees have been retained, where there are no new retaining walls and larger bridge and underpass structures have not been built. The impacts would

not be changed where the impact is derived from the traction power stations, noise barriers, security and segregation fencing, which are assumed to remain the same as for the exhibited project.

11.2.3. Change to daytime visual amenity impacts

Table 11-2 includes all impacts identified for the exhibited project as well as the assessment of the preferred project. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 11-2 Ancillary Works – daytime visual amenity impacts

	Viewpoint	Sensitivity rating	Construction impact		Operation impact	
			Exhibited project	Preferred project	Exhibited project	Preferred project
1	View northwest in McNeilly Park, Marrickville	Local	Moderate adverse	Negligible	Minor adverse	Negligible
2	View west from the Livingstone Road rail bridge, Marrickville	Neighbourhood	Minor adverse	Minor adverse	Negligible	Negligible
3	View east from Challis Avenue, Dulwich Hill	Neighbourhood	Minor adverse	Negligible	Negligible	Negligible
4	View east from Wardell Road overbridge, Dulwich Hill	Local	Minor adverse	Minor adverse	Minor adverse	Negligible
5	View north from Foord Avenue, Hurlstone Park	Neighbourhood	Minor adverse	Negligible	Negligible	Negligible
6	View northeast from Sawyer Reserve, Hurlstone Park	Neighbourhood	Negligible	Negligible	Negligible	Negligible
7	View west along Hutton Street, Hurlstone Park	Neighbourhood	Minor adverse	Minor adverse	Minor adverse	Minor adverse
8	View south from Church Street Park, Hurlstone Park	Neighbourhood	Negligible	Negligible	Negligible	Negligible
9	View northeast from Close Street, Canterbury	Local	Moderate adverse	Moderate adverse	Minor adverse	Minor adverse
10	View east from the Terry Lamb Reserve, Belmore	Local	Minor adverse	Negligible	Negligible	Negligible
11	View northeast from The Boulevarde Lakemba	Neighbourhood	Minor adverse	Minor adverse	Minor adverse	Minor adverse
12	View east from Scott Street, Punchbowl	Neighbourhood	Minor adverse	Minor adverse	Negligible	Negligible
13	View north from the Bankstown Arts Centre courtyard	Local	Minor adverse	Negligible	Negligible	Negligible
14	General passenger views from a train	Local	Minor adverse	Negligible	Minor adverse	Negligible

11.3. Night-time visual amenity

11.3.1. Night-time visual impacts of the exhibited project

At night there would be a **negligible** visual impact during construction due to the absorption of the works into the existing, brightly lit night scene.

During operation, the rail corridor would not be lit at night, however, the headlights and internal lighting of a more frequent Metro train service, would be seen along the alignment, and the substations would require some lighting for security. This would be generally consistent with the surrounding night scene and would result in a **minor adverse** visual impact along the railway corridor between Marrickville Station and Punchbowl, and a **negligible** visual impact in Bankstown.

11.3.2. Night-time visual impacts of the preferred project

At night there would be works required at night for the preferred project. There would be a **negligible** visual impact during construction due to the absorption capacity of the existing, brightly lit night scene.

During operation, at night the preferred project would not include lighting along the rail corridor. There would, however, be additional headlights and internal lighting from a more frequent Metro train service, seen in views to the alignment. The substations would require some lighting for security as described in the exhibited project. This would result in a **minor adverse** visual impact for the railway corridor between Marrickville Station and Punchbowl, and a **negligible** visual impact in Bankstown.

11.3.3. Change to night-time visual amenity impacts

The impacts at night would remain unchanged during construction and operation.

Table 11-3 includes a summary of these night-time visual amenity impacts. Any assessments that would increase or decrease from the exhibited project have been highlighted in bold.

Table 11-3 Ancillary works – night-time visual amenity impacts

Location	Sensitivity rating	Construction impact		Operation impact	
		Exhibited project	Preferred project	Exhibited project	Preferred project
Rail corridor (excluding Bankstown)	E3: Medium district brightness	Minor adverse	Minor adverse	Minor adverse	Minor adverse
Rail corridor through Bankstown	E4: High district brightness	Negligible	Negligible	Negligible	Negligible

SYDENHAM TO BANKSTOWN

SUBMISSIONS AND PREFERRED INFRASTRUCTURE REPORT

> Appendix G – Landscape and visual impact assessment