

7. Project Description

7.1 Key Project elements

7.1.1 Sunshine Section

The SUN key aspects of the Project relevant to the LVIA are detailed in Table 7.1, with the following key elements:

- Modifications to Sunshine Station, including platform extensions and the construction of a new up-end elevated concourse.
- Construction of a new 1.5 km long MAR twin track viaduct structure, including associated OHLE (Albion / Sunshine Viaduct) and CSR between Sunshine Station and the Albion-Jacana corridor, crossing Ballarat Road, the Sunbury rail corridor, St Albans Road and Stony Creek.
- Anderson Road overbridge widening including a new SUP bridge and amended interface with HV McKay Gardens.
- Shared User Path along eastern side of the rail corridor from Albion Station up to Gilmour Road.
- Upgrades to existing public car parks and the creation of a forecourt adjacent to Albion Station.
- Ballarat Road landscaping and Albion Gateway feature.
- Talmage Street landscape treatment.

Table 7.1 Sunshine Section key elements

Element	Description
Sunshine Station	<p>Up-end concourse:</p> <ul style="list-style-type: none"> • approximately 10 m wide x 51 m long x 6.6-8.0m high. • Access is provided via lift, stairs, and escalators to each platform. <p>Platforms:</p> <ul style="list-style-type: none"> • Increased length of all platforms (length varies) to accommodate the relocated train stopping platforms towards the Up-end of the station. • Widening of platform Up-end to 9 m wide.
MAR Viaduct	<p>Elevated rail overpass for an approximate distance of 1.5 km. Starting north of Sunshine Station, near HV McKay Memorial Gardens, the elevated structure spans over Ballarat Road and St Albans Road, descending alongside Gilmour Road, south of Cary Street.</p> <p>Pier structures:</p> <ul style="list-style-type: none"> • Concrete columns with paint finish (anti-graffiti treatment - colour to be confirmed) • Variation to shape as required to accommodate physical and structural constraints, including Portal Piers (two columns and crosshead), Blade Piers (single flat wide pier) and Super Piers (increased dimensions and additional steel 'branch' extensions to crosshead). • Pier columns approximately 2.5 m wide x 2.0 m lozenge shape single column up to 11.5 m high. Pier crossheads approximately 10.3 m wide x 3.8 m high x 2 m deep. • Deflection walls to protect pier structures in the at grade rail corridor. • Piers are spaced approximately 25 m to 32 m apart, with longer spans required across Anderson Road, the Sunbury and Bendigo track intersection, and spanning the Sunbury line south of St Albans Road (at approximately Chainage (CH) 13+925). <p>Rail track deck and edge barrier parapet:</p> <ul style="list-style-type: none"> • Approximately four 1.8 m deep prestressed super-T girders with concrete deck and non-ballasted track structure. • Top of parapet maximum 19.7 m above ground level. • Parapet height above top of rail 1.4 m, overall height of parapet is approximately 3.1 m. Modular element, Non-reflective, lightweight material. <p>OHW (overhead wire) support structures:</p> <ul style="list-style-type: none"> • Architecturally designed mast fixing bracket, to support OHW mast from each side of pier crosshead.

Element	Description
	<ul style="list-style-type: none"> • OHW masts extend approx. 8.9 m above top of the rail to top of mast. • OHW mast locations typically at 60 m spacings on pier crossheads <p>Maintenance and Emergency Access Stairs:</p> <ul style="list-style-type: none"> • Lightweight steel staircase structures with lightweight, perforated, and solid, modular cladding, located CH 13+350 and CH 13+400.
Albion Gateway feature	An architectural feature aligning to the MAR Viaduct where it crosses over the Ballarat Road rail overpass. The design of the feature is to be developed in the detailed design phase. For assessment purposes, the feature is indicated to a maximum height of 24 m (from existing rail level) above Ballarat Road, so that it is not higher than the John Darling and Son Flour Mill roof level.
Albion Station Precinct	<p>Station platforms:</p> <ul style="list-style-type: none"> • Platform 2 widening/adjustment due to track realignment <p>West Forecourt:</p> <ul style="list-style-type: none"> • Activated pedestrian area, including shared use street, between the John Darling and Son Flour Mill and the existing rail corridor including new paving and canopy trees. • Small carpark consists of Kiss & Ride, DDA parking and staff parking. <p>East Forecourt:</p> <ul style="list-style-type: none"> • Activated forecourt including new paving, SUP and canopy trees in existing carpark area with integrated Water Sensitive Urban Design (WSUD).
Shared Use Path	<ul style="list-style-type: none"> • A SUP of approximately 900 m in length is proposed to traverse the eastern side of the existing rail corridor from Albion Station up to Gilmour Road intersection connecting into the existing on-road cycleway on St Albans Road. • SUP located under Ballarat Road and along St Albans Road, new SUP bridge adjacent to St Albans Road bridge • New through-truss SUP bridge adjacent to Anderson Road rail bridge, with switchback ramp to existing path connections on the east. • At-grade section of the SUP to comprise typical fencing adjacent to existing rail corridor to be compliant with MTM standards.
Noise walls	<p>SUN noise walls of a consistent design including:</p> <ul style="list-style-type: none"> • Pre-stressed concrete panels with steel posts. Panels with outward facing texture/relief. This has been custom designed to reflect the local environment. • Nominal 2.5-3.5 m high. <p>The noise wall interface is classified into the following typologies:</p> <ul style="list-style-type: none"> • Type 1: Adjacent local road - custom design panel finish to outward public interface. Opportunity for vegetation screening within road reserve area (Sunshine SUP, Gilmour Road). • Type 2: Adjacent local reserve or pedestrian path - plain panel finish. Opportunity for vegetation screening within reserve area (HV McKay Gardens, Talmage Street reserve) • Type 3: Residential interface with VicTrack boundary - plain panel finish. No opportunity to screen between public/private viewpoint
Relocatable Electrical Building (REB)	<ul style="list-style-type: none"> • Pre-fabricated metal containers with IT racks and ventilation • The appearance and finish of the REBs will be based on their visibility to sensitive receptors including: <ul style="list-style-type: none"> ○ Standard coloured REB – areas of low visual sensitivity ○ REB coloured to blend or feature – areas of low-medium visual sensitivity ○ Architectural screening or façade treatment – areas of high visual sensitivity
Existing rail corridor modifications	<ul style="list-style-type: none"> • Widening of existing rail bridge crossing over Anderson Road by approximately 40 m to the south. • Concrete retaining walls with mesh barrier to 1.8 m high adjacent HV McKay Memorial Gardens
Existing road network modifications	<ul style="list-style-type: none"> • Anderson Road southbound realignment to provide space for the central pier and widening of road median.

7.1.2 Corridor Section

The COR key aspects of the Project relevant to LVIA are detailed in Table 7.2 and include the following:

- Cranbourne Avenue pedestrian overpass.
- Construction of the new MAR tracks, comprising an approximately 8 kilometre dual track railway and associated overhead line equipment (OHLE), combined services route (CSR) and track drainage works, including:
 - > Maribyrnong River Bridge: an elevated twin track viaduct structure across the Maribyrnong River Valley, adjacent to the western side of the existing state significant heritage bridge.
 - > M80 Western Ring Road Bridge crossing over the M80 and Steele Creek to Sharps Road: a 2.3 kilometre long elevated twin track viaduct structure between Sharps Road, Tullamarine and the Albion-Jacana rail corridor, crossing Steele Creek and the M80 Freeway including emergency and maintenance access points (Airport Viaduct).
 - > New at-grade MAR tracks within the existing Albion-Jacana rail corridor, located on the western side of the existing Australian Rail Track Corporation (ARTC) tracks.
- Corridor noise walls.
- Replacement of shared use path (SUP) connections at Calder Freeway / Fullarton Road, provision of a new SUP overpass at Cranbourne Avenue, and provision of a Strategic Cycling Corridor link between Western Ring Road and Airport Drive via Steele Creek.
- Construction of an intake supply substation at Fullarton Road, Airport West and traction power substations at Fullarton Road and within the Sunshine North industrial area, Sunshine North.

Table 7.2 Corridor Section key elements

Element	Description
Cranbourne Avenue pedestrian overpass	<p>Elevated pedestrian overpass at Cranbourne Avenue railway reserve to Gilmour Avenue near to Clayton Street.</p> <p>Pier structures:</p> <ul style="list-style-type: none"> • Concrete pier columns with painted anti-graffiti treatment, colour to be confirmed. • 2 pier columns to either side of track approximately 5.2 x 8.3 m lozenged shape single column supporting steel truss bridge, connecting to ramps and stairs. <p>Overpass, ramps and stairs</p> <ul style="list-style-type: none"> • Overpass at 50.5 m long x 5.8 m high (underside) with truss height to 4.1 m with in-built throw-screens. • Concrete ramp with cantilevered piers from Cranbourne Ave with 3 switchbacks (105 m long over 52.5 m wide), landscape mounded to meet level of lower 2 ramps within rail reserve area. • Concrete ramp with cantilevered piers from Cranbourne Ave with 3 switchbacks, up to 109 m total length • Concrete ramp with cantilevered piers from Gilmour Ave with 2 switchbacks, up to 124 m total length • Stair access steel structure at end of Cranbourne Ave. • Stair access steel structure at Gilmour Ave. <p>Screens/barriers:</p> <ul style="list-style-type: none"> • Lightweight steel perforated throw-screens to overpass truss across rail tracks at 4.1 m high, to stairs and ramps up to 2.9 m high. • Solid modular cladding privacy screens adjacent residential properties at 2.9 m high.
Maribyrnong River Bridge	<p>Rail bridge over the Maribyrnong River Valley at a length of 550 m (CH17+330 to CH17+885), and 12.2 m wide. It is parallel to the existing Albion Viaduct, with rail track centrelines offset 15.4 m.</p> <p>Pier structures:</p> <ul style="list-style-type: none"> • Concrete pier columns with painted anti-graffiti treatment, colour to be confirmed. • Pier columns approximately 3.5 x 5m lozenged shape single column up to 40 m high. • First pier to the south side is a larger super pier supporting a combined services maintenance 'pit' (CSR), adjacent to the elevated track.

Element	Description
	<ul style="list-style-type: none"> Pier crossheads approximately 10.7 m wide x 3.9 m high x 3.5 m deep. Piers are spaced approximately 60 m. <p>Rail track deck and edge barrier parapet:</p> <ul style="list-style-type: none"> Rail deck support structure, 2 steel box girders approximately 4 m high. Parapet height above top of rail 1.4 m, overall height of parapet is approximately 4.5 m. Top of parapet is 51.4 m at the highest point above ground level. Parapet in non-reflective, lightweight modular material. <p>OHW (overhead wire) support structures:</p> <ul style="list-style-type: none"> Architecturally designed mast fixing bracket to support OHW mast from each side of pier crosshead. OHW masts extend approximately 8.8 m above top of the rail to top of mast. OHW mast structures at each pier (typically at 60 m spacings) <p>CSR pits:</p> <ul style="list-style-type: none"> 2 pits (first pier on south side and another on the north abutment) 8.5 m x 3.2 m height matching parapet.
M80 Western Ring Road Bridge	<p>Steel Box Girder Span Bridge, approximately 80 m pier to pier, with a curved plan layout, is across the M80 Ring Road. The bridge forms part of the elevated rail structure that extends from just north of Calder Freeway to Mercer Drive within the APAM Airport Precinct.</p> <ul style="list-style-type: none"> The two steel box girders area is approximately 4 m high at the piers and curve up to a reduced height at midspan of approximately 1.5 m. OHW masts are fixed to the steel girders at mid span and each side of the M80. <p>Pier structures:</p> <ul style="list-style-type: none"> Concrete column with anti-graffiti painted treatment, colour to be confirmed. Piers are formed by two concrete blade piers aligned to the M80. Piers are approximately 6.5 m high x 2 m deep with a tapered elevation 13.4 m wide at the top and 7.2 m wide at the bottom.
Airport Viaduct	<p>Elevated rail viaduct from the existing ARTC freight corridor at the Steele Creek embankment, across the M80 and Steele Creek wetland reserve, to along Airport Drive to Mercer Drive</p> <p>Pier structures:</p> <ul style="list-style-type: none"> Pier Column, lozenge shape 2.5 m wide x 2 m deep. Height varies from approximately 8m to 20 m. Pier Crossheads, approximately 9 m wide x 2 m deep x 3.8 m high. Piers are spaced at nominally 28 m spans. <p>OHW (overhead wire) support structures:</p> <ul style="list-style-type: none"> Architecturally designed mast fixing bracket, to support OHW mast from each side of pier crosshead. OHW masts extend approximately 8.8 m above top of the rail to top of mast. OHW mast structures at each pier (typically at 60 m spacings). <p>Rail track deck and edge barrier</p> <ul style="list-style-type: none"> Rail deck support structure, approximately four 1.5 m deep concrete super-T girders. Top of parapet above ground level varies. Parapet height above top of rail 1.4 m, overall height of parapet is approximately 3.1m. This is a modular element that is non-reflective and made of a lightweight material. <p>Maintenance and Emergency Access Stairs</p> <ul style="list-style-type: none"> Lightweight steel staircase structures with perforated and solid lightweight modular cladding, located at CH14+100 to CH14+150.
Noise walls	<p>COR noise walls of a consistent design including:</p> <ul style="list-style-type: none"> Pre-stressed concrete panels with steel posts. Panels with outward facing texture/relief. This has been custom designed to reflect the local environment. Nominal 2.5 - 3.5 m high (3.0m - Sterling Drive, 3.5 m – Border Drive Reserve to Moyangul Drive) <p>The noise wall interface is classified into the following typologies:</p>

Element	Description
	<ul style="list-style-type: none"> Type 1: Adjacent local road - custom design panel finish to outward public interface. Opportunity for vegetation screening within road reserve area (Gilmour Road, Mansfield Avenue and Moyangul Avenue). Type 2: Adjacent local reserve - plain panel finish. Opportunity for vegetation screening within reserve area Type 3: Residential interface with VicTrack boundary - plain panel finish. No opportunity to screen between public/private viewpoint (Sterling Drive, Border Reserve to Moyangul Avenue) Type 4: Transparent noise barrier (MRB, Fullarton Road, Airport Viaduct - if required)
Substations	<ul style="list-style-type: none"> Typical Traction Power Substations at Sunshine North industrial area at height up to 5 m. Materials/cladding are Colourbond steel, finish and colour to be confirmed. Terror Street – one standard Traction Power substation close to rail tracks and one larger Intake substation on Terror St. Buildings up to 8mH with architectural treatment to exterior and landscape buffer. An intake substation located near to the M80 and Keilor Park Drive, with an electrical connection installed in trenches bored beneath the M80 from the existing Keilor Terminal Station. Buildings up to 8 m high with architectural treatment to exterior and landscape buffer.
Relocatable Electrical Building (REB)	<ul style="list-style-type: none"> Pre-fabricated metal containers with IT racks and ventilation The appearance and finish of the REBs will be based on their visibility to sensitive receptors including: <ul style="list-style-type: none"> Standard coloured REB – areas of low visual sensitivity REB coloured to blend or feature – areas of low-medium visual sensitivity Architectural screening or façade treatment – areas of high visual sensitivity
Shared User Paths	<ul style="list-style-type: none"> Fullarton Road SUP upgrade. Widen underpass to a minimum 3 m with an additional 1 m benching to either side (SUP to act as maintenance access path and emergency services with 3.5 m minimum clearance). The northern side SUP crossing of the rail line (Fullarton Rd) has a new protection screen with cycle balustrade attached. The southern side SUP crossing over the rail line (M80 on ramp), nose barrier integrated with the outer protection screen as a transparent material to provide better passive surveillance. Retaining walls to Fullarton Road and SUP interfaces. Soft landscape to SUP surrounds excluding undercroft. Proposed lighting to underpass. Upgrade to fencing to interface between rail and SUP.
Existing road network modifications	<ul style="list-style-type: none"> Fullarton Road widening and upgrade to road barriers and noise barrier on the southern side

7.2 Construction

Construction is set to begin in 2022, subject to the required statutory approvals, and will take up to nine years to complete. Typical construction activities and elements would include the following:

- For the establishment of construction site compounds, removal of vegetation and trees where permitted and subsequent clearing, grubbing and grading, is to occur to the minimum extent necessary.
- General earthworks, storage and removal of spoil (including the treatment of contaminated soil, where required).
- Temporary worksites in construction compounds including hard stands, site offices, worker car parking, material stockpiling and access points.

- Development of infrastructure including tracks, bridgeworks, station building, station platforms, access infrastructure, shared use paths and other structural works.
- Development of ancillary infrastructure including noise barriers, gantries, lighting structures, barriers, signalling and the installation of drainage and water quality treatments.
- Temporary occupation of the rail corridor for construction purposes, including 24/7 occupation at discrete times and selective locations.
- Landscaping and site reinstatement as required.

7.2.1 Temporary worksites

Construction worksites and laydown areas are required for the Project to store centralised plant and equipment, larger stockpiles, site offices and other building materials. These temporary worksites areas have been located to avoid community and environmental constraints; however, they may have a short-term visual impact from nearby viewpoints. Refer to Figure 7.1 and Figure 7.2 for location of construction works sites, planned activity and potential impacts related to landscape and visual amenity.

Due to the linear nature of the Project, the extent of the scheme is likely to be split up into different segments that will be constructed concurrently. Each segment will be served by a range of compounds to enable construction of the key structures. The proposed compound locations may change as the Project design develops or when a contractor is onboarded to construct the Project. The proposed site compounds are itemised in Table 7.3.

Table 7.3 Temporary worksites and activities

Area Number	Worksites/ laydown area locations	Approximate duration	Activity	Potential impacts
1	Chaplin Reserve, Albion	3 years 10 months (Aug-22 to May-26)	• Worksites / laydown area	• Temporary ground disturbance in proposed future development site
2	HV McKay Memorial Gardens, Albion (north corner)	3 years 10 months (Aug-22 to May-26)	• SUP works • Worksite / laydown area • CSR signalling and utility works	• Partial impact at northern corner garden gates / SUP • Potential impact on existing trees
3	Barclay Reserve, Albion	2 years 8 months (Aug-22 to May-25)	• Worksites / laydown area	• Temporary ground disturbance and closure of recreation reserve
4	1 + 1A Talmage Street, Albion (west of rail line)	3 years 10 months (Aug-22 to May-26)	• Worksite / laydown area • CSR signalling and utility works	• Temporary ground disturbance (Sugar Gums protected during construction)
5	Albion Triangle		• Worksites / laydown area	• Temporary ground disturbance in proposed future development site
6	Sunshine Energy Park (southern corner)	2 years 5 months (May-23 to Oct-25)	• Worksite / laydown area • Crane use for viaduct installation	• Temporary ground disturbance to southern corner of rehabilitated area • Gilmour Road access and street tree removal
7a-b	Maribyrnong River Parkland (a. southwest of Albion Viaduct, b. southeast of EJ Whitten bridge)	4 years 6 months (Q4-22 to Q2-27)	• Elevated viaduct works • Worksite / laydown area • Construction access within parkland valley	• Significant ground disturbance in areas of cut and fill works over steep topography • Removal of vegetation • Temporary closure of Maribyrnong River Trail

Area Number	Worksites/ laydown area locations	Approximate duration	Activity	Potential impacts
8	Brimbank Park (area between M80 and Keilor East residential)	6 years (Q2-22 to Q4-28)	<ul style="list-style-type: none"> AusNet HV relocation works Woks Site / laydown area 	<ul style="list-style-type: none"> Temporary ground disturbance in grassland area
9	Border Drive Reserve, Keilor East	5 years (Q4-23 to Q4-28)	<ul style="list-style-type: none"> Track & civil works Worksite / laydown area CSR signalling and utility works 	<ul style="list-style-type: none"> Removal of existing vegetation including trees
10a	Industrial site 10A: southeast of St Albans Road overpass	3 years 11 months Jul-22 to May-26	<ul style="list-style-type: none"> Worksite / laydown area CSR signalling and utility works (10c.) 	<ul style="list-style-type: none"> Temporary ground disturbance in proposed future development site
10b	Industrial site 10B: northeast of St Albans Road overpass	2 years (Aug-22 to Au-24)		<ul style="list-style-type: none"> Temporary construction compounds/ activity in existing industrial sites
10c	Industrial site 10C: northwest of St Albans Road overpass	3 years 11 months (Jul-22 to May-26)		
10d-e	d. McIntyre Road/Furlong Road e. Ralston Street, Sunshine North industrial area	5 years (Q4-23 to Q4-28)	<ul style="list-style-type: none"> Worksite / laydown areas CSR signalling and utility works (10d.) 	<ul style="list-style-type: none"> Temporary construction compounds/ activity in existing industrial sites
10f	Munro Avenue, Keilor East		<ul style="list-style-type: none"> Worksite / laydown areas CSR signalling and utility works Substation works 	<ul style="list-style-type: none"> Permanent substation site in industrial area
10g	Sunshine North industrial area industrial site (southwest of Albion Viaduct)	6 years (Q4-22 to Q4-28)	<ul style="list-style-type: none"> Elevated viaduct works Worksite / laydown area 	<ul style="list-style-type: none"> Significant ground disturbance in areas of cut and fill works over steep topography Removal of vegetation
10h	Terror Street, Keilor Park	5 years 6 months (Q2-23 to Q2-29)	<ul style="list-style-type: none"> Worksite / laydown area Substation works 	<ul style="list-style-type: none"> Permanent substation site in industrial area
10i-m	Tullamarine Park Road industrial site (west of Airport Dv)		<ul style="list-style-type: none"> Elevated viaduct works Worksite / laydown area CSR signalling and utility works Track and civil works (10m.) 	<ul style="list-style-type: none"> Temporary construction compounds/ activity in existing industrial sites permanent emergency and maintenance access
11a	Commercial site north of Stony Creek	2 years (Aug-22 to Aug-24)	<ul style="list-style-type: none"> Worksite / laydown area 	<ul style="list-style-type: none"> Temporary ground disturbance in industrial site

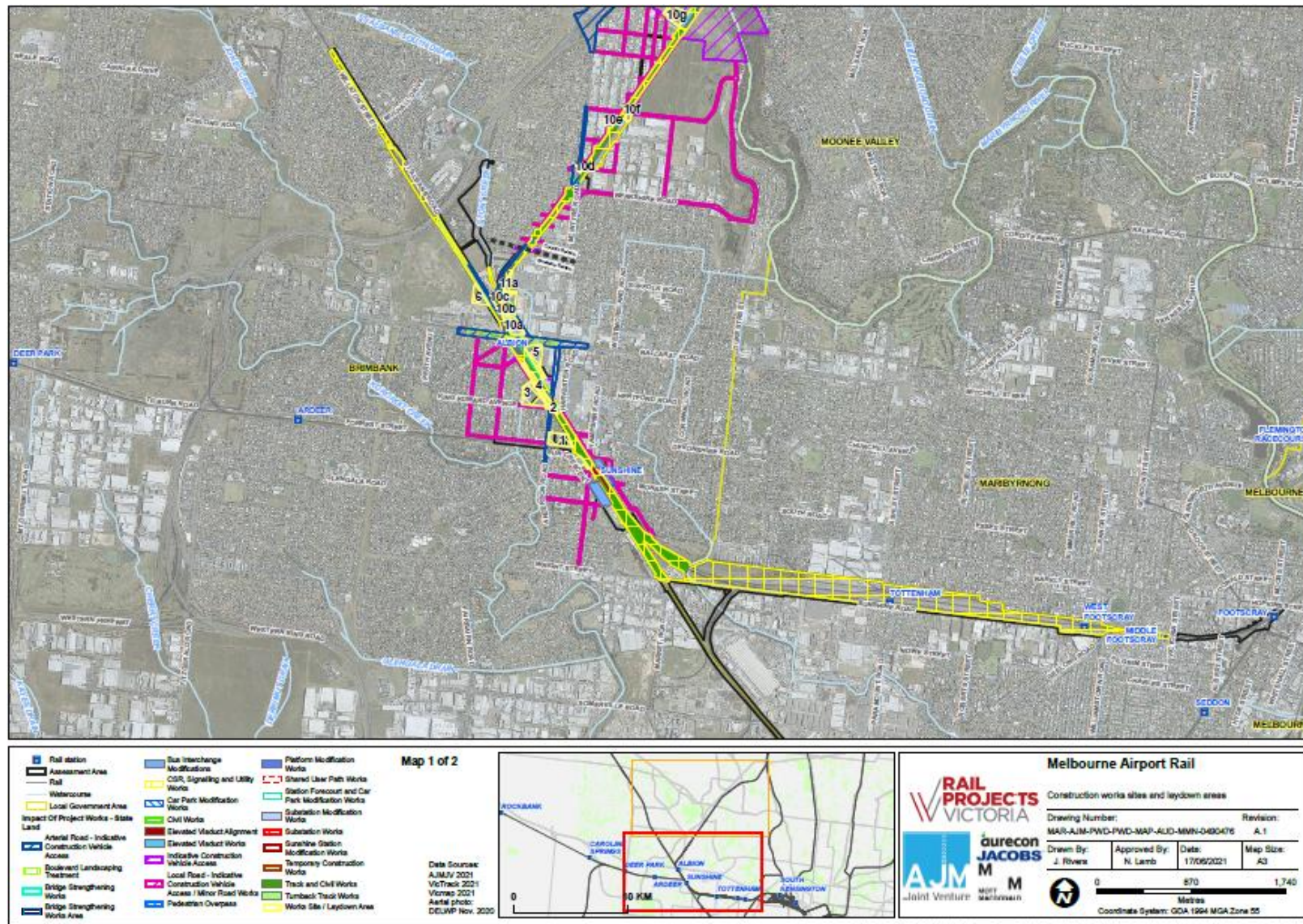


Figure 7.1 Construction worksites - SUN and COR Sections (1 of 2)

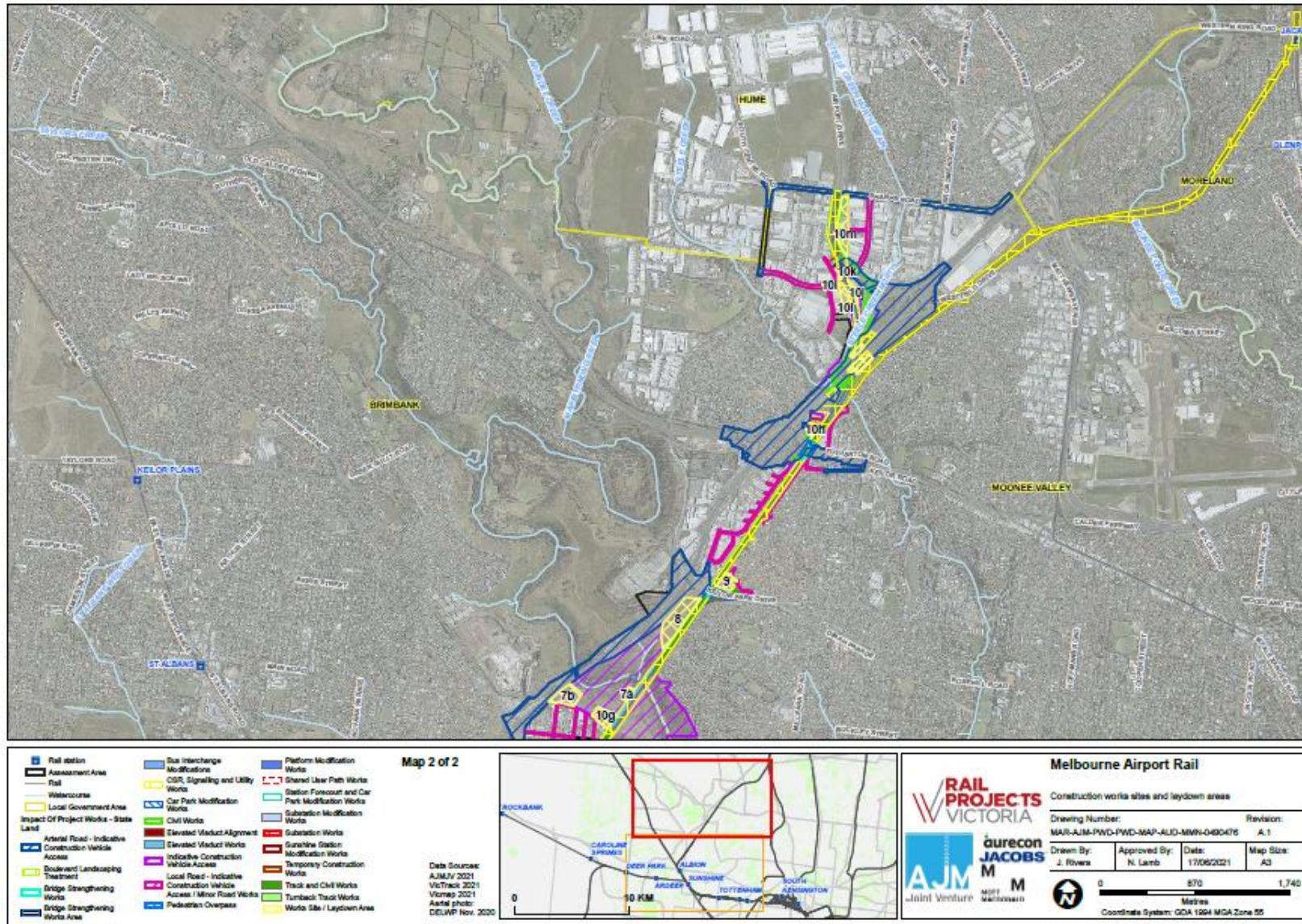


Figure 7.2 Construction worksites – COR Section (2 of 2)

8. Visual Appraisal

8.1 Visibility of the Project

The assessment of the visual impacts has been based on the sensitivity of the view and the degree of modification or changes to the view as part of the Project. The following Section outlines the impact assessment on the visual elements of the Project, at the following phases:

- Construction – during construction as outlined in Section 7.2.
- Operational – working draft design in the first year of operation as described in Section 7.1.
- Residual – ten years after project opening, considering screening effect of matured vegetation.

The details of the individual viewpoints including photographs of existing conditions and preliminary renders of the Project can be found in the subsequent Section.

The production of preliminary rendered photomontages is described in Section 4.5.3. They are indicative of the working draft design at operation and intend to provide an indication of the bulk and form of the proposed Project elements.

8.2 Sunshine Section

8.2.1 High visual sensitivity uses

As outlined in Section 4.3, visual sensitivity is a measure of how critically a change to the existing landscape would be regarded based on the use of the area from where it is viewed. The high visual sensitivity uses adjoining the Project include the following:

- Residential housing overlooking the Project along Station Place, Anderson Road, King Edward Avenue, Talmage Street, The Gables, Ferguson Street, Bazentin Street, Sydney Street, Derrimut Street, Service Road of Ballarat Road, Gilmour Road and Barwon Avenue.
- Barclay Reserve
- HV McKay Memorial Gardens
- Public Park and Recreation Zone (PPRZ) east of Talmage Street
- Upper Stony Creek Transformation wetland reserve
- Stony Creek.

Additionally, the John Darling & Son Flour Mill has a moderate visual sensitivity. Although the land use, and arterial road in the foreground of the viewpoint is a low sensitivity level, the Brimbank Planning Scheme has an objective to preserve the views to the Flour Mill and accordingly has a high viewer sensitivity. Combined with the moderately sensitive LCT, provides a moderate visual sensitivity.

8.2.2 Detailed assessment of representative viewpoints

A total of 16 representative viewpoints were identified within the SUN Section, based on the design, viewing distance and aspect. The locations of the assessed viewpoints are shown in Table 8.1.

Table 8.1 Assessed viewpoints within SUN Section

Viewpoint	Location	Receptors	Project elements
VP1	Matthew Hill Reserve, Sunshine	Recreational park users	Signalling, Sunshine Station
VP2	Station Street SUP, Sunshine Station	Residential	Sunshine Station up-end
VP3	HV McKay Memorial Gardens, Sunshine	Recreational park users	MAR Viaduct
VP4	Harvester Road SUP, Sunshine	SUP recreation	MAR Viaduct
VP5	Anderson Rd rail overpass - south, Sunshine	Residential	MAR Viaduct
VP6	Anderson Rd rail overpass - north, Sunshine	SUP recreation	MAR Viaduct
VP7	Talmage Street - south, Albion	SUP recreation	MAR Viaduct, SUP
VP8	Talmage Street, Albion	Residential	MAR Viaduct, SUP
VP9	Sydney Street, Albion	Residential	MAR Viaduct, Albion Gateway
VP10	Derrimut Street, Albion	Residential	MAR Viaduct, Albion Gateway
VP11	Ballarat Road - west, Sunshine	Residential	MAR Viaduct, Albion Gateway
VP12	Ballarat Road - east, Albion	Road users	MAR Viaduct, Albion Gateway
VP13	Ballarat Road overpass – John Darling & Son Flour Mill	Road users	MAR Viaduct, Albion Gateway
VP14	Albion Station	Public transport users	MAR Viaduct, SUP
VP15	St Albans Road, Sunshine North	SUP recreation	MAR Viaduct, SUP
VP16	Gilmour Road, Sunshine North	Recreational park users	MAR Viaduct

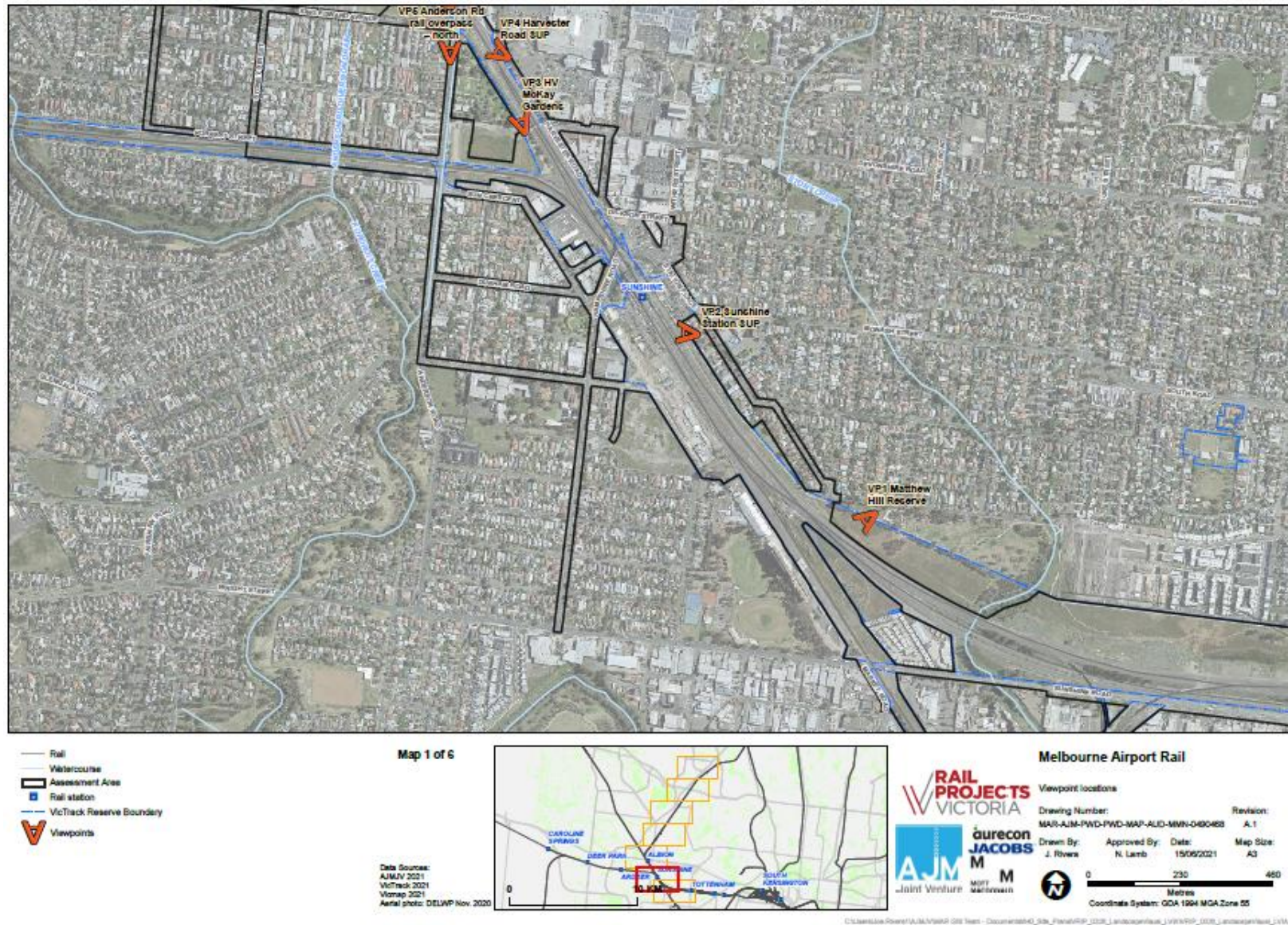


Figure 8.1 Sunshine viewpoint locations (Plan 1 of 2)

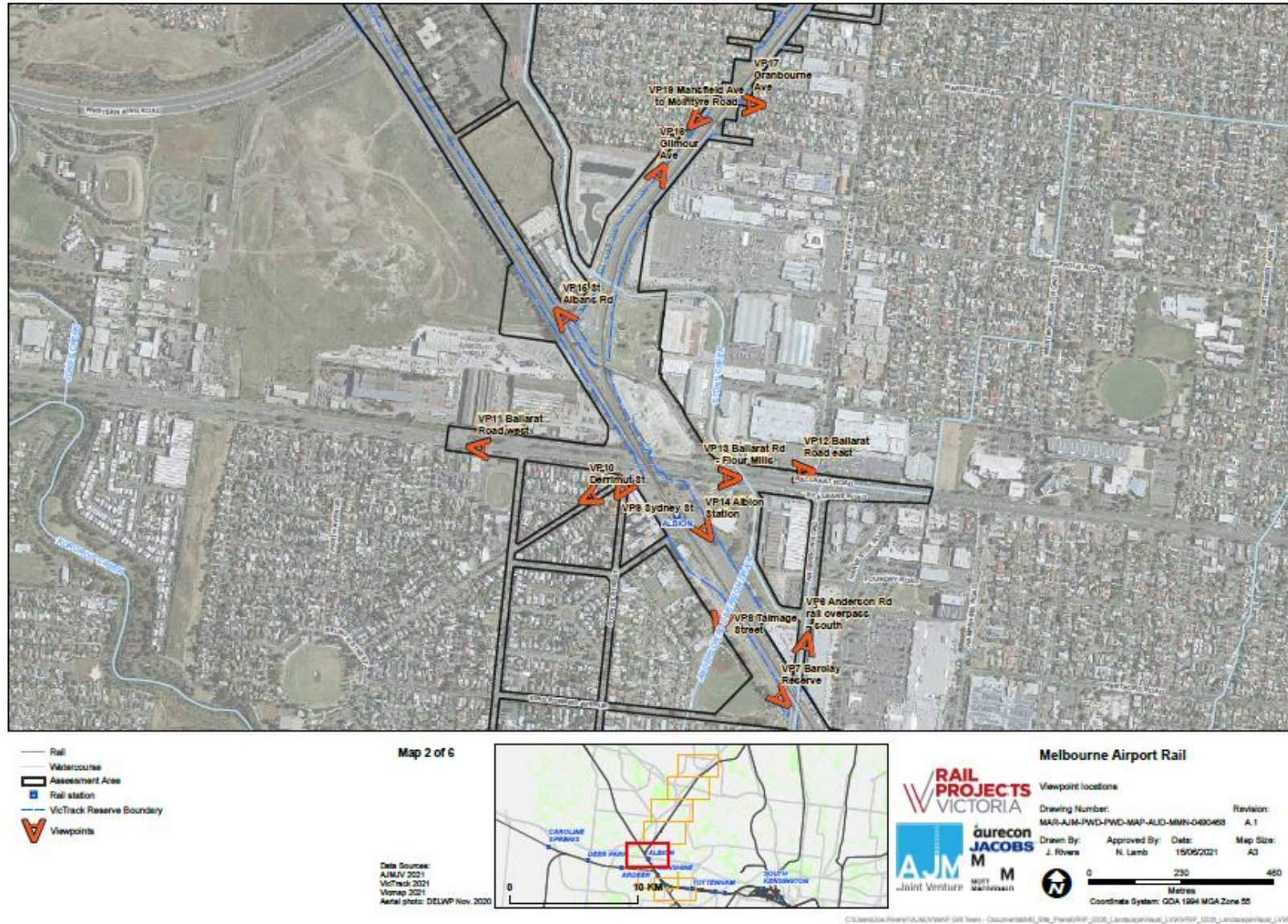


Figure 8.2 Sunshine viewpoint locations (Plan 2 of 2)

VIEWPOINT 01: Matthew Hill Reserve

Viewing location	From Matthew Hill Reserve looking southwest towards the rail corridor		
Existing setting	<p>The view is experienced by visitors to the reserve, which includes a playground located directly behind the viewpoint at Matthew Street, Sunshine. The viewpoint as shown in Figure 8.3 is adjacent the railway corridor across a grassland area, which is separated from the reserve for conservation of endangered grassland species. This area is mostly an open grassed area with a small patch of tall native trees to the centre of the space and to the north edge, lining the SUP and separating the conservation area to the park.</p> <p>To the south of the reserve, overhead gantries along the railway line are visible, with the bottoms of these and the rail tracks mostly screened below the low embankment. In the background, to the west side of the railway, a tall concrete factory with silos is prominent due to the height, with no other structures within view. Tree canopies are visible within the background.</p>		
Viewing context	Duration of view: static	Viewing angle: parallel	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Park and reserves	Landscape Type	Recreational Park (LCT 5)
Viewing distance (m)	Foreground (approximately 400 metres from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	NEGLECTIBLE		
Viewpoint discussion	<p>The proposed works includes signalling changes will be in the middleground of the viewpoint, within the existing rail corridor. These changes including new posts for signals are expected to be commensurate with the exiting conditions and are expected to be a negligible level of modification from the existing view.</p> <p>A rendered photomontage has not been produced as no key project elements are visible from this viewpoint.</p>		
Construction Visual Impact	NEGLECTIBLE		
	There are no construction compounds visible from this viewpoint, resulting in a negligible visual impact during construction.		
Operational Visual Impact	NEGLECTIBLE		
	The negligible visual modification and moderate visual sensitivity, results in a negligible visual impact at operation for park users.		
Residual Visual Impact	NEGLECTIBLE		
	No mitigation is proposed, and visual impacts remain negligible.		



Figure 8.3 VP1 Existing view looking southwest across the reserve towards rail tracks and silos.

VIEWPOINT 02: Sunshine Station

Viewing location	Sunshine SUP, located between the railway corridor and residential housing, looking northwest towards Sunshine Station.		
Existing setting	<p>The viewpoint (Figure 8.4) is representative of views from residents along Station Street, with a perpendicular view potentially experienced in their backyard behind timber paling fences approximately 1.8–2.2 m in height. The viewpoint is looking along the railway corridor, although views by residents are likely to be perpendicular. There are 19 dwellings and one medical clinic that have back fences to the SUP. The viewpoint is a short distance from Sunshine Rail Station, which is surrounded by elevated roads, commercial, industrial and public transport land uses.</p> <p>Views from the SUP towards Sunshine Station comprise of a narrow corridor between the residential fences and an open mesh security fence along the railway corridor boundary. There are narrow strips of grass to either side of the concrete path, but few trees or screening vegetation. There tall light poles for night lighting.</p> <p>The row of houses on Station Place adjoining the SUP are within a residential growth zone (GRZ), typically comprise single storey dwellings with an outlook onto Station Street. A primary school (Our Lady of the Immaculate Conception Primary School) is located to the east side of Station Street. The existing setting is dominated by rail infrastructure (station, platforms, overpasses and carparking) and train movement along the railway corridor.</p>		
Viewing context	Duration of view: static	Viewing angle: parallel	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT 2)
Viewing distance (m)	Foreground (approximately 50 m from closest project element)		
Viewer sensitivity level	Moderate	Absorptive ability	Very low
Visual Modification	MODERATE		
Viewpoint discussion	<p>The Sunshine Station upgrade works including the up-end concourse and platform extension, will be visible and at a close proximity from this viewpoint, as demonstrated in Figure 6.5. The proposed up-end concourse comprises a covered walkway accessed by stairs, with a canopy structure, and lifts within a building sheath. The height of this concourse is approximately 6m, commensurate with a double storey dwelling and therefore likely to be a noticeable element within the view.</p> <p>A REB ancillary structure at 3.5m height, will be located behind the viewpoint and experienced by SUP users and visible by some adjacent residents. This introduces a new structure adjacent to the SUP, however the scale not intrusive against the station.</p> <p>It is noted that the rendered photomontage indicates a transparent ‘window’ on the concourse walkway, that users of the concourse would seemingly have east-facing views, including towards backyards of the houses along Station Place. However, this is expected to be a perforated screen, not allowing direct views.</p> <p>The platform extension is at a lower height and likely to be barely visible to SUP users and not visible to residents. The design of the up-end concourse is expected to match existing Sunshine Station aesthetics, however it introduces a new element at closer proximity to those residents on Station Place and is considered a moderate visual modification from the existing setting.</p> <p>Construction worksites will be located to the other side of the railway corridor (refer to Section 7.2).</p>		



**Construction
Visual Impact**

HIGH

Construction works associated with the station and noise wall will be visible from this viewpoint and are of a scale and contrast that is considered a moderate visual modification to the existing setting. Consequently, the visual impact during construction for residents is expected to be high adverse.

**Operational
Visual Impact**

HIGH

The two storey height of the up-end concourse will be visible to residents, above the height of the noise wall, providing a new element that will be a moderate visual modification, given the close proximity of rail infrastructure already in this setting. Combined with a high visual sensitivity, the visual impact is expected to be high adverse.

**Residual
Visual Impact**

HIGH

There are no preliminary mitigation measures proposed for the Sunshine Station upgrade works, therefore the residual impact remains to be high adverse. The view east from the concourse walkway, is to be screened to retain privacy to private backyards reducing opportunities for overlooking private property. This does not reduce the visual impact of the proposed structure.



Figure 8.4 VP2 existing view from the SUP looking northwest towards Sunshine Station.



Figure 8.5 VP2 preliminary rendered photomontage indicating the Sunshine Station up-end concourse (at two years post construction).

VIEWPOINT 03: HV McKay Memorial Gardens

Viewing location

From the southeast end of heritage registered HV McKay Memorial Gardens (HO10), near to the pedestrian overpass, looking north along the pedestrian path parallel to the railway corridor.

Existing setting

The view is experienced by visitors to the reserve and pedestrians crossing the rail overpass from Harvester Road to the reserve.

Views within the reserve comprise of mature canopy trees, planted garden beds, grassed areas and connecting paths arranged in a designed arrangement and a well maintained garden setting. As shown in Figure 8.6, the railway corridor is noticeable from within the reserve, with mesh fencing, low planting and occasional trees between the gardens and railway corridor. Bench seating is arranged on the path with direct views towards the rail corridor and the Harvester Road carpark and street trees to the east side of the corridor. Although this existing view is not of high visual amenity, it creates a sense of openness within the garden and watching the trains go past is a subjective activity. The formality of the path is emphasized by vegetation to both sides and the red light poles located on the west side of the path.

The existing fence between the gardens and railway corridor is in rail reserve land.

The Sunshine Presbyterian Church (HO54) is located approximately 100 m to the left of the view and has only small glimpses of the railway corridor in between garden planting and trees.

Viewing context

Duration of view: static

Viewing angle: parallel

Visual Sensitivity

HIGH

Viewer sensitivity

Landscape sensitivity

Land use

Park and reserves

Landscape Type

Recreational Park
(LCT 5)

Viewing distance (m)

Foreground (approximately 10 m
from closest project element)

Viewer sensitivity level

High

Absorptive ability

Very low

Visual Modification

MODERATE

Viewpoint discussion

The railway corridor will be widened parallel to this viewpoint, to allow for the MAR rail line and MAR Viaduct. Within this viewpoint, as shown in Figure 8.7, a retaining wall will be located at the boundary to the gardens and rail reserve, which is closer to the edge of the existing path. Trees and shrubs will be removed in the area to the right of the path, this includes some mature native trees.

The proposed concrete retaining wall height is approximately 1-1.5 m in height and will have a visually permeable barrier to the top up to 1.8 m height total. The wall will obstruct existing views of the railway corridor. The view of the railway corridor is not considered of high visual amenity; however, the existing transparency enabling views of passing trains is considered subjective.

The railway corridor will remain noticeable by overhead wiring and masts along the tracks, visible above the wall. The permanent removal of existing trees to the right (east) of the path would be a noticeable compositional change, with views redirected internally to the established gardens.

Construction Visual Impact

HIGH

The removal of trees to the right of the path, together with construction works, is expected to cause a high level of visual modification to the existing setting. Combined with a high sensitivity, there will be a high visual impact during construction.

Operational Visual Impact

HIGH

The compositional changes with the loss of vegetation and proposed retaining wall is expected to be of moderate visual modification to the existing setting. Consequently, the visual impact from a highly sensitive viewpoint is of adverse high visual impact at operation.

Residual Visual Impact

MODERATE

Design mitigation would include vegetation screening between the path and the retaining wall, as shown in Figure 8.8. This would soften the appearance of the wall and be commensurate with the garden setting. The inclusion of mitigation measures reduces it to a moderate residual visual impact.



Figure 8.6 VP3 existing view looking north from the south end of HV McKay Memorial Gardens, towards the perimeter path and train tracks.



Figure 8.7 VP3 preliminary rendered photomontage indicating proposed retaining wall to the garden boundary (at two years post construction).



Figure 8.8 VP3 preliminary rendered photomontage indicative of screening to retaining wall and residual impact at 10 years.

VIEWPOINT 04: Harvester Road SUP, Albion

Viewing location

From Harvester Road shared user path looking north.

Existing setting

Harvester Street SUP is dominated by the rail corridor setting comprising gantries and rail fencing to the west, and the commercial warehouse buildings (up to two-storeys high) and associated car parking to the west as seen in Figure 8.9. The area also contains heritage listed buildings which were part of the Sunshine Harvester works.

The Albion VR, DC substation, and John Darling and Sons Flour Mill silos are prominent background features in the landscape. The Talmage Street Sugar Gums (H042) are key landscape features from this vantage point, to the left of the view in the middle-ground. Barclay Reserve is located behind these tall trees to the left of the view.

The Harvester Street SUP adjoins the eastern rail corridor connecting Sunshine Station to Albion Station. The SUP provides connections to Anderson Road and to the west of the rail via an elevated SUP rail overpass south of the HV McKay Memorial Gardens (HO10).

Viewing context

Duration of view: dynamic

Viewing angle: parallel

Visual Sensitivity

LOW

Viewer sensitivity

Landscape sensitivity

Land use

Shared Use Path

Landscape Type

Commercial (LCT 3)

Viewing distance (m)

Foreground (20 m from closest project element)

Viewer sensitivity level

Moderate

Absorptive ability

Moderate

Visual Modification

MODERATE

Viewpoint discussion

The project elements that would be visible by the users of the Harvester Road SUP include the MAR Viaduct, associated piers and OHW masts. To the west side of the railway corridor, the retaining wall and subsequent removal of existing trees to the boundary of HV McKay Memorial Gardens will be noticeable. The proposed elevated rail would be positioned over the existing rail corridor, as shown in Figure 8.10. There is partial screening of the John Darling & Sons Flour Mills brick building in the background.

A REB ancillary structure will be located in the midground adjacent the SUP. Existing vegetation will help to screen the REB, with the scale and form non-intrusive against background commercial building character.

It is acknowledged that the project proposes an elevated rail overpass to an existing at grade rail corridor that already adjoins the SUP. The viewpoint is already influenced by urban elements such as rail gantries, powerlines, street lighting poles and vehicles. The introduction of new vertical urban infrastructure would not be unaccustomed views for the SUP users. Furthermore, the views experienced towards the commercial warehouse buildings on the eastern side of the SUP.

Construction worksites will be located to the other side of the railway corridor (refer to Section 7.2).

Construction Visual Impact

MODERATE

The civil and track work construction activity, as well as a construction compound located within Barclay Reserve, in the background, will be noticeable from this viewpoint, resulting in a moderate visual modification to the existing setting. Consequently, the visual impact during construction for SUP users is expected to be moderate adverse.

Operational Visual Impact

LOW

The viewing angle combined with the extent of the project elements visible and the height and bulk of the structure would result in a noticeable visual change to the setting from the SUP at operation as seen in Figure 8.10, that is not a high contrast to the existing rail corridor setting. The low level of visual sensitivity combined with the moderate degree of visual modification, would result in a low visual impact for the users of the Harvester Road SUP.

Residual Visual Impact

LOW

There are no preliminary mitigation measures proposed along the SUP boundary to screen MAR elements; therefore, the residual impact would be low adverse.



Figure 8.9 VP4: Existing view from the SUP at Harvester Road looking north.



Figure 8.10 VP4 preliminary rendered photomontage indicating the MAR Viaduct ramping up towards Ballarat Road in the distance.

VIEWPOINT 05: Anderson Road overpass (south)

Viewing location	Looking north from Anderson Road, adjacent residential houses, towards the rail underpass.	
Existing setting	<p>This viewpoint is located predominately within an urban landscape comprising of Anderson Road that forms four lanes, residential housing (nine dwellings between the railway line and Ridley Street) and the occasional commercial activity such as childcare and the HV McKay Memorial Gardens, west and east respectively. The setting is dominated by road infrastructure including the elevated rail overpass, traffic lights, vehicles, overhead powerlines and street lighting as seen in Figure 8.11.</p> <p>The residential housing is a mix of styles from references to the Sunshine Harvester works era to post-war two-storey brick buildings. The Sunshine Presbyterian Church (H054) is a prominent heritage feature in the landscape, to the right (out of view). The large canopy trees within the HV McKay Memorial Gardens are key landscape features.</p>	
Viewing context	Duration of view: static (fixed view)	Viewing angle: perpendicular

Visual Sensitivity HIGH

Viewer sensitivity

Landscape sensitivity

Land use	Residential	Landscape Type	Residential (LCT 2)
Viewing distance (m)	Foreground (approximately 100 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very Low

Visual Modification LOW

Viewpoint discussion

As represented in Figure 8.12, the Project proposes an additional elevated rail overpass to an existing elevated rail corridor over Anderson Road. Project elements that would be visible by the residents located on Anderson Road include the through-truss bridge for the SUP. Other changes to the visual setting include new retaining walls associated with the widening of the existing rail bridge crossing over Anderson Road accommodating new tracks, a ramp from the new SUP bridge and noise barriers. The MAR Viaduct would be positioned at a comparable height to the existing rail corridor level.

The addition of a new vertical urban infrastructure would not be unaccustomed views for the residents located on Anderson Road.

The retaining wall and noise barrier along the boundary of HV McKay Memorial Gardens may be noticeable behind existing screening and due to the removal of some existing trees. The SUP will be re-aligned and cross over Anderson Road on the new through-truss bridge.

A construction worksite will be located to the right of the viewpoint, within an area between the existing SUP and the HV McKay Memorial Gardens, for the rail bridge widening, SUP realignment and track works (refer to Section 7.2). The construction works would temporarily affect the pathways and vegetation in this area, with the extant gates avoided and protected. The establishment of the work site requires the removal of vegetation and installation of hardstand and vehicle access points. The area will be restored with landscape works surrounding the SUP realignment.

Construction Visual Impact

HIGH

Construction activity and removal of some vegetation in the north east corner of the gardens, around the existing SUP alignment will be a noticeable short-term change for residents, with a moderate level of visual modification. The resulting visual impact within a viewpoint of high visual sensitivity is high adverse.

Operational Visual Impact

MODERATE

Overall, the viewing angle, the extent of the project elements visible and the height and bulk of the structure would result in a marginal change to the existing landscape setting. The high level of visual sensitivity combined with the low degree of visual modification, would result in a moderate visual impact for adjacent Anderson Road residents.

Residual Visual Impact

LOW

Revegetation along the proposed retaining wall adjacent the boundary of HV McKay Memorial Gardens will assist in screening the wall. Residual visual impacts are reduced to low adverse.



Figure 8.11 VP5 existing view from the south of the Anderson Street rail overbridge looking north.



Figure 8.12 VP5 preliminary rendered photomontage indicating the Anderson St Road bridge widening and SUP (at two years post construction).

VIEWPOINT 06: Anderson Road overpass (north)

Viewing location	Looking south from Anderson Road, adjacent commercial buildings, towards the rail underpass from the SUP.		
Existing setting	<p>As seen in Figure 8.13 the setting is dominated by existing road and urban infrastructure comprising black security fencing, road barriers, road lighting, SUP lighting and existing gantries within the railway corridor.</p> <p>The foreground comprises of office buildings and warehouses to both side of the road, creating a narrowing field of view concentrated on the four-laned road and rail underpass. The railway line crosses over the road and trains are prominent in this view. The rail bridge has aesthetic feature finishes including retaining walls with painted murals (yellow wall to the right of view), vibrant blue perforated screen to the SUP and coloured blades.</p> <p>Large native trees which are in HV McKay Memorial Gardens (left) and Talmage Street Sugar Gums (right) are visible in the background of the view.</p>		
Viewing context	Duration of view: dynamic	Viewing angle: perpendicular	
Visual Sensitivity	LOW		
Viewer sensitivity	Landscape sensitivity		
Land use	Shared Use Path	Landscape Type	Commercial (LCT 3)
Viewing distance (m)	Foreground (approximately 150 m from closest project element)		
Viewer sensitivity level	Moderate	Absorptive ability	Moderate
Visual Modification	LOW		
Viewpoint discussion	<p>The project proposes an additional elevated rail overpass to an existing elevated rail corridor over Anderson Road. The viewpoint is already influenced by rail infrastructure, commercial buildings and vehicles. The addition of a new vertical urban infrastructure is noticeable as demonstrated in Figure 8.14, however would not be unaccustomed views for SUP users and motorists.</p> <p>The project elements that would be visible by SUP users and motorists on Anderson Road include the MAR Viaduct ramping up to the north, positioned on the other side of the bridge. The existing SUP bridge indicated by the blue screen in the foreground is retained.</p> <p>New retaining walls associated with the widening of the existing rail bridge to accommodate the new tracks are expected to be commensurate with the existing setting. Construction worksite are proposed to be located to either side of Anderson Road, on the other side of the rail bridge from this viewpoint (refer to Section 7.2).</p>		
Construction Visual Impact	LOW		
	Construction activity will be a marginally noticeable short-term change for SUP users and motorists, having a low level of visual modification. The resulting visual impact within a viewpoint of moderate visual sensitivity is low.		
Operational Visual Impact	LOW		
	Overall, the MAR Viaduct is positioned height that presents a noticeable new element to the existing rail corridor level, resulting in a moderate level of visual modification. Combined with the low level of visual sensitivity, this would result in a low visual impact for SUP users and motorists.		
Residual Visual Impact	LOW		
	No mitigation is proposed in this location. Consequently, the residual impact on views from Anderson Road north would be low adverse.		

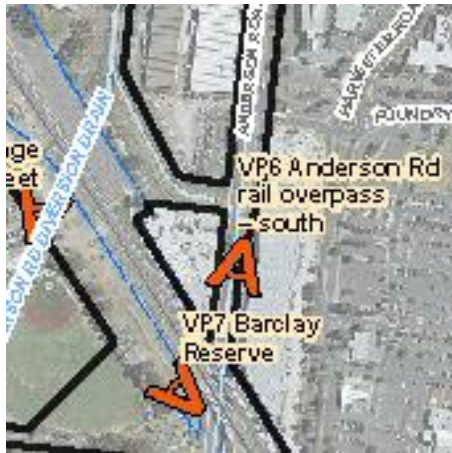


Figure 8.13 VP6 existing view from the north of the Anderson Street rail overbridge looking south.



Figure 8.14 VP6 preliminary rendered photomontage indicating the Anderson St Road bridge widening to the far side of the existing bridge (at two years post construction).

VIEWPOINT 07: Talmage Street south

Viewing location	Looking north from the SUP at the south end of Talmage Street, opposite Barclay Reserve.		
Existing setting	<p>The view (Figure 8.15) is experienced by SUP users with views towards Barclay Reserve. It is also noted that there are 11 dwellings on King Edward Street opposite Barclay Reserve and are likely to experience impacts because of the Project. Heritage elements from the Sunshine Harvester Works, including the gates and shed viewed in the foreground, have been relocated to this position and do not mark the current entry of this park.</p> <p>The Talmage Street linear public park and associated shared use path is dominated by the rail corridor setting comprising gantries, utility pads and rail fencing. The industrial heritage character is also evident with the HV McKay Memorial Gates (HO53), the Albion VR, DC substation, and John Darling and Sons Flour Mill silos prominent features in the background. The Talmage Street Sugar Gums (HO42) are a key landscape feature.</p> <p>The SUP connects from the south end of Talmage St over Anderson Road bridge, connecting to HV McKay Memorial Gardens and the Sunshine Station, following the railway corridor along Harvester Road.</p>		
Viewing context	Duration of view: dynamic	Viewing angle: parallel	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Shared use path	Landscape Type	Recreational parks (LCT 5)
Viewing distance (m)	Foreground (approximately 50 m from closest project element)		
Viewer sensitivity level	Moderate	Absorptive ability	Very low
Visual Modification	MODERATE		
Viewpoint discussion	<p>The project elements that would be visible by the users of the SUP include the MAR Viaduct, associated piers and OHWs, as shown in Figure 8.16. The proposed elevated rail overpass would be positioned over the existing rail corridor. The structure height would range between approximately 5 to 10 m high at this location.</p> <p>The SUP alignment is altered to meet the widened rail corridor and bridge over Anderson Road. Landscaping works including planted embankments to one metre height along the railway boundary to the right of view, scattered trees and grassing. This will screen some of the lower level rail infrastructure (near to existing track height) and create more of a park-like setting. The existing Sugar Gums will be retained, continuing to screen background structures, and remaining prominent within this viewpoint.</p> <p>A construction worksite will be located within Barclay Reserve to the left of the viewpoint, as well as a worksite in the reserve area to the right side of Talmage Street (refer to Section 7.2).</p>		
Construction Visual Impact	HIGH		
	Multiple construction worksites visible from this viewpoint will be a high level of visual modification for SUP users and nearby residents, with Barclay Reserve closed during construction. The existing HV McKay hut, heritage gates and trees to the edge of Barclay Reserve are expected to be retained and protected. The resulting visual impact within a viewpoint of high visual sensitivity is high.		
Operational Visual Impact	HIGH		
	<p>The scale of the MAR Viaduct is a noticeable visual modification but not a high contrast given its placement in the existing rail corridor. The landscape works within the linear reserve would be a noticeable improvement to the existing landscape by helping to enhance the reserve setting. Consequently, the overall visual modification is moderate from the existing setting. In the highly sensitive viewpoint, this results in a high adverse visual impact.</p>		
Residual Visual Impact	MODERATE		
	Maturing tree canopies and landscaping between the viewpoint and MAR Viaduct will partially screen and soften views resulting in a lowering of visual impacts to moderate adverse (Figure 8.17).		

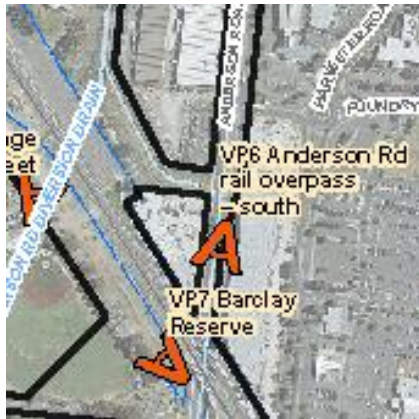


Figure 8.15 VP7 existing view of heritage gates at Barclay Reserve, corner of King Edward Avenue and Talmage Street.



Figure 8.16 VP7 preliminary rendered photomontage indicating MAR Viaduct and reserve landscape works (at two years post construction).



Figure 8.17 VP7 preliminary rendered photomontage indicative of residual impact at 10 years.

VIEWPOINT 08: Talmage Street

Viewing location	Talmage Street looking northeast towards the railway corridor and Albion VR, DC substation.		
Existing setting	<p>The view is representative of residential views experienced from approximately 12 dwellings along the northern end of Talmage Street. The streetscape and the linear reserve located between the street and railway corridor, is dominated by the rail corridor setting comprising gantries, utility pads and rail fencing, as well as power poles and lines (Figure 6.18). The viewpoint is looking along the railway corridor, although views by residents are likely to be perpendicular.</p> <p>The industrial heritage character is also evident with the Albion VR, DC substation (HO28), and John Darling and Sons Flour Mill silos (HO4) prominent features in the area. The Talmage Street Sugar Gums (H042), the mature row of trees located to the right side (east) of the street are a key landscape feature in the existing setting.</p> <p>There is no access at this location to the commercial activities to the east of the rail corridor. The SUP connects to Barclay Reserve to the southwest of Talmage Street and travels south over Anderson Road, connecting to Sunshine Station.</p>		
Viewing context	Duration of view: static	Viewing angle: perpendicular	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT 2)
Viewing distance (m)	Foreground (approximately 100 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	MODERATE		
Viewpoint discussion	<p>As indicated in Figure 8.19, the MAR Viaduct, associated piers and OHW masts, and maintenance access stairs will be visible by residents from this viewpoint. Views beneath the elevated rail of the background industrial warehouses are retained, though partially screened by piers. Views of the heritage listed Albion VR, D.C. substation and Flour Mills are also retained.</p> <p>Landscape works to the linear reserve to the foreground of the elevated rail include planted embankments to one meter high and scattered trees. This would soften the views of the railway corridor and background warehousing. It is acknowledged that the project proposes an elevated rail overpass to an existing at grade rail corridor that already adjoins the linear public reserve. The introduction of new vertical urban infrastructure would not be unaccustomed views for the residents along Talmage Street.</p> <p>A REB ancillary structure at 3.5m height, will be located in the background, to the boundary of the reserve against the rail corridor. Landscaping within the reserve will assist in screening the structure. Views of the REB are not expected to be prominent from within the reserve or by adjacent residents.</p> <p>The existing mature Sugar Gums (HO42) would be protected and retained, providing some screening of tall background structures from residents, and remaining prominent within this viewpoint.</p> <p>A construction worksite/laydown area and CR signalling and utility works area will be located within the linear reserve for a period near to four years (refer to Section 7.2).</p>		

Construction Visual Impact

HIGH

Construction worksites and activity within the linear reserve will be obvious from this viewpoint and a high level of visual modification for residents. The resulting visual impact within a viewpoint of high visual sensitivity is high.

Operational Visual Impact

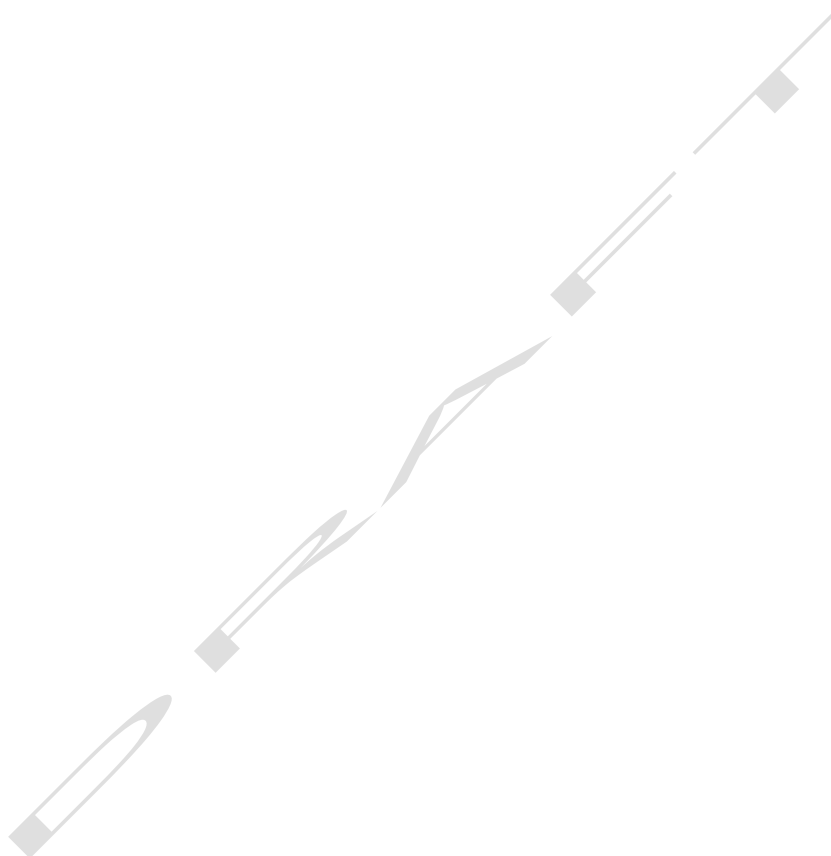
HIGH

The distance from the viewpoint combined with the viewing angle, the extent of the project elements visible and the height and bulk of the structure would result in a noticeable visual change for the residents along Talmage Street at operation. From the existing setting, which is already dominated by the railway corridor, this is a moderate level of visual modification, resulting overall in a high adverse visual impact.

Residual Visual Impact

MODERATE

Maturing tree canopies and landscaping between the viewpoint and MAR Viaduct will partially screen and soften views resulting in a lowering of visual impacts to moderate adverse (Figure 8.20).



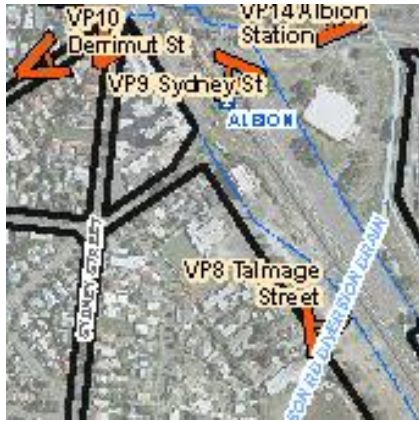


Figure 8.18 VP8 Existing view from Talmage Street looking northeast.



Figure 8.19 VP8 preliminary rendered photomontage indicating the MAR Viaduct parallel to Talmage Street (at two years post construction).



Figure 8.20 VP8 preliminary rendered photomontage indicative of residual impact at 10 years.

VIEWPOINT 09: Sydney Street, Albion

Viewing location	From Sydney Street behind John Darling and Sons Flour Mill, and the entry to the Albion Station carpark, looking north towards Ballarat Road rail overpass.		
Existing setting	<p>The view is representative of residents to the west side of Sydney Street. There housing typically comprises single storey dwellings with pedestrian paths and grassed nature strips on both sides of the street. Large to medium evergreen street trees are located within the nature strips.</p> <p>The street is anchored at both ends by Albion Station to the north and Kororoit Creek to the south. In the existing viewpoint (Figure 8.21), at the north end of the street, the Ballarat Road rail overpass dominates the view. The landscaped embankment softens the appearance of the structure. This elevated carriageway screens background views. The John Darling and Sons Flour Mill (HO4) is a discernible built feature within the streetscape setting and is to the right of the viewpoint. The Albion Station carpark entry is located to the right of view in the middleground. Other urban influences include overhead powerlines and street lighting.</p>		
Viewing context	Duration of view: static	Viewing angle: perpendicular	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT 2)
Viewing distance (m)	Foreground (approximately 100 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	HIGH		
Viewpoint discussion	<p>The project elements that would be visible by Sydney Road residents include the Albion Gateway feature, MAR Viaduct, associated piers and OHW masts, as shown in Figure.8.22. The proposed elevated rail would be positioned over the existing rail corridor, at a height of between approximately 11-20 m high (top of piers to top of parapets) at this location. A red dashed line in the photomontaged render indicates the scale and approximate position of the Albion Gateway. At this scale and height, the elevated rail is expected to be dominant within the streetscape. Direct views whilst travelling north and in the peripheral view of houses are likely.</p> <p>Views of the Flour Mills are not screened from this viewpoint and remain prominent within the setting. The Albion Gateway provides a new feature in the setting of a similar height to the John Darling & Son Flour Mill roof height and lower than the silos and is of a linear alignment to the elevated rail. Therefore, it is not expected to visually compete with the heritage building.</p> <p>Landscaping works to the station entry forecourt to the right of view assists with softening foreground views and streetscape amenity.</p>		
Construction Visual Impact	MODERATE		
	<p>Construction worksites are not proposed within this viewpoint, however the installation of the MAR Viaduct, and station forecourt landscape works are expected to be noticeable. The visual modification during construction is low, in an existing rail corridor, resulting in a moderate visual impact.</p>		
Operational Visual Impact	HIGH		
	<p>The scale, height and proximity of the Project key elements provide a high degree of visual modification from the existing setting for residents at the south end of Sydney Street. Combined with the high level of visual sensitivity, this results in a high visual impact.</p>		
Residual Visual Impact	HIGH		
	<p>Although the landscaping works to the station entry forecourt would assist in softening foreground views and streetscape amenity, the height and bulk of the proposed structures would remain foremost in this view. Consequently, the residual impact on views from residents of Sydney Street would be high adverse.</p>		

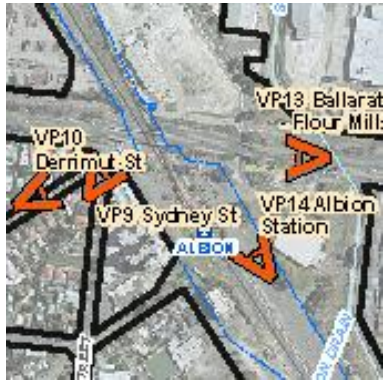


Figure 8.21 VP9 existing view from Sydney Street looking north.



Figure.8.22 VP9 preliminary rendered photomontage indicative of MAR Viaduct and Albion Gateway at Ballarat Road rail-overpass (at two years post construction). Indicative location of Albion Gateway shown by red dashed line.

VIEWPOINT 10: Derrimut Street, Albion

Viewing location	From Derrimut Street near the corner of Lawson Street looking north-east.		
Existing setting	<p>This residential area comprises housing estates that were developed with reference to ideals of the 'Garden City' movement. The streets have wide carriageways creating an open, urban streetscape. Derrimut Street typically comprises single storey dwellings with pedestrian paths and grassed nature strips on both sides of the street. Large evergreen and intermediary small deciduous street trees are located within the nature strips.</p> <p>The street is anchored at both ends by Albion Station and Selwyn Park, north-east and south-west respectively. The John Darling and Sons Flour Mill is a discernible built feature within the streetscape setting. As seen in Figure 8.23, urban influences within the street include overhead powerlines and street lighting, and to the north end of the street the elevated carriageway of Ballarat Road.</p>		
Viewing context	Duration of view: static (fixed view)	Viewing angle: perpendicular	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT2)
Viewing distance (m)	Foreground (approximately 150 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very Low
Visual Modification	LOW		
Viewpoint discussion	<p>The project elements that would be visible by the residents along Derrimut Street include the MAR Viaduct and associated piers and OHWs. These are visible in the background of the viewpoint, particularly at the end of the street framed between existing buildings.</p> <p>The MAR Viaduct is proposed to be approximately 11-20 m (top of piers to top of parapets) high at Ballarat Road. The Albion Gateway feature is expected to be screened by intervening buildings from this viewpoint (Figure 8.24).</p> <p>It is acknowledged that the Project proposes an elevated rail overpass to an existing at grade rail corridor and elevated road four-lane carriageway. The proposed urban elements would not significantly contrast or be aesthetically inconsistent with the existing urban setting experienced by the adjoining residential properties.</p> <p>No changes are proposed within the Derrimut streetscape, with existing trees continuing to provide partial screening towards the Project.</p>		
Construction Visual Impact	NEGLIGIBLE		
	Construction worksites are not proposed within this viewpoint. Visual impacts are consequently negligible.		
Operational Visual Impact	MODERATE		
	The limited view of the Project key elements provide a low degree of visual modification from the existing setting for residents of Derrimut Street. Combined with the high level of visual sensitivity, results in a moderate visual impact.		
Residual Visual Impact	MODERATE		
	No further design mitigation is proposed in this location. Consequently, the residual impact on views from residents at Derrimut Street would be moderate adverse.		

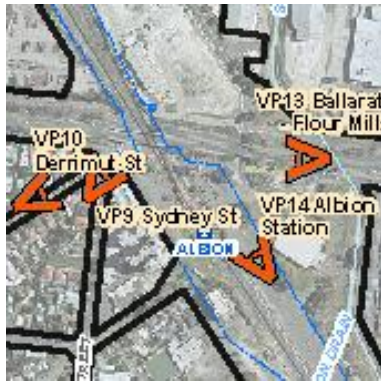


Figure 8.23 VP10 Existing view from Derrimut Street looking north-east.



Figure 8.24 VP10 preliminary rendered photomontage indicative view of MAR Viaduct.

VIEWPOINT 11: Ballarat Road west

Viewing location	From the Ballarat Road service road, near the corner of Maylands Street, looking east towards the Ballarat Road rail overpass.		
Existing setting	<p>This viewpoint (Figure 8.25) is dominated by the Ballarat Road carriageway that has three lanes in each direction, separated by a central grassed median and with service roads to either side. The service road medians form embankments, steepening towards the railway corridor in the background. To both sides of Ballarat Road, these embankments are grassed with mature native trees which are a landscape feature along Ballarat Road. Other road infrastructure within the view includes road barriers, overhead powerlines, street lighting and vehicles.</p> <p>Between the viewpoint and the Project elements there are 22 dwellings and the Turkish Community Centre fronting onto Ballarat Road. The sports grounds of Albion Primary School also intersect with the service road. The dwellings are within a residential growth zone (GRZ), typically comprise single storey dwellings with an outlook onto Ballarat Road.</p>		
Viewing context	Duration of view: static	Viewing angle: perpendicular	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT 2)
Viewing distance (m)	Middleground (approximately 500 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	VERY LOW		
Viewpoint discussion	<p>The project elements that would be visible by residents on the service road to the south side of Ballarat Road include the MAR Viaduct and a partial view of the Albion Gateway feature as shown in Figure 8.26.</p> <p>The MAR Viaduct is proposed to be approximately 11-20 m high (top of piers to top of parapets) above the railway line, allowing traffic clearance over Ballarat Road rail overpass. This is visible in the background of the viewpoint, between existing street trees assimilates the structure into the landscape setting.</p> <p>The proposed urban elements would not significantly contrast or be aesthetically inconsistent with the existing urban setting experienced by the adjoining residential properties.</p> <p>The existing trees within the median strips are proposed to be retained, which provides substantial screening towards the Project.</p>		
Construction Visual Impact	VERY LOW		
	Construction worksites are not proposed within this viewpoint; however, the installation of the MAR Viaduct and Albion Gateway is expected to be noticeable during the construction period. The visual modification during construction is considered very low, resulting in a very low visual impact.		
Operational Visual Impact	LOW		
	The visual modification of the Project for residents along Ballarat Road service road is expected to be low, given the distance, viewing angle, existing dominance of urban infrastructure, and the Project key elements being considerably screened by existing trees. Consequently, combined with the high visual sensitivity, would result in a low visual impact.		
Residual Visual Impact	LOW		
	No further design mitigation is proposed in this location. Consequently, the residual impact on views from residents from Ballarat service road would be low adverse.		



Figure 8.25 VP11 existing view of Ballarat Road looking east.



Figure 8.26 VP11 preliminary rendered photomontage indicating view of the MAR Viaduct and Albion Gateway at Ballarat Road rail-overpass (at two years post construction). Indicative location of Albion Gateway shown by red dashed line.

VIEWPOINT 12: Ballarat Road (east)

Viewing location	From a commercial centre carpark on Ballarat Road, looking west towards the Ballarat Road rail overpass.		
Existing setting	<p>The view is experienced by motorists along Ballarat Road. The viewpoint is dominated by the Ballarat Road carriageway that has two lanes in each direction, turning lanes, separated by a central grassed median. Service roads to either side have two lanes each with road medians forming embankments, steepening towards the railway corridor in the background. The nature strips on both sides of Ballarat Road are grassed with mature native trees, which are a landscape feature along Ballarat Road.</p> <p>The highly urbanised landscape is dominated by road infrastructure including road barriers, street lighting, traffic lights, overhead powerlines and vehicles, as seen in Figure 8.27.</p> <p>Between the viewpoint and the Project elements are commercial buildings and car parks to both sides of the wide carriageway.</p>		
Viewing context	Duration of view: dynamic (moving)	Viewing angle: perpendicular	
Visual Sensitivity	LOW		
Viewer sensitivity	Landscape sensitivity		
Land use	Arterial road	Landscape Type	Commercial (LCT 3)
Viewing distance (m)	Middleground (approximately 500 m from closest project element)		
Viewer sensitivity level	Low	Absorptive ability	Moderate
Visual Modification	LOW		
Viewpoint discussion	<p>The project elements that would be visible by motorists travelling west on Ballarat Road include the MAR Viaduct, associated piers and the Albion Gateway feature as shown in Figure 8.28.</p> <p>The MAR Viaduct is proposed to be approximately 11-20 m high (top of piers to top of parapets) above the railway line, allowing traffic clearance over Ballarat Road rail overpass. This is visible in the background of the viewpoint between existing mature street trees.</p> <p>The existing trees within the median strips are proposed to be retained, which provides substantial screening from this viewpoint; however, within the road carriageway, the Project elements are expected to be clearer within the view.</p> <p>It is acknowledged that the project proposes an elevated rail overpass to an existing at grade rail corridor and elevated road four-lane carriageway. The proposed urban elements would not significantly contrast or be aesthetically inconsistent with the existing urban setting.</p> <p>A construction worksite is proposed near the railway corridor, to the right in the background of this viewpoint (Albion Triangle refer Section 7.2).</p>		
Construction Visual Impact	LOW		
	There is likely to be an increase in construction traffic and the installation of the MAR Viaduct and Albion Gateway are expected to be noticeable for a short period, though partially screened by existing trees and road infrastructure. The visual modification during construction is considered low, resulting in a low visual impact.		
Operational Visual Impact	LOW		
	The visual modification of the Project for motorists travelling west along Ballarat Road is expected to be low, given the visibility of the feature sculptures and geographical extent of the elevated rail. Consequently, combined with the low visual sensitivity, would result in a low visual impact.		
Residual Visual Impact	LOW		
	No further design mitigation is proposed in this location. Consequently, the residual impact would be low adverse.		

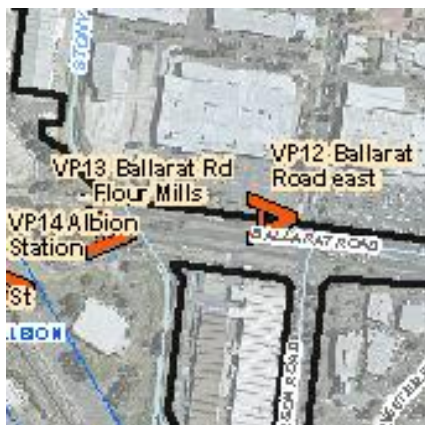


Figure 8.27 VP12 existing view from Ballarat Road east, looking west towards the rail overpass.

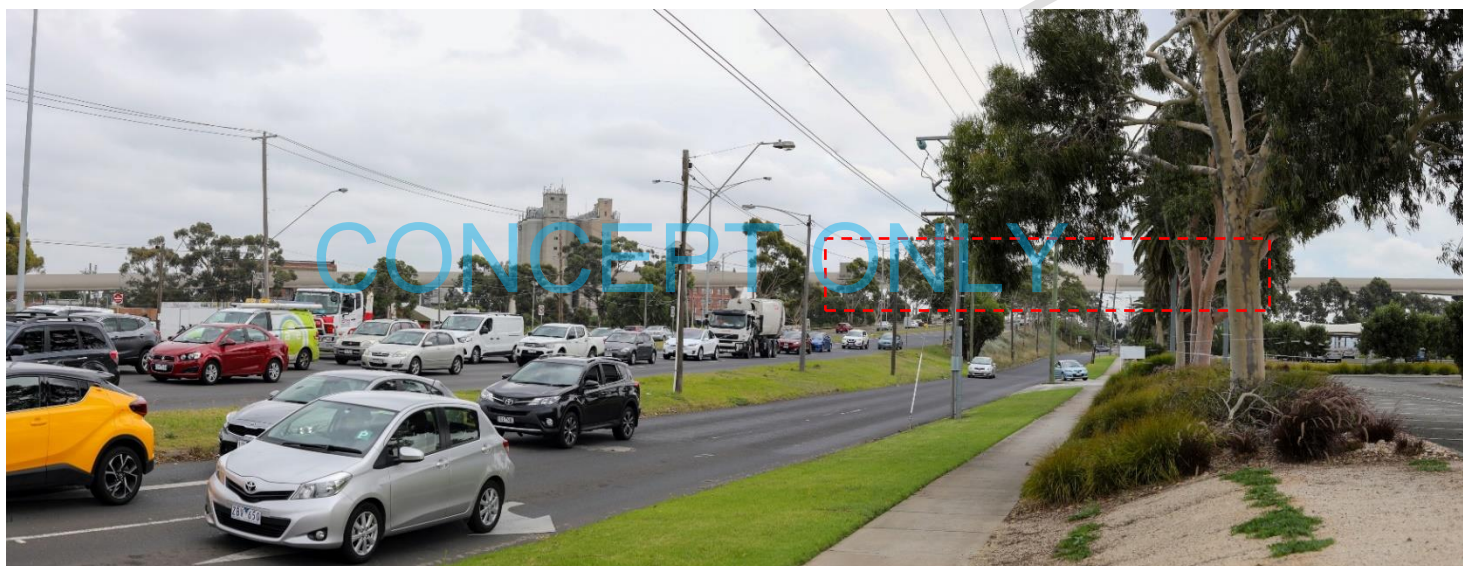


Figure 8.28 VP12 preliminary rendered photomontage indicating view looking west toward Ballarat Road rail-overpass and the MAR Viaduct (at two years post construction)
Indicative location of Albion Gateway shown by red dashed line.

VIEWPOINT 13: Ballarat Road

Viewing location	From the elevated carriageway of Ballarat Road east, looking south-west.		
Existing setting	<p>This viewpoint is representative of the sensitive key view towards the John Darling & Sons Flour Mill (HO4) from Ballarat Road rail overpass, on the east side of the rail corridor (<i>Darling Flour Mill View Lines Assessment</i>* – June 2014, Brimbank City Council).</p> <p>This elevated road setting comprising four lanes bordered by commercial, industrial and public transport land uses. The highly urbanised landscape is dominated by road infrastructure including street lighting, traffic lights, vehicles and billboard advertising as seen in Figure 8.29.</p> <p>The John Darling & Sons Flour Mill and silos, and the Albion VR, DC substation are prominent visual elements in the landscape. Tall mature Eucalyptus trees located within the road embankments partially screen and frame views towards the surrounding land uses including the John Darling & Sons Flour Mill.</p>		
Viewing context	Duration of view: dynamic (moving)	Viewing angle: perpendicular	
Visual Sensitivity	MODERATE		
Viewer sensitivity	Landscape sensitivity		
Land use	Arterial road	Landscape Type	Commercial (LCT 3)
Viewing distance (m)	Foreground (approximately 160 m from closest project element)		
Viewer sensitivity level	High*	Absorptive ability	Moderate
	*Although the land use is a low sensitivity level, Brimbank City Council Planning Scheme has an objective to preserve the views to the Flour Mill from this viewpoint and accordingly has a high viewer sensitivity.		
Visual Modification	MODERATE		
Viewpoint discussion	<p>The project elements that would be visible by the users of the Ballarat Road include the MAR Viaduct and Albion Gateway feature as seen in Figure 8.30. The elevated rail overpass is proposed to be approximately 11-20 m high (top of piers to top of parapets) above the railway line. The Albion Gateway feature is proposed to be a linear form aligning to the elevated rail, perpendicular to Ballarat Road.</p> <p>It is acknowledged that the Project proposes an elevated rail overpass to an existing at grade rail corridor and elevated road four-lane carriageway. The proposed urban elements would not be unfamiliar within the adjoining commercial and industrial landscape setting as the skyline already comprises large warehouses, rail and industrial storage yards and urban infrastructure such as rail gantries, advertising billboards, vehicles, powerlines and street lighting poles. Furthermore, the viewing experience is dynamic.</p> <p>The existing canopy trees within the road reserve embankment, which are to be retained and protected, are in line with and are likely to partially screen views of the Albion Gateway for motorists when travelling towards and up to the Ballarat Road overpass.</p> <p>The John Darling & Sons Flour Mill and silos are prominent built forms on the horizon from this elevated vantage point and would be partially obscured by the proposed MAR Viaduct. However, the existing view of the John Darling & Sons Flour Mill is already partially screened by existing trees.</p>		
Construction Visual Impact	MODERATE		
	Construction worksites are not proposed within this viewpoint; however, the installation of the MAR Viaduct and Albion Gateway is expected to be substantial for a short period. The visual modification during construction is considered moderate, resulting in a moderate visual impact.		
Operational Visual Impact	HIGH		
	As these views are preserved within Brimbank Planning Scheme and the Project would disrupt these views the result would be a substantial visual change. Consequently, the moderate level of visual sensitivity combined with the high degree of modification would result in a high adverse visual impact at operation for the users of Ballarat Road. The John Darling & Sons Flour Mill is expected to still be a visible feature from this viewpoint, with its red brick and architectural form, a contrast to the linear elevated rail.		
Residual Visual Impact	HIGH		
	No further design mitigation is proposed in this location. Consequently, the residual impact would be moderate adverse.		

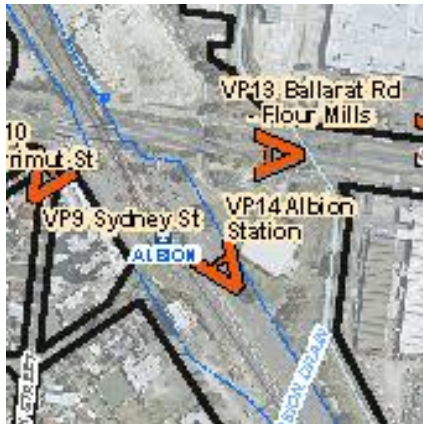


Figure 8.29 VP13 existing view from elevated carriageway of Ballarat Road looking west.
(Image source: Position 4 - *Darling Flour Mill View Line Assessment*, Brimbank City Council - June 2014)



Figure 8.30 VP13 preliminary rendered photomontage indicating the MAR Viaduct to the front of John Darling Flour Mill (at two years post construction).
Indicative location of Albion Gateway shown by red dashed line.

VIEWPOINT 14: Albion Station

Viewing location	From the east station carpark looking northwest towards Albion Station.		
Existing setting	<p>This view is experienced by accessing Albion Station from the adjacent car park, east of the railway line. As shown in Figure 8.31, the John Darling and Son Flour Mill (HO4) is prominent within this view. Below the Flour Mill the Albion Station building and platform, though close to the viewpoint, is not prominent in the view due to its scale and recessive grey colour. The rail infrastructure including overhead wires and masts, plus lighting and power poles within the carpark contribute to the existing urban setting.</p> <p>There are some existing trees and shrubs along the boundary between the railway corridor and carpark. The embankment supporting Ballarat Road rail overpass is visible in the midground, screening views beyond to an industrial area. To the west of the railway corridor, there are some single-storey buildings barely discernible between the silos and existing trees.</p>		
Viewing context	Duration of view: static	Viewing angle: parallel	
Visual Sensitivity	MODERATE		
Viewer sensitivity	Landscape sensitivity		
Land use	Public transport facilities	Landscape Type	Commercial (LCT 3)
Viewing distance (m)	Foreground (approximately 50 m from closest project element)		
Viewer sensitivity level	Moderate	Absorptive ability	Moderate
Visual Modification	HIGH		
Viewpoint discussion	<p>The Project elements that would be visible within the carpark include the Albion Gateway feature, MAR Viaduct, associated piers and OHW masts, as shown in Figure 8.32. The proposed elevated rail would be positioned over the existing rail corridor. The structure height would range between approximately 11-20 m high (top of piers to top of parapets) at this location. A red dashed line in the photomontaged render indicates the scale and approximate position of the Albion Gateway. At this range the scale and height of key elements are prominent within the view.</p> <p>Views of the John Darling and Son Flour Mill is partially screened from this viewpoint, although remains to be significant within the setting. The Albion Gateway feature is of similar height to the John Darling and Son Flour Mill roof and is screened by both existing and proposed trees within the carpark.</p> <p>The extension of the station platform is commensurate to the existing rail corridor conditions and barely noticeable against the scale of the elevated rail and piers.</p> <p>The urban activation to the east station forecourt, beneath the John Darling and Son Flour Mill is likely to be noticeable from this viewpoint, including tree planting and any outdoor settings. Landscaping works to the station carpark assists with softening foreground views and amenity.</p>		
Construction Visual Impact	HIGH		
	Construction worksites are not proposed within this viewpoint, however the installation of the MAR Viaduct and Albion Gateway, as well as carpark works are expected to be substantial during the construction period. The visual modification during construction is considered high, resulting in a high visual impact.		
Operational Visual Impact	HIGH		
	There is a high level of visual modification from this viewpoint given the close proximity and the scale of key Project elements. Combined with the moderate level of visual sensitivity, would result in a high visual impact for users of the railway station carpark.		
Residual Visual Impact	HIGH		
	The landscaping to the carpark area is considered to improve the visual amenity, however the increase in rail infrastructure at a large scale is considered an adverse impact, although commensurate with rail use. Consequently, the residual impact would be high adverse.		

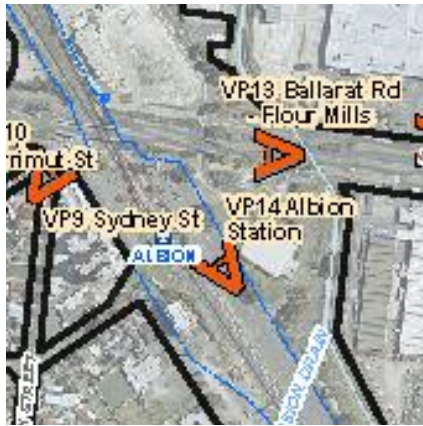


Figure 8.31 VP14 existing view from Albion Station carpark, east of the railway station.



Figure 8.32 VP14 preliminary rendered photomontage indicative view from Albion Station carpark (at two years post construction). Indicative location of Albion Gateway shown by red dashed line.

VIEWPOINT 15: St Albans Road

Viewing location	From St Albans Road footpath and on-road cycle lane, near intersection with Gilmour Road, looking south-east.		
Existing setting	<p>The viewpoint is representative of views from the on-road bike path. St Albans Road to the north of Ballarat Road is adjacent to industrial land uses with the Sunshine Energy Park adjoining the western edge. The viewpoint is located within a road setting comprising a two-way road over rail bridge, street lighting and a pedestrian path to the west as seen in Figure 8.33. The landscape character is dominated by rail and industrial activities such as rail corridors with overhead gantries, storage yards and large warehouses.</p> <p>The John Darling & Sons Flour Mill and silos are just discernible within the background to this industrial area.</p> <p>The occasional canopy tree and road over rail bridge, filter or inhibit views to the adjoining land uses such as the elevated Section of Ballarat Road</p>		
Viewing context	Duration of view: dynamic	Viewing angle: perpendicular	
Visual Sensitivity	VERY LOW		
Viewer sensitivity	Landscape sensitivity		
Land use	Shared Use Path	Landscape Type	Industrial landscape (LCT 1)
Viewing distance (m)	Foreground (approximately 50 m from closest project element)		
Viewer sensitivity level	Moderate	Absorptive ability	High
Visual Modification	HIGH		
Viewpoint discussion	<p>The project elements that would be visible by the users of the St Albans Road SUP (footpath and on-road cycle lane) include the MAR Viaduct and associated piers, deflection walls to the bottom of piers and OHW masts along the elevated rail track. The proposed SUP, an extension to the existing bridge width, will be commensurate with the existing setting of elevated urban infrastructure. The MAR Viaduct would be positioned over both the existing rail corridor and St Albans Road road-over-rail bridge. The structure height would be up to approximately 11 m high at this location.</p> <p>The proposed urban elements would not be unfamiliar within the adjoining rail and industrial landscape setting as the skyline already comprises large warehouses, rail and industrial storage yards and urban infrastructure such as rail gantries, vehicles, powerlines and street lighting poles. The elevated carriageway of Ballarat Road and the John Darling & Sons Flour Mill silos are just discernible on the horizon. Furthermore, the viewing experience is dynamic.</p> <p>An REB will be located in beneath the flyover and is expected to be screened from view by the SUP structure and existing road bridge.</p> <p>The distance from the viewpoint combined with the viewing angle, the extent of the project elements visible and the height and bulk of the structure would result in a substantial visual modification to the setting for users of the SUP at operation as seen in Figure 8.34.</p> <p>A construction worksite will be located within Sunshine Energy Park to the north of the viewpoint, as well as a worksite in the rail reserve area to the left of the viewpoint (refer to Section 7.2).</p>		
Construction Visual Impact	LOW		
	Multiple construction worksites visible from this viewpoint will be a high level of visual modification for SUP users and motorists. The resulting visual impact within a viewpoint of very low visual sensitivity is low adverse.		
Operational Visual Impact	LOW		
	The very low level of visual sensitivity combined with the high degree of modification, would result in a low adverse visual impact at operation for the users of St Albans Road SUP.		
Residual Visual Impact	LOW		
	Proposed trees within the road reserve will help to soften the streetscape from the works depot and partially screen the MAR Viaduct. However, the height and bulk of the structure over St Albans Road overpass will be remain a substantial visual modification. Consequently, the residual impact on views for users of St Albans Road SUP would be low adverse.		



Figure 8.33 VP15 existing view from St Albans Road footpath and on-road cycle lane looking south-east.



Figure 8.34 VP15 preliminary rendered photomontage indicating the MAR Viaduct and SUP (at two years post construction).

VIEWPOINT 16: Gilmour Road

Viewing location	From Gilmour Road pedestrian path, opposite Upper Stony Creek wetland reserve, looking south.		
Existing setting	<p>Gilmour Road is a two-way local road which traverses a mix of land uses. Most of the road adjoins industrial and commercial uses with a public recreation reserve to the north-west which incorporates the Upper Stony Creek transformation project. Factory warehouses with extraction chimneys, open storage yards and associated expansive car parking areas are dominate elements in the landscape. The northern most Section of the road comprises residential (four dwelling with views toward the rail corridor), predominately single storey brick homes. The rail corridor adjoins the south-eastern edge of the road with an associated open grassed strip reserve as seen in Figure 8.35.</p> <p>A pedestrian path is located on the south-eastern side of the road and connects to St Albans Road on-road cycle lane and pedestrian overpass. Juvenile Eucalyptus trees line the street within the nature strip. Overhead powerlines line one side of the street.</p>		
Viewing context	Duration of view static (fixed view)	Viewing angle: parallel	
	The viewpoint is representative from Upper Stony Creek wetland reserve (due to the site currently under construction and closed to public access) and will be public open space in the future.		
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Parks and reserves	Landscape Type	Waterway reserves (LCT 4)
Viewing distance (m)	Foreground (approximately 20 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Low
Visual Modification	MODERATE		
Viewpoint discussion	<p>The project elements that would be visible by the users of the future Upper Stony Creek public reserve include the MAR Viaduct, associated piers, deflection walls to the bottom of piers and OHWs. The proposed elevated rail overpass would be positioned over the existing rail corridor. The structure height would be below 11.5 m as the rail overpass is projecting at this location. The existing view of towards the John Darling and Son Flour Mill would be screened by the elevated structure.</p> <p>A new security fence will be installed, connecting to a noise wall to the north (out of view in Figure 8.36). The project proposes an elevated rail overpass to an existing at grade rail corridor. The viewpoint is already influenced by urban elements and as such, the introduction of new vertical urban infrastructure would not be unaccustomed views for park users. Furthermore, the proposed structures screening views of rail, commercial and industrial settings which are not considered of high visual amenity.</p> <p>The distance from the viewpoint combined with viewing angle, the extent of the Project elements visible and the height and bulk of the structure would result in a noticeable visual change to the setting from within Upper Stony Creek public reserve at operation. It has been assumed the existing (juvenile) street trees on the south end of Gilmour Road, will be removed for construction access and re-instated. This will have a visual impact during construction and at two years but should be established to filter and soften views towards the Project from the wetland reserve at 10 years.</p> <p>A construction worksite will be in the rail reserve area, to other side of the rail corridor and within the background. (refer to Section 7.2).</p>		
Construction Visual Impact	HIGH		
	<p>Multiple construction worksites will be visible from this viewpoint, including a crane to install the structure. These will be in the periphery from this viewpoint, with an expected moderate level of visual modification. The resulting visual impact within a viewpoint of high visual sensitivity is high.</p>		
Operational Visual Impact	HIGH		
	<p>The existing setting around the wetland reserve is predominantly industrial, with the introduction of the elevated rail, with juvenile trees not yet filtering views is likely to emphasize the industrial aesthetic. The high level of visual sensitivity combined with the high degree of modification, would result in a high adverse visual impact at operation for park users.</p>		
Residual Visual Impact	MODERATE		
	<p>Vegetation screening to the front of the security fence, together with established street trees will soften and filter views towards the rail corridor and there is likely to be more of an inward focus on the wetland reserve as it establishes. The residual impact on views for users of Upper Stony Creek wetland reserve would reduce a level.</p>		



Figure 8.35 VP16 existing view from St Albans Road footpath and on-road cycle lane looking south-east.



Figure 8.36 VP16 preliminary rendered photomontage indicative at operation (at two years post construction).

8.2.3 Summary of visual impact from representative viewpoints

Table 8.2 summarises the visual impacts from the representative viewpoints for the Project.

Table 8.2 Summary of visual impacts

VIEWPOINT No.	DESCRIPTION	CONSTRUCTION VISUAL IMPACT	OPERATIONAL VISUAL IMPACT	RESIDUAL VISUAL IMPACT
VP1	Recreational users at Matthew Hill reserve, Sunshine	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE
VP2	Residents near Sunshine Station	HIGH	HIGH	HIGH
VP3	Recreational users at HV McKay Memorial Gardens, Sunshine	HIGH	HIGH	MODERATE
VP4	Recreational users at Harvester Road SUP, Sunshine	MODERATE	LOW	LOW
VP5	Residents at Anderson Rd south, Sunshine	HIGH	MODERATE	MODERATE
VP6	SUP recreational users at Anderson Rd rail overpass – north, Sunshine	LOW	LOW	LOW
VP7	Talmage St SUP users, Albion	HIGH	HIGH	MODERATE
VP8	Residents at Talmage Street	HIGH	HIGH	MODERATE
VP9	Residents at Sydney Street, Albion	MODERATE	HIGH	HIGH
VP10	Residents at Derrimut Street, Albion	NEGLIGIBLE	LOW	LOW
VP11	Residents at Ballarat Road west, Sunshine	VERY LOW	LOW	LOW
VP12	Motorists at Ballarat Road east, Albion	LOW	LOW	LOW
VP13	Motorists at Ballarat Road Flour Mills overpass	MODERATE	HIGH	HIGH
VP14	Public transport users at Albion Station	HIGH	HIGH	HIGH
VP15	SUP users at St Albans Road, Sunshine North	LOW	LOW	LOW
VP16	Wetland reserve visitors at Gilmour Road, Sunshine North	HIGH	HIGH	MODERATE

8.3 Corridor Section

8.3.1 High visual sensitivity uses

The high visual sensitivity uses adjoining the Project include the following:

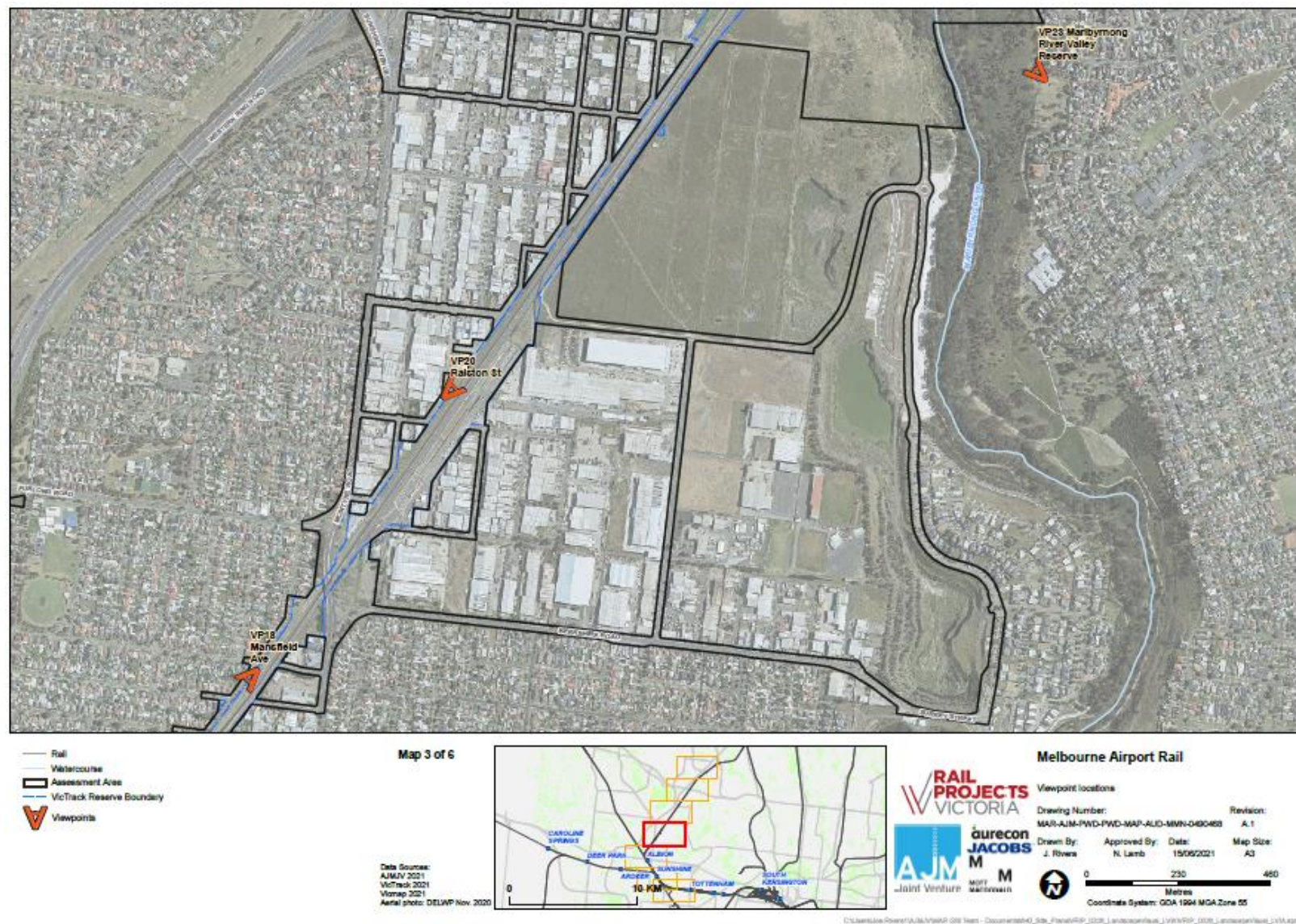
- Residential housing overlooking the Project along Cranbourne Ave, Mansfield Ave, Sterling Drive, Moyangul Drive, Roberts Road and Parer Road.
- Maribyrnong River Trail.
- Western Ring Path.

8.3.2 Detailed assessment of representative viewpoints

A total of 22 representative sensitive viewpoints were identified within the Corridor Section for the Project based on the design, viewing distance and aspect. The locations of the assessed viewpoints are listed in Table 8.3 and shown in Figures 8.34 to 8.37.

Table 8.3 Assessed viewpoints within the COR Section

Viewpoint	Location	Receptors	Project elements
VP17	Cranbourne Avenue, Sunshine North	Private residential	Noise wall + pedestrian overpass
VP18	Mansfield Avenue, Sunshine North	Private residential	Noise wall + pedestrian overpass
VP19	Gilmour Road, Sunshine North	Private residential	McIntyre Rd overpass embankment + noise wall
VP20	Ralston Street, Sunshine North	Industrial	Substation
VP21	EJ Whitten Bridge	Road users	Maribyrnong River Bridge
VP22	Trestle bridge lookout, Keilor East	Private residential / recreation	Maribyrnong River Bridge
VP23	Maribyrnong River Valley reserve, Avondale Heights	Private residential / recreation	Maribyrnong River Bridge
VP24	Maribyrnong River Trail	SUP recreation use	Maribyrnong River Bridge
VP25	Maribyrnong River Valley	Recreation use	Maribyrnong River Bridge
VP26	Sterling Drive, Keilor East	Private residential	Noise wall
VP27	Keilor Park Drive, Keilor East	Private residential	Substation
VP28	Border Drive Reserve, Keilor East	Recreation park	Noise wall
VP29	Moyangul Drive, Keilor East	Private residential	Noise wall
VP30	Slater Parade/Calder Freeway, Keilor East	Industrial / SUP recreation use	Calder Freeway underpass & substation
VP31	Milleara Avenue/Western Ring Path, Keilor East	Private residential / SUP recreation	Calder Freeway underpass & substation
VP32	Fullerton Road overpass, Keilor East	Road users	M80 Bridge, Terror Street substation
VP33	Roberts Road, Keilor East	Private residential	M80 Bridge
VP34	Western Ring path at Steele Creek, Airport West	SUP recreation	Steele Creek overpass (ES06)
VP35	Parer Road, Airport West	Private residential	M80 viaduct
VP36	M80 near to Steele Creek	Road users	M80 viaduct
VP37	M80 Western Ring Road / Airport Drive overpass, Airport West	Road users	M80 viaduct
VP38	Beverage Drive / Steele Creek wetland reserve, Tullamarine	SUP recreation	M80 viaduct



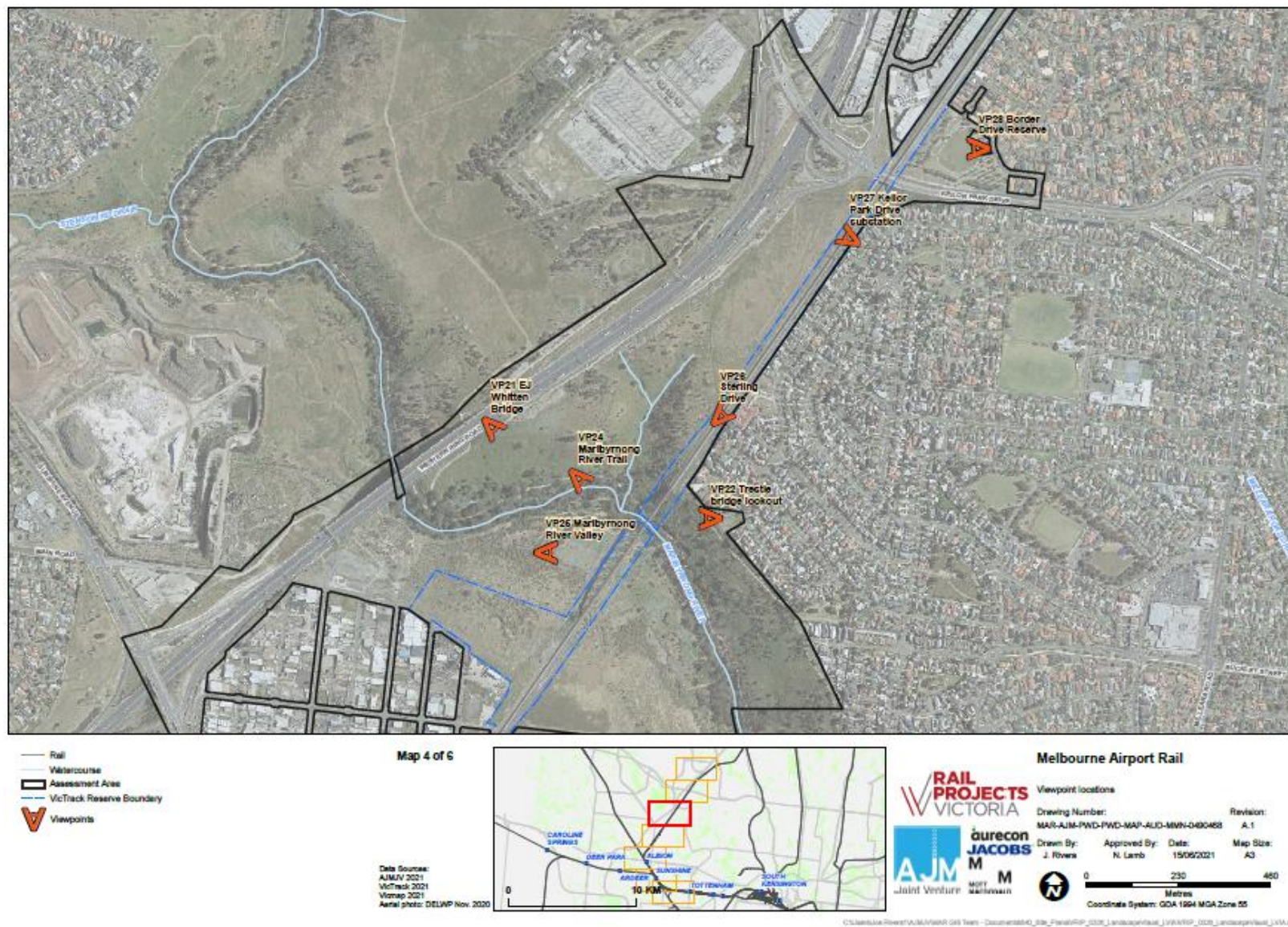


Figure 8.38 Corridor viewpoint locations (Plan 2 of 4).



Map 5 of 6

Data Sources:
AJM/JV 2021
VicTrack 2021
Vicmap 2021
Aerial photo: DELWP Nov. 2020



Melbourne Airport Rail

Viewpoint locations

Drawing Number: MAR-AJM-PWD-PWD-MAP-AUD-MW-040488
Revision: A.1
Drawn By: J. Rowe
Approved By: N. Lamb
Date: 15/06/2021
Map Size: A3
Coordinate System: GDA 1994 MGA Zone 55

Figure 8.39 Corridor viewpoint locations (Plan 3 of 4).



Map 6 of 6

Data Sources:
AJM JV 2021
VicTrack 2021
Vicmap 2021
Aerial photo: DELWP Nov. 2020



Melbourne Airport Rail

Viewpoint locations

Drawing Number: MAR-AJM-PWD-PWD-MAP-AUD-MVN-0490468
Revision: A.1
Drawn By: J. Rivers
Approved By: N. Lamb
Date: 15/06/2021
Map Size: A3
Coordinate System: GDA 1984 MGA Zone 55

Figure 8.40 Corridor viewpoint locations (Plan 4 of 4).

VIEWPOINT 17: Cranbourne Avenue

Viewing location	Cranbourne Avenue - looking west towards the street-end and the Albion-Jacana rail corridor.		
Existing setting	<p>The view in Figure 8.41 is experienced by nearby residents within a no-exit street. To the north (right) is a small informal reserve (within rail corridor PUZ4), comprising a grassed area with a few small to medium native trees. The houses on Cranbourne Street are single-storey with landscaping to the front of houses and low front fencing. There are pedestrian paths, grassed nature strips with medium-sized trees to both sides of the street, urban elements within the streetscape include power poles and lines.</p> <p>The railway line is noticeable from this viewpoint, with a low wire mesh fence located at the end of the cul-de-sac. A low grassed mound is located between the fence and the railway tracks.</p> <p>The background view consists of a residential street (Clayton Street), which aligns with Cranbourne Avenue, on the other side of the railway line. Low density single-storey dwellings, trees and power lines are visible in this residential area.</p>		
Viewing context	Duration of view: static	Viewing angle: perpendicular	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT 2)
Viewing distance (m)	Foreground (approximately 100 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	HIGH		
Viewpoint discussion	<p>The Cranbourne Avenue pedestrian overpass will be a prominent new feature visible by residents of Cranbourne Street, as well as attracting new pedestrian and cycle users. The overpass includes a bridge and associated piers, stairs and a ramp located within the existing small reserve area, as shown in Figure 8.42. The proposed overpass would be positioned over the existing rail corridor.</p> <p>The height of the structure would range between approximately 5.8 m (underside) to 12 m height at the top of the truss. The inclusion of transparent elements to provide architectural interest to the structure, thus reducing its prominence in the skyline. The screening adjacent the residential boundary will be solid to provide privacy from views from the ramp looking down in the property. New OHW and gantries will be visible along the at grade rail section on the western side of the existing tracks (not visible within the rendered photomontage at Figure 8.42)</p> <p>The existing medium-sized trees within the rail reserve will be removed for construction access. Additional trees will be planted to the perimeter of the reserve, adjacent the residential boundary to provide screening.</p> <p>A REB will be located to the west (left) of the viewpoint within rail reserve land and is not expected to be visible from this viewpoint, though will be visible from the elevated SUP.</p> <p>Additionally, a noise wall from 2.5-3.5m height will be located parallel to the railway corridor. This will reduce the visual permeability with the railway corridor and neighbouring residential suburb towards Clayton Street.</p>		
Construction Visual Impact	HIGH		
	Construction worksites are not proposed within this viewpoint; however, the installation of the pedestrian overpass, presences of a crane and subsequent landscape works are expected to be substantial. The visual modification during construction is considered high resulting in a high visual impact.		
Operational Visual Impact	HIGH		
	There is a high level of visual modification from this viewpoint given the scale of key Project elements and the introduction of these new urban elements. Combined with the high level of visual sensitivity, this would result in a high visual impact for residents of Cranbourne Avenue.		
Residual Visual Impact	HIGH		
	Design mitigation includes planting against the noise wall which will soften the appearance at the end of street. This helps soften the appearance of hard structures and improve the landscape amenity; however, this does not reduce the scale of the visual modification from the existing setting. Consequently, the residual impact would be high adverse.		



Figure 8.41 VP17 existing view from Cranbourne Avenue, looking west toward the Albion-Jacana rail corridor.



Figure 8.42 VP17 preliminary rendered photomontage indicative of pedestrian overpass at Cranbourne Avenue (at two years post construction).

VIEWPOINT 18: Mansfield Avenue

Viewing location	View from Mansfield Avenue, Sunshine North, looking south towards the Drake St pedestrian crossing		
Existing setting	<p>The view is experienced by nearby residents, with approximately 16 dwellings having views from Mansfield Ave towards the railway corridor. As shown in Figure 8.43, the foreground view to the left of the viewpoint comprises of the railway reserve which is an open grassed area with a drainage swale indicated by tall grass. The railway lines are noticeable, with no fencing blocking access. A pedestrian path is located parallel to the road, with a grassed nature strip and juvenile street trees.</p> <p>The middle-ground view, to the left (east), contains a high fence and warehousing within an industrial area. Urban infrastructure in the viewpoint include power poles and lines, and a white fence in the midground which is the Drake Street pedestrian rail crossing.</p> <p>Residential houses (to the right) are mostly single-storey dwellings and some double-storey townhouses, that face onto Mansfield Avenue and the railway corridor. The properties have some landscaping to the front yards with low fencing, providing clear views out onto the railway reserve and road.</p>		
Viewing context	Duration of view: static	Viewing angle: parallel	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT 2)
Viewing distance (m)	Foreground (approximately 10 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	MODERATE		
Viewpoint discussion	<p>The proposed noise wall would be noticeable to Mansfield Ave residents. The noise wall is approximately 2.5 m high and would screen views of the rail corridor, and warehousing on the eastern side of the rail corridor. This will cause a loss in the visual permeability with the railway corridor and neighbouring residential/commercial area. The location of the noise wall will provide more of an enclosed spatial arrangement to the streetscape, contrasting to the existing openness of the rail reserve. New OHW and gantries will be visible above the noise wall, along the at-grade rail section on the western side of the existing tracks.</p> <p>The introduction of a solid urban structure to the length of the street would result in a noticeable visual change to the setting along Mansfield Ave as seen in Figure 8.44. It has been assumed the juvenile trees that line the street will be protected and retained, contributing towards filtering and softening views towards the Project.</p> <p>There are no construction worksites proposed within this viewpoint (refer to Section 7.2).</p>		
Construction Visual Impact	MODERATE		
	Construction worksites are not proposed within this viewpoint but the installation of the noise wall and track works are expected to be noticeable for a short period. The visual modification during construction is considered low, resulting in a moderate visual impact.		
Operational Visual Impact	HIGH		
	Consequently, the high level of visual sensitivity combined with the moderate degree of modification, would result in a high adverse visual impact at operation for residents of Mansfield Avenue.		
Residual Visual Impact	MODERATE		
	Design mitigation includes planting against the noise wall which will soften the appearance along the street. This will help soften the appearance of the concrete wall and improve the landscape amenity. Consequently, the residual impact would be moderate adverse. See Figure 8.45 for an indicative residual photomontage render.		



Figure 8.43 VP18 existing view from Mansfield Avenue, looking south.



Figure 8.44 VP18 preliminary rendered photomontage indicative of view along Mansfield Avenue (at two years post construction).



Figure 8.45 VP18 preliminary rendered photomontage indicative of residual impact at 10 years.

VIEWPOINT 19: Gilmour Road

Viewing location	Gilmour Road, Sunshine Nth – looking north towards Cranbourne Avenue pedestrian overpass.		
Existing setting	<p>The view is experienced by residents from Gilmour Road. There are approximate eight dwelling which have views facing towards the rail corridor. As shown in Figure 8.46, the foreground view to the right of the viewpoint comprises of the railway reserve which is an open grassed area with a drainage swale. An existing rail underpass through to Barwon Avenue is visible to the right (east). It should be noted that the underpass was inaccessible due to flooding when the assessment was done, causing pedestrians to cross the tracks across the reserve.</p> <p>The railway lines and trains are noticeable, with no fencing blocking access. Residential houses are visible to the other side of the railway corridor. A pedestrian path is located parallel to the road, with a grassed nature strip and juvenile street trees.</p> <p>Residential houses (to the left) are mostly single-storey dwellings and some double-storey townhouses, facing onto Gilmour Road and the railway corridor. The properties have some landscaping to the front yards with low fencing, providing clear views out onto the railway reserve and road.</p>		
Viewing context	Duration of view: static	Viewing angle: parallel	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT 2)
Viewing distance (m)	Foreground (approximately 200 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	HIGH		
Viewpoint discussion	<p>The key elements as seen in Figure 8.47, include a noise wall and the Cranbourne Avenue pedestrian overpass. The noise wall is approximately 2.5-3.5 m high and will cause a loss in the visual permeability with the rail corridor and residential area on the eastern side of the rail corridor. The location of the noise wall will provide more of an enclosed spatial setting to the length of the street, contrasting to the existing openness the rail reserve area provides. Access to the existing underpass will be removed. New OHW and gantries will be visible above the noise wall.</p> <p>The Cranbourne Avenue pedestrian overpass and associated stairs and ramp will be noticeable large scaled new urban structure visible in the midground view where the street veers left out of sight. This is likely to partially intrude in viewpoint regarding its scale, contrasting to the residential built form, however, will be in the peripheral view of most residents. Those residents around the Clayton Street intersection (to the left of view), would have direct views of the overpass structure. New OHW and gantries will be visible above the noise wall.</p> <p>It has been assumed the juvenile trees that line the street will be protected and retained near the noise wall, interrupting views of the horizontal wall. A few trees near to the overpass will be removed and low-level vegetation planted to softening views towards the Project.</p> <p>There are no construction worksites proposed within this viewpoint (refer to section 7.2).</p>		
Construction Visual Impact	<p>HIGH</p> <p>Construction worksites are not proposed within this viewpoint, however the installation of the noise wall and the Cranbourne pedestrian overpass, including presence of a crane are expected to be noticeable. The visual modification during construction is considered moderate from this peripheral viewpoint, resulting in a high visual impact.</p>		
Operational Visual Impact	<p>HIGH</p> <p>The scale of the pedestrian overpass in the foreground as well as the noise wall is considered a high degree of modification, being a noticeable composition change but in a setting of existing rail infrastructure. Consequently, the high level of visual sensitivity combined with the high degree of modification, would result in a high adverse visual impact at operation for the residents along Gilmour Street.</p>		
Residual Visual Impact	<p>MODERATE</p> <p>Design mitigation includes planting against the noise wall which will soften the appearance along the street. This will help soften the appearance of hard structures and improve the landscape amenity. Consequently, the residual impact would be moderate adverse. See Figure 8.48 for an indicative residual photomontage render.</p>		

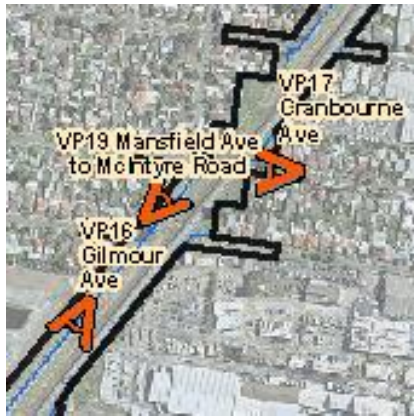


Figure 8.46 VP19 existing view from Gilmour Road, looking north towards McIntyre Road overpass.



Figure 8.47 VP19 preliminary rendered photomontage indicative of view looking north from Gilmour Road (at two years post construction).



Figure 8.48 VP19 preliminary rendered photomontage indicative of residual impact at 10 years.

VIEWPOINT 20: Ralston Avenue (substation)

Viewing location	Looking northeast along railway corridor from Ralston Avenue.	
Existing setting	The view is experienced by workers and occasional visitors of the industrial area. Industrial warehouses are visible in the mid-ground, to either side of the railway corridor and to the left of view. As seen in Figure 8.49, the Albion-Jacana railway corridor has a grassed area visible in the foreground, with large machinery and rail cars visible to the other side. There are powerlines following the railway line. This is a highly modified area with limited natural landscape features.	
Viewing context	Duration of view: dynamic (moving view)	Viewing angle: perpendicular

Visual Sensitivity VERY LOW

Viewer sensitivity

Landscape sensitivity

Land use	Local road	Landscape Type	Industrial (LCT 1)
Viewing distance (m)	Foreground (approximately 200 m from closest project element)		
Viewer sensitivity level	Low	Absorptive ability	High

Visual Modification VERY LOW

Viewpoint discussion	<p>Within this viewpoint, a substation will be located to the left-midground and there will be new OHW masts to the MAR tracks, as shown in Figure 8.50. The scale and appearance of the substation in the existing industrial setting, as well as OHW masts in the rail corridor, is commensurate with the existing setting.</p> <p>The proposed substation location will be a construction worksite during the construction phase (refer to Section 7.2).</p>
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Construction Visual Impact VERY LOW

The construction worksite will be barely noticeable, given the existing industrial setting with a low visual modification. Consequently, the visual impact is considered very low.

Operational Visual Impact VERY LOW

Once built, the substation is expected to blend into the existing setting and provides a very low visual modification. This results in a very low visual impact in a setting that is of very low sensitivity.

Residual Visual Impact VERY LOW

No mitigation is proposed in this location. Consequently, the residual impact on views for users along Ralston Avenue is considered very low adverse.



Figure 8.49 VP20 existing view from Ralston Avenue, looking east across railway corridor.



Figure 8.50 VP20 preliminary rendered photomontage indicative of view of substation (at two years post construction).

VIEWPOINT 21: EJ Whitten Bridge

Viewing location	From the M80 Western Ring Road maintenance track, to the north-east side of EJ Whitten Bridge, looking south-east towards the Albion Viaduct.		
Existing setting	<p>The EJ Whitten Bridge comprises ten lanes with road lighting, signage, concrete road safety barriers and transparent mesh throw screens across its length (Figure 8.51). The bridge traverses the Maribyrnong River Valley which is only experienced briefly on the approaches to the bridge by motorists.</p> <p>Beyond the bridge span, the M80 is contained within road embankments and adjoins industrial and residential land uses. The Albion Viaduct is just discernible across the valley at the bridge approach whilst travelling westbound. The presence of industrial warehouses is discernible on higher points of the surrounding area to the southwest, with the high voltage towers distinctive vertical elements in the visual setting. In clear conditions, the Melbourne city skyline is visible in the background to the south. The view is interrupted by the EJ Whitten bridge mesh barriers and is experienced for a short duration by motorists travelling at speeds up to 80 km/h.</p>		
Viewing context	Duration of view: dynamic (moving view)	Viewing angle: perpendicular	
	The viewpoint is representative of views experienced by motorists on EJ Whitten Bridge		
Visual Sensitivity	LOW		
Viewer sensitivity	Landscape sensitivity		
Land use	Arterial road	Landscape type	Waterway reserve (LCT 4)
Viewing distance (m)	Foreground (approximately 400 m from closest project element)		
Viewer sensitivity level	Low	Absorptive ability	Low
Visual Modification	LOW		
Viewpoint discussion	<p>As shown in Figure 8.52 the Maribyrnong River Bridge (MRB) is proposed between this viewpoint and the existing Albion Viaduct at approximately the same height of the existing viaduct. This will likely screen some elements of the existing viaduct from this viewpoint, making it less prominent.</p> <p>The Proposal will be visible to the front, featuring concrete piers of a smaller scale (width), allowing the trestle girders to be visible and remain distinctive due to their design. The darker colouring of the existing trestle girders is visually recessive, against the new bridge shadowing and light-coloured concrete piers. The Albion Viaduct's bridge deck will be screened by the bulkier MRB deck and parapet. The OHWs are barely perceptible from this distance.</p> <p>It is acknowledged that the project proposes an elevated rail bridge seemingly over the Maribyrnong River and valley. However, the project proposes an elevated rail bridge within a PUZ4. The viewpoint is already influenced by urban elements such as vehicles, road lighting and overhead signage, OHW support structures, safety barriers and throw screens. Additionally, any views experienced by the road users are limited to the bridge approaches and these are transitory moments at speeds up to 80 km/hr. There are peripheral views already experienced towards urban influences such as the industrial storage yards in the surrounding area and the high voltage transmission towers to the south-west.</p> <p>A construction worksite and construction access will be located within the valley (refer to Section 7.2).</p>		
Construction Visual Impact	<p>VERY LOW</p> <p>Construction worksites for the MRB installation are to be located within the valley, including laydown areas and access tracks to the south side to the top of the escarpment which will incur some vegetation removal. The viewing angle and duration of construction worksites is considered very low from this viewpoint, resulting in a very low visual impact.</p>		
Operational Visual Impact	<p>LOW</p> <p>Overall, the viewing angle, the dynamic viewing experience and duration of the project elements that would be visible combined with the height and bulk of the structure and its considered positioning adjacent to the Albion Viaduct, would result in a barely perceptible visual change with a minor deterioration to the view for the road users. The low level of visual sensitivity combined with the low degree of modification, would result in a low adverse visual impact at operation for the users of the EJ Whitten bridge.</p>		
Residual Visual Impact	<p>LOW</p> <p>No mitigation is proposed in this location given the scale of the MRB. Consequently, the residual impact on views for users of the EJ Whitten bridge would be low adverse.</p>		



Figure 8.51 VP21: Existing viewing from eastern end of EJ Whitten Bridge towards Albion Viaduct.



Figure 8.52 VP21 preliminary render indicating Maribyrnong River Bridge to the front of Albion Viaduct (at two years post construction).

VIEWPOINT 22: Trestle Bridge Lookout

Viewing location	From Trestle Bridge Lookout within reserve adjacent to Sterling Drive, Keilor East looking west		
Existing setting	<p>From this viewpoint (Figure 8.53), are open views of the Maribyrnong River Valley, afforded by the steep escarpments falling down to a small river covered by trees. The valley has a natural landscape appearance, well vegetated with native trees, shrubs and grasses with little intrusion of built elements.</p> <p>The Albion Viaduct is a distinctive feature in the foreground of this view. Its trestle design providing transparency, with little visual obstruction to the landscape behind. The deck of the viaduct sits almost in line with the horizon.</p> <p>The EJ Whitten bridge is visible in the background, sitting behind the Albion Viaduct. Above the valley, industrial buildings and transmission towers located in Sunshine North are visible, though not distinct in the background.</p> <p>Behind this viewpoint are houses along Sterling Crescent. This viewpoint represents the worst-case scenario, based on the high sensitivity of both the reserve visitors the residences (approximately 16 on Sterling Drive and 11 on Hedgerow Court). adjacent the reserve with potential views toward the Maribyrnong River Valley.</p>		
Viewing context	Duration of view: static (fixed)	Viewing angle: perpendicular	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Parks and reserves	Landscape Type	Waterway reserve (LCT 4)
Viewing distance (m)	Foreground (approximately 400 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Low
Visual Modification	LOW		
Viewpoint discussion	<p>The MRB will be located to the north of the Albion Viaduct, partially screened from this viewpoint. As shown in Figure 8.54 the MRB elements visible include the tall concrete piers, part of the deck, parapets and the OHW masts.</p> <p>The MRB will be the third bridge within this viewpoint, after the Albion Viaduct and the EJ Whitten Bridge. As it will be located behind the Viaduct from this viewpoint, it will not be distinct in its setting, which is a PUZ4. The bulk and scale of the piers will be the most noticeable, though will have little effect on view of the landscape and valley beyond. OHW support structures will be an additional vertical element on the horizon, those these are at a scale and material that is commensurate with views of transmission towers in the background.</p> <p>A construction laydown area will be located on the opposite upper escarpment behind the existing viaduct and access tracks will be located within the valley to the west side of the river (refer to Section 7.2), which will include some vegetation removal of mostly low level shrubs. The access tracks to the MRB piers will become permanent maintenance tracks.</p>		
Construction Visual Impact	HIGH		
	Construction worksites for the MRB installation are to be located within the valley, including laydown areas, access tracks and the removal of some vegetation. These sites and the construction activity will be noticeable contrast to the existing setting, with a moderate visual modification. Consequently, in this highly sensitive viewpoint, the visual impact will be high.		
Operational Visual Impact	MODERATE		
	<p>The visibility of the MRB and its considered positioning adjacent to the Albion Viaduct would result in a barely perceptible visual change with a minor deterioration to the view for reserve visitors (Figure 8.54).</p> <p>The high level of visual sensitivity combined with a low degree of modification, would result in a moderate adverse visual impact at operation for visitors to the Trestle bridge lookout.</p>		
Residual Visual Impact	MODERATE		
	No mitigation is proposed in this location. Consequently, the residual impact for users of the lookout would be moderate adverse.		

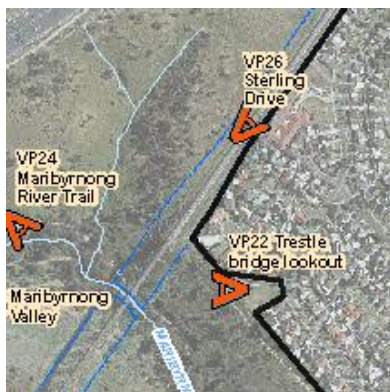


Figure 8.53 VP22 existing view from the Trestle Bridge Lookout, looking northwest.



Figure 8.54 VP22 preliminary rendered photomontage indicative of view from the Trestle Bridge Lookout (at two years post construction).

VIEWPOINT 23: Maribyrnong River Valley - residential reserve

Viewing location	From a reserve above the Maribyrnong River Valley in the suburb of Avondale Heights, looking north-west		
Existing setting	<p>This viewpoint as seen in Figure 8.55, has open views of the Maribyrnong River Valley, afforded by the steep escarpments falling down to the Maribyrnong River covered by trees. The valley has a natural landscape appearance, vegetated with native trees, shrubs and grasses with little intrusion of built elements.</p> <p>The reserve is accessed by a gravel path, as seen to the right of the view, which follows the top of river valley embankments.</p> <p>The Albion Viaduct is a distinctive feature in the middleground of this view. Its trestle design providing transparency, with little visual obstruction to the landscape behind. The deck of the viaduct sits almost in line with the horizon.</p> <p>The EJ Whitten bridge is barely visible in the background, sitting behind the Albion Viaduct.</p> <p>Behind this viewpoint are residential dwellings on three sides of the reserve; along Willow Drive, Arcade Way and South Gateway. This viewpoint represents the worst-case scenario, based on the high sensitivity of both the reserve visitors the residences adjacent the reserve with potential views toward the Maribyrnong River Valley. There are between 30-40 dwellings south of Edmonds Reserve and one aged care facility (Doutta Galla) with potential views of Albion Viaduct and, thus, of the Project.</p>		
Viewing context	Duration of view: static (fixed view)	Viewing angle: perpendicular	
The viewpoint is representative of views experienced by residential dwellings surrounding the reserve.			
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT 2),
Viewing distance (m)	Middleground (approximately 780 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	VERY LOW		
Viewpoint discussion	<p>The Maribyrnong River Bridge (MRB) will be barely noticeable from this viewpoint, providing a minor deterioration to the existing view, located behind the existing Albion Viaduct in the middleground.</p> <p>The MRB tall concrete piers will be visible through and behind the existing Albion Viaduct trestles. Other elements including the deck and parapets will be partially visible and OHW support structures barely perceptible due to their bulk and grey colour blending into the horizon. Additionally, there is existing intervening vegetation partially filtering and screening views from this viewpoint of the MRB.</p> <p>Views northwest through to the valley and views of the horizon, remain visible from this viewpoint. The visibility of the Proposal and its considered positioning adjacent to the Albion Viaduct would result in a barely perceptible visual change with a minor deterioration to the view for reserve visitors and adjacent residents (Figure 8.56).</p> <p>A construction worksite and construction access will be located within the valley (refer to Section 7.2).</p>		
Construction Visual Impact	LOW		
<p>The construction sites and activity will be barely perceptible from the viewing distance, providing a very low level of visual modification. The resulting visual impact in from a highly sensitive viewpoint is moderate during construction.</p>			
Operational Visual Impact	LOW		
<p>The high level of visual sensitivity combined with the very low level of modification, would result in a low adverse visual impact at operation for the residential dwellings adjoining the Maribyrnong River Valley.</p>			
Residual Visual Impact	LOW		
<p>No mitigation is proposed in this location. Consequently, the residual impact on views for residential dwellings adjoining the Maribyrnong River Valley would be low adverse.</p>			



Figure 8.55 VP23 existing view from reserve adjacent the Maribyrnong River Valley and residential properties.



Figure 8.56 VP23 preliminary rendered photomontage indicating Maribyrnong River Bridge behind Albion Viaduct in the background (at two years post construction).

VIEWPOINT 24: Maribyrnong River Trail

Viewing location	From the existing Maribyrnong River Trail, looking southeast.		
Existing setting	<p>The dirt access track in the foreground is surrounded by low-lying vegetation, with large shrubs and trees growing on the escarpment to the west (right), as shown in Figure 8.57.</p> <p>The Albion Viaduct in the foreground is prominent from this viewpoint with architectural details of the structure visible. This is seen for a short duration as trees to either side of the trail often screen the Albion Viaduct, therefore this viewpoint is representative of the worst-case scenario. The valley landscape is visible through the viaduct trestles, with the vegetated escarpments visible in the background.</p> <p>Houses to the tops of the escarpments, which are set back, are indiscernible. There are no other built elements visible, giving this viewpoint a sense of remoteness.</p>		
Viewing context	Duration of view: dynamic (moving view)	Viewing angle: perpendicular	
Visual Sensitivity	MODERATE		
Viewer sensitivity	Landscape sensitivity		
Land use	Shared use path	Landscape Type	Waterway reserve (LCT 4)
Viewing distance (m)	Foreground (approximately 200 m from closest project element)		
Viewer sensitivity level	Moderate	Absorptive ability	Low
Visual Modification	MODERATE		
Viewpoint discussion	<p>The Maribyrnong River Bridge (MRB) is proposed to be located between this viewpoint and the Albion Viaduct (Figure 8.58). Due to the height, bulk and close proximity to this viewpoint, the MRB will be a focal point in the field of view, however, views experienced are already of a bridge strcuture within a valley landscape.</p> <p>The MRB will be the same height as the Albion Viaduct with elements of the MRB visible including the tall concrete piers, underside of the deck, parapets and OHW masts. The MRB piers are narrow compared to trestle girders, allowing the existing structure to be visible and remain distinctive. The Albion Viaduct deck will be screened by the MRB deck and parapets. The OHW masts will add a repetitious vertical element, though will be barely noticeable, given their relative fineness and their colour blending with the sky.</p> <p>During construction the trail is to be widened by one metre and used for construction access (refer to Section 7.2) and closed for recreational use. Subsequently the existing gravel trail will be paved (concrete or asphalt).</p>		
Construction Visual Impact	HIGH	Construction access will close public and recreational use of the trail. The construction worksites, activity and traffic will be a high level of visual modification, contrasting from the existing setting. Consequently, in a highly sensitive viewpoint, the visual impact is high.	
Operational Visual Impact	MODERATE	The moderate level of visual sensitivity combined with the moderate degree of modification, would result in a moderate adverse visual impact at operation for the users of the Maribyrnong River Trail.	
Residual Visual Impact	MODERATE	No mitigation is proposed in this location. Consequently, the residual impact on views for users of the Maribyrnong River Trail would be moderate adverse.	



Figure 8.57 VP24 existing view from Maribyrnong River Trail, looking south towards the Albion Viaduct.



Figure 8.58 VP24 preliminary rendered photomontage of Maribyrnong River Bridge (at two years post construction).

VIEWPOINT 25: Maribyrnong River Valley

Viewing location	On the existing recreational track in the Maribyrnong River valley, on the north-west side of the Albion Viaduct.		
Existing setting	<p>This viewpoint is representative of users of the Maribyrnong River Trail. As shown in Figure 8.59, the Trail is surrounded by native trees and shrubs which screen clear views to the Albion Viaduct. The viewpoint has been taken on the western side of the river on an informal track where there is less vegetation and open views towards the Project, representing the worst-case scenario.</p> <p>The Albion Viaduct has a dominant presence from this viewpoint, being at close proximity and of a height that takes up a large proportion of the field of view. Details of the structure can be seen including the underside of the decking, rails and textures. The landscape to the foreground is covered in low-lying vegetation, on a flat to slight undulating flood plain.</p> <p>The tops of the escarpments are visible to the east in the background, with built form set back from the valley, being barely perceptible.</p>		
Viewing context	Duration of view: dynamic (moving view)	Viewing angle: perpendicular	
Visual Sensitivity	MODERATE		
Viewer sensitivity	Landscape sensitivity		
Land use	Shared use path	Landscape Type	Waterway reserve (LCT 4)
Viewing distance (m)	Foreground (approximately 100 m from closest project element)		
Viewer sensitivity level	Moderate	Absorptive ability	Low
Visual Modification	MODERATE		
Viewpoint discussion	<p>The MRB is proposed to be located between this viewpoint and the Albion Viaduct. Due to the height, bulk and close proximity to this viewpoint, the MRB will be a focal point in the field of view, however, views experienced are already of a bridge structure within a valley landscape (Figure 8.60).</p> <p>The MRB will be the same height as the Albion Viaduct with elements of the MRB visible including the tall concrete piers, underside of the deck, parapets and OHW masts. The MRB piers are narrow compared to trestle girders, allowing the existing structure to be visible and remain distinctive. The Albion Viaduct deck will be screened by the MRB deck and parapets. The OHW masts will add a repetitious vertical element, though will be barely noticeable, given their relative fineness and their colour blending with the sky.</p> <p>A construction worksite, laydown area and construction access will be located within the valley (refer to Section 7.2). Permanent maintenance access tracks will be in the foreground of this viewpoint, not dissimilar to the existing tracks.</p>		
Construction Visual Impact	HIGH		
	The construction worksites, activity and traffic will be a high level of visual modification, contrasting from the existing setting and near the viewpoint. Consequently, in a highly sensitive viewpoint, the visual impact is high.		
Operational Visual Impact	MODERATE		
	The moderate level of visual sensitivity combined with the moderate degree of modification, would result in a moderate adverse visual impact at operation for the users of the Maribyrnong River Trail.		
Residual Visual Impact	MODERATE		
	No mitigation is proposed in this location. Consequently, the residual impact on views for users of the Maribyrnong River Trail would be moderate adverse.		



Figure 8.59 VP25 existing view from Maribyrnong River Valley floor.



Figure 8.60 VP25 preliminary render indicative of Maribyrnong River Bridge viewed from the Maribyrnong River Valley floor (at two years post construction).

VIEWPOINT 26: Sterling Drive

Viewing location	Looking north along the Albion-Jacana railway line, near the Edenvale Manor Aged Care Facility		
Existing setting	<p>There are 41 private residential dwellings and one aged care facility to the west side of Sterling Drive, Hawthorn Court and Hedgerow Court with their back fences against the rail corridor. The viewpoint is looking along the railway corridor, although views by residents are likely to be perpendicular. The boundaries have existing fences, typically timber paling fencing, at 1.8 m to 2 m in height, of varying age and quality. There are some large shrubs and tall trees within the Albion-Jacana rail corridor, located against boundary fencing, that provide further screening in a few locations.</p> <p>Existing views from these private residences, above existing fences comprise scattered trees, powerlines and tall transmission towers visible in the background. The existing trains travelling along the railway are likely to be pronounced with the level of tracks at a similar level to the boundary line. The Edenvale Manor Aged Care facility, as seen in the foreground of Figure 8.61, has black mesh fencing and windows where the view of the rail corridor. The surrounding grasslands and passing trains are clearly visible.</p>		
Viewing context	Duration of view: static	Viewing angle: parallel	
The view is representative of those residents adjacent the railway corridor on the west side of Sterling Drive. This includes residents of Edenvale Manor Aged Care Facility.			
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT 2)
Viewing distance (m)	Foreground (approximately 50 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	LOW - *HIGH		
Viewpoint discussion	<p>A noise wall from 3.0-3.5 m high is proposed along the boundary of the rail corridor, adjoining the back fence of private residences along Sterling Drive as demonstrated in Figure 8.62. The concrete noise wall will be visible above the existing residential rear fences, raising the height of the boundary. However views to the rail corridor and surrounding grasslands are already inhibited. New OHW and gantries will be partially visible by residents above the noise wall, however these are not expected to contrast greatly to large transmission towers in the background.</p> <p>*A concrete noise wall is expected to be a high level of contrast for the Aged Care facility only, given this is the only property that has views of the railway corridor and surrounding grasslands afforded by mesh fencing.</p> <p>During construction there will be a construction worksite and AusNet HV relocation worksite located within the rail reserve (refer to Section 7.2).</p>		
Construction Visual Impact	LOW		
<p>The construction worksite will be barely noticeable for residents, given the ground location of works is screened by existing boundary fences. Relocation works of background HV towers will be a very low level of visual modification, resulting overall in a low visual impact for residents along the west side of Sterling Drive.</p>			
Operational Visual Impact	MODERATE - *HIGH		
<p>The level of visual modification to residents located on the west side of Sterling Drive is considered low, resulting in a moderate visual impact.</p> <p>* For aged care residents at Edenvale Manor, it is recognised that there is a high level of contrast. Combined with a highly sensitive setting, the high level of modification would result in a high adverse visual impact at operation for aged care residents at Edenvale Manor.</p>			
Residual Visual Impact	MODERATE - *HIGH		
<p>No mitigation is proposed to non-public facing noise walls, therefore the residual impacts remain as a moderate visual impact and high visual impact for the aged care facility.</p>			

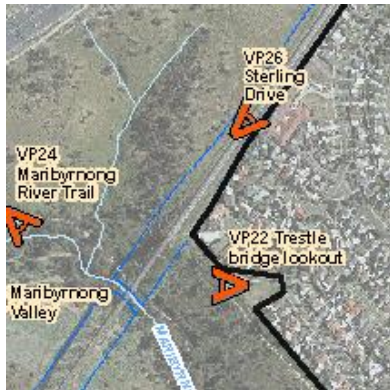


Figure 8.61 VP26 existing view from railway corridor parallel to Sterling Drive, looking north



Figure 8.62 VP26 preliminary rendered photomontage indicating proposed noise wall (at two years post construction).

VIEWPOINT 27: Keilor Park Drive substation

Viewing location	Looking west across the Albion-Jacana railway line, from the rear fences of residents along Sterling Drive near Keilor Park Drive.		
Existing setting	<p>The viewpoint (Figure 8.63), is looking towards the M80 and the Keilor Terminal Station, is representative of the view experienced by residents. There are 37 private residential dwellings to the west side of Sterling Drive with their back fences against the rail corridor. The boundaries have existing fences, typically timber paling fencing, at 1.8 m to 2 m in height, of varying age and quality. There are some large shrubs and tall trees within the Albion-Jacana rail corridor, located against boundary fencing, that provide further screening in a few locations.</p> <p>Existing views from these private residences, above existing fences comprise powerlines and tall transmission towers, with grassland beneath. The area between the railway and M80 road corridor is a PPRZ which is part of Brimbank Park, though there is no public access. Grassed embankments for the road ramps of Keilor Park Drive to the M80 are visible in the midground and in the background are scattered trees and Keilor Terminal Station components. The existing trains travelling along the railway in the foreground are likely to be pronounced with the level of tracks at a similar level to the boundary line.</p>		
Viewing context	Duration of view: static	Viewing angle: perpendicular	
	The view is representative of residents adjacent the railway corridor on the west side of Sterling Drive.		
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT 2)
Viewing distance (m)	Foreground (approximately 120 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	LOW		
Viewpoint discussion	<p>A noise wall up to 2.5-3.5 m high is proposed along the boundary of the rail corridor, adjoining the back fence of private residences along Sterling Drive. The top of the concrete noise wall will be barely noticeable above the existing residential rear fences however views to the rail corridor and surrounding grasslands are already inhibited. New OHW and gantries will be partially visible by residents above the noise wall, however these are not expected to contrast greatly to large transmission towers in the background.</p> <p>As shown in Figure 8.64, near the M80, a substation will be visible at a height of approximately 8m. The façade of the substation will have cladding to soften the industrial appearance. The substation introduces a building where there are currently none, although the view is highly influenced by road and electrical infrastructure. There will be some removal of trees in the background which are expected to be barely noticeable from this viewpoint.</p> <p>During construction there will be a construction worksite and AusNet HV relocation worksite located within the rail reserve (refer to Section 7.2), and civil and building works for the substation.</p>		
Construction Visual Impact	HIGH		
	A construction worksite is proposed to take up a vast area of the grassed reserve. The worksite, construction activity and traffic will be noticeable contrast to the existing setting, resulting in a high visual modification. Consequently, in this highly sensitive viewpoint, the visual impact will be high.		
Operational Visual Impact	LOW		
	The construction worksite will be rehabilitated, with reserve conditions and activity restored. The level of contrast incurred by the substation is a very low level of modification. Consequently, the high level of visual sensitivity combined with a very low visual modification would result in a low adverse visual impact at operation for Sterling Drive residents.		
Residual Visual Impact	LOW		
	No mitigation is proposed in this location. Consequently, the residual impact on views for users would be low adverse.		



Figure 8.63 VP27 existing view from railway corridor, near Kellor Park Drive parallel to Sterling Drive, looking northwest .



Figure 8.64 VP27 preliminary rendered photomontage indicating proposed substation (at two years post construction).

VIEWPOINT 28: Border Reserve

Viewing location	Border Drive Reserve playground, looking west toward the railway corridor		
Existing setting	<p>The view (Figure 8.65) is experienced by visitors to the reserve, and adjacent residents with views of the reserve (Border Drive and Yallop Court). The reserve comprises an open grassed sports area, with scattered trees and a few garden beds containing low planting surrounded by a low barrier to the perimeter. The playground is located near to Border Drive, central to the reserve with a connecting concrete path.</p> <p>The trees and shrubs located to the perimeter of the reserve, are typically native species. Contrasting to this are a few rows of evenly spaced, Canary Island Palms adjacent Keilor Park Drive to the south.</p> <p>There is a planted embankment up to Keilor Park Drive with road traffic noticeable within the reserve. Planted mounding adjacent the railway corridor screen lower-level views of the Albion-Jacana rail tracks, with the backs of industrial warehousing visible that are more apparent due to the brightly coloured graffiti. Passing trains are expected to be visible from this viewpoint.</p>		
Viewing context	Duration of view: static	Viewing angle: perpendicular	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Parks and reserves	Landscape Type	Recreation Parks (LCT 5)
Viewing distance (m)	Foreground (approximately 400 metres from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	VERY LOW		
Viewpoint discussion	<p>The works along the railway line adjacent to Border Drive will include some track and signalling works, which are commensurate with the existing visual conditions. New OHW and gantries along the rail corridor will be partially visible, although are not expected to be too noticeable from this distance.</p> <p>A bio-basin is proposed to be located to the west side of the reserve near to the railway corridor. This will be barely noticeable, comprising an area of longer grasses, as shown in Figure 8.66.</p> <p>During construction there will be a construction worksite, track and civil works, CSR signalling and utility works located within the reserve for approximately five years (refer to Section 7.2). Trees along the Keilor Park Drive embankment will be removed for construction access and a stockpile area to the centre of the reserve.</p>		
Construction Visual Impact	HIGH		
	<p>A construction worksite is proposed to take up a vast area of the reserve and this will include the removal of vegetation and stockpiling of materials. The worksite, construction activity and traffic will be noticeable contrast to the existing setting, resulting in a high visual modification. Consequently, in this highly sensitive viewpoint, the visual impact will be high.</p>		
Operational Visual Impact	LOW		
	<p>The construction worksite will be rehabilitated, with reserve conditions and activity restored. The level of contrast incurred by the proposed bio-basin is a very low level of modification. Consequently, the high level of visual sensitivity combined with a very low visual modification would result in a low adverse visual impact at operation for the users of Border Drive Reserve.</p>		
Residual Visual Impact	LOW		
	<p>No further mitigation is proposed in this location. Consequently, the residual impact on views for users would be low adverse.</p>		



Figure 8.65 VP28 existing view from Border reserve, looking west.



Figure 8.66 VP28 preliminary rendered photomontage indicating proposed bio-basin to the right of view (at two years post construction).

VIEWPOINT 29: Moyangul Drive

Viewing location	Moyangul Drive roadside reserve, looking west towards the railway corridor		
Existing setting	<p>There are approximately 30 houses on Gungarlan Drive (behind viewpoint) and on Moyangul Drive (right of viewpoint) with front yard views overlooking the streetscape and railway corridor, as represented in Figure 8.67. The viewpoint is looking along the railway corridor, although views by residents are likely to be perpendicular.</p> <p>In the foreground there is a wide nature strip located on the corner of Moyangul Drive (right) and Gungarlan Drive, comprising scattered native trees and a grassed area. The nature strip to the far side of Moyangul Drive is approximately 2.5 m wide with native trees and shrubs, irregularly spaced. This existing vegetation filters and partially screens views towards the rail corridor. There is a low mesh fence (1 m high), between the road reserve and rail corridor.</p> <p>In the background to the west side of the rail corridor are the back walls of industrial warehouses, typically painted with graffiti, which is visible from Moyangul Drive.</p> <p>Views of the railway corridor and moving trains are prominent from this viewpoint.</p>		
Viewing context	Duration of view: static	Viewing angle: parallel	
	The viewpoint is also considered as representative of the visual setting experienced by 26 residential properties and one aged care facility with the back fences against the rail corridor on Yallop Court, Collins Court, Trott Place, Berembong Drive and Urana Drive in Keilor East.		
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT 2)
Viewing distance (m)	Foreground (approximately 50 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	HIGH		
Viewpoint discussion	<p>A 3.5 m high noise wall is proposed along the length of Moyangul Drive replacing the existing 1 m high mesh fencing along the rail corridor boundary. New OHW and gantries along the rail corridor will be partially visible above the noise wall. A REB will be located within the road reserve, which introduces a new element to the streetscape. A second REB will be located behind the noise wall and is unlikely to be visible above the noise wall.</p> <p>The introduction of a solid urban structure to the length of the street would result in a noticeable visual change to the streetscape setting as seen in Figure 8.68.</p> <p>A seating area and bio-basin is proposed within the wide street reserve, to the foreground of the viewpoint. This will be noticeable through longer grasses, though is not considered a contrast to the existing setting.</p> <p>It has been assumed that most existing street trees will be removed during construction of the noise wall. Vegetation screening including shrubs and trees will be re-planted in the road reserve.</p>		
Construction Visual Impact	HIGH		
	Construction worksites are not proposed within this viewpoint; however, the installation of the noise wall and associated vegetation removal is expected to be a noticeable intrusion. The visual modification during construction is considered high, resulting in a high visual impact.		
Operational Visual Impact	HIGH		
	Vegetation screening will take some time to establish along the wall, consequently the level of visual modification at operation is expected to be high degree. Combined with a high visual sensitivity the visual impact will be high adverse for the adjacent residents.		
Residual Visual Impact	MODERATE		
	Design mitigation includes planting against the noise wall which will soften the appearance along the street, as shown in Figure 8.69. This will help soften the appearance of the concrete wall and improve the landscape amenity. Consequently, the residual impact would be moderate adverse.		

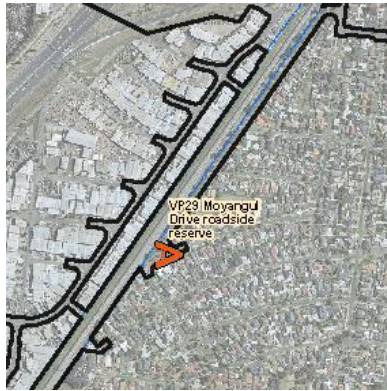


Figure 8.67 VP29 existing view from Moyangul Drive, looking west towards railway corridor.



Figure 8.68 VP29 preliminary rendered photomontage indicative of view at Moyangul Drive (at two years post construction).



Figure 8.69 VP29 preliminary rendered photomontage indicative of residual impact at 10 years.

VIEWPOINT 30: Western Ring Path/Calder Freeway

Viewing location	Viewed from Western Ring Path, near the end of Slater Parade, looking north towards the Calder Freeway/M80 interchange noise barrier.		
Existing setting	<p>The view as shown in Figure 8.70, is experienced by users of the SUP which is within the area zoned as road reserve. The SUP in the foreground is surrounded by an open grassed area with a few trees. The path forks left, over the railway overpass and to the right where it continues under the Calder Freeway and Fullarton Road.</p> <p>In the foreground of the view there is a low embankment up to the Calder Freeway interchange with M80 ramp, blocked from view by a timber noise wall. This wall joins a coloured (red) corrugated steel wall to the edge of the rail overpass. To the far right of the view is the rail corridor which sits in a culvert, with residential housing to the east.</p> <p>This area has a lack of surveillance being fenced off from the road, not observed by adjacent industrial users and no visible path lighting. As such, it is an area not attractive for SUP users with potential social issues, evidenced with vandalism painted on the noise walls.</p>		
Viewing context	Duration of view: dynamic (moving view)	Viewing angle: perpendicular	
Visual Sensitivity	Very Low		
Viewer sensitivity	Landscape sensitivity		
Land use	Shared use path	Landscape Type	Industrial (LCT 1)
Viewing distance (m)	Foreground (approximately 400 m from closest project element)		
Viewer sensitivity level	Moderate	Absorptive ability	High
Visual Modification	LOW		
Viewpoint discussion	<p>Project works proposed within this viewpoint include widening of the rail corridor to make way for MAR tracks, widening and strengthening of Calder Freeway rail overpass and widening of the SUP rail overpass. Consequently, as shown in Figure 8.71, the direction of the Western Ring Path SUP will be realigned to traverse over the rail corridor, removal of the SUP to the right of the viewpoint and SUP bridge widening.</p> <p>Where the MAR rail will push into the embankment to the right of the viewpoint will be barely noticeable as these works will be within the existing culvert and beneath the road overpass. The existing path to the right will be removed and revegetated, with a seating node located in the foreground.</p> <p>The widened SUP bridge will be fitted with transparent safety screens/ noise attenuation barrier, retaining views over the rail corridor. The existing red metal noise barrier between the SUP and Calder Freeway will be partially removed due to the road widening, providing some visual permeability between road and SUP bridge, with a new metal road safety barrier between the two.</p> <p>In landscape remediation and bike station works there will be additional planting including trees along the SUP and low planting to the foreground of this viewpoint, providing increased landscape amenity in an area surrounded by road infrastructure and industrial warehousing.</p>		
Construction Visual Impact	VERY LOW		
	<p>There are no construction worksites proposed within this viewpoint, however construction works on the rail corridor including SUP realignment and temporary closure of the SUP is expected to be of a moderate to high visual modification in this setting. Consequently, in an area of very low visual sensitivity, the visual impact is very low.</p>		
Operational Visual Impact	VERY LOW		
	<p>Consequently, the very low level of visual sensitivity combined with the low degree of modification, would result in a very low adverse visual impact at operation for the SUP users.</p>		
Residual Visual Impact	NEUTRAL		
	<p>Design mitigation includes vegetation screening to the existing timber noise wall and improve the landscape amenity (Figure 8.72). Consequently, the residual impact on views for SUP users would be neutral.</p>		



Figure 8.70 VP30 existing view from Western Ring Path SUP, beside the Calder Freeway/M80 interchange.



Figure 8.71 VP30 preliminary rendered photomontage indicative of proposed SUP realignment (at two years post construction).



Figure 8.72 VP30 preliminary rendered photomontage indicative of residual impact at 10 years.

VIEWPOINT 31: Milleara Road/Calder Freeway

Viewing location	From the north end of Milleara Road, adjacent the Calder Freeway, looking west to a SUP connecting to the Western Ring Path.		
Existing setting	<p>The view as shown in Figure 8.73, is experienced by nearby residents and users of the SUP, traversing the rail overpass or underpass. The setting is highly influenced by the presence of the Calder Freeway, although the road is screened from view by a timber noise wall, road lighting and signage is visible above the wall. The walls are tagged by graffiti.</p> <p>The SUP is visible at the end of the street, in a narrow corridor between the Calder Freeway noise wall and residential fencing. The landscape in the foreground consists of low grassed mounds to the left side of the slightly curved path. Views of the SUP disappear as the corridor narrows. There are trees at the road end only.</p> <p>Residential houses (to the left) are mostly single-storey dwellings and some double-storey townhouses, that face onto the street. There are five dwellings located to the south of the SUP between Milleara Road and the rail corridor. These residences are already highly influenced by road infrastructure from the Calder Freeway, given the close proximity.</p>		
Viewing context	Duration of view: static	Viewing angle: perpendicular	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT 2)
Viewing distance (m)	Foreground (approximately 400 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	VERY LOW		
Viewpoint discussion	<p>The Project elements visible in this viewpoint include an upgrade to the existing SUP to provide main access to the Western Ring Path, crossing over the rail corridor and ramping around to traverse under Calder Freeway and Fullarton Road (to the right). The SUP ramp is seen in the midground, with a seating node to the foreground of the ramp (Figure 8.74).</p> <p>The SUP realignment including additional ramps and a widening bridge over the rail corridor is not visible from this viewpoint.</p>		
Construction Visual Impact	MODERATE		
	There are no construction worksites proposed within this viewpoint, however civil works to the SUP overpass and temporary closure of the SUP is expected to be of a moderate visual modification in this setting. Consequently, in an area of moderate visual sensitivity, the visual impact is moderate adverse.		
Operational Visual Impact	LOW		
	The high level of visual sensitivity combined with the very low level of visual modification, would result in a low visual impact at operation for SUP users and adjacent residents.		
Residual Visual Impact	NEUTRAL		
	<p>Planting is proposed along the noise wall (right) and the residential boundary (left) which will deter graffiti and provide increased landscape amenity in a narrow area surrounding by fencing, adjacent a busy road, providing a moderately beneficial level of visual modification (Figure 8.75).</p> <p>Consequently, the residual impact on views for residents would be neutral. .</p>		



Figure 8.73 VP31 existing view from the end of Milleara Road looking towards SUP besides the Calder Freeway noise wall.



Figure 8.74 VP31 preliminary rendered photomontage indicative of proposed SUP ramp realignment (at two years post construction).



Figure 8.75 VP31 preliminary rendered photomontage indicative of residual impact at 10 years.

VIEWPOINT 32: Fullarton Road

Viewing location	From the Fullarton Road – M80 overpass, looking east over the M80 and towards Terror Street.		
Existing setting	<p>The view is experienced by motorists on Fullarton Road and is representative of motorists traveling east on the M80. Pedestrian and cyclists also experience this view from the SUP located to the north side of the overpass and connects with the Western Ring Path.</p> <p>The viewpoint (Figure 8.76) is highly influenced by the road infrastructure and views are experienced whilst moving. The view looks down along the M80 in the foreground with four lanes in each direction plus on/off ramps for Calder Freeway. In the middleground to the right of view comprises a cluttered industrial area with depots and storage yards, located beneath and near to the HV transmission lines. The HV towers are visible in the background, prominent in this view due to their scale. The Western Ring Path SUP traverses from the right of view beneath HV transmission lines.</p> <p>To the left (west) of view there is a steep rock embankment with a noise wall at the top adjacent residential houses within the suburb of Keilor Park. Views east towards the road corridor to are screened from residences.</p> <p>There is little presence of the natural landscape from this viewpoint, with road reserves largely grasses and only few tall native trees; however, the spread of industrial elements is prominent.</p>		
Viewing context	Duration of view: dynamic (moving view) Viewing angle: perpendicular		
Visual Sensitivity	VERY LOW		
Viewer sensitivity	Landscape sensitivity		
Land use	Arterial Road	Landscape Type	Industrial (LCT 1)
Viewing distance (m)	Foreground (approximately 300 m from closest project element)		
Viewer sensitivity level	Low	Absorptive ability	High
Visual Modification	VERY LOW		
Viewpoint discussion	<p>The M80 bridge will be noticeable from this viewpoint (Figure 8.77), rising from the right of view near to the new substation, and over the M80 in the background. The scale and extent of the bridge and adjoining Airport Viaduct is noticeable in the field of view; however, at this distance is not an intrusion in the field of view. Furthermore, the presence of bridges crossing the M80 is a regular occurrence for motorists using the road.</p> <p>The proposed substation located in Terror Street is in the peripheral vision of motorists using either the M80 or Fullarton Road. The size and industrial aesthetic of the substation is commensurate with the existing industrial use, barely noticeable with intervening buildings.</p> <p>During construction there will be a worksite, laydown area and substation works located at Terror Street for approximately five and a half years (refer to Section 7.2).</p>		
Construction Visual Impact	<p>VERY LOW</p> <p>The construction works in an existing industrial area, will be a minimal compositional contrast to the existing setting for motorists, resulting in a very low level of visual modification. Consequently, with the very low level of visual sensitivity, the visual impact will be very low.</p>		
Operational Visual Impact	<p>VERY LOW</p> <p>There is expected to be a minor deterioration to the view experienced by the presence of the M80 bridge and Airport Viaduct, being a large structure, and the proposed substation of industrial aesthetic. Consequently, the very low level of visual sensitivity combined with the low degree of modification, would result in a very low visual impact at operation for the users of Fullarton Road and the M80.</p>		
Residual Visual Impact	<p>VERY LOW</p> <p>No mitigation is proposed in this location. Consequently, the residual impact on views for motorist would be very low adverse.</p>		



Figure 8.76 VP32 existing view from Fullarton Road overpass at the M80 looking north-east (image: AJMJV).



Figure 8.77 VP32 preliminary rendered photomontage of M80 bridge (centre), Airport Viaduct (left) and Fullarton substation (right) (at two years post construction).

VIEWPOINT 33: Roberts Road

Viewing location	From the end of Moorna Drive looking northwest towards Roberts Road and the Steele Creek rail embankment.		
Existing setting	<p>The view is experienced by nearby residents on Roberts Road and Moorna Drive. The Steele Creek Rail embankment (HO37) visible in the background has a Heritage Overlay applied to it. Its significance includes 'A large and visually impressive railway embankment of local significance, particularly for its historical association with the linking of railway lines, and in connection with the Maribyrnong River and Moonee Ponds Creek bridges also on this line' (Victorian Heritage Database).</p> <p>Albion-Jacana trains are visually prominent from the reserve and surrounding area, when passing on this embankment given its elevation. As shown in Figure 8.78, the embankment has low-level vegetation and there are trees and shrubs planted at the base. This reserve area widens to the right of view towards Steele Creek. This is the low point, with the surrounding area elevated, providing some extended views of the surrounding streetscape for residents.</p> <p>Approximately eight dwellings on Roberts Road and at the bottom of Moorna Drive have potential views facing the rail embankment. Typically, dwellings are brick, split-level to double-storey large houses, with garages to the ground floor facing onto the street with landscaped front yards.</p> <p>The existing setting is influenced by urban infrastructure including powerlines and street lighting. Streets have pedestrian paths to both side with grassed nature strips and street trees at regular spacings. Additionally, there is a wide nature strip to both sides of the intersection, along Roberts Road. The background view is screened by the large embankment, with tall HV transmission towers just discernible.</p>		
Viewing context	Duration of view: static	Viewing angle: perpendicular	
Visual Sensitivity	HIGH		
Viewer sensitivity	Landscape sensitivity		
Land use	Residential	Landscape Type	Residential (LCT 2)
Viewing distance (m)	Foreground (approximately 400 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low
Visual Modification	MODERATE		
Viewpoint discussion	<p>The M80 bridge and associated OHW masts and pier crossheads will be visible in the background of this viewpoint, above the existing rail embankment as shown in Figure 8.79. The bridge structure, presents a compositional change where the rail infrastructure is apparent, compared to the rail embankment which blends into the landscape. However, the bridge is viewed in the background of the existing setting and does not obscure any background views from this viewpoint. The proposed bridge is located close to the existing rail embankment and is in land zoned PUZ4.</p> <p>During construction there will be a worksite behind the rail embankment at Terror Street and construction vehicle access is expected to the top end of Roberts Road (refer to Section 7.2).</p>		
Construction Visual Impact	LOW		
	<p>The construction worksite will be screened from this viewpoint, as will ground works associated with bridge construction. Once the bridge piers are in place, installation of the bridge deck, parapets and OHW masts will be a minor deterioration to the view, with construction traffic apparent on Roberts Road and experienced in a setting of high visual sensitivity. Accordingly, the very low level of visual modification during construction, would result in a low adverse visual impact for nearby residents.</p>		
Operational Visual Impact	HIGH		
	<p>The scale and visibility of the M80 bridge is moderate level of modification to the existing setting. Combined with a high visual sensitivity, resulting in a high adverse visual impact at operation for residents of Roberts Road and Moorna Drive.</p>		
Residual Visual Impact	HIGH		
	<p>No mitigation is proposed in this location. Consequently, the residual impact on views for residents would be moderate adverse.</p>		



Figure 8.78 VP33 existing view from Moorna Drive/ Roberts Road, looking northwest to the Steele Creek rail embankment (HO37).



Figure 8.79 VP33 preliminary rendered photomontage indicative of view from Moorna Drive/ Roberts Road (at two years post construction).

VIEWPOINT 34: Western Ring Path, Steele Creek

Viewing location	From M80 looking northeast towards Steele Creek – Western Ring Path.		
Existing setting	<p>The view is representative of views experienced by users of the Western Ring Path, located adjacent to M80 to the left (west) of this view (Figure 8.80). The SUP is located between the Albion-Jacana rail corridor and the M80 freeway, within the HV transmission easement. From this viewpoint the SUP continues north under the Steele Creek bridge and south at Terror Street. The freeway and transmission lines are strong influence in this setting, despite the location of Steele Creek within a small gully in the foreground.</p> <p>There is low level vegetation surrounding the SUP including grass and native shrubs. The SUP ramps down to cross Steele Creek in an informal crossing, and veers to the left, underneath the M80 where the path continues through Steele Creek Tributary Reserve. The creek environs are within a gully with the narrow creek mostly covered in tall riparian grasses (Phragmites), is of a degraded condition with lots of rubbish. Gully embankments are covered in grasses and shrubs, but there are few large trees due to proximity of high voltage wires.</p>		
Viewing context	Duration of view: dynamic (moving view)	Viewing angle: perpendicular	
Visual Sensitivity	MODERATE		
Viewer sensitivity	Landscape sensitivity		
Land use	Shared use path	Landscape Type	Waterway reserve (LCT 4)
Viewing distance (m)	Foreground (approximately 400 m from closest project element)		
Viewer sensitivity level	Moderate	Absorptive ability	Low
Visual Modification	MODERATE		
Viewpoint discussion	<p>As shown in Figure 8.81, the M80 bridge will be prominent in this viewpoint, spanning from far right to near where it connects with the existing rail corridor, to far left where the Airport Viaduct continues in the background. The height of the bridge above the M80 is 13.1 m. The key elements visible include the tall concrete piers and OHW masts which create a repetitive vertical element. These are connected by the deck and parapet which is a continuous horizontal element across the field of view. OHW masts are at a scale and material that is commensurate with views of transmission towers in the background.</p> <p>Whilst the Project proposes a new rail structure to this area, the scale and linearity is commensurate with the M80 freeway. The bridge and viaduct will not be distinct in its setting, which is a PUZ4.</p> <p>Further works will be done on the Western Ring Path SUP, with a new path located on the embankment to the right of the existing Steele Creek bridge, connecting the SUP with the west side of the M80 through Steele Creek Tributary Reserve and towards Tullamarine Airport. Landscaping works commensurate with the existing conditions will surround this SUP.</p> <p>A construction worksite, laydown area and SUP works will be located in the midground at the top of the Steele Creek embankment (refer to Section 7.2). This location is a PUZ4 and already influenced by road infrastructure, traffic and an industrial area.</p>		
Construction Visual Impact	MODERATE		
	<p>The construction worksites and activity are expected to be noticeable compositional changes to the apparent waterway reserve setting. This moderate level of modification in a viewpoint of moderate visual sensitivity results in a moderate visual impact for SUP users.</p>		
Operational Visual Impact	MODERATE		
	<p>The M80 bridge and Airport Viaduct, are highly visible and intrusive regarding the size, scale and extent within the field of view; however, the structures do not contrast with the existing setting which is highly influence by road and electrical infrastructure. Consequently, the moderate level of visual sensitivity combined with a moderate level of modification, would result in a moderate visual impact at operation for SUP users at Steele Creek.</p>		
Residual Visual Impact	MODERATE		
	<p>No design mitigation is proposed in this location. Consequently, the residual impact on views for SUP users at Steele Creek would be moderate adverse.</p>		



Figure 8.80 VP34 existing view from the Western Ring Path towards Steele Creek (image: AJMJV).



Figure 8.81 VP34 preliminary rendered photomontage indicative of view from the Western Ring Path towards Steele Creek (at two years post construction).

VIEWPOINT 35: Parer Road

Viewing location	Within the Albion-Jacana rail corridor adjacent the rear boundary of houses along Parer Road (end of Etzel Street), looking northwest towards Steele Creek.		
Existing setting	<p>The private residential properties on the west side of Parer Road, have potential views overlooking the Albion-Jacana rail corridor and towards the M80. The viewpoint is looking along the railway corridor, although views by residents are likely to be perpendicular. The existing setting is influenced by urban infrastructure including powerlines, HV transmission towers and surrounding grasslands. Typically, dwellings are brick, single-storey houses, with garages to the rear of the property. Approximately 10 of the 60 dwellings are double-storey, with further potential for views toward the Project.</p> <p>The backyards have high fences (up to two meters in height), of varying age and quality. There are some large shrubs and tall trees within the railway corridor, located against boundary fencing, that partially screen outward views. It was evidenced during the site visit of some reappropriation of the rail corridor being used for residential use (e.g. produce garden and bouldering wall).</p> <p>From the viewpoint (Figure 8.82) the Albion-Jacana railway line is visible in the foreground, with Powerlines and HV towers in the background and a wide grassed area below. Parts of the M80 freeway including road signage and industrial warehousing adjacent Steele Creek Tributary Reserve is visible in the background.</p>		
Viewing context	Duration of view: static	Viewing angle: perpendicular	
	The view is representative of approximately 60 dwellings adjacent the railway corridor on Parer Road with northwest facing views.		

Visual Sensitivity

HIGH

Viewer sensitivity

Landscape sensitivity

Land use	Residential	Landscape Type	Residential (LCZ 2)
Viewing distance (m)	Foreground (approximately 400 m from closest project element)		
Viewer sensitivity level	High	Absorptive ability	Very low

Visual Modification

LOW

Viewpoint discussion

The M80 bridge will be prominent in this viewpoint, spanning from far left where the elevated rail splits from the Albion-Jacana railway line, to far right where the Airport Viaduct continues northwards in the background (Figure 8.83).

The key elements visible include the tall concrete piers and OHW masts which create a repetitive vertical element. Existing landform and vegetation screen the base of some piers. The deck and parapet are a continuous horizontal element across the field of view.

The height of the bridge above the M80 is approximately 13.1 m, situated in approximately the centre of the panoramic viewpoint. Maintenance and emergency access stairs are discernible, located to the right (northwest) side of the M80. The Airport Viaduct is contiguous with the M80 bridge, continuing to curve north towards Airport Drive.

The light colouring of the structure assists with blending into the sky, where it is viewed at a height sitting just above the horizon. Given that this viewpoint is experience behind existing residential fences, the positioning of the structure just above the horizon line and the angle of the view from residential backyards, indicates that the structure is unlikely to be visible or at worst, partial visibility of the parapets and OHW masts.

Whilst the Project partially intrudes across a wide field of view, it does not obstruct the current view from sensitive land use areas. Furthermore, the new rail structure is in an existing PUZ4, PUZ1 and RD1, with the linearity commensurate with the M80 freeway.

A construction worksite and laydown area will be located in the foreground, on the far side of the rail tracks to the centre and left of the viewpoint (refer to Section 7.2). This location is a PUZ4 and already influenced by road, rail and large electrical infrastructure.



**Construction
Visual Impact**

LOW

The construction worksites and activity will be noticeable within this viewpoint, though expected to be screened by existing fencing, given the distance and ground works associated with the bridge construction. Installation of the bridge deck, parapets and OHW masts have the potential to be a minor deterioration to the view. Accordingly, the very low level of visual modification during construction, would result in a moderate adverse visual impact for nearby residents.

**Operational
Visual Impact**

MODERATE

The level of visual modification for private residents is considered low, given that the structure is unlikely to be visible or only partially visible above existing fences. Consequently, the resulting visual impact in a viewpoint of high visual sensitivity is rated moderate.

**Residual
Visual Impact**

MODERATE

No mitigation is proposed in this location. Consequently, the residual impact on views for residents of Parer Road, adjacent the rail reserve, is moderate adverse.

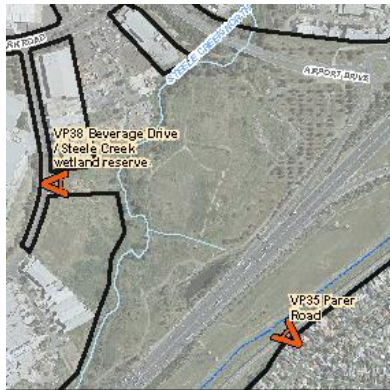


Figure 8.82 VP35 existing view from Parer Road property boundary within railway corridor near Steele Creek.



Figure 8.83 VP35 preliminary render indicating the M80 Bridge and Airport Viaduct (at two years post construction).

VIEWPOINT 36: M80 (west)

Viewing location	M80 Western Ring Road – looking north-east		
Existing setting	<p>The view as shown in Figure 8.84, is experienced for a short duration by motorists travelling at speeds up to 80 km/h. The foreground is dominated by the road corridor which includes five lanes in each direction, separated by a concrete barrier. To the east (right), the HV towers, located in groups of three, are prominent due to the scale and run parallel to the freeway into the background. Road signage on gantries are also visible in the background.</p> <p>The peripheral view to either side of the freeway, comprises of vegetated areas – low vegetation to the right in the electrical easement (PUZ4) which rises up from the freeway. The landscape falls away from the freeway to the left, into the Steele Creek Tributary Reserve which is surrounded by trees and shrubs. The industrial buildings to the left of view are noticeable, limiting the natural landscape setting.</p>		
Viewing context	Duration of view: dynamic (moving view)	Viewing angle: perpendicular	
Visual Sensitivity	LOW		
Viewer sensitivity	Landscape sensitivity		
Land use	Arterial road	Landscape Type	Waterway reserve (LCT 4)
Viewing distance (m)	Foreground (approximately 200 metres from closest project element)		
Viewer sensitivity level	Low	Absorptive ability	Low
Visual Modification	HIGH		
Viewpoint discussion	<p>As shown in Figure 8.85, the M80 bridge will be prominent in this viewpoint, sitting 13.1 m above the M80 and spanning from far right to near where it connects with the existing rail corridor, to far left where the Airport Viaduct is contiguous in the background. The key elements visible include the tall concrete piers and OHW masts which create a repetitive vertical element in the background view. These are connected by the deck and parapet which is a continuous horizontal element across the field of view. OHW masts are at a scale and material that is commensurate with views of transmission towers in the background, partially screen by the M80 bridge.</p> <p>Whilst the Project proposes a new large rail bridge to this area, the height and appearance is commensurate with other road and highway bridges crossing the M80, regularly experienced by motorists. However, the angle that it crosses and the continuous elevation above the existing landscape results in the structure visually exposed. Comparatively, road bridges at the Calder Freeway interchange are integrated into the landscape through road culverts and embankments.</p> <p>Keilor Park Drive substation will be visible to the east for a short duration by motorists.</p> <p>A construction worksite, laydown area and SUP works will be located to both sides of the M80, within PUZ4 and IN1Z areas that are not expected to be prominent for motorists on the M80 (refer to Section 7.2). Construction activity will include the removal of some existing vegetation as well as the introduction of access tracks which is considered an adverse change to the existing setting.</p>		
Construction Visual Impact	LOW		
	<p>The construction worksites and activity, including vegetation removable is expected to be noticeable from this viewpoint, experienced for a short period by motorists. Accordingly, this is a moderate level of modification in a viewpoint of low visual sensitivity, resulting in a low visual impact for motorists along the M80.</p>		
Operational Visual Impact	MODERATE		
	<p>The scale and extent of the Project elements in the viewpoint provides a high level of visual modification. Combined with the low visual sensitivity, results in a moderate adverse visual impact at operation for motorists along the M80.</p>		
Residual Visual Impact	MODERATE		
	<p>No mitigation is proposed in this location. Consequently, the residual impact on views would be moderate adverse.</p>		



Figure 8.84 VP36 Existing view from M80 looking northeast, near to Steele Creek (image: Google Street View).



Figure 8.85 VP36 preliminary render indicating M80 Bridge crossing the Western Ring Road – M80 (at two years post construction).

VIEWPOINT 37: Airport Drive/M80

Viewing location

Airport Drive overpass looking south-west onto the M80 Western Ring Road.

Existing setting

The view is experienced for a short duration by motorists travelling at speeds up to 80 km/h, as shown in Figure 8.86. Within this elevated viewpoint, the foreground is dominated by the road bridge which includes two lanes in each direction, with views to the left over the M80 and surrounding landscape. The existing setting is influenced by road infrastructure including barriers, signage and lighting.

To the east side, the land rises with embankments along the M80. Tall HV towers are prominent due to the scale and running parallel to the freeway into the distance, in land zoned RDZ1 and PUZ1. There is mostly maintained grass areas beneath the powerlines, with limited shrubs.

On the west side, the setting of Steele Creek Tributary Reserve is an area which sits below the M80, falling down to the creek and then back up to the west and industrial area. The vegetation comprises large areas of native grasses, shrubs vegetated area with trees and shrubs, and some medium sized native trees adjacent the M80 and along the creek, which screens views of the reserve (zoned IN1Z, RDZ1, PPRZ and PUZ1), from this viewpoint.

Built form is visible, including residential housing in the midground to the left and industrial warehouse in the background to the right. It is also noted that the Airport Drive overpass connects a commercial area (B1Z) to the industrial warehousing (IN1Z) in the Tullamarine airport environs.

Viewing context

Duration of view: dynamic (moving view)

Viewing angle: perpendicular

Visual Sensitivity

VERY LOW

Viewer sensitivity

Landscape sensitivity

Land use

Arterial road

Landscape Type

Industrial (LCT 1)

Viewing distance (m)

Foreground (approximately 400 m from closest project element)

Viewer sensitivity level

Low

Absorptive ability

High

Visual Modification

LOW

Viewpoint discussion

As shown in Figure 8.87, the M80 bridge will be noticeable from this viewpoint, visible from the left of view, over the M80 and disappearing behind existing vegetation within Steele Creek Tributary Reserve to the right. The scale and extent of the bridge and adjoining Airport Viaduct is noticeable; however, at this distance is not an intrusion in the field of view. Furthermore, the presence of bridges crossing the M80 is a regular occurrence for motorists using the road.

During construction there will be a worksite, laydown area and subsequent removal of vegetation to both sides of the M80. These are both of a location or distance that is unlikely to be discernible or would be screened from this viewpoint. However the proximity to the construction works further north of Airport Drive will likely be noticeable due to increase construction traffic (refer to Section 7.2).

Construction Visual Impact

VERY LOW

Construction worksites are not expected to be visible from this viewpoint, however the increase in construction traffic, close to construction worksites will noticeable, although already on a road with trucks accessing industrial and commercial areas. A very low level of visual modification, in a viewpoint with very low sensitivity, results in a very low adverse visual impact.

Operational Visual Impact

VERY LOW

There is expected to be a minor deterioration to the view experienced by the presence of the M80 bridge and Airport Viaduct, being a large structure over the existing M80 freeway. Consequently, the very low level of visual sensitivity combined with the low degree of modification, would result in a very low adverse visual impact at operation for the users of the Airport Drive overpass.

Residual Visual Impact

VERY LOW

No mitigation is proposed in this location. Consequently, the residual impact on views for motorist on Airport Drive overpass would be very low adverse.



Figure 8.86 VP37 Existing view from Airport Drive overpass, looking south-west over the M80.



Figure 8.87 VP37 preliminary render indicative of view of M80 Bridge from Airport Drive overpass (at two years post construction).

VIEWPOINT 38: Steele Creek Tributary Reserve

Viewing location The view is looking east over the reserve area, towards the M80, from Beverage Drive, Tullamarine

Existing setting The viewpoint as shown in Figure 8.88, is representative of the view experienced by users of the SUP in Steele Creek Tributary Reserve. Within the wetland reserve is a gravel access track that follows the alignment of Steele Creek North as well as some other maintenance access tracks. The creek gully is noticeable to the left midground of the viewpoint where the tops of trees are visible and embankments to the other side of the creek. The foreground view is covered by long grasses.

To the far left of the viewpoint, is the edge of an industrial warehouse. Other warehouses are located just outside the viewpoint, behind and to the far right, have an influence on this setting. The M80 freeway is not obvious despite it being approximately 400 m away, with intervening shrubs and trees. There is some traffic and road signage gantries on the M80 that are barely noticeable.

Due to the undulation of the creek area, road cutting and embankments, the reserve almost appears contiguous with the grassland area beneath the transmission towers in the background. The background also comprises vegetation and a residential area within Airport West.

PUZ and PPRZ follow the creek, with industrial and road zones to either side (RDZ1 and IN1Z), covering a wide area between the M80 and Airport Drive. ESO6 covers an area between the creek and M80. Existing native vegetation has been identified within the reserve as important native habitat.

Viewing context Duration of view: dynamic (moving view) Viewing angle: perpendicular

Visual Sensitivity MODERATE

Viewer sensitivity

Landscape sensitivity

Land use	Shared Use Path	Landscape Type	Waterway reserve (LCT 4)
Viewing distance (m)	Foreground (approximately 200 m from closest project element)		
Viewer sensitivity level	Moderate	Absorptive ability	Low

Visual Modification MODERATE

Viewpoint discussion The Airport Viaduct will be a noticeable compositional change to the existing landscape setting as shown in Figure 8.89. The key elements visible include the tall concrete piers and OHW masts which create a repetitive vertical element in the midground view. These are connected by the deck and parapet which is a continuous horizontal element across the field of view. OHW masts are at a scale and material that is commensurate with views of transmission towers in the background. A maintenance and emergency access stairway is visible, with the location of the M80 bridge visible to the right of these stairs.

The Project proposes a new large rail viaduct, of a scale and continuous elevation above the existing landscape that contrasts to the reserve setting and takes up a wide field of view. From this viewpoint, the colour and level of the deck and parapet, allow the structure to blend into the sky above the horizon. An extension of the Western Ring Path SUP along Steele Creek is also proposed. It is acknowledged that SUP users would experience the viaduct at closer proximity, with the scale and height being a major influence in the waterway reserve.

During construction there will be a worksite, laydown area and subsequent removal of vegetation, located to the left of the viewpoint (refer to Section 7.2). The construction works is considered a contrast the existing setting, which although contains some access tracks, has limited existing use.

Construction Visual Impact

MODERATE

The construction worksites, activity and traffic will be a moderate level of visual modification, contrasting from the existing setting. Consequently, in a moderately sensitive viewpoint, the visual impact is moderate adverse.

Operational Visual Impact

MODERATE

The Project key elements will partially intrude the field of view and scale, with a noticeable composition change from the existing setting. The moderate level of visual sensitivity combined with the moderate degree of modification, would result in a moderate adverse visual impact at operation for SUP recreational users.

Residual Visual Impact

MODERATE

No mitigation is proposed in this location. Consequently, the residual impact on views for recreational users would be moderate adverse.

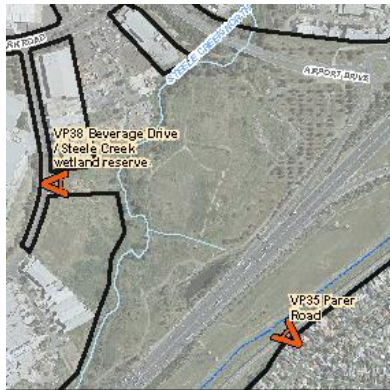


Figure 8.88 VP38 existing view from Steele Creek reserve from adjacent Beverage Crescent.



Figure 8.89 VP38 render indicative view of M80 bridge and Airport Viaduct (at two years post construction).

8.3.3 Summary of visual impacts from representative viewpoints

Table 8.4 summarises the visual impacts from COR representative viewpoints for the Project.

Table 8.4 Summary of visual impacts

VIEWPOINT No.	DESCRIPTION	CONSTRUCTION VISUAL IMPACT	OPERATIONAL VISUAL IMPACT	RESIDUAL VISUAL IMPACTS
VP17	Cranbourne Avenue, Sunshine North	HIGH	HIGH	HIGH
VP18	Mansfield Avenue, Sunshine North	MODERATE	HIGH	MODERATE
VP19	Gilmour Road, Sunshine North	HIGH	HIGH	MODERATE
VP20	Ralston Street, Sunshine North	VERY LOW	NEGLIGIBLE	NEGLIGIBLE
VP21	EJ Whitten Bridge	VERY LOW	LOW	LOW
VP22	Sterling Drive - Trestle bridge lookout, Keilor East	HIGH	MODERATE	MODERATE
VP23	Maribyrnong River Valley- residential reserve, Avondale Heights	LOW	LOW	LOW
VP24	Maribyrnong River Trail	HIGH	MODERATE	MODERATE
VP25	Maribyrnong River Valley	HIGH	MODERATE	MODERATE
VP26	Sterling Drive, Keilor East	LOW	MODERATE / *HIGH	MODERATE / *HIGH
VP27	Keilor East	HIGH	LOW	LOW
VP28	Border Drive Reserve, Keilor East	HIGH	LOW	LOW
VP29	Moyangul Drive, Keilor East	HIGH	HIGH	MODERATE
VP30	Western Ring Path/ Keilor East	VERY LOW	VERY LOW	NEUTRAL
VP31	Milleara Road / Calder Freeway, Keilor East	MODERATE	LOW	NEUTRAL
VP32	Fullarton Road overpass, Keilor East	VERY LOW	VERY LOW	VERY LOW
VP33	Roberts Road, Keilor East	LOW	HIGH	HIGH
VP34	Western Ring Path at Steele Creek, Airport West	MODERATE	MODERATE	MODERATE
VP35	Parer Road, Airport West	LOW	MODERATE	MODERATE
VP36	M80 at Steele Creek	LOW	MODERATE	MODERATE
VP37	M80 Western Ring Road / Airport Drive overpass, Airport West	VERY LOW	VERY LOW	VERY LOW
VP38	Steele Creek Tributary Reserve, Tullamarine	MODERATE	MODERATE	MODERATE

9. Mitigation

The purpose of mitigation is to avoid, reduce or where possible remedy or offset any significant adverse effects on the environment arising from the proposed development. This Section outlines mitigation and management measures for the Project to reduce potential landscape and visual impacts during construction and operation. It is intended to provide a broader guideline for detailed design.

9.1 Avoidance in Design

The following Section provides a description and details of how the Project has been designed to avoid or minimise landscape character and visual impacts.

The Project's working draft design has formulated design strategies to provide an overarching approach and address RPV's *Urban Design Framework*. The draft design informs the integrated planning and design of Melbourne Airport Rail, guides the design and delivery of high quality, context sensitive urban design outcomes, enhances the corridor's amenity and minimises adverse impacts to local communities. Key elements have been designed as a kit of parts, to provide a consistent design language, with simplified form and sensitive to its context.

The assessment of operational landscape and visual impacts (refer to Section 8), is based on the working draft design. This is the baseline design to which there has been further consideration within landscape and urban design, to minimise adverse impacts as a result of the Project.

Table 9.1 sets out the potential adverse impacts of key elements and provides mitigation measures which have been considered. These mitigation measures are subject to approvals.

Table 9.1 Avoidance in design/ mitigation measures to key Project elements

Key visual elements	Potential impact	Avoidance in design/ mitigation measures
Sunshine Station extension	Visual prominence of key visible elements including up-end concourse and platform canopies.	No mitigation proposed – platforms and overpass consistent with existing form and finish.
MAR Viaduct	Visual prominence and character influence. Key visible elements including piers, deck, parapets and OHW masts.	<ul style="list-style-type: none"> Key visual elements designed as kit of parts to provide visual consistency. Retention of existing canopy trees and proposed new trees provide scale to large infrastructure elements and interrupt the length of the elevated structure.
	Visual impacts to existing heritage protected John Darling and Son Flour Mill.	<ul style="list-style-type: none"> Provide heritage buildings with sufficient offsets from new development to allow them to be distinguished on their own. Retain a visual connection between the John Darling and Son Flour Mill the Albion VC DC Substation. This is to connect their industrial history. The lower structural section of the MAR Viaduct should retain views through providing openness from ground-level through to heritage buildings. Minimise depth of deck and parapets to create streamlined appearance, reducing the screening effect on the John Darling and Son Flour Mill building from Ballarat Road and the west forecourt areas.
Albion Gateway feature	Visual prominence and character influence on existing heritage buildings.	<ul style="list-style-type: none"> The Albion Gateway is to be no higher than or obscure the John Darling & Son Flour Mill roofline and of linear form aligning to MAR Viaduct. This is to retain visual prominence of heritage structures. The Albion Gateway is a structure that reads separate to the John Darling and Son Flour Mill, sufficiently contrasting in form, colour and use of materials, though also complementing the local landscape character. The structure is to appear fine and visually recessive compared to the bulk and scale of the adjacent heritage protected John Darling and Sons Flour Mills.

Key visual elements	Potential impact	Avoidance in design/ mitigation measures
Albion Station Precinct	Visual prominence and character influence on existing heritage buildings. Works include: <ul style="list-style-type: none"> • Station platform extension • West forecourt activated pedestrian area • East forecourt and carpark upgrade. 	<ul style="list-style-type: none"> • Deflection walls to western forecourt with climbing plants at Albion Gateway. • Eastern forecourt, retention of existing mature trees. • Use of locally sourced stone and brick, reflective of site heritage built form.
Cranbourne Avenue pedestrian overpass	Visual prominence and character influence on the residential area.	<ul style="list-style-type: none"> • Use of on-fill structure to help blend and decrease massing of ramps, including planting and installation of mature trees.
Maribyrnong River Bridge	Competing with the aesthetic value of the heritage listed viaduct. Visual prominence and contrast to existing landscape. Key visible elements including piers, deck, parapets and OHW masts.	<ul style="list-style-type: none"> • Heritage Design Guidelines where the existing viaduct retains its legibility as a feature within the Maribyrnong River valley. • Revegetation of grassland to restore construction worksites. • No mitigation proposed for structure - key visual elements designed as kit of parts to provide visual consistency.
M80 Western Ring Road Bridge (M80 Bridge)	Visual prominence. Key visible elements including piers, deck, parapets and OHW masts.	<ul style="list-style-type: none"> • Revegetation to restore construction worksites. • No mitigation proposed for structure - key visual elements designed as kit of parts to provide visual consistency.
Airport Viaduct	Visual prominence and contrast to existing landscape. Key visible elements including piers, deck, parapets and OHW masts.	<ul style="list-style-type: none"> • Revegetation to restore construction worksites. • No mitigation proposed for structure - key visual elements designed as kit of parts to provide visual consistency.
Noise and retaining walls	Loss of or screening of existing views / perception of spatial enclosure.	<ul style="list-style-type: none"> • Noise walls designed as kit of parts to provide consistent elements across MAR corridor. Options based on visual prominence and spatial constraints include: • Custom design wall – coloured/patterned to reflect local context • Vegetation screening to public-facing area • Offset wall to within rail reserve to allow increased vegetation screening • Use of transparent materials for noise barrier to retain existing light penetration • Optimising noise wall height to balance visual impact with noise attenuation.
Substations	Instilling industrial character.	<ul style="list-style-type: none"> • Architectural screening to building surrounds, context-sensitive to location • Architectural building façade to soften appearance in areas of high visual sensitivity • Landscape treatment to soften appearance in highly visible areas.
Relocatable Electrical Buildings (REB)	Visual prominence and clutter in public domain	<ul style="list-style-type: none"> • Placement within rail corridor or against existing structures • Coloured to blend with background in areas of low-medium visual sensitivity • Architectural screening or façade treatment in areas of high visual sensitivity
Shared User Paths	Lack of visibility and safety.	<ul style="list-style-type: none"> • Soft landscape to SUP surrounds • Proposed lighting to underpass • Upgrade to fencing to interface between rail and SUP • Seating nodes at 200m and bike station every 1km

The following viewpoints are likely to have a reduction in the residual visual impact with the above avoidance in design mitigation measures applied:

- VP2 from High to Moderate residual visual impact
 - > Soft landscape to SUP surrounds including tree screening would provide partial screening of the Sunshine up-end concourse for adjacent residents, reducing the visual impact.
- VP26 from High to Low residual visual impact
 - > Use of transparent material for the noise barrier adjacent the Aged Care facility would retain existing light penetration and views from the windows looking out on the railway corridor. For Aged Care residents, this results in a reduced visual impact.
- VP28 from Moderate to Low/Neutral residual visual impact
 - > Offsetting the wall to within the rail reserve provides space for an SUP and linear reserve-like area with low level planting. The alternative location of the noise wall will enable existing vegetation to be retained, limiting the visual modification.

Additionally, mitigation measures are likely to enhance the landscape setting but make no change to the overall visual impact due to the bulk and height of proposed structures for the Albion Station precinct (VP14) and the Cranbourne Avenue pedestrian overpass (VP17 and VP19).

9.2 Construction phase mitigation

At the time of this report, construction elements have not been designed. The below provides an approach based on construction access and build sites in proximity to the Site.

Table 9.2 Avoidance in design/ mitigation measures to key Project elements

Key visual elements	Potential impact	Construction mitigation measures
Construction worksites	Visual impacts of construction worksites	<ul style="list-style-type: none"> • Installation of temporary screens/site hoardings to minimise exposure of construction areas from local viewpoints. • High quality hoarding around construction sites within the public realm, with consideration given to the potential for public art integration to soften the visual impact of the hoarding. Opportunities for the use of interpretative designs on hoardings during construction to visually display the history and significance of heritage items along the Project route would be investigated (Figure 7.1 - Figure 9.3). • Where feasible and reasonable, the elements within construction sites would be located to minimise visual impact, for example materials and machinery would not be visible above temporary screens. • Storage areas and associated works are to be in cleared or otherwise disturbed areas away from residential areas.
Heritage elements	Screening of heritage elements which contribute to the landscape character/sense of place	<ul style="list-style-type: none"> • Construction worksites should avoid and protect heritage structures and items of archaeological significance.
Public access	Disruption to public access	<ul style="list-style-type: none"> • Maintain access within public reserves and shared use paths or provide alternative routes for pedestrians and cyclists that are legible and do not add to a significant length in journey. • Provide wayfinding signage where pedestrian and cycling routes are altered.
Light pollution	Construction lighting glare and light spill	<ul style="list-style-type: none"> • Where possible, lights will be used at the lowest effective level and would be directed downwards to the work area and away from incoming viewpoints and oncoming traffic. • Site lighting is to be designed to minimise glare issues and light spillage into adjoining properties and be generally consistent with the requirements of <i>Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting</i>.
Vegetation and landscape	Visual impacts from the removal of existing vegetation	<ul style="list-style-type: none"> • Existing trees adjacent to the works will be retained and protected where possible to screen construction support sites, minimising clearing where possible.

Key visual elements	Potential impact	Construction mitigation measures
		<ul style="list-style-type: none"> Where possible, trees will be trimmed rather than removed. Works would be carried out by a qualified arborist. All areas disturbed by construction and not required for operation of the project are to be restored to existing condition. Early planting works are to be considered to provide a screening buffer that has time to mature before the project is fully operational.

The following viewpoints are likely to have a reduction in the construction visual impact with the above construction mitigation measures applied.

- VP5 from High to Moderate construction visual impact
 - The retention of trees nearest Anderson Road and the use of site hoardings to minimise the exposure of construction, has the potential to reduce visual impacts for residents.
- VP7 and VP8 from High to Moderate to construction visual impact
 - The use of site hoardings to minimise the exposure of construction worksites located at Barclay Reserve and Talmage St to reduce the visual impact to SUP users and residents.

Additionally, the retention of trees within construction worksites is likely to limit the visual medication, however the impacts are typically based on proximity.



Figure 9.1 Example of construction hoarding with graphics

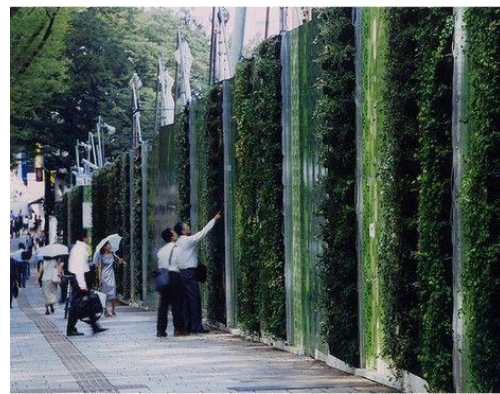


Figure 9.2 Example of temporary living wall



Figure 9.3 Example of construction hoarding
(image: <https://www.facebook.com/metrotunnel/posts/the-final-section-of-hoarding-on-the-metro-tunnel-construction-site-in-jj-hollan>)



Figure 9.4 Example of Tree Protection Fencing

9.3 Operational phase mitigation

Mitigation of potential visual impacts as a result of the Project are considered in relation to:

- Local Council guidelines on minimising visual impacts on the John Darling and Son Flour Mill from Ballarat Road (refer to Section 5.3.2); and
- In accordance with guidance provided by Plan Melbourne, including:
 - Outlines improvements to local travel options including creation of pedestrian friendly streets, cycle networks, safety and accessibility and improved streetscapes.
 - As an NEIC (National Employment and Innovation Clusters), Sunshine will need high levels of amenity to attract businesses and workers, including public transport, walking and cycling paths.
 - Promotes urban design excellence in the built environment with the Victorian Government to lead by example, with a focus on great place-making outcomes.

The mitigation measures described in the following Table 9.3 are good design principles to limit the risk of visual impacts; however, they do not further reduce the assessed residual impacts for Project elements within State Project Land.

Table 9.3 Mitigation measures to built form

Key visual elements	Potential impact	Mitigation measures to built form
MAR Viaduct	Visual prominence and character influence on existing heritage buildings	<ul style="list-style-type: none"> Where possible, frame views of the John Darling and Son Flour Mill from Ballarat Road, locating overhead gantries to minimise obscuring or dominating the view, and having a high level of visual permeability of the above deck elements. There is opportunity to provide historical interpretation within improved activity areas and shared used paths
Albion Gateway feature	Visual prominence and character influence on existing heritage buildings	<ul style="list-style-type: none"> Colour finish and lighting to be sufficient contrast but complimentary to the John Darling and Sons Flour Mill
Maribyrnong River Bridge, M80 Western Ring Road Bridge (M80 Bridge) and Airport Viaduct	Visual bulk of structure	<ul style="list-style-type: none"> Where piers are in a public setting, the finish should be commensurate with the urban design setting (Figure 9.5). Colour of piers to be visually recessive to the existing setting.
Cranbourne Avenue pedestrian overpass	Visual bulk of structure	<ul style="list-style-type: none"> Transparent safety barriers on pedestrian overpasses should be considered to assist with the reduction of bulk and retain visual permeability for desirable view lines, as demonstrated in Figure 9.6.
Shared User Paths	Visual clutter of utilities and furniture	<ul style="list-style-type: none"> Consideration to the opportunity to combine several above-ground street elements (e.g., lighting, traffic signals and overhead wiring) on common use poles to reduce visual clutter and to reduce potential impacts on existing awnings, forecourts and footpaths. High quality fencing suitable for parks and public spaces will be used where construction ancillary facilities are in close proximity to sensitive residential receivers such as residents and users of recreational space. Consider structural options which reduce the bulk and allow for visual permeability, such as through truss structures.
Substations	Contrast to the existing setting	<ul style="list-style-type: none"> Ancillary buildings should wherever possible be constructed in an architectural style, use of material and colours which reflects the overriding vernacular of the landscape character. Architectural screening to building surrounds, context-sensitive to location Architectural building façade to soften appearance in areas of high visual sensitivity Landscape treatment to soften appearance in highly visible areas.

Key visual elements	Potential impact	Mitigation measures to built form
Sunshine Station extension	Contrast to the existing setting	<ul style="list-style-type: none"> Architectural design is to be commensurate with existing station. Screening through the use of architectural materials (i.e., fins, perforated metal) should be applied to limit public views over private properties.



Figure 9.5 Single piers with a slender super-T girder and coloured base (image: Caulfield to Dandenong).



Figure 9.6 Transparent perforated mesh barriers (image: <https://productselector.co.nz/products/perforated-metal-infrastructure>).

9.3.1 Vegetation and landscape

- On-site mitigation should focus upon increasing street trees adjacent to the proposed alignment as well as the smaller scale elements such as substations, ancillary buildings and noise walls.
- Continuous buffer planting adjacent to sensitive receptors is considered an adequate measure to screen from external view or enhance the landscape.
- Where the loss of trees and other native vegetation is unable to be mitigated through the above measures, the Project would replace trees removed, in accordance with a tree replacement strategy to be developed during detailed design. This strategy would identify suitable species and planting configurations for inclusion along the Project alignment, to provide commensurate amenity with the original trees.
- Protect the existing row of Sugar Gums on Talmage Street from development and earthworks, by providing sufficient offset as designated by a qualified arborist.

9.3.2 Night lighting

The strategy for night lighting would be to ensure the Project contributes to safe and legible public realm. The lighting required for the Project would be mitigated as follows:

- All lights would be located at a similar level to existing street lighting to minimise the light spill onto adjacent areas (Figure 9.8).
- All lights would be directed downwards, with the exception of limited feature lighting within activity areas that would be capped by a surface material.
- Light colour should be sensitive to the surrounding context and be selected to complement the surrounding lighting colour (Figure 9.7).
- Australian Standard levels for public safety and CCTV would be used, so no unnecessary lighting would be required to be provided.



Figure 9.7 Example of lighting to building contrasting to background spire (image: Workshop Architecture)



Figure 9.8 Gold Coast gateway sign example of complimentary to road context (image: LOT-EK)

10. Summary of findings

The State land landscape and visual impacts of the Melbourne Airport Rail have been assessed within this report. Due to the large extent of the Project and the number of proposed elements, this assessment has been divided into two Sections (Sunshine Section works and Corridor Section works). Following is a summary of the landscape and visual impacts which would potentially arise because of the Project, during construction, at operation and the resulting residual impacts.

10.1 Landscape Character

A baseline analysis of the landscape character was undertaken based on land use and site context. There are eight LCTs within the Study Area, described below with their ability to absorb change.

- LCT 1 Industrial: Industrial complexes are a common presence along the MAR corridor, typically of highly modified landscapes with little to no natural characteristics. Impacts which may occur as result of the Project are indirect to this LCT, except for the construction worksites and substation proposed in industrial areas.
 - > HIGH ability to absorb change - existing high degree of modification and lack of natural characteristics.
- LCT 2 Residential: The presence of built form (houses and roads) are more prevalent than natural features, with generally a homogenous style (one to two-storey brick or timber) of residential suburban development. Within Albion, there are some post-war housing associated with the former Sunshine Harvester works and subsequently have a heritage overlay. Impacts which may occur as result of the Project are typically indirect to this LCT, with the exception of those residences where a noise wall is proposed to their boundary.
 - > VERY LOW ability to absorb change - private settings and residents sensitive to their surrounds.
- LCT 3 Commercial: Sunshine has a rich industrial heritage character, which is reflected through numerous historical buildings developed and influenced by the Sunshine Harvester Works. Direct impacts will occur within Albion Station precinct, where revitalisation to the east forecourt at the base of the John Darling & Sons Flour Mill is proposed. Elsewhere within the Project, impacts are considered indirect to this LCT.
 - > MODERATE ability to absorb change - existing high degree of built form.
- LCT 4 Waterway reserves: This area largely contains terrestrial elements such as vegetation and water that are formed naturally or restored in the case of the Upper Stony Creek Waterway Reserve. The Maribyrnong River is an important river system and is ecologically and culturally important, with potential sites of cultural sensitivity. Impacts which may occur as result of the Project are direct to this LCT, within the Maribyrnong River Valley and Steele Creek Tributary Reserve.
 - > VERY LOW ability to absorb changes proposed by built form in areas valued for natural characteristics.
- LCT 5 Recreation parks: Within the study area are garden parks, neighbourhood parks and sports reserves that are all designed for landscape amenity and open space for public recreation. Direct impacts because of the Project are anticipated at HV McKay Memorial Gardens, Barclay Reserve, 1A Talmage St and Border Reserve.
 - > VERY LOW ability to absorb change - valued for public amenity and aesthetics.
- LCT 6 Grasslands: Few patches of native grasslands remain in the Victorian Volcanic Plain Bioregion. The spaces characterised within this study as 'grasslands' typically have a sense of openness or vastness including Sunshine Energy Park (rehabilitated landfill site), Matthew Hill Reserve and some areas beneath transmission towers. Indirect impacts only are anticipated.
 - > LOW ability to absorb change - valued native habitat and open space.
- LCT 7 Airport environs: A built-up landscape interspersed with various buildings, roads and some canopy trees. Impacts to State land covered in this report are considered indirect.

- > MODERATE ability to absorb change – receptor is transient so not overly sensitive to changes, however there is some sense of place or identity.

- LCT 8 Railway infrastructure: Areas including Sunshine and Albion-Jacana rail corridors, used for freight and passenger trains. Structures of higher sensitivity include the Albion Viaduct (HO5/HO107) and Steele Creek rail embankment (HO37). Impacts because of the Project are direct to this LCT.
- HIGH ability to absorb change in a highly modified environment.

The sensitivity of the viewer and the ability of the landscape setting to absorb change, combined with the level of visual modification due to the Project, are used to define the visual impact.

10.2 Visual Impacts

10.2.1 Summary of Construction Visual Impacts

The assessment of construction visual impacts are based on the proposed location of temporary worksites described in Section 7.2.1 as well as the proximity to proposed key Project elements which will require temporary construction activity.

10.2.1.1 SUN

Construction worksites are proposed in a few locations of high visual sensitivity including:

- Sunshine Station – Construction works experienced by residents adjacent the building of the up-end concourse, due to its scale.
- Barclay Reserve and Talmage Street – These construction worksites are to either side of Talmage St and are in a residential area. VP7 (Barclay Reserve) and VP8 (Talmage Street) are assessed as having high visual impacts experienced by residents and park visitors during construction. These construction worksites are expected to be operational for approximately three to four years.
- HV McKay Memorial Gardens (north corner) - VP3 at HV McKay Memorial Gardens and VP5 at Anderson Rd south have close and direct views of construction activity, including removal of existing trees, resulting in high visual impacts during construction, for a period of approximately 3 years and 10 months respectively.
- Gilmour Road – Construction worksites adjacent the rail corridor and removal of existing street trees, will be a high visual impact for Wetland Reserve users (VP16) for approximately 3 years and 11 months.

Public transport users at Albion Station will experience high visual impacts during construction due to the level of works being carried out in close viewing proximity to receptors.


Moderate visual impacts during construction were assessed for VP4 (Harvester Rd) and VP14 (Albion Station) where construction of key elements is likely to be visible but in a setting that is already highly influenced by rail activity. VP9 (Sydney Street) is in a setting of high sensitivity and visibility of construction works is not direct.

Low visual impacts are experienced from viewpoints (VP6 and VP12) located further away from construction worksites, with intervening built form or lower levels of visual sensitivity. VP15 at St Albans Road is close to construction worksite (located at Sunshine Energy Park and existing industrial sites surround St Albans Road) yet it is of a very low visual sensitivity with a resulting low visual impact.

10.2.1.2 COR

In the COR Section, construction worksites are proposed in a limited number of high visual sensitivity locations including:

- Cranbourne Avenue – The construction of the pedestrian overpass will be noticeable for adjacent residents at Cranbourne Avenue (VP17) and Gilmour Road (VP19).
- Maribyrnong River Valley - There will be some larger construction compounds, laydown areas and disturbance of ground conditions including some vegetation removal for construction of the MRB. These will likely be barely noticeable from VP22 (Trestle Bridge lookout), which is representative of adjacent residents, but will be most noticeable from the Maribyrnong River Trail (VP24 and VP25). The trail is



likely to be closed to public access during construction and any trail diversions will be a new visual setting for users. This results in a high visual modification for users and consequently a high visual impact during the construction phase, which is set for approximately 4.5 years.

- Border Drive Reserve – A construction worksite is proposed for a period of 5 years. VP28 has a high level of visual modification from the existing reserve setting for nearby residents and park or playground users, during construction.

High visual impacts during the construction phase are expected for VP17 (Cranbourne Avenue) and VP19 (Gilmour Road) which are in high sensitivity residential areas. The construction works of the Cranbourne Avenue pedestrian overpass and noise walls are in close proximity to residents and of a moderate to large scale that contrasts to the existing setting. Removal of existing street trees along the south side of Gilmour Road, will cause a temporary loss of visual amenity.

High visual impacts are also expected for VP29 (Moyangul Drive), a residential area with a high level of visual sensitivity. Noise wall or SUP realignment works will be in close proximity to houses and expected to be noticeable.

Moderate visual impacts during construction have been assessed for:

- VP18 (Mansfield Ave) – Highly sensitive residential area due to construction of noise walls in a wide field of view but of a moderate scale.
- VP31 (Milleara Road/Calder Freeway) – Highly sensitive residential with existing road influences. The civil road and SUP works will be in close proximity, with SUP access temporarily closed.
- VP34 (Western Ring Path at Steele Creek) – A setting of moderate visual sensitivity. The construction worksites and activity for the M80 bridge is expected to be noticeable compositional change to the apparent waterway reserve, though at a moderate distance.
- VP38 (Steele Creek Tributary Reserve) - Based on the land use zoned PPRZ, this viewpoint is of moderate visual sensitivity. Construction worksites located west of Tullamarine Park Drive and construction vehicles constructing the viaduct are likely to have moderate level of visual modification to the setting, resulting in the overall visual impact rated moderate.

Low visual impacts during construction are assessed for those viewpoints distanced from construction activity for the MRB (VP23, VP26), in areas of very low visual sensitivity (VP20, VP21, VP30, VP32, VP36, VP37), or construction activity is screened from viewpoints (VP33, VP35).

10.2.2 Summary of Operational Visual Impacts

10.2.2.1 SUN

In the Sunshine Section, the Project proposes key elements within the existing rail corridor and to the Sunshine and Albion rail stations to accommodate the MAR rail network. Key elements which are likely to be a noticeable to dominant visual influence include an up-end concourse at Sunshine Station, the MAR Viaduct and Albion Gateway. Subsequent works will be noticeable at a close distance from elements including Albion Station precinct upgrades, realignment of the existing SUP (including continuation from Albion Station to St Albans Road), existing rail corridor modifications and existing road network modification. The visual impacts as a result of key Project elements is summarised below.

- Sunshine Station

A high visual impact was assessed for VP2- Station Street, as a result of the proposed Sunshine Station up-end concourse. Although the proposed structure does not contrast vastly to the existing setting, it is in a residential setting of high visual sensitivity, resulting in a high visual impact for residents.

- MAR Viaduct

High visual impacts experienced in residential areas of high visual sensitivity including VP8-Talmage St and VP7 – Talmage St, where the introduction of the MAR Viaduct has a moderate visual modification softened by landscaping surrounding the SUP realignment. Whereas in VP9-Sydney St, the level of modification is high with the increased scale and height of the elevated rail and Albion Gateway feature. Although the existing setting is influenced by road and rail infrastructure, the elevated placement and scale of proposed elements are dominant in the field of view.

VP13 at Ballarat Rd looking towards the heritage protected John Darling and Sons Flour Mills, has a moderate visual sensitivity due to motorists experiencing the view for a short time, with the view of the heritage building to be preserved under Brimbank City Council objectives. The level of modification is high, as the elevated rail partially obstructs the view of the John Darling and Son Flour Mill, consequently the overall visual impact is rated high.

The level of modification for VP14 at Albion Station carpark is high, given its close proximity and scale of the MAR Viaduct, Albion Gateway and station platform extension, together with carpark upgrade works. The level of visual sensitivity for the public transport users is moderate, resulting in a high visual impact.

Moderate visual impacts were assessed for VP5 Anderson Road south, with a high visual sensitivity, however the level of modification imposed by the MAR Viaduct is considered low in the field of view. VP16 at Gilmour Rd has a high visual sensitivity, with the bulk and height of the proposed structure, highly visible in the existing setting.

VP3 from HV McKay Memorial Gardens is in a setting of high visual sensitivity, with the proposed retaining wall and screen introducing a hard edge to the gardens, with the loss of some trees. The change to the visual conditions shifts from views of the rail corridor and background urban setting, to a view which is likely to concentrate inwards towards the gardens and a subsequent moderate degree of modification.

Low visual impacts were assessed for VP4, VP6, VP10, VP12, VP15 and very low for VP11 where the Project barely noticeable and partially screened by intervening built form and vegetation.

- Albion Gateway

The effects of the Albion Gateway have been assessed from viewpoints where the feature is visible from residential areas, roads and activity areas. The feature is most noticeable from the nearby residential area to the west of the railway station as assessed in VP9 – Sydney Street. From this viewpoint the Albion Gateway is a dominant new feature aligning with the MAR Viaduct and at close proximity. In VP14 Albion Station carpark, the rendered photomontage demonstrates the feature is of a comparable height to the heritage John Darling and Son Flour Mill, contrasting to the solid concrete silos and red brick building. Viewpoints from either side of Ballarat Road rail overpass (VP11, VP12 and VP13), indicate that the alignment of the feature in line with the elevated rail, contrasts to the Ballarat Road boulevard trees, though is subsequently partially screened at angled views.

- Relocatable Electrical Buildings (REBs)


REBs will be located within rail land at Sunshine Station (VP2), Harvester Road (VP4), Talmage Street reserve (VP8), Ballarat Road (VP14), Cranbourne Street (VP17) and St Albans Road (VP15). The REBs will be less noticeable than the larger and elevated rail components. In the Talmage Street reserve, perimeter screening that blends into the reserve landscaping will help screen the structure. Where the REBs are located adjacent Sunshine SUP and Harvester Road SUP, the structure is a slight contrast to the linear paths. Existing landscaping at Harvester Road will help soften the structure.

10.2.2.2 COR

In the Corridor Section, the Project proposes key elements within the existing rail corridor and proposes a new rail bridge over the Maribyrnong River Valley, and an elevated rail splitting from the Albion-Jacana rail line, to connect to the Melbourne Tullamarine Airport. Key elements which are likely to be a noticeable dominant visual influence include the Maribyrnong River Bridge, the M80 Western Ring Road Bridge, Steele Creek Viaduct and Cranbourne Avenue pedestrian overpass. Subsequent works will be noticeable at a close distance including two new substations, noise walls and realignment of the existing SUP at Fullarton Road, existing rail corridor modifications and existing road network modification. Currently the COR rail alignment is ARTC only and is not electrified. The MAR rail will include OHW and gantries at regular intervals. The visual impacts as a result of key Project elements is summarised below.

- Cranbourne Avenue pedestrian overpass

The pedestrian overpass is proposed over the existing rail corridor connecting from the end of Cranbourne Avenue on the east to Gilmour Road (near Clayton Street) on the west. There are private residential houses which have potential views of the structure, with viewpoints representing these highly visual sensitive areas assessed at VP17 and VP19. There is a high level of visual modification due to the introduction of the large scaled structure (at a height of approximately 11m), providing more of an



urban setting to the residential streets. Furthermore, proposed noise walls impose visual obstruction across the rail corridor between residential areas. The resulting visual impacts to VP17 and VP19 are high, though it is noted that there is not a high number of residents impacted. Existing street trees removed from Gilmour Road for construction, will be reinstated at operation, although will take a number of years to establish.

- Noise walls

Noise attenuation barriers have been proposed to the rail corridor boundary adjacent to residential houses. The assessment of viewpoints within Sunshine North (VP17, VP18 and VP19) and Keilor East (VP29), introduces a 2.5-3.5 m high noise wall where there are no existing solid fences. For the purpose of the LVIA, the noise walls are assumed to be solid concrete panels between steel posts. This has spatial effects on the landscape setting, as well as obstructing visual permeability of and through the rail corridor, with resulting high visual impacts (VP17, VP18 and VP19).

For the proposed noise wall parallel to Moyangul Drive (VP29), the removal of existing screening vegetation together with the introduction of a noise wall, results in a high level of visual modification, consequently a high adverse visual impact.

There is typically a low to moderate level of visual modification for those noise walls proposed where there are existing residential fences (approximately 1.8 to 2m high), with a height increase to between 2.5-3.5 m high. The exception is for the Aged Care facility on Sterling Drive (VP26) which has windows looking out onto the rail corridor. The resulting impact would be high adverse, screening both light and window views.

The Western Ring Path SUP bridge beside Calder Freeway has an existing solid noise wall between the road and the SUP, which creates a disconnect for SUP users from the surrounds. The proposed transparent acrylic noise wall will be located to the outside of the SUP, acting also as a bridge safety barrier. Subsequent removal of part of the exiting noise barrier between the SUP and Calder Freeway will increase the visual permeability, resulting in a very low visual impact for SUP users.

- Maribyrnong River Bridge

The Project proposes an elevated rail bridge over the Maribyrnong River Valley, in a location that is a PUZ4. The MRB will be the third bridge within the MRV Study Area, located next to the existing Albion Viaduct and approximately 400 meters south of the EJ Whitten Bridge.


The potential visual impacts of the proposal are in context of the effects that the MRB will have in the landscape setting of the Maribyrnong River Valley and its existing level of landscape modification. It is important to differentiate this to potential visual impacts to the VHR-listed Albion Viaduct, which are not assessed within this report. However, it is noted that views of the Albion Viaduct are partially screened by the MRB when viewed from the northwest towards the EJ Whitten Bridge.

The most noticeable elements of the MRB include the scale of the piers at a height up to 40m. The piers at approximately 60m spans, whilst noticeable, will have little effect on view of the landscape and valley beyond. The bridge decking is proposed to be linear, minimising further verticality or bulk, in line with the horizon when viewed from the surrounds at a similar level.

Although the scale and height of the structure would be a prominent change in the landscape, the degree of visual exposure is limited to within the Maribyrnong River Valley. Overall the landscape and visual appraisal of the MRB demonstrates that views are predominately limited to within the foreground (500 metres) of the MRB.

VP24 is from the Maribyrnong River Trail and VP25 is representative of a worst-case scenario, situated across the river valley, are expected to have the greatest level of visual impact. These viewpoints have a moderate visual sensitivity, within a setting ('Waterway Reserve') with a very low landscape absorptive capability. The level of visual modification from these viewpoints is moderate, due to the close proximity and scale of the MRB prominent within the view, although there is an existing bridge in the viewpoint of the same height. It is noted that from the Maribyrnong River Trail (VP24), the view is experienced for a short duration by recreational trail users, as existing vegetation often screens the view towards the bridge.

VP22 at the Trestle Bridge lookout and VP23 from the residential reserve are viewpoints have a high visual sensitivity, overlooking the Maribyrnong River Valley landscape character 'Waterway Reserves' which has a very low landscape absorptive capability. The level of visual modification from VP22 is



moderate, in close proximity, resulting in a moderate visual impact. At VP23 the MRB is barely perceptible, presenting a low visual modification and resulting in a low adverse visual impact. In both these viewpoints, views of the river valley and the Albion Viaduct remain prominent.

VP21 is representative of views by a high number of motorists on EJ Whitten Bridge. This viewpoint has a low visual sensitivity as the result of viewers being transient, and the view experienced for only a short duration. The level of visual modification as a result of the Proposal is low, resulting in an overall low visual impact.

- M80 Western Ring Road Bridge (M80 Bridge) and Airport Viaduct

The M80 Bridge splits from the Albion-Jacana railway line north of Fullarton Road and south of the heritage rail embankment, curving around to the west over Steele Creek in land zoned PUZ4, PUZ1 and RDZ1.

Viewpoints with a high visual sensitivity were assessed in adjacent residential areas where there were potential views of the Project including at Moorna Drive/Roberts Road (VP30) and representative of residential backyards along the west side of Parer Road (VP35). The rail corridor and moving trains, together with large transmission towers are an existing influence in the setting of both these viewpoints. The proposed M80 Bridge is noticeable behind and above the heritage rail embankment (HO37) in VP30, introduces a built structure which contrasts to the existing setting resulting in a high visual impact. The structure as viewed from VP35 is further away and is unlikely to be visible or at worst, only partially visible above existing 1.8-2 m high residential fences, resulting in a moderate visual impact.

Viewpoints with a moderate visual sensitivity and representative of views from recreational trails (Western Ring Path SUP) were assessed from the Western Ring Path at Steele Creek (VP34) and from within the Upper Steele Creek tributary reserve (VP38). The M80 Bridge and Airport Viaduct are highly visible and intrusive in regard to the size, scale and extent within the field of view, however the structures do not contrast with the existing setting which is highly influenced by large road and electrical infrastructure. Consequently, the visual modification is considered moderate, resulting in moderate adverse visual impacts.

The proposed structures are expected to be highly visible by motorists travelling on the M80 (VP36) and road overpasses at Fullarton Road (VP32) and Airport Drive (VP37). However, the presence of bridges crossing the M80 is a regular occurrence for motorists and the ability for these viewpoints to absorb change is high. The design of the deck and parapets along with the piers and OHW masts, provides a visually consistent structure that visually recessive also through its colouring (light grey). Additionally, emergency access stairs are commensurate with the scale and materiality of road gantries. Within close proximity the structures have a high level of visual modification, combined with the low to very low level of visual sensitivity, the resulting visual impact is moderate, from the closest viewpoint on the M80 (VP36) and low to very low from existing road overpasses further away (VP32 and VP37).

- Substations

The visual impacts for three proposed substations located within Sunshine North industrial area (VP20), near Keilor Park Drive (VP27) and at Fullarton Road (VP32), have been assessed. The proposed locations are within existing industrial areas with a very low visual sensitivity. VP27 is adjacent sensitive residential receivers, however the visual modification of the substation is a low contrast from the existing road and industrial influence. The appearance and scale of the substations is expected to be commensurate with surrounding warehouses and sheds, consequently the level of modification is very low resulting in low to very low visual impact of the substations within the landscape setting.

It is recognised that while road users are not considered to have a high sensitivity to their surrounds, Keilor Park Drive substation will be highly visible from the M80 and Calder Freeway and Fullarton Road overpasses (VP32 and VP36). The Keilor Terminal Station (opposite the substation site) has a landscape buffer and it is expected that the substation would have a similar approach to its treatment.

- Relocatable Electrical Buildings (REBs)

The REB in the road reserve at the south end of Moyangul Avenue (VP29) is land zoned Residential (R1Z), will have architectural screening or façade treatment to help integrate it into the setting.

10.3 Summary of residual impacts

Visual impacts that are assessed as having moderate or high residual impact ratings are summarised in 10.3.1.1 (SUN residual visual impacts) and 10.3.1.2 (COR residual visual impacts) from the representative viewpoints for the Project, including the mitigation measures which have been considered. These viewpoints have resulting residual impacts due to the height and scale of the Project elements remaining dominant in the field of view or providing a contrast to the existing setting after mitigation measures had been applied.

Mitigation measures are discussed in Section 9.1. There are limited design mitigation measures applied in the assessment, given the large scale of many of the proposed key elements, thus much of the design mitigation is centred around the landscape design to screen and soften views of proposed structures and their settings.

A summary of residual impacts within the SUN Section are included in Table 10.1 and discussed by the key Project elements below.

10.3.1.1 SUN Section

- Sunshine Station extension

The up-end concourse at Sunshine Station is of a scale of approximately 6 m height within an existing rail corridor. The appearance of the structure is commensurate with the station structures situated further north and away from adjacent residential houses with a high visual sensitivity. No mitigation has been proposed and residual impacts are considered high for residents along Station Street.

- MAR Viaduct

Visual impacts are higher for those viewpoints closest to the key elements (VP9 – Sydney St residents, VP13 – Ballarat Rd motorist and VP14 – Albion Station carpark). Mitigation measures proposed by the landscape and architectural design have limited capacity to significantly reduce the visual impacts owing to the height of the elevated rail and feature sculptures.

Landscaping surrounding proposed SUP realignment is likely to enhance the existing setting for Anderson Rd residential receptors (VP5), however it is unlikely to effectively screen the large scale and geographical extents of the MAR Viaduct, to reduce visual effects. The proposed landscaping along Talmage St reserve will interrupt views of the elevated structure and together with an enhanced landscape setting, reduces the residual visual impact to moderate for Talmage St residents (VP8) and SUP recreational users (VP7).

As the Project is within an existing rail corridor, the Project is not proposing an element that is contrasting to the existing setting. There is a moderate residual visual impact for VP3 at HV McKay Memorial Gardens, where the proposed retaining wall partially encloses the existing setting. Screening vegetation or climbing plants to the retaining wall is likely to soften its appearance, however there is a loss of visual permeability to the bordering garden path. It is subjective whether the view of the rail corridor or an enclosed 'garden wall' is a preferred outcome. The visual impact assessment provides that the moderate level of visual modification is a result of a new component (retaining wall).

- Albion Gateway

The feature is likely viewed on approach from Ballarat Road, from the Albion Station precinct and from some viewpoints within residential streets within close proximity. There is only one significant viewpoint assessed of the John Darling and Son Flour Mills (VP13), where the feature would be prominent when travelling over the rail overpass. The UDS prescribes the feature to be visually recessive compared to the bulk and scale of the adjacent heritage protected John Darling and Sons Flour Mills (HO4). Residual impacts are unlikely to adversely increase the level of visual modification.

- Albion Station precinct

There are no existing sensitive viewpoints surrounding the Albion Station precinct. The assessment of VP14 to the eastern station carpark, comprises the MAR Viaduct, Albion Gateway feature and carpark upgrade, which all contribute to a high level of visual modification. Proposed landscaping to the carpark, along with trees proposed within the John Darling and Son Flour Mill forecourt upgrade are included in the working draft design and not considered in the assessment of residual impacts.

Table 10.1 Summary of SUN residual visual impacts

PROJECT ELEMENTS	VIEWPOINT	MITIGATION MEASURES	RESIDUAL VISUAL IMPACTS
Sunshine Station up-end concourse	VP2: view representative of residents at Station St	No mitigation proposed – up-end concourse at scale and appearance commensurate with existing station.	HIGH (no change)
MAR Viaduct and retaining wall	VP3: Looking north along the path in HV McKay Memorial Gardens	Vegetation screening to retaining wall to soften appearance.	MODERATE (no change)
MAR Viaduct and SUP realignment	VP5: view representative of residents at Anderson Rd (south) rail overpass	SUP realignment includes landscape amenity improvements.	MODERATE (no change)
	VP7: Recreational users at Talmage St from Anderson Road bridge SUP	SUP realignment includes landscape amenity improvements.	MODERATE (from High)
MAR Viaduct and Albion Gateway	VP8: Residents at Talmage Street	No mitigation proposed for structures	MODERATE (from High)
	VP9: Residents at Sydney Street, looking	No mitigation proposed for structures	HIGH (no change)
	VP13: Ballarat Road overpass looking towards John Darling & Sons Flour Mill	No mitigation proposed for structures	HIGH (no change)
	VP14: Albion Station east carpark	No mitigation proposed for structures	HIGH (no change)
MAR Viaduct and noise wall	VP16: Recreational users of wetland reserve on Gilmour Road	No mitigation proposed for structures.	HIGH (no change)

There has been further consideration to minimise or avoid adverse impacts as a result of the Project including:

- Partial screening of the Sunshine Station up-end concourse has the potential to reduce VP2 residual visual impacts from high to moderate.

10.3.1.2 COR Section

A summary of residual impacts within the COR Section are included in Table 10.2 and discussed by the key Project elements below.

- Cranbourne Avenue pedestrian overpass

The Project proposes a contrast to the existing residential setting with the introduction of a large scaled urban structure and noise walls. The design mitigation assists in integrating the appearance of the structure through landscaped mounding around the ramp, increased vegetation (trees and shrubs) and public amenity for pedestrian and cyclists. The residual visual impact remains high due to the scale of the structure at approximately 11 m in height and 50 m across the rail corridor, not able to be screened from view, and remaining a high level of visual modification.

- Noise walls

Vegetation screening is proposed to soften the appearance of the noise walls, deter graffiti and improve the landscape amenity. At Mansfield Ave (VP18) and Moyangul Drive (VP29) the effect of screening vegetation reduces the visual impact from high to moderate. Screening vegetation against the noise wall and to the residential fence boundary within the SUP reserve at Milleara Road (VP31), provides an enhanced landscape setting which is considered a neutral residual visual impact.

Vegetation screening is also proposed for Gilmour Road (VP19) and Cranbourne Ave (VP17), which softens the appearance of noise walls, however these viewpoints are modified by the scale of the Cranbourne Avenue pedestrian overpass, thus residual impacts are not reduced by this vegetation screening.

Noise walls located alongside existing residential back fences have a low level of visual modification, except where the view is blocking windows looking out onto the rail corridor, as occurs at the Aged Care facility (VP26) where the residual visual impact is high, with no mitigation proposed for the noise walls.

- Maribyrnong River Bridge

The setting and height of the MRB means it cannot effectively be screened. Mitigation is concentrated on limiting the MRB visually imposing on the Maribyrnong River Valley setting, which is of natural and remote character. Mitigation is thus limited to reducing the bulk of the proposed structure, with potential to contrast from the Albion Viaduct, and providing a structure that is sympathetic to its setting.

The visual impacts have been assessed based on the working draft design of the MRB. As such, there is no change in the residual visual impacts which are moderate for VP22 – representative of residents near Trestle Bridge lookout, VP24 and VP25 – Maribyrnong River Trail SUP users.


- M80 Western Ring Road Bridge (M80 Bridge) and Airport Viaduct

The scale of the M80 Bridge and Airport Viaduct, similar to the MRB, means it cannot effectively be screened. Mitigation, within the setting which is highly influenced by road and industrial infrastructure is concentrated on enhancing the aesthetic appearance of the bridge and providing a structure that is sympathetic to the wetland reserve surrounding Steele Creek, in which the long structure is located.

Residual impacts remain unchanged from the operational visual impacts assessed. These are high adverse visual impacts for residents at Roberts Road/Moorna Drive (VP31), and moderate adverse for SUP users on the Western Ring Path near Steele Creek (VP34), motorist on the M80 near Steele Creek (VP36), and SUP users at Steele Creek tributary reserve (VP38).

Table 10.2 Summary of COR residual visual impacts

PROJECT ELEMENTS	VIEWPOINT	MITIGATION MEASURES	RESIDUAL VISUAL IMPACTS
Cranbourne Ave pedestrian overpass and noise walls	VP17: View from the end of Cranbourne Ave by residents	Use of on-fill structure to help blend and decrease massing of ramps, including planting and installation of mature trees	HIGH (no change)
	VP19: Gilmour Road residents looking north	Custom design wall finish/relief and vegetation screening to public facing area	MODERATE (reduced from High)
Noise walls	VP18: View from Mansfield Ave by residents	Custom design wall finish/relief and vegetation screening to public facing area	MODERATE (reduced from High)
	VP26: View representative of Sterling Drive residents	No mitigation to non-public facing noise walls	MODERATE / *HIGH
	VP29: Moyangul Drive	Custom design wall finish/relief and vegetation screening to public facing area	MODERATE (reduced from High)
Maribyrnong River Bridge	VP22: Trestle Bridge Lookout	No mitigation proposed for structures due to height and geographical extent. Key visual elements designed as kit of parts to create uniformed appearance and visually recessive where possible.	MODERATE (no change)
	VP24: view from Maribyrnong River Trail by recreational users		MODERATE (no change)
	VP25: view from Maribyrnong River Valley by recreational users		MODERATE (no change)
M80 Bridge and Airport Viaduct	VP33: view at Roberts Rd/ Moorna Drive towards rail embankment (HO37) by residents	No mitigation proposed for structures due to height and geographical extent. Key visual elements designed as kit of parts to create uniformed appearance and visually recessive where possible.	HIGH (no change)
	VP34: view from Western Ring Path at Steele Creek by recreational users		MODERATE (no change)
	VP35: view representative of Parer Road residents		MODERATE (no change)
	VP36: view from the M80 looking east by motorists		MODERATE (no change)
	VP38: Steele Creek Tributary Reserve at Beverage Drive, looking east towards the M80		MODERATE (no change)



There has been further consideration within the UDS and landscape and urban design documentation, to minimise or avoid adverse impacts as a result of the Project including:

- The use of transparent acrylic panels in lieu of the proposed concrete noise wall will limit the visual modification for residents, resulting in a reduced residual visual impact from high to low at VP26.
- At Moyangul Drive (VP29), the placement of the noise wall within the rail reserve provides space for an SUP and linear reserve-like planted area as well as helping to retain existing vegetation. This would reduce the visual modification, resulting in a change to the residual visual impact from moderate to low or neutral.

10.4 Lighting impacts

The sensitivity of the local landscape to the introduction of more lighting has been considered. Sensitivity depends on visibility, remoteness and scenic quality with the degree of enclosure afforded by the key factors' landform and vegetation, along with patterns of land use and settlements. Three different environmental lighting zones have been identified within the visual catchment of the project. These are:

- Environmental Zone E2: Low district brightness area – Sunshine Energy Park, Upper Stony Creek Transformation project, Barclay Reserve, H.V McKay Memorial Gardens, Maribyrnong River Valley, Border Reserve and Steele Creek tributary reserve.
- Environmental Zone E3: Medium district brightness area – Residential areas, industrial areas and rail yards.
- Environmental Zone E4: High district brightness area – Western Ring Road (M80), Ballarat Road, Anderson Road, St Albans Road, Calder Freeway, Fullarton Road, Keilor Park Drive and commercial areas.

The main potential receptors of light include the residential properties, roads and commercial areas in vicinity of the Site which are currently affected by existing light sources. Existing sources of light adjoining or in the immediate area surrounding the Project include:

- The existing residential properties surrounding the Project area;
- The existing commercial areas surrounding the Project area;
- Traffic and street lighting on the surrounding roads in particular Ballarat Road, Anderson Road, St Albans Road, Calder Freeway, Fullarton Road and Keilor Park Drive; and
- The trains within the Sunshine and Albion-Jacana rail lines, Sunshine and Albion stations.

Lighting of the Albion Gateway and the lighting from the train itself at the proposed elevated level, has the potential to result in a negative change to the night time setting of adjacent residents, albeit at a low level.

Additional proposed operational lighting of the new rail corridor is not expected to result in a negative change and is consistent with the existing setting.

The proposed lighting treatments for Sunshine and Albion Stations would not result in a negative impact to the setting due to the presence of existing lighting.

Overall, the Site already experiences lighting impacts from the rail corridor and adjoining lighting sources such as street lighting, advertising billboards, retail car parks and general sky glow from the urban area. Consequently, the operational lighting impacts for the Proposal is not expected to generate significant levels of lighting above that is currently experienced within a townscape. Therefore, the lighting impacts for the Project are low. Accordingly, the lighting assessment demonstrates that the Site is not sensitive to the introduction of new lighting.

10.5 Environment Effects Act 1978 Self-Assessment Criteria

The EE Act is relevant to the Project as it provides for the assessment of proposed projects that may have a significant effect on the environment. The Ministerial Guidelines under the EE Act provide the criteria used to determine whether a project warrants referral to the Minister for Planning. A project proponent is responsible

for assessing whether its project will have potential adverse environmental effects that could be significant in a regional or State context.

As part of this Impact Assessment, consideration has been given to the criteria specifically relevant to landscape and visual impact only to determine the potential extent of landscape and visual effects. The referral criteria relevant to this Impact Assessment and the associated response is provided in Table 10. below.

Criteria relevant to other environmental matters are addressed in the relevant impact assessment.

Table 10.3: Landscape and Visual Assessment of EE Act Referral Criteria

EE Act Self-Assessment Criteria	Landscape and Visual Response	Criterion for referral met?
Potential extensive or major effects on landscape values of regional importance, especially where recognised by a planning scheme overlay or within or adjoining land reserved under the <i>National Parks Act 1975</i> .	<p>The Project is unlikely to have an extensive or major effect on landscape values of regional importance, with no land reserved under the <i>National Parks Act 1975</i> in or adjacent to the State Project Land. This assessment identifies that whilst the construction of the new MRB viaduct over Maribyrnong River is likely to have a visual impact, particularly on the Maribyrnong River Trail, it would not represent an extensive or major effect to the landscape character of the area as described below.</p> <ul style="list-style-type: none"> • Within the COR area, the Maribyrnong River Valley is identified as having landscape values of regional importance. An Environmental Significance Overlay - Schedule 5 (ESO5) applies to the area under the Brimbank Planning Scheme. The ESO5 notes that the Maribyrnong River is a major feature of the regionally significant Brimbank Park and adjoining Council owned park, recreation and trail network and references the environmental values of the area. An Environmental Significance Overlay – Schedule 3 (ESO3) is also applied to the Maribyrnong River valley under the Moonee Valley Planning Scheme and seeks to protect the habitat values of the area. The landscape values of the Maribyrnong River Valley are therefore considered significant, with the landscape setting having a low ability to absorb change due to its natural characteristics. Although the Project is located within land zoned PUZ4, the scale of the MRB has the potential to influence the landscape setting. Of the Viewpoints subject to this assessment, VP24 and VP25 from Maribyrnong River Trail was identified as being likely to experience moderate visual impacts, with these impacts unlikely to be effectively mitigated due the height of the MRB. However, while visual impacts are likely to occur, it is considered unlikely that the impacts at VP24 and VP25 would represent an extensive or major effect to the landscape character of the area. • The new Maribyrnong River Bridge would be the third bridge in the local area, with the EJ Whitten Bridge located approximately 400 meters west of the site. This highlights that bridges and elevated structures are familiar along the Maribyrnong River, and the introduction of a new rail bridge, designed to match the height and length of the existing Rail Bridge (Albion Viaduct), would not be out of context in this setting. Additionally, the design of the proposed rail bridge will be considered within the Urban Design Strategy, and in consultation with heritage consultants to ensure that the visual impact on the surrounding area is minimised. 	Criterion not met.
Potential significant effects on the amenity of a substantial number of residents, due to extensive or major, long-term changes in visual, noise and traffic conditions.	<p>There are seven new structures that have the potential to have visual impacts on residents, however there were no areas within the Study Area that have a significant number of residents directly impacted by the Project.</p> <p>High visual impacts are limited to approximately 70 residential properties, it is submitted that the key Project elements are unlikely to result in significant visual impacts to a substantial number of residents and thus, this criterion would not be met. This is detailed as follows:</p> <ul style="list-style-type: none"> • Sunshine Station <p>A high residual visual impact (VP2) is assessed as a result of the scale of the up-end concourse and its proximity to 20 residential houses. The surrounding land use is generally industrial or public use, with very limited residential zoning.</p> <ul style="list-style-type: none"> • MAR Viaduct <p>A high residual visual impact is assessed on one residential viewpoint (VP9) and moderate visual impact (VP5 and VP8), in the surrounding residential areas. However, there are shown to be a low number of residential properties in proximity to the rail corridor, with only five residential properties likely to experience a high residual impact. The land use is generally industrial or public use, with very limited residential zoning along Talmage Street.</p>	Criterion not met.

EE Act Self-Assessment Criteria	Landscape and Visual Response	Criterion for referral met?
	<ul style="list-style-type: none"> • Cranbourne Avenue pedestrian overpass <p>The introduction of a new large urban structure, spanning over the existing railway line from Cranbourne Avenue to Mansfield Avenue, is likely to be a high residual visual impact for residents as assessed from Cranbourne Ave (VP17) and moderate residual visual impact from Gilmour Road (VP19). The location of the structure to the end of Cranbourne Ave limits direct or substantial views by residents to approximately two residential properties at the end of the street. Direct views from residential houses on Gilmour Road and Clayton St is restricted to approximately eight dwellings.</p> <ul style="list-style-type: none"> • Maribyrnong River Bridge <p>The construction of the new bridge over Maribyrnong River is likely to have a moderate residual visual impact from few houses along Sterling Drive as represented in VP22. View lines from residential properties located in Keilor East and Avondale Heights contain intervening elements including the existing rail bridge, fencing and vegetation. A low level of visual modification is therefore expected, and the works are unlikely to result in a significant effect to the amenity of a substantial number of residents.</p> <ul style="list-style-type: none"> • Keilor Drive intake substation <p>The substation is visible by approximately 37 residents of Sterling Drive (VP27) with road and electrical infrastructure in the background, providing a low level of visual modification to the existing setting. Construction works in this PPRZ (part of Brimbank Park) will be visible and located in a large area, providing a high level of visual modification and therefore a temporary high visual impact for a low number of dwellings.</p> <ul style="list-style-type: none"> • Steele Creek Viaduct / M80 Bridge <p>The structure will be visible from approximately 60 residential properties directly adjoining the eastern side of the rail corridor in Airport West, as assessed in VP33 – Roberts Road and VP35 - Parer Road. Assessment of the forementioned indicates that potential high residual visual impacts to a low number of residents in VP33, and moderate visual impacts to a medium number of dwellings in VP35.</p> <ul style="list-style-type: none"> • Noise walls <p>A moderate to high level of visual modification is expected, where the noise walls are a new element where there is currently an open area within the rail reserve (VP18 and VP19). However, the noise walls are not expected to obstruct significant views and are experienced by a low number of residents (approximately 34 residential properties). Noise walls proposed within Keilor East are expected to have a moderate to low level of visual modification, being commensurate with existing boundary fences or views of industrial buildings. It is noted that the residual visual impacts for VP26 Sterling Cres (Edenvale Aged Care) are high, as existing building windows would be blocked by the proposed noise wall.</p>	



List of References

AJM Joint Venture MAR State Land assessments reports:

- MAR Heritage Design Guidelines - Maribyrnong River Bridge
- MAR State Land Aboriginal Cultural Heritage Impact Assessment
- MAR State Land Historic Heritage Impact Assessment
- MAR State Land Use Planning Impact Assessment
- MAR State Land Terrestrial Ecology Impact Assessment
- MAR State Land Traffic and Transport Impact Assessment

City of Hume Planning Scheme, June 2020

City of Moonee Valley Planning Scheme, June 2020

City of Moonee Valley, Neighbourhood Character Study, Planisphere 2012

Department of Planning and Community Development, Maribyrnong River Valley Design Guidelines, April 2010

Heritage Council Victoria – Victorian Heritage Database

Institution of Lighting Professionals; Guidance Notes for the Reduction of Obtrusive Light GN01:2011

Lovell Chen for AJMJV, 'Maribyrnong River Bridge – Heritage Design Guidelines', September 2020,

Transport of NSW, Guideline for landscape character and visual impact assessment. Environmental impact assessment practice note EIA-N04, 2020