

LEVEL CROSSING REMOVAL AUTHORITY FRANKSTON PACKAGE

18 - Edithvale Road, Edithvale
**Preliminary Landscape & Visual Impact Assessment –
Rail Under Road**

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Executive summary

The AECOM-GHD Joint Venture is engaged by the Level Crossing Removal Authority to provide specialist planning and environmental advice for the Level Crossing Removal Program. Over the next eight years the Level Crossing Removal Authority will oversee the removal of 50 dangerous and congested level crossings across Melbourne.

The focus of this Preliminary Landscape and Visual Impact Assessment report is the Edithvale Road, Edithvale level crossing removal. The project area includes the existing rail reserve bounded between Lochiel Avenue and Elsie Grove.

This assessment has been undertaken to understand the potential impacts to landscape character and visual amenity that the project may have. It found the project effects rating from Moderate to Negligible for landscape character, and from Moderate to Low for representative visual receiver locations.

Potential mitigation approaches will be explored during the design and planning phase of the project. These will reduce the effects on the landscape and visual character, as described by this assessment, and could even have beneficial outcomes on the overall character of the investigation area.

As part of the ongoing development of the project, further landscape and visual impact assessment can be undertaken to verify that the project's effects are reduced and, where possible, converted from adverse to neutral or positive additions.

Abbreviations

Term	Definition
JV	AECOM-GHD Joint Venture
LCZ	Landscape Character Zone
LXRA	Level Crossing Removal Authority

1. Introduction

1.1 Scope

The AECOM-GHD Joint Venture (JV) is engaged by the Level Crossing Removal Authority (LXRA) to provide specialist planning and environmental advice for the Level Crossing Removal Program. This Preliminary Landscape and Visual Impact Assessment has been undertaken for the Edithvale Road, Edithvale level crossing removal.

1.2 Background

Over the next eight years LXRA will oversee the removal of 50 dangerous and congested level crossings across Melbourne.

Level crossings are a key cause of congestion on Melbourne's roads, and form one of the limitations on the number of train services that can operate on each line. The 50 level crossings planned for removal were chosen on a range of different factors, including safety, congestion and overall network benefits.

The Victorian Government allocated \$2.4 billion in its 2015-16 budget to remove at least 20 level crossings by 2018. These sites form the basis of a long-term strategic plan being developed to remove all 50 level crossings by 2022.

Construction has already commenced on several sites, and planning and early consultation is underway for the delivery of the entire program.

Three level crossings on the Frankston railway line have already been removed:

- North Road, Ormond
- McKinnon Road, McKinnon
- Centre Road, Bentleigh.

In November 2015, the Victorian Government announced that work on removing a further eight Frankston line level crossings had commenced. These are:

- Charman Road and Park Road¹, Cheltenham
- Balcombe Road, Mentone
- Edithvale Road, Edithvale
- Station Street/Bondi Road, Bonbeach
- Station Street, Carrum
- Eel Race Road, Carrum²
- Seaford Road, Seaford
- Skye/Overton Road, Frankston.

¹ Park Road has since been included in the Cheltenham package of works

² Station Street, Carrum and Eel Race Road, Carrum are being considered as a single package of works

1.3 Project description

1.3.1 Study area

The Edithvale Road level crossing project area (Edithvale project area) extends approximately 530 metres north from Edithvale Road to Lochiel Avenue and approximately 800 metres south to Elsie Grove. The Edithvale project area includes the rail corridor and all of Station Street and Nepean Highway to the east and west respectfully between Lochiel Avenue and Elsie Grove.

Pedestrian/cyclist rail crossings are located at Lochiel Avenue, Edithvale Road, Denman Avenue, Fraser Avenue and Berry Avenue.

The project area is within the local government area of the City of Kingston. Refer to Figure 1.

For the purpose of this assessment, the key area of focus is considered to be those areas within a 500 metre offset from the proposed infrastructure between Lochiel Avenue and Berry Avenue.

Beyond this area it is anticipated the combined effects of distance, intervening landform, built form and vegetation will combine to render landscape and visual effects negligible.

1.3.2 Project scope

It is proposed to remove the level crossing by lowering the Frankston railway line into a trench whilst maintaining Edithvale Road at current road level. The trench would be approximately one kilometre in length and approximately 12 metres wide. The rail track would be approximately eight metres below ground level at its lowest point at Edithvale Station and would include underground infrastructure (below the rail track) to collect and divert rain water from the trench. Barriers, fencing and screening would be erected along the trench, at road level, to prevent access by vehicles or people. Decking above the rail trench would be required to provide for station car parking and space has been set aside for a future substation. New pedestrian bridges would be constructed to maintain pedestrian access across the railway line. A new station building would be provided with access to the below-ground train platforms.



Figure 1
EDITHVALE
Project Area

Paper Size A3
0 25 50 100
Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55



X:\Project Data\PRGM\GIS\GHD\Maps\Working\Investigation Areas\Frankston8_new3_JA_20161110.mxd

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Data source: Planning Zones, Vicmap Data, DELWP, 2016. Investigation Area, LXRA, 20/06/2016. Created by:edged

2. Methodology

2.1 Overview

This methodology is focussed on identifying the key likely or potential landscape and visual impacts or effects (hereafter known as 'effects'). The following tasks form the methodology³:

1. Identifying the key proposal characteristics
2. Establishing the landscape baseline and visual context
3. Assessing the landscape effects of the proposed design
4. Assessing the visual effects of the proposed design
5. Identifying potential mitigation approaches.

Note: For this preliminary assessment only high level mitigation approaches have been outlined. More detailed mitigation measures will be progressed at a future point in the project's development, once the design is more developed, and to ensure a more integrated outcome.

There is no accepted national guidance on landscape and visual impact assessment in Australia, therefore practice in this field has adopted good international approaches.

This methodology is informed by the techniques set out in the following documents:

- *Guidelines for Landscape and Visual Impact Assessment, Third Edition* (2013) developed by the Landscape Institute and Institute for Environmental Management and Assessment (United Kingdom)
- *Forest Landscape Description and Inventories – a basis for land planning and design* by R Burton Litton Jr. (1968)
- *National Forest Landscape Management Volume 2*, by the US Forest Service and US Department of Agriculture (1974).

Note: This assessment deals with the final operational design of the project and does not consider visual and landscape impacts associated with construction. Construction-stage considerations will be explored in more detail during the tender selection and detailed design process.

2.2 Identification of key proposal characteristics

This task identifies the physical attributes of the proposal, in this case the lowering of the rail line into a rail trench under Edithvale Road, which inform the size of the project area, the 'seen' components of the project, and the identification of visual receptors that need to be assessed.

³ Note: For the purposes of this preliminary assessment, a high level summary approach is applied for each assessment task.

2.3 Establishment of the landscape baseline and visual context

This task seeks to understand and describe the character of the landscape within which the proposal is set and identifying Landscape Character Zones. To achieve this, a visual inspection and photographic survey is undertaken as well as a review of the following relevant documents:

1. Functional design developed by the AECOM-GHD JV
2. Level Crossing Removal Project Urban Design Framework by the AECOM-GHD JV
3. Preliminary Urban Design Concept Report by the AECOM-GHD JV
4. Kingston Planning Scheme
5. GIS analysis of the topography
6. Digital aerial imagery from the JV, LXRA, the Department of Environment and Primary Industries and the Department of Environment, Land, Water and Planning
7. Google Earth imagery.

In addition to the identification of landscape character, visual receptor locations are identified that allow a comparison of the existing conditions with the visual effects the project may have. These visual receptors were selected in locations that are the most sensitive or likely to experience the greatest effects in order to assess the most significant changes that will be made by the proposal.

2.4 Assessment of landscape effects

Assessment of landscape effects deals with the effect of a visible change on the landscape and development on the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character.

The assessment comprises the combination of the following assessments.

2.4.1 Sensitivity of landscape to visual change

The identification of the sensitivity of the landscape to a specific change encompasses the following components:

Susceptibility to change

The existing landscape baseline is assessed to understand the capacity to accommodate the proposal without adverse effect of the existing landscape character(s) based on landform, land use, scale and design; as well as the capacity to achieve any landscape policy and strategy objectives.

Value of the landscape

This assesses whether the value of the landscape would be affected based on existing landscape character designations (be they internationally, nationally or locally recognised landscapes), and the value of particular landscape features or notable aesthetic, perceptual or experiential qualities.

These individual criteria are combined to achieve a landscape sensitivity that is defined in the following way:

Table 1 Sensitivity of landscape to change

Sensitivity of landscape to visible change	
High	Landscapes of international designation and/or landscapes that have high sensitivity to the type of development proposed which could have a detrimental effect on the landscape character or value. Mitigation measures will be unlikely to reduce all of the effects of the change.
Moderate	Landscapes of regional designation or valued more locally and tolerant of moderate levels of change. Any change would be unlikely to have a significant adverse effect on the landscape character or value and mitigation would neutralise some of the effects.
Low	Landscapes of local designation that are more commonplace and potentially tolerant of noticeable change or are undergoing substantial development themselves, with mitigation measures likely to neutralise or improve the landscape character.
Negligible	Landscapes of local designation and/or with low sensitivity to the type of change proposed with mitigation likely to completely neutralise any effects or not required at all.

2.4.2 Magnitude of landscape effect

The magnitude of landscape effects is comprised of these components.

Size or scale of change

An assessment of size or scale of change in the landscape likely to be experienced as a result of the proposed development which may include the extent of loss of an existing landscape element, the degree of alteration to aesthetic or perceptual aspects of the landscape, or any change to key characteristics of the landscape.

Geographical extent of effects

This considers the geographical extent over which the landscape effects will be felt, and is distinct from the size or scale of the change. This is influenced by site levels, the immediate context, and landscape character types in the vicinity.

Duration and reversibility of the effects

Duration is judged on a scale of short term (zero to five years), medium term (five to ten years) and long term (more than ten years). Reversibility is a professional judgement about the prospects of the effect being reversed, for example, a project such as a temporary sporting facility that might have a limited life.

These individual criteria are combined to achieve a magnitude of landscape effect that is defined in the following way:

Table 2 Magnitude of landscape effect

Magnitude of landscape effect	
High	A substantial/obvious change to the landscape due to total loss of, or change to, elements, features or characteristics of the landscape. Change would cause a landscape to be permanently changed and its quality diminished.
Moderate	Discernible changes in the landscape due to partial loss of, or change to key elements, features or characteristics of the landscape which may be partly mitigated. The change would be out of scale with the landscape, at odds with the local character, and would leave an adverse impact on the landscape. The change would partially obstruct or change a view.
Low	Minor loss or alteration to one or more key landscape features or characteristics, or the introduction of elements that may be visible but may not be uncharacteristic within the existing landscape.
Negligible	Almost imperceptible or no change in the landscape or views as there is little or no loss of, or change to the elements, features or characteristics of the landscape.

2.4.3 Overall rating of landscape effects

Once the sensitivity of the landscape to visual change and the magnitude of the landscape effect is determined, a professional judgement is made on the level of significance of the effect, which may be described as being Negligible, Low, Minor, Moderate - Low, Moderate, High - Moderate or High (refer to Figure 2).

		Magnitude of effect			
		High	Moderate	Low	Negligible
Sensitivity	High	High	High - Moderate	Moderate	Negligible
	Moderate	High - Moderate	Moderate	Moderate - Low	Negligible
	Low	Moderate	Moderate - Low	Low	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible



 Significant change
 Potentially significant change

Figure 2 Rating and significance of landscape effects

Professional judgement on the significance of a landscape effect is specific to every place and a combination of the location, landscape context and type of proposal. While there are no absolute rules that define what makes a significant effect, this assessment considers an overall High matrix rating to be a significant change, and an overall High – Moderate rating to be a potentially significant change.

A further professional judgement can be made about the quality of the landscape effects once a project design is developed, which can be adverse, neutral or positive. These ratings help inform where mitigation may be required to minimise or improve the quality of the landscape character. For the purposes of this preliminary report, this has not been undertaken and any ratings identified reflect unmitigated outcomes.

Once the design of the project is further progressed, the quality of effects will be better understood and comprehensive and detailed mitigation measures can be identified and integrated into the project. These may help to reduce the landscape effects of the project in future stages.

2.5 Assessment of visual effects

Assessment of visual effects deals with the effects of change and development on the surroundings of individuals or groups of people. This identifies the change or loss of existing elements of the visual landscape and/or introduction of new elements to relevant users.

2.5.1 Sensitivity of visual receptors

The sensitivity of visual receptors is assessed in terms of both their **susceptibility** to the proposed change in views and visual amenity, and also the **value** attached to particular views.

Susceptibility of visual receptors to change

The susceptibility of different visual receptors to changes in views and visual amenity is mainly a function of the activity of people experiencing the view and the extent to which their attention or interest may therefore be focused on the view.

Visual receptors most susceptible to change are generally residents who are likely to occupy these locations for long periods of time, people engaged in outdoor activity, visitors to attractions where the surroundings are part of the experience, and communities where the landscape setting is an important contributor.

Visual receptors with a moderate susceptibility to change are generally travellers on road and rail transport. Where travel involves recognised scenic routes awareness of views may be particularly high.

Visual receptors with less sensitivity to change include people engaged in outdoor sport and people at their place of work where attention is focussed on their activity and the setting is less important to their experience.

Value attached to views

This assessment considers:

- the recognition of the value attached to particular views, either in relation to heritage assets or through planning designations, planning policy or other existing planning or urban design studies
- indications of the value attached to views, either through inclusion in guidebooks or on tourist maps, provision of facilities for their enjoyment such as sign boards and interpretive material
- reference to them in literature or art.

These parameters are combined to produce a sensitivity assessment that ranges from High to Negligible that is set out in Table 1.

2.5.2 Magnitude of the visual effects

Each of the visual effects identified is evaluated in terms of **size or scale of the change**, the **geographical extent of the effects**, over which it occurs, and its **duration and reversibility**.

Size or scale of the change

This assessment takes account of the scale of change in the view with respect to: the loss or addition of features in the view; the degree of contrast or integration of any new features or changes and characteristics in terms of form, scale and mass, line, height, colour and texture; and the nature of the view of the proposal and whether views will be full, partial or glimpses.

Geographical extent of effects

The geographical extent of a visual effect will vary with different viewpoints and is likely to reflect the angle of the view, the distance of the viewpoint, and the extent of the area over which changes would be visible.

Duration and reversibility of the effects

Duration is judged on a scale of short term (zero to five years), medium term (five to ten years) and long term (more than ten years). Reversibility is a professional judgement about the prospects of the effect being reversed.

These parameters are combined to produce a magnitude of visual effect assessment that ranges from High to Negligible that is set out in Table 2.

2.5.3 Overall significance of visual effects

Once the sensitivity of the landscape to visual change and the magnitude of the landscape effect is determined, a professional judgement is made on the level of significance of the visual effect, which may be described as being Negligible, Low, Minor, Moderate - Low, Moderate, High - Moderate or High, as set out in Figure 3.

		Magnitude of effect			
		High	Moderate	Low	Negligible
Sensitivity	High	High	High - Moderate	Moderate	Negligible
	Moderate	High - Moderate	Moderate	Moderate - Low	Negligible
	Low	Moderate	Moderate - Low	Low	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible



 Significant change
 Potentially significant change

Figure 3 Significance of visual impacts

While there is no standard approach to determining what makes a significant effect, this assessment considers an overall High matrix rating to be a significant change, and an overall High – Moderate matrix rating to be a potentially significant change.

A further professional judgement can also be made about the quality of the effects, which can be adverse, neutral or positive. These ratings help inform where mitigation may be required to minimise or improve the quality of the visual impact. For the purposes of this preliminary report, this has not been undertaken and any ratings identified reflect unmitigated outcomes.

When the proposal's design is further progressed the quality of effects will be better understood and comprehensive and detailed mitigation measures can be identified and integrated into the project. This is likely to reduce the visual effects of the project.

2.6 Identification of potential mitigation approaches

Landscape and visual impact assessments typically develop and assess mitigation measures at a well-advanced point within the development of a project to treat landscape and visual effects that are initially identified. These measures are most successful when they are developed as integrated elements that are cohesive parts of the core proposal as is intended with this proposal.

This report identifies the project's design intentions which are outlined in the Level Crossing Removal Authority's Urban Design Framework (Version 3) and the Preliminary Urban Design Concept Report for Edithvale Road, Edithvale (July 2016). These documents identify a range of design outcomes which are potential mitigation measures that can be employed as the project is developed.

This will allow a further assessment of the landscape and visual effects once mitigation is identified.

2.7 Design assumptions

Given the project is at such an early stage of development with regard to landscape and urban design, the following assumptions have been agreed with LXRA to facilitate the assessment process:

- This report should be read in conjunction with the preliminary urban design concept drawing in Appendix A.
- Planting will be possible along most of the edge of the project where indicated in green on the urban design drawing. This will have the following characteristics:
 - The minimum outcome will be a planting width of 2.4 metres and a maximum height of 2.4 metres.
 - Where more landscape planting room is available, small to potentially moderate sized trees will be able to be planted, dependent on the width of the planting area.
- An integrated traffic barrier / security fence / throw screen system will be provided along the top edge of the rail trench to maximise the width of planting outside of the operational corridor, and provide visual screening of these infrastructure elements from adjacent residential and commercial areas.
- Where it is not possible to provide the minimum width of vegetation to the edge of the project, elements such as shade structures will be integrated into the design of areas likely to be heavily utilised by pedestrians, e.g. either side of the station precinct.
- The proposed station building would:
 - be designed to complement the formal axial design of Beeson Reserve
 - consider measures to provide views above Nepean Highway to Beeson Reserve and beyond to Port Phillip Bay from the new station building, e.g. from an elevated café, seating space, or component of entry / exit route (refer V09 photo for existing view from station platform).

2.8 Design opportunities

The following design opportunities would improve landscape character and visual amenity outcomes for the project. Adoption of these opportunities would be likely to reduce the landscape and visual effects ratings for the project:

- Bonbeach sits on an Aeolian (wind-blown sand) landscape. This provides the following opportunities for 'bio-swales' or 'rain gardens' that have street trees and shrubs within them, and collect stormwater run-off from roads, which:
 - maximise irrigation of plant material at every rain event,
 - improve tree health / coastal landscape character outcomes;
 - treat road run-off pollutants;
 - potentially reduce stormwater infrastructure costs, with the 'first flush' and smaller rainfall events infiltrating into the landscape areas, facilitating subsequent reduced volumes from larger events that need to be transported away from the roads through a traditional pit and pipe system, potentially reducing costs due to reduced pipe sizing requirements;
 - facilitate more comfortable outdoor spaces to commercial areas (e.g. shade), with potential economic benefits, e.g. from improved patronage of cafes and restaurants with outdoor seating.
- The combination of highly free draining soils (sand) and salt-laden winds from Port Phillip Bay limit the street tree planting palette. Endemic, relatively low growing species such as Coastal Banksia (*Banksia integrifolia*) and potentially Old Man Banksia (*Banksia serrata*) could fulfil an amenity and shading / environmental amelioration role, in addition to conserving the coastal vegetation character of the road / rail infrastructure corridor.
- Street trees to both sides of Nepean Highway and Station Street would provide a strong coastal character framework in addition to the above benefits. This would require undergrounding of power where present.
- Where trees are proposed to areas that are on slab, e.g. the station building plaza, the station carpark and substation surrounds, provision be made:
 - to facilitate in-ground planting, e.g. beyond the edge of the slab that are subject to passive irrigation, e.g. street stormwater run-off
 - for special provision be made to facilitate tree health on-slab by means of slab set-downs that closely adjoin natural ground, or similar measures sufficient to ensure the long-term viability of the plantings without reliance on piped irrigation
 - for on-slab measures to be undertaken in consultation with a soil scientist and an arborist.
- Consider providing within the design of the integrated traffic barrier / security fence / throw screen system to be located atop the trench retaining walls, sufficient strength to break the fall of small to moderate sized trees, thereby potentially facilitating the incorporation of trees within much of the rail corridor edge planting.

3. Landscape and visual impact baseline

3.1 Policy context

An assessment was undertaken of key planning policy and legislation with relevance to landscape and visual amenity of the project area to ensure an understanding of existing (and future) aspirations for the project area, and the role of the project within this context.

3.1.1 Transport Integration Act, 2010

The Transport Integration Act 2010 (Victoria) provides the policy framework for an integrated and sustainable transport system, developed through a comprehensive program of consultation with transport stakeholders.

The Act brings together all elements of the transport portfolio (including roads, rail, ports and marine) under one statute. The Act requires transport agencies and other areas of government to have regard to broader social, economic and environmental considerations, a clear triple bottom line framework, when making decisions about the transport system.

The most relevant requirements for landscape and visual impact assessment are:

- That the transport system should actively contribute to environmental sustainability by protecting, conserving and improving the natural environment; and avoiding, minimising and offsetting harm to the local and global environment, including through transport-related emissions and pollutants and the loss of biodiversity
- That the transport system should improve the amenity of communities and minimise impacts of the transport system on adjacent land uses.

3.1.2 Planning and Environment Act, 1987

The Planning and Environment Act 1987 (Victoria) establishes the framework for use, development and protection of land in Victoria. The Act provides the standard provisions for planning schemes which are administered by local government.

The most relevant objectives for landscape and visual impact assessment are:

- To enable land use and development planning and policy to be easily integrated with environmental, social, economic, conservation and resource management policies at state, regional and municipal levels
- To ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land.

3.1.3 Kingston Planning Scheme

The Kingston Planning Scheme provides a framework within which decisions about the use and development of land can be made. It expresses state, regional, local and community expectations for areas and land uses and provides for the implementation of State, regional and local policies affecting land use and development.

The most relevant clauses for landscape and visual impact assessment include:

- State Planning Policy Framework which seeks to:
 - contribute towards a high standard of amenity and urban design (Settlement)
 - protect landscapes and significant open spaces that contribute to character, identity and sustainable environments (Landscapes)
 - minimise impacts on the surrounding natural visual, environmental and coastal character (Coastal Tourism)
 - contribute positively to local urban character and minimise detrimental impacts upon neighbouring properties (Urban Design)
 - ensure the conservation of places of heritage significance (Heritage)
 - ensure transport practices, including design, construction and management, reduce environmental impacts (Transport).
- Local Planning Policy Framework which seeks to:
 - protect and enhance the quality and unique character of Kingston's natural and built environments and infrastructure assets (Vision)
 - provide for a range of housing types across the municipality while respecting neighbourhood character (Residential Land Use)
 - protect and strengthen the hierarchy of activities centres, including Edithvale as a Neighbourhood Centre (Retail and Commercial Land Uses)
 - promote opportunities for development on the foreshore that is compatible with the character and scale of the surrounding landscape (Foreshore)
 - protect and enhance the amenity of Kingston's residential areas and other sensitive land uses through appropriate management of transport networks (Transport).

A specific overlay relevant for the Edithvale Level Crossing Project is Design and Development Overlay – Schedule 1 which seeks to protect and enhance the foreshore environment through the control of building heights to the maximum of two storeys, affecting all private land between the rail corridor and foreshore.

These policies reinforce feedback received from the community on the importance and value placed on the character and visual amenity of the project area.

3.2 Landscape character zones

Five landscape character zones (LCZs) have been identified, informed by the following:

- Landscape value: landscapes designated for their scenic or landscape importance or valued recreational function
- Landscape elements: that contributes to defining character e.g. residential, river/creek corridors, landform and open space
- Landscape character attributes: including scale, grain and perceptual characteristics such as the sense of remoteness tranquillity and/or its perceived character).

The five character zones, as identified in Figure 4, are:

- **LCZ 1** – Infrastructure corridor
- **LCZ 2** – Residential
- **LCZ 3** – Commercial
- **LCZ 4** – Open space
- **LCZ 5** – Foreshore



Figure 4 Landscape Character Zones for Edithvale Road level crossing removal project

3.2.1 LCZ 1 – Infrastructure corridor

This LCZ is a linear corridor of land that is flanked by both Nepean Highway and Station Street that flank the rail corridor. The LCZ is highly visible and is lined with intermittent vegetative cover, comprising of low-growing regrowth of endemic shrubs and trees which contribute to the coastal character of Edithvale's streetscapes. The LCZ also comprises elements associated with rail and road infrastructure, including the regularly spaced gantries, overhead power lines, safety fencing, a station building and car parking, as well as footpaths, nature strips, power poles and street lighting.



Figure 5 Typical character of LCZ1 as viewed from the Nepean Highway

3.2.2 LCZ 2 – Residential

The landform in LCZ 2 is generally flat to gently undulating across the zone and incorporates some scattered remnant vegetation and limited street tree planting in residential streets. Built form typically comprises single and double storey housing, and up to four storeys in locations within close proximity to the train station and commercial areas.



Figure 6 Typical character of LCZ 2 west of the rail corridor with a predominance of more recent residential development and visual connection to the foreshore



Figure 7 Typical character of LCZ 2 east of the rail corridor, showing limited street trees, high fencing along busier roads and typical overhead power and lighting in the street

3.2.3 LCZ 3 – Commercial

This LCZ comprises a small linear commercial centre located along the Nepean Highway. This contains a mix of shops, small businesses and cafes/restaurants located in one or two storey premises. Edithvale Station is visible from this LCZ and acts as a landmark and gateway for the commercial centre.

The landscape character associated with this LCZ is considered to be of very low amenity due to its close interface with the busy Nepean Highway, which is unrelieved by street trees or significant level of other vegetation, and provides little in the way of other amenities such as seating.



Figure 8 Typical character of LCZ 3 along Nepean Highway

3.2.4 LCZ 4 – Open space

LCZ 4 comprises Beeson Reserve, a flat, linear park located between Edithvale Station and the foreshore, situated in the centre of the project area, and Regents Park, situated on the northern boundary of the project area. Beeson Reserve features a paved war memorial space, raised terraces at both ends and a turfed picnic area. An important gateway between the station and the coast, the reserve includes formal planting, with fringing vegetation and low scattered trees on the boundary adjacent to The Esplanade.

The recreational land on the northern boundary of the project area comprises Regents Park; Edithvale Recreational Reserve, and Rosedale Golf Club, although only Regents Park and small portion of the Rosedale Golf Club lie within the project area boundary.



Figure 9 Typical character of LCZ 4 at Beeson Reserve looking towards the existing railway station with the war memorial in the foreground



Figure 10 Panorama view of Beeson Reserve taken from the Edithvale Life Saving Club

3.2.5 LCZ 5 – Foreshore

LCZ 5 comprises a strip of coastal land and associated dwellings. Figure 11 shows a typical example of the foreshore character between Mordialloc Creek and Frankston. The LCZ comprises low dunes with varying patches of remnant vegetation.

The LCZ is highly valuable as a recreational reserve and includes the local Edithvale Life Saving Club. Residential housing backs onto the dunes with many beach houses scattered along the foreshore. The location of boat sheds/changing facilities provides further enhancement of the coastal character of this zone.



Figure 11 Typical character of LCZ 5 at Edithvale

3.3 Visual impact receptor locations

A total of nine representative viewpoints were identified within the project area. The location of these viewpoints reflects key locations that have sensitive visual receptors and/or a relatively high number of potential viewers.

Receptor locations are outlined below:

- **V01** – Nepean Highway – view south-east across Nepean Highway
- **V02** – Edithvale Life Saving Club, The Esplanade – view north-east across Beeson Reserve
- **V03** – Chelsea Foreshore Reserve viewing platform – view north-east across Bank Road
- **V04** – Corner of Nepean Highway and Bank Road – view north-east across Nepean Highway
- **V05** – Station Street – view south-west to Edithvale Station
- **V06** – Edithvale Road – view south-west to level crossing
- **V07** – Station Street – view north-west across Station Street
- **V08** – Corner of Station Street and Fraser Avenue – view north-west across Station Street
- **V09** – Edithvale Station - view looking south-west from station platform.



Figure 12 Representative visual receptor location map for Edithvale Road level crossing

3.4 Visual envelope mapping

The likely visibility of the proposed elements of the project at operation from surrounding areas has been broadly mapped to define a visual envelope. This provides an indication of where the project is potentially visible from. This map indicates 'worst case' and is indicative only as it does not include nor consider the effects of existing vegetation cover.



Figure 13 Visual envelope map for Edithvale Road level crossing

4. Preliminary assessment

4.1 Landscape character assessment

Landscape Character Zone 1 – Infrastructure corridor

Sensitivity to change: **Moderate**

Susceptibility to change

This LCZ is characterised by the railway corridor, comprising a low, dominant form that cuts in a straight line through the landscape, regularly spaced rail gantries, and the alignment of the LCZ with the overall development grid and the Port Phillip Bay edge. The LCZ contains a moderate to low, intermittent cover, of endemic low-growing regrowth and planted shrubs and trees, which is considered to be of local landscape value in that it reflects the broader low, endemic coastal landscape character associated with the Port Phillip Bay and Frankston rail line corridor, and comprises an important contributor to the sense of place for Edithvale. Other than the vegetation within the LCZ, there is limited landscape vegetation within adjacent areas.

The LCZ is considered to have a moderate potential to accommodate the proposed change without long-term landscape character effects, or to accommodate the project while also achieving current landscape planning policies. This is due to the rail-under option potentially requiring a greater width of the LCZ being dedicated to hard infrastructure compared with the rail over option, and the height (and therefore character) of any replacement vegetation potentially being limited due to rail landscape safety policy requirements where it is located within proximity of rail infrastructure. However, the extent of this issue is partially mitigated by the design assumptions provided within the methodology (refer s.2.7).

The trench structure comprises a large and uncharacteristic new element within the landscape. However, this occurs within the context of an infrastructure corridor.

Value of LCZ

The informal and naturalistic nature of planting within this LCZ contributes to the coastal landscape character of the broader area. However, it is also compromised by transport and utility functions.

Magnitude of change: **Moderate**

Size/scale

The scale of change in the landscape would be moderate, given the size and uncharacteristic form of the rail trench within this existing low coastal setting, but taking into consideration that this occurs within the context of an infrastructure corridor.

Additionally, there is potential for some reduction in the replacement of existing endemic regrowth vegetation over that currently in place, particularly trees, which could impact upon this key 'sense of place' element within the project area. Note: the extent of this change would be expected to reduce with the adoption of the design opportunities identified within the methodology (refer s.2.8).

Geographic extent

The project is contained within the existing rail corridor and comprises a length of approximately one kilometre (refer s.1.3.2).

Duration/reversibility

The project would comprise a permanent change to the character of the landscape.

Significance of landscape character effect: **Moderate**

Sensitivity to change: **Moderate**

Susceptibility to change

The vegetation within the rail corridor (LCZ 1) is important to the landscape character of this LCZ. However, any effects arising from loss of this vegetation on the existing character of LCZ 2 are largely isolated to the two edges adjacent to the rail corridor. Within this context, the scale and form of the rail trench and associated fencing / traffic barrier infrastructure also affects the landscape character of this LCZ, but as above this is primarily limited to those edges adjacent to the project.

Value of LCZ

LCZ 2 is considered to be of local value due to the contribution of tree planting within residential lots to the wider landscape character, in addition to associated limited public realm planting.

Magnitude of change: **Low**

Size/scale

The scale of change in this LCZ would be locally moderate, given the size and uncharacteristic form of the rail trench within this existing low coastal setting, and other structures including a substation, pedestrian overpasses and corridor edge infrastructure such as security fencing, traffic barriers and potentially noise walls. However, taking into consideration that these effects occur within the context of an infrastructure corridor, and within the of the boundary of that LCZ, the effect is considered to be low.

The loss of coastal vegetation within the rail corridor could alter the landscape setting of properties immediately adjacent to the project. However, a substantial area of the project is expected to be reinstated to vegetation that reflects this coastal character, particularly south of Edithvale Road. New structures, including substation, noise walls, pedestrian overpasses, car parking, security fencing and traffic barriers would also impact the existing landscape setting of these properties. However, beyond the edge with LCZ 1, effects on this extensive LCZ rapidly decrease with distance from the project.

Geographic extent

The extent of change within this LCZ is likely to be limited to enabling roadworks, and potentially the addition of street trees within parts of the road reserve adjoining LCZ 1, over a distance of approximately one kilometre. The effects of coastal character vegetation loss are expected to be felt primarily alongside the northern end of the station precinct and the pedestrian ramp immediately north of the station, with limited vegetation present within the remainder of existing area of the proposed station / car parking precinct.

Duration/reversibility

The project would comprise a permanent change to the sections of this LCZ that are adjacent to the extent of works.

Significance of landscape character effect: **Moderate - Low**

Landscape Character Zone 3 – Commercial

Sensitivity to change: **Low**

Susceptibility to change

The susceptibility to change of LCZ 3 is limited due to the built up, commercial nature of the Edithvale neighbourhood centre and the interface with Nepean Highway, a major transport corridor.

Value of LCZ

The landscape value of LCZ 3 is defined by low levels of visual amenity and limited vegetation within the zone and along the Nepean Highway. The high visibility of rail infrastructure and utilities also minimise the landscape value of the zone.

Magnitude of change: **Low**

Size/scale

The scale of change in the landscape is expected to be low for this LCZ given the lowering of the rail infrastructure beneath ground level. However, elements such as the station building, pedestrian overpasses, barriers, car parking and traffic requirements may limit opportunity to establish any significant landscaping to mitigate the effects in that part of the project..

Geographic extent

The identified commercial zone interfaces with approximately half of the project extent along Nepean Highway.

Duration/reversibility

The project would comprise a permanent change to the setting of this LCZ.

Significance of landscape character effect: **Low**

Sensitivity to change: **Low**

Susceptibility to change

The proposed substantial station building is aligned almost exactly with half of an axial backdrop, i.e. half of the backdrop contains the substantial station building, and the other half of the back drop has minimal structure within it, all of which is set against a skyline view. This has the potential to appear visually incongruent in association with the formal reserve design. Within this context, the susceptibility of this LCZ to change is considered to be moderate. However, as per the assumptions within the methodology, the issue will be addressed by the project (refer s.2.7).

Value of LCZ

Beeson Reserve is considered to have local value given its location adjoining the beach and designation as a war memorial site.

Magnitude of change: **Low**

Size/scale

The scale of change in the landscape is expected generally to be low for this LCZ.

Geographic extent

The geographical extent of the edge effect relative to the area of LCZ 4 is low, given a relatively small interface with the rail reserve (approximately 35 metres).

Duration/reversibility

The project would comprise a permanent change to this LCZ.

Significance of landscape character effect: **Low**

Sensitivity to change: **Low**

Susceptibility to change

The ability of this LCZ to accommodate the proposed change without effects on its landscape character is considered to be high given its substantial separation from the project.

Value of LCZ

This LCZ is considered to comprise a Local value landscape on the basis of it being designated a Foreshore Reserve within the context of the Kingston Planning Scheme (Moridalloc to Carrum Foreshore Reserve).

Magnitude of change: **Negligible**

Size/scale

The scale of change in the landscape would be negligible given its clear separation from the project.

Geographic extent

The extent of the change is considered to be negligible for this LCZ.

Duration/reversibility

There is no visible impact to this LCZ.

Significance of landscape character effect: **Negligible**

4.2 Visual effects assessment

V01 – Nepean Highway



Existing view south-east across Nepean Highway



Photomontage of proposed view south-east across Nepean Highway

Sensitivity to change: **Moderate**

Susceptibility of visual receptor to proposed change

Residents are likely to have moderate susceptibility to proposed changes given the visibility of the project from their homes, particularly due to vegetation loss. However, the extent of this issue is partially mitigated by the design assumptions provided within the methodology (refer s.2.7). Further, high fences and vegetation currently limit direct views of the rail corridor and Nepean Highway from some adjacent ground floor and single storey dwellings.

Value attached to view

Vegetation along the rail corridor provides a visual buffer for residents and contributes to the coastal character of the streetscape, with the provision for vegetation replacement at this location being narrow, and subsequent provision for taller vegetation being unlikely.

Magnitude of change: **Moderate**

Size/scale

It is expected that the width of the trench will limit opportunities to reinstate much in the way of taller or broad swathes of vegetation. However, the extent of this issue is partially mitigated by the design assumptions provided within the methodology (refer s.2.7).

Geographic extent

The visual impact of the project is limited due to the lowering of the rail line, with vegetation replacement likely to be moderate to low in this location. The geographic extent of the effect will be limited to between the residential edges of Nepean Highway and Station Street.

Duration/reversibility

Permanent

Significance of visual effect: **Moderate**



Existing view north-east across Beeson Reserve

Sensitivity to change: **Low**

Susceptibility of visual receptor to proposed change

Users of Beeson Reserve are generally unlikely to be highly susceptible to the proposed changes given most views will be looking away from the project. The potential for the reserve to be susceptible to issues arising from the axial view described for LCZ 4 would be mitigated as per the design assumptions provided within the methodology (refer s.2.7). Views from residential dwellings are considered to be less susceptible given the current orientation of rooms and windows towards the street and not the project.

Value attached to view

A high local value is applicable to views within Beeson Reserve due to the recreational use of the park and low lying nature of surrounding buildings and coastal character of the landscaping. These values are not anticipated to be compromised by the project.

Magnitude of change: **Low**

Size/scale

The scale of the change in the view is considered to be low.

Geographic extent

The visibility of the project is limited, given its location approximately 150 metres from this viewpoint. The rail corridor is also subject to visual screening by the vegetation and streetscape elements such as signage and fencing within the immediate foreground.

Duration/reversibility

Permanent

Significance of visual effect: **Low**



Existing view north-east across Bank Road

Sensitivity to change: **Low**

Susceptibility of visual receptor to proposed change

Users of Chelsea Foreshore Reserve are likely to be susceptible to any proposed changes, given the coastal and naturalistic character of the area. However, this is limited by the distance of the project from this viewpoint.

Value attached to view

The view from the Chelsea Foreshore Reserve is comprised of both urban and coastal elements, providing recreational users visual amenity and interest. As such, it is considered to have a more significant local value than typical street views.

Magnitude of change: **Low**

Size/scale

The scale of the change is considered to be low as proposal does not introduce any additional features that would be highly visible or interrupt any existing long range views from this viewpoint.

Geographic extent

This viewpoint is located approximately 200 metres from rail corridor, resulting in a very low level of visibility of the proposal. The rail corridor is also subject to visual screening by the vegetation and streetscape elements such as signage and fencing within the immediate foreground.

Duration/reversibility

Permanent

Significance of visual effect: **Low**



Existing view north-east across Nepean Highway



Photomontage of proposed view north-east across Nepean Highway

Sensitivity to change: **Low**

Susceptibility of visual receptor to proposed change

The susceptibility of receptors at this location is low given the nature of the activities at the Edithvale neighbourhood centre, short-term occupation of the area by users and the built up character of the area.

Value attached to view

The value attached to this view is low given the current visual outlook to the Nepean Highway, car parking and infrastructure elements. Landscaping is intermittent.

Magnitude of change: **Moderate**

Size/scale

The scale of the change is considered to be moderate, with car parking and the substation proposed within this view.

Geographic extent

The extent of area over which the changes would be visible is moderate given the large, new station building, car park and substation, notwithstanding that the project would be in trench opposite the commercial strip.

Duration/reversibility

Permanent

Significance of visual effect: **Moderate-Low**



Existing view south-west to Edithvale Station

Sensitivity to change: **Low**

Susceptibility of visual receptor to proposed change

Residents are considered likely to have a moderate to low susceptibility to the proposed change given the visibility of the project from their homes, and the potential inability to reinstate significant amounts of tree and shrub cover, notwithstanding implementation of the design assumptions provided within the methodology (refer s.2.7). However, the replacement architectural and urban design outcomes would comprise a significant improvement over the existing situation.

Value attached to view

The value attached to the existing view from this location is considered to be low given the rudimentary character of the station buildings, limited soft landscape, and general lack of streetscape amenity within the station precinct.

Magnitude of change: **Moderate**

Size/scale

The scale of the change in the view would be considerable notwithstanding that much of the station would be out of sight within the rail trench, but taking into account: the substantial new station and substation buildings; the introduction of an integrated vehicle barrier/ throw screen / security fencing edge; and the likelihood of little in the way of tree planting being visible from this location. Note: the extent of this change would be expected to reduce with the adoption of the design opportunities identified within the methodology (refer s.2.8).

Geographic extent

The geographic extent of the works is similar to that existing.

Duration/reversibility

Permanent

Significance of visual effect: **Moderate-low**



Existing view south-west to level crossing with commercial area beyond

Sensitivity to change: **Low**

Susceptibility of visual receptor to proposed change

The susceptibility of residents to the proposed change in the view and visual amenity is limited due to the built up and commercial nature of the area. There will be limited visible change from this viewpoint due to the lowering of the rail line beneath the road.

Value attached to view

A low landscape value is ascribed to the existing view from this location due to the built up nature of the view, the limited level of soft landscaping and the lack of an identifiable streetscape character along Edithvale Road.

Magnitude of change: **Low**

Size/scale

The scale of the change is considered to be low as proposal does not introduce any additional features that would be highly visible.

Geographic extent

The project is located approximately 50 metres from this viewpoint. Existing visibility and view lines to the commercial premises on Nepean Highway and long range views beyond these are retained.

Duration/reversibility

Permanent

Significance of visual effect: **Low**



Existing view north-west across Station Street to the rail corridor



Photomontage of proposed view north-west across Station Street

Sensitivity to change: **Moderate**

Susceptibility of visual receptor to proposed change

Residents at this viewpoint are likely to be susceptible to proposed changes, given the visibility of the project from their homes, including integrated vehicle barrier/ throw screen / security fencing edge; pedestrian overpass and substation building. However, provision is also made for a substantial length of screen planting of moderate width, but which may not have trees within it.

Value attached to view

Existing vegetation along the rail corridor provides a moderate level of visual buffer of coastal vegetation for residents, including low to moderate sized trees, and is important to the existing streetscape character. However, planting is intermittent and is compromised by transport and utility functions along both Station Street and Nepean Highway.

Magnitude of change: **Moderate**

Size/scale

A new substation substantial building and pedestrian overpass will be within this view, in addition to the above mentioned trench edge infrastructure. The width of the trench is likely to will limit opportunity to reinstate trees as a component of edge planting. Note: the extent of this change would be expected to reduce with the adoption of the design opportunities identified within the methodology (refer s.2.8).

Geographic extent

The geographic extent of change should be similar to that existing.

Duration/reversibility

Permanent

Significance of visual effect: **Moderate**



Existing view north-west across Station Street

Sensitivity to change: **Moderate**

Susceptibility of visual receptor to proposed change

Residents at this viewpoint are likely to be susceptible to the proposed changes, given the visibility of the project from their homes, addition of a substantial substation, and pedestrian overpass which would have limited capacity for vegetative screening.

Value attached to view

Vegetation along the rail corridor provides a visual buffer for residents and is important to the existing streetscape character. However, planting is intermittent and is compromised by transport and utility functions.

Magnitude of change: **Moderate**

Size/scale

A proposed pedestrian overpass would be prominent in the view. However, the integrated traffic barrier / throw screens / security fencing element would be expected to be subject to a significant level of coastal character screening seen from this viewpoint. Note: the extent of this change would be expected to reduce with the adoption of the design opportunities identified within the methodology (refer s.2.8).

Geographic extent

The geographic extent of change should be reduced from this location due to the opportunity for substantial levels of screen planting to both sides of the rail corridor.

Duration/reversibility

Permanent

Significance of visual effect: **Moderate**



Existing view from Edithvale Station platform looking south-west

Sensitivity to change: **Low**

Susceptibility of visual receptor to proposed change

The susceptibility of rail customers to the proposed change in the view and visual amenity would generally be low due to the functional, generally work related nature of their use of the station.

Value attached to view

The level of visual amenity associated with the station precinct is considered to be relatively low, given the view broadly comprises of standard commercial and residential development that obscures views of the foreshore, other than for the above partial view to Beeson Reserve and Port Phillip Bay (refer s.2.8)..

Magnitude of change: **High**

Size/scale

The scale of change would be high given the proposed view from the platform would be enclosed within the rail trench, notwithstanding the application of well-considered architectural and urban design principles and design within this setting.

Geographic extent

The trench would form the immediate foreground view from the platform with no medium or long range views available to the surrounding precinct. However, views from the station building and plaza would incorporate streetscape views.

Duration/reversibility

Permanent

Significance of visual effect: **Moderate**

4.3 Summary of effects

The tables below summarise the significance of the landscape character effects and visual effects identified (prior to mitigation). The conservative approach that has been undertaken during this assessment highlights the maximum effects on very localised parts of landscape character areas and viewpoints that are immediately adjacent to the project. These viewpoints therefore have a higher level of sensitivity than the broader community would experience. The below ratings reflect the effects of the project prior to the incorporation of mitigated measures.

Table 3 Summary of landscape character effects

LCZ	Landscape character type	Sensitivity to change	Magnitude of change	Significance of landscape effect
LCZ 1	Infrastructure corridor	Moderate	Moderate	Moderate
LCZ 2	Residential	Moderate	Low	Moderate-low
LCZ 3	Commercial	Low	Low	Low
LCZ 4	Open space	Low	Low	Low
LCZ 5	Foreshore	Low	Negligible	Negligible

Table 4 Summary of visual effects

Viewpoint	Receptor	Sensitivity to change	Magnitude of change	Significance of visual effect
V01	Nepean Highway	Moderate	Moderate	Moderate
V02	Edithvale Life Saving Club, The Esplanade	Low	Low	Low
V03	Chelsea Foreshore Reserve	Low	Low	Low
V04	Corner of Nepean Highway and Bank Road	Low	Moderate	Moderate-Low
V05	Station Street	Low	Moderate	Moderate-Low
V06	Edithvale Road	Low	Low	Low
V07	Station Street	Moderate	Moderate	Moderate
V08	Corner of Station Street and Fraser Avenue	Moderate	Moderate	Moderate
V09	Edithvale Station	Low	High	Moderate

As the project progresses, the significance of landscape effect rating and significance of visual effect rating (as listed above) will be used to help inform where and what form of mitigation will be integrated into the design to minimise or improve the quality of the visual impact. Section 5 of this report describes the approach to mitigation measures that will ensure better and locally appropriate landscape and visual outcomes from the project.

5. Mitigation measures

A range of measures that can mitigate the landscape and visual effects identified in this report can be used as the design of the project is further developed. Measures should be specific and locally appropriate to the existing landscape and streetscape features. Given the relatively early stage of the project's development, such measures specific have yet to be identified for the Edithvale Road level crossing removal project.

Any proposed measures will be guided by the principles and measures that form the Level Crossing Removal Authority's Urban Design Framework (Version 3). This document outlines the expectations of the State and Local Governments for achieving high quality, context sensitive urban design outcomes at each level crossing removal site.

The document plays a dual role by informing the design process as well as providing a basis for the evaluation of design solutions. The Framework identifies eight key principles inherent to successful level crossing removal projects, which address identity, connectivity, urban integration, sustainability, amenity, vibrancy, safety, and accessibility.

The document also identifies a specific mitigation approaches that need to be considered as projects are developed. These are listed in Table 5.

Table 5 Level Crossing Removal Authority Urban Design Framework – mitigation measures

Specified measures	Potential mitigation approaches identified
6.1 Whole of project	Seeks the development of a design response that provides an integrated landscape, architectural and urban design outcome that minimises visual clutter, aligned with local character.
6.2 Train stations	Seeks the development of station designs that provide high quality civic places, enhance local context, are sensitively sited and integrate public area and car parking as part of a high quality landscape design.
6.3 Bridges and elevated structures	Seeks the development of elevated structures that positively contribute to corridor and local identity, provide gateway experiences, are sensitive to the existing context, minimise the visual and spatial impact of services and maximise the amenity of public areas through siting and visual connections.
6.4 Open cuttings (rail trenches)	Seeks the minimisation of disconnection and improvement to visual connectivity, and integration of visually prominent elements such as elevated pedestrian and cycling connections.
6.6 Landscape and natural environments	Seeks the enhancement of the quality of existing landscape s through cohesive landscape design concepts, minimise loss and maximised replanting of trees, integrated landform, planting and water sensitive urban design outcomes.
6.9 Materials and finishes	Seeks the development of materials and finishes that are sensitive to local environments and contribute positively to local identity.
6.12 Integrated Public Art	Seeks the inclusion of integrated public art that responds to the local character of the urban setting and creates a new positive visual landmark.

Building on the principles of the UDF, urban design guidelines specific to Edithvale Road level crossing will be developed by the Authority and will provide further guidance of the State Government's expectations on the design of the project. These guidelines will more specifically shape and enforce mitigation measures and a level of considered design to ensure high quality outcomes for local residents and station users.

6. Conclusion

This preliminary landscape and visual impact assessment has been undertaken to understand the potential effects that the project will have.

This assessment found the Edithvale Road level crossing removal project impacts rating from Moderate to Negligible for the landscape character effects, and from Moderate to Low for visual receiver effects.

Whilst the project is still in its design and planning phase, there are potential mitigation approaches that may be used to reduce the visual impacts of the proposal. Such approaches are required and guided by the Level Crossing Removal Project Urban Design Framework and the relevant Urban Design Guideline Report drafted for this site. These documents will ensure that high quality urban design and landscape outcomes for local residents and station users are achieved, particularly with regards to visual impacts.

As part of the ongoing development of the project, further landscape and visual impact assessment can be undertaken to verify that the project's landscape and visual effects are reduced or a positive outcome achieved.

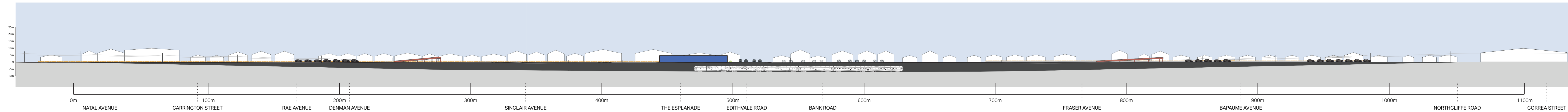
Appendices

Appendix A – Preliminary Urban Design Concept Drawing

LEVEL CROSSING
REMOVAL PROJECT

18 - EDITHVALE ROAD - EDITHVALE
PRECINCT URBAN DESIGN CONCEPT

FEBRUARY 2017



- LEGEND
- POTENTIAL SUBSTATION LOCATION
 - CAR PARKING
 - STATION BUILDING
 - POTENTIAL LANDSCAPING
 - POTENTIAL PEDESTRIAN OVERPASS
 - STATION PRECINCT
 - EXISTING PEDESTRIAN PATH
 - POTENTIAL PEDESTRIAN PATH
 - RETAINING WALL
 - STATION PLATFORMS
 - BUS STOPS