

# Urban Design and Landscape Plan

North East Link Eastern Freeway Upgrades — Tram Road to Springvale Road

**BIG BUILD**  
**EASTERN FREEWAY**

Artist impression — indicative only



## Attachment 4: Urban Design Overshadowing and Overlooking Assessment

---

---

THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK

---

# Overview

Attachment 4: Urban Design Overshadowing and Overlooking Assessment has been prepared as an attachment of the Urban Design and Landscape Plan (UDLP) associated with the Eastern Freeway Upgrades – Tram Road to Springvale Road (the Project) in accordance with relevant Environmental Performance Requirements and requirements of the Urban Design Strategy.

Attachment 4 contains an urban design overshadowing and overlooking assessment associated with Eastern Freeway Upgrade – Tram Road to Springvale Road that should be read in conjunction with:

- UDLP Report
- Attachment 1: Architecture and Urban Design
- Attachment 2: Landscape Design
- Attachment 3: Visualisations

Each UDLP Attachment is intended to provide clear and accessible level of information for public reference.

In this attachment the following is covered:

- An overview of the methodology, limitations and outcomes of the overshadowing assessment.
- The overlooking assessment including relevant section drawings.
- Table of Contents.
- Key Alignment Plan showing the extent of the Area Wide analysis
- Area Wide Analysis showing overshadowing impacts at a 1:2000 scale.
- Focused Analysis showing overshadowing impacts along Eram Road and Surrey Road at a 1:1250 scale.

## Interface with existing UDLPs

The design approved under the Eastern Freeway Upgrades – Burke Road to Tram Road UDLP includes a small portion of land within the boundary of this UDLP; described as Tram Road to Springvale Road Package. This overlapping interface occurs approximately 150 metres west of Tram Road to approximately 250 metres east of Tram Road. This UDLP seeks a new approval to bring all works of the Tram Road to Springvale Road Package to be within one UDLP. Upon approval by the Minister for Planning, this UDLP will replace the approved overlapping scope provided by the Eastern Freeway Upgrades – Burke Road to Tram Road UDLP.

The designs for this area outlined in this attachment can be delivered in this portion of land under the approval granted for the provided by the Eastern Freeway Upgrades – Burke Road to Tram Road UDLP where the use and development remains generally in accordance with the final built form shown in that UDLP.



Figure 1: Eastern Freeway Upgrades – Tram Road to Springvale Road project area in relation to other North East Link projects

## Document control – revision history

Rev. No.	Date	Description of change	Prepared by
0	1 September 2025	Issue for Public Exhibition	TSA
1	19 December 2025	UDLP Final Submission	TSA
2	1 April 2026	Issued for Approval	TSA

# Overview – Overshadowing Assessment

The purpose of this Overshadowing and Overlooking Assessment is to identify and assess expected overshadowing and overlooking caused as a result of the Eastern Freeway Upgrades – Tram Road to Springvale Road. Overshadowing refers to the shadow cast by a building or a structure onto nearby properties. Overlooking considers whether project works enable views into adjacent homes or gardens.

## Overshadowing assessment

The overshadowing assessment is based on shadows cast by non-transparent structures during the September equinox, which occurs in the Southern Hemisphere between September 21 to 24 each year.

The assessment is prepared in accordance with the EPR LP4, which requires the following in relation to overshadowing:

*Minimise overshadowing from noise walls and elevated structures and overlooking from elevated structures.*

*Overshadowing from elevated structures and noise walls to residential properties (including existing solar panels), community facilities, open spaces, waterways and valuable natural habitats must be minimised through detailed design. Consultation must occur with directly affected property owners and occupiers to inform formulation of parameters for these structures including location, design and materials. Unless with the consent of an affected landowner or in exceptional circumstances, the extent of additional overshadowing of residential properties from non-transparent structures:*

- *Should be no greater than the existing shadowing of secluded private open spaces associated with residential properties cast by existing structures including existing noise walls and other structures (e.g. elevated walkways) between the hours of 9:00 am to 3:00 pm as measured on September 22.*
- *If additional overshadowing occurs it must not be greater than 50% of the secluded private open space or 40 sqm, whichever is the greater, between the hours of 9:00 am to 3:00 pm as measured on September 22.*

Refer to UDLP Attachment 1: Architecture and Urban Design for design drawings related to noise walls, finishes and noise wall alignment.

## Methodology

The methodology employed for the overshadowing assessment consisted of the following:

- Development of a 3D terrain model created using one metre contour data.
- Development of a 3D model of the design which is informed by ongoing consultation and design development.

- Use of modelling software to analyse and diagram shadows on September 22nd.
- Using modelling software to analyse overshadowing impacts in line with design development.

The overshadowing assessment is comprehensively documented in diagrams of analysis at the following scales:

- **Area Wide Analysis:** A broad scale analysis was undertaken to identify areas of potential overshadowing. This analysis was undertaken at 9am, 12pm and 3pm at a broad scale. This assumed a ‘worst case scenario’ where noise walls are installed to the UDLP indicative height and with 100% solid wall panels. This analysis was used to understand the potentially affected properties that require a more focused analysis of overshadowing and included consideration of existing secluded private open spaces, waterways, vegetation, natural habitats, community facilities, solar panels and other sensitive areas.
- **Focused Analysis:** A Focused Analysis was undertaken for properties that the Area Wide Analysis identified as being subject to overshadowing impacts. The Focused Analysis provides a zoomed-in analysis of overshadowing impacts at specific properties and depicts overshadowing for all relevant hours throughout the day at 1-hour intervals. As with the Area Wide Analysis, the Focused Analysis initially assumes noise walls are installed to the UDLP indicative height and with 100% solid wall panels. It includes an assessment of the secluded private open space (SPOS) at each property. Where additional overshadowing is identified, the Focused Analysis includes further analysis that assumes the use of acrylic panels in the noise wall solution to maximise daylight access to adjacent residential SPOS.

## Limitations

Although every effort has been taken to produce an accurate model, the limitations of the contour data resolution and the approximated dwelling heights and forms mean that the overshadowing results should be treated as indicative only. They are intended to support ongoing consultation and guide the development of mitigation measures during the design process.

In some instances, approximations were made off external data sources to determine the location and dimensions of elements where data is not readily available, such as the use of high-resolution aerial imagery and LiDAR point clouds. These were used for determining the extent of SPOS, footprint of houses, and approximate height of residential buildings and fences.

The analysis does not consider overshadowing from existing bridge structures and other minor features such as existing canopy cover, gantries, light poles, and low height retaining walls.

Further information gathered from site surveys, including the location of existing buildings and associated private open space, heights of existing fences and site levels will be incorporated into the detailed design process to inform a more accurate understanding of overshadowing impacts.

Noise wall heights are indicated on drawings at Attachment 1: Architecture and Urban Design and are based on the most current noise modelling and road alignment design.

Throughout detailed design, the road alignment and noise modelling may result in a reduction in noise wall heights and changes to type of noise wall.

The Focused Analysis has assumed a realistic worst case scenario that is based on assessing the noise wall type with the the lowest proportion of acrylic panels in the noise wall types indicated at Attachment 1.

The materials and extent of application are to be finalised during the design development process in consultation with directly affected properties to achieve compliance with the requirements of EPR LP4.

## Assessment outcomes

The design presented in this UDLP minimises overshadowing throughout the project at residential properties, community facilities, open spaces, waterways and valuable natural habitats.

This has been achieved by rationalising the road alignment design to ensure the freeway footprint is minimised as far as practicable. This resulted in new noise wall alignments being further offset from residential properties, particularly along Eram Road where the EES Reference Design showed noise walls being installed along the property boundary. The design has also ensured that large extents of existing noise walls can be retained.

Further minimisation measures include reducing the extent and height of new noise walls to the minimum height required to achieve relevant operational traffic noise requirements, as well as proposing the installation of acrylic wall panels to maximise daylight access to adjacent residential SPOS.

The overshadowing assessment undertaken across two scales of analysis identified minor additional overshadowing of the SPOS of properties along Eram Road and Conrad Court, where the SPOS is close to the existing shared use path on the southern side of the Eastern Freeway. However, the Focused Analysis demonstrates that once acrylic treatment is incorporated in the design solution, any additional overshadowing impacts are mitigated.

## Detailed design and consultation

Overshadowing is progressively assessed throughout the design development subject to detailed site surveys and further noise assessments used to determine if the extent of overshadowing can be further reduced.

The Focused Analysis presented in this overshadowing assessment assumes that noise walls will be installed to the UDLP indicative height and with acrylic wall panels.

Increased acrylic treatment has been specified in areas where it is advantageous to maximise daylight access to adjacent residential SPOS. This measure helps to minimise overshadowing of SPOS as well as extents of the Koonung Creek Trail and open space areas.

The design development process will further minimise the extent of overshadowing by considering detailed survey information when available, any updated noise modelling assessments as well as the following design optioneering opportunities:

- Refinements to noise wall alignments and heights based on confirmation of noise reduction performance
- Changes to height uniformity and the approach to overlapping and stepping of noise walls
- Selection of noise wall types and colours at certain locations.

Consultation will be undertaken throughout the design development process, with property owners identified as potentially affected by the Overshadowing Assessment. This consultation will inform the parameters for these structures including location, design and materials.

Agreement and consent to the proposed design will be obtained from directly affected landowners where the overshadowing conditions of EPR LP4 cannot, or will not, be achieved. The Project will make all reasonable endeavours to reach an acceptable design outcome and obtain land owner consent. If this cannot be achieved exceptional circumstance will apply.

# Overview – Overlooking Assessment

## Overlooking assessment

An overlooking assessment was undertaken to respond to the relevant requirements of EPR LP4, which are as follows:

*Overlooking from elevated structures, especially within a distance of 15 metres to secluded open space and habitable room windows of residential properties, must be minimised through detailed design as far as practicable. Consultation must occur with directly affected property owners and occupiers to inform formulation of parameters, designs and materials for these structures.*

## Methodology

The overlooking assessment was based on a review of all elevated structures proposed as part of the project. This includes the new Eram Road pedestrian and cycling bridge, as well as eastbound and westbound road bridges at Middleborough Road.

The assessment included analysis of potential sightlines between pedestrian and road user heights at each structure and secluded open space areas and habitable room windows of residential properties.

Section and elevation drawings presented at Attachment 1: Architecture and Urban Design for each structure are included below to demonstrate potential sightlines and distances between relevant locations.

## Assessment outcomes

The assessment demonstrates that the elevated structures proposed as part of the project do not have the potential to result in overlooking to secluded open space areas and habitable room windows of residential properties. The section and elevation drawings have been included below to demonstrate the height of pedestrians and road users, and their associated sightlines, in relation to residential properties.

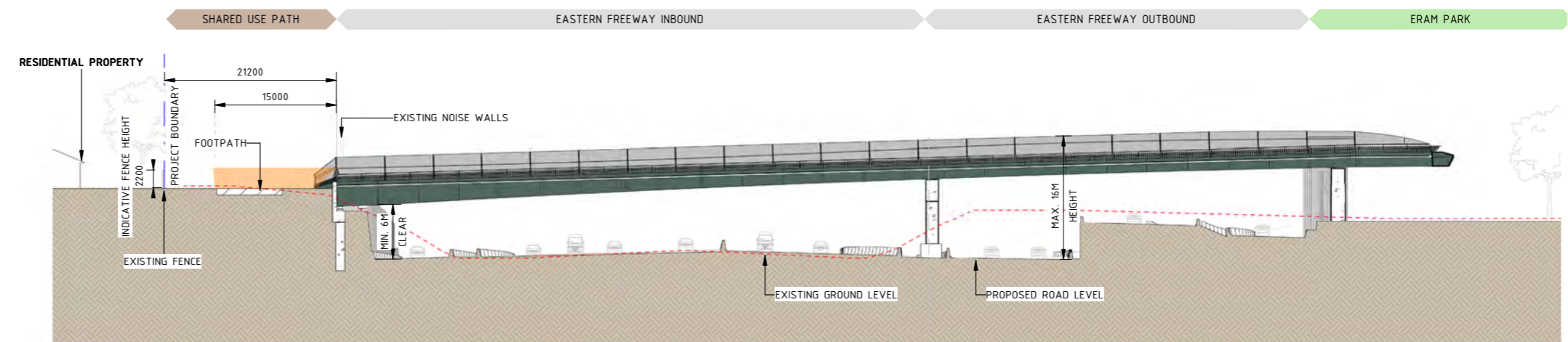
The new Eram Road pedestrian and cycling bridge is designed to avoid overlooking by users as it ensures that the bridge terminates at the level of the existing Koonung Creek Trail path on the southern side of the freeway. Where the bridge is slightly elevated from the height of the existing Koonung Creek Trail path, it is more than 50 metres from residential properties, which is greater than the 15 metre distance recommended in the EPR. This results in no potential for overlooking from the bridge into secluded open spaces and habitable room windows of residential properties.

The Middleborough Road eastbound and westbound road bridges are elevated but will not result in any overlooking impacts to secluded open space and habitable room windows of residential properties. The eastbound off-ramp is located approximately 100 metres from any residential properties and has no potential for overlooking. The Middleborough Road on-ramp is offset by more than 15 metres from residential properties along Eram Road and is lower than the height of the adjacent noise walls which

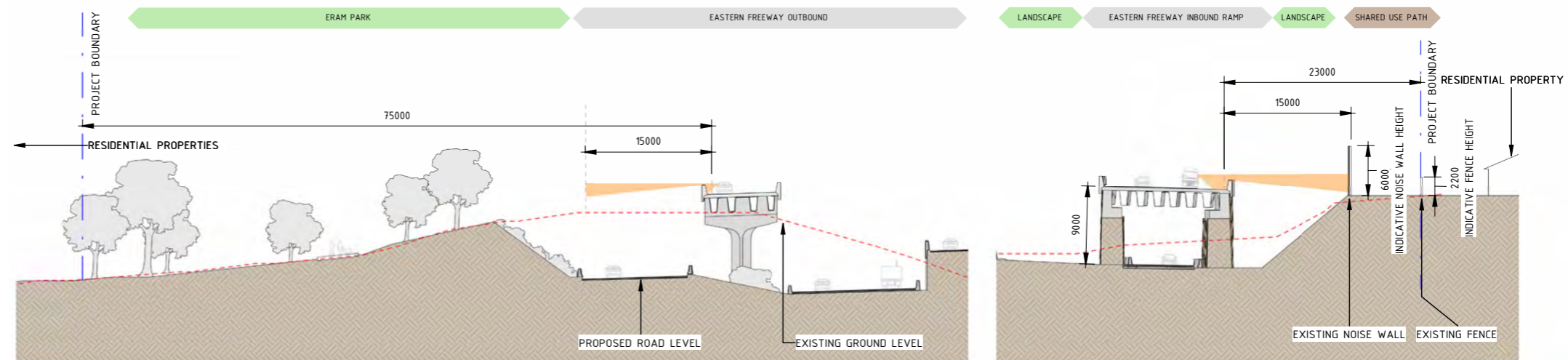
prevent sight lines towards residential properties. Any potential for overlooking from the road bridges is further minimised through the use of parapet barriers.

The detailed design process will include ongoing review of the design of these structures to ensure that the heights and alignments do not result in any additional overlooking concerns.

The diagrams below show observations taken at 1.7 metres in height at the closest part of the elevated structure to residential properties.

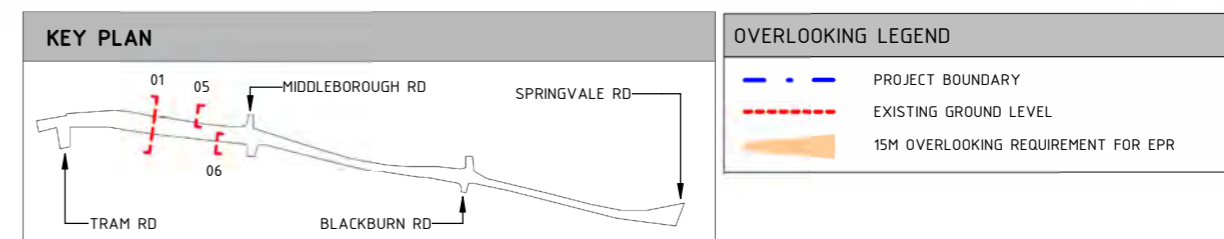


1 ERAM RD PEDESTRIAN AND CYCLING BRIDGE SECTION 01 - OVERLOOKING ANALYSIS SECTION  
1 : 500



1 TYPICAL ROAD SECTION 05 - OVERLOOKING ANALYSIS SECTION  
1 : 500

2 TYPICAL ROAD SECTION 06 - OVERLOOKING ANALYSIS SECTION  
1 : 500



# Table of Contents

## Attachment 4: Urban Design Overshadowing and Overlooking Assessment

Drawing Number	Location	Drawing Number	Location
NEL-EST-NEA-6600-UUD-DRG-GEN-4000	COVER SHEET	NEL-EST-NEA-6600-UUD-PLA-4055	GA_06 - FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 12PM - TYPE 1 ASSESSMENT
NEL-EST-NEA-6600-UUD-PLA-4001	OVERSHADOWING ALIGNMENT KEY PLAN	NEL-EST-NEA-6600-UUD-PLA-4056	GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 9AM-11AM - TYPE 3 ASSESSMENT
NEL-EST-NEA-6600-UUD-PLA-4002	GA_01 - OVERSHADOWING ANALYSIS TRAM RD 9AM - 3PM	NEL-EST-NEA-6600-UUD-PLA-4057	GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 12PM-2PM- TYPE 3 ASSESSMENT
NEL-EST-NEA-6600-UUD-PLA-4003	GA_02 - OVERSHADOWING ANALYSIS - LYNDHURST CRES 9AM	NEL-EST-NEA-6600-UUD-PLA-4058	GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 9AM-11AM - TYPE 3 ASSESSMENT
NEL-EST-NEA-6600-UUD-PLA-4004	GA_02 - OVERSHADOWING ANALYSIS - LYNDHURST CRES 12PM	NEL-EST-NEA-6600-UUD-PLA-4059	GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 12PM-2PM - TYPE 3 ASSESSMENT
NEL-EST-NEA-6600-UUD-PLA-4005	GA_02 - OVERSHADOWING ANALYSIS - LYNDHURST CRES 3PM	NEL-EST-NEA-6600-UUD-PLA-4060	GA_06 - FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 9AM-11AM - TYPE 3 ASSESSMENT
NEL-EST-NEA-6600-UUD-PLA-4006	GA_03 - OVERSHADOWING ANALYSIS - ERAM RD 9AM	NEL-EST-NEA-6600-UUD-PLA-4061	GA_06 - FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 12PM - TYPE 3 ASSESSMENT
NEL-EST-NEA-6600-UUD-PLA-4007	GA_03 - OVERSHADOWING ANALYSIS - ERAM RD 12PM	NEL-EST-NEA-6600-UUD-PLA-4062	GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 9AM-11AM - TYPE 5 ASSESSMENT
NEL-EST-NEA-6600-UUD-PLA-4008	GA_03 - OVERSHADOWING ANALYSIS - ERAM RD 3PM	NEL-EST-NEA-6600-UUD-PLA-4063	GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 12PM-2PM- TYPE 5 ASSESSMENT
NEL-EST-NEA-6600-UUD-PLA-4009	GA_04 - OVERSHADOWING ANALYSIS - MIDDLEBOROUGH RD 9AM	NEL-EST-NEA-6600-UUD-PLA-4064	GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 9AM-11AM - TYPE 5 ASSESSMENT
NEL-EST-NEA-6600-UUD-PLA-4010	GA_04 - OVERSHADOWING ANALYSIS - MIDDLEBOROUGH RD 12PM	NEL-EST-NEA-6600-UUD-PLA-4065	GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 12PM-2PM - TYPE 5 ASSESSMENT
NEL-EST-NEA-6600-UUD-PLA-4011	GA_04 - OVERSHADOWING ANALYSIS - MIDDLEBOROUGH RD 3PM	NEL-EST-NEA-6600-UUD-PLA-4066	GA_06 - FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 9AM-11AM - TYPE 5 ASSESSMENT
NEL-EST-NEA-6600-UUD-PLA-4012	GA_05 - OVERSHADOWING ANALYSIS - KOONUNG RD BRIDGE 9AM	NEL-EST-NEA-6600-UUD-PLA-4067	GA_06 - FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 12PM - TYPE 5 ASSESSMENT
NEL-EST-NEA-6600-UUD-PLA-4013	GA_05 - OVERSHADOWING ANALYSIS - KOONUNG RD BRIDGE 12PM		
NEL-EST-NEA-6600-UUD-PLA-4014	GA_05 - OVERSHADOWING ANALYSIS - KOONUNG RD BRIDGE 3PM		
NEL-EST-NEA-6600-UUD-PLA-4015	GA_06 - OVERSHADOWING ANALYSIS - CONRAD CT BRIDGE 9AM		
NEL-EST-NEA-6600-UUD-PLA-4016	GA_06 - OVERSHADOWING ANALYSIS - CONRAD CT BRIDGE 12PM		
NEL-EST-NEA-6600-UUD-PLA-4017	GA_06 - OVERSHADOWING ANALYSIS - CONRAD CT BRIDGE 3PM		
NEL-EST-NEA-6600-UUD-PLA-4018	GA_07 - OVERSHADOWING ANALYSIS - CABENA ST BRIDGE 9AM		
NEL-EST-NEA-6600-UUD-PLA-4019	GA_07 - OVERSHADOWING ANALYSIS - CABENA ST BRIDGE 12PM		
NEL-EST-NEA-6600-UUD-PLA-4020	GA_07 - OVERSHADOWING ANALYSIS - CABENA ST BRIDGE 3PM		
NEL-EST-NEA-6600-UUD-PLA-4021	GA_08 - OVERSHADOWING ANALYSIS - SPRINGVALE RD 9AM		
NEL-EST-NEA-6600-UUD-PLA-4022	GA_08 - OVERSHADOWING ANALYSIS - SPRINGVALE RD 12PM		
NEL-EST-NEA-6600-UUD-PLA-4023	GA_08 - OVERSHADOWING ANALYSIS - SPRINGVALE RD 3PM		
NEL-EST-NEA-6600-UUD-PLA-4050	GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 9AM-11AM - TYPE 1 ASSESSMENT		
NEL-EST-NEA-6600-UUD-PLA-4051	GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 12PM-2PM - TYPE 1 ASSESSMENT		
NEL-EST-NEA-6600-UUD-PLA-4052	GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 9AM-11AM - TYPE 1 ASSESSMENT		
NEL-EST-NEA-6600-UUD-PLA-4053	GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 12PM-2PM - TYPE 1 ASSESSMENT		
NEL-EST-NEA-6600-UUD-PLA-4054	GA_06 - FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 9AM-11AM - TYPE 1 ASSESSMENT		



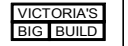
# URBAN DESIGN AND LANDSCAPE PLAN

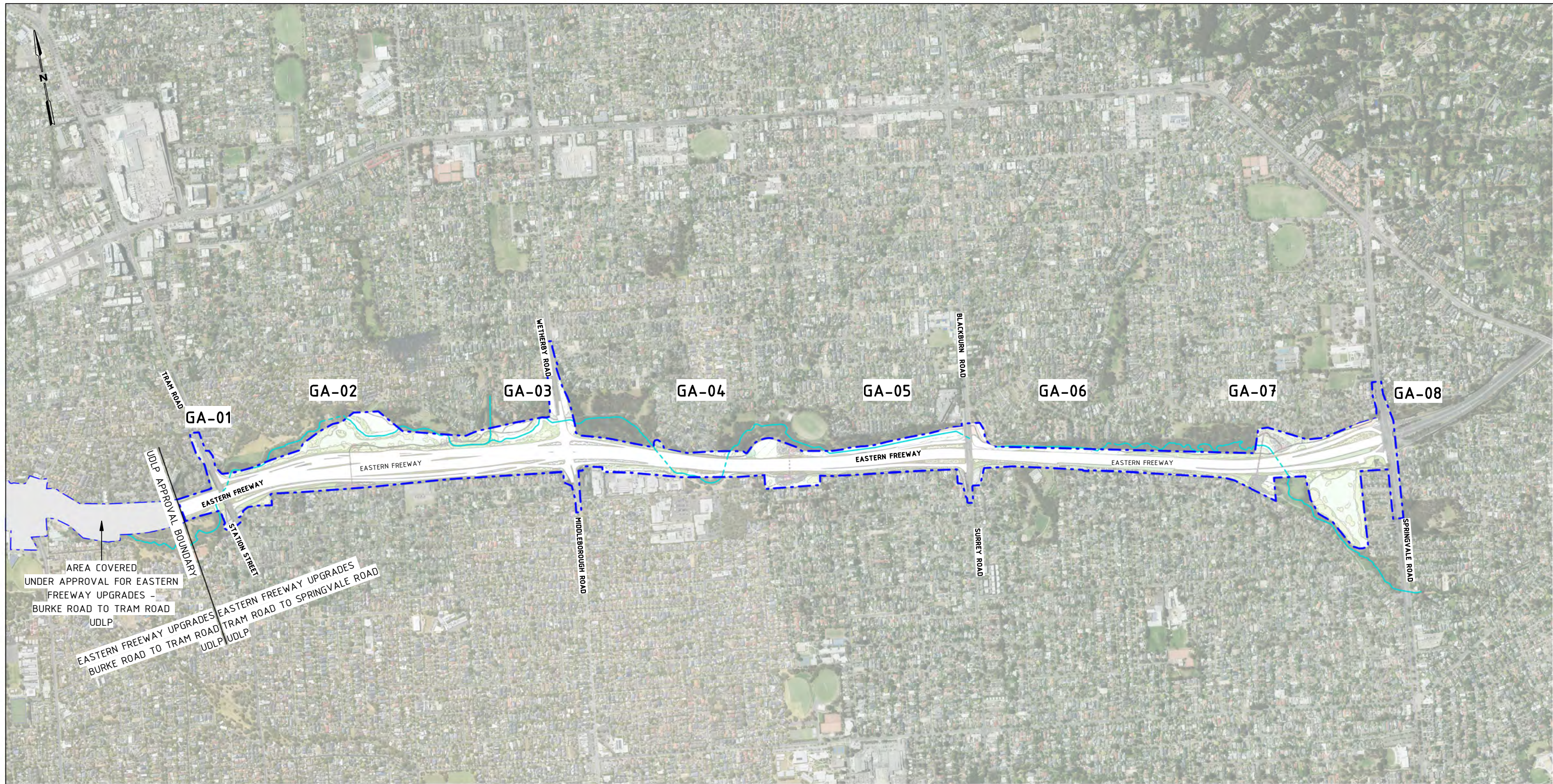
## EASTERN FREEWAY UPGRADES - TRAM ROAD TO SPRINGVALE ROAD

### URBAN DESIGN OVERSHADOWING ASSESSMENT

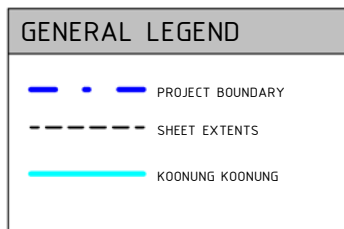
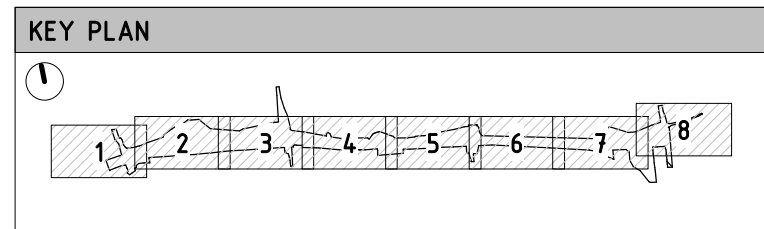
UDLP SUBMISSION  
NOT FOR CONSTRUCTION

NEL-EST-NEA-6900-UUD-MD3-1000.rvt

© North East Link Program			DISCLAIMER			  		EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN AND LANDSCAPE COVER SHEET ZONE 6600		DTP No.:		
2	ISSUED FOR APPROVAL	01/04/26	Conditions of Use: This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade. Recipients of this document: Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.			Tram to Springvale Alliance		PROJECT CONTRACT: EAST		NELP DRAWING No.: NEL-EST-NEA-6600-UUD-DRG-GEN-4000		REVISION
1	UDLP FINAL SUBMISSION	19/12/25	COORDINATE SYSTEM: MGA94 Z55 HEIGHT DATUM (m): AHD			SIZE: A3    SCALE:		CAD FILE: NEL-EST-NEA-6900-UUD-MD3-1000.rvt		REVISION 2		
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25	DRAWN:			DRAWN:		DRAWN:		DRAWN:		REVISION
REV. DESCRIPTION		DATE	DRAWN:			DRAWN:		DRAWN:		DRAWN:		REVISION
REVISIONS		DATE	DRAWN:			DRAWN:		DRAWN:		DRAWN:		REVISION



1 OVERSHADOWING SITE PLAN  
1 : 15000



**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6900-UUD-MD3-1000.rvt

© North East Link Program

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM: MGA94 Z55  
HEIGHT DATUM (m): AHD DRAWN:

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:15000 CAD FILE: NEL-EST-NEA-6900-UUD-MD3-1000.rvt

DTP No.:

**EASTERN FREEWAY UPGRADES  
TRAM ROAD TO SPRINGVALE ROAD  
URBAN DESIGN AND LANDSCAPE  
OVERSHADOWING ALIGNMENT KEY PLAN**

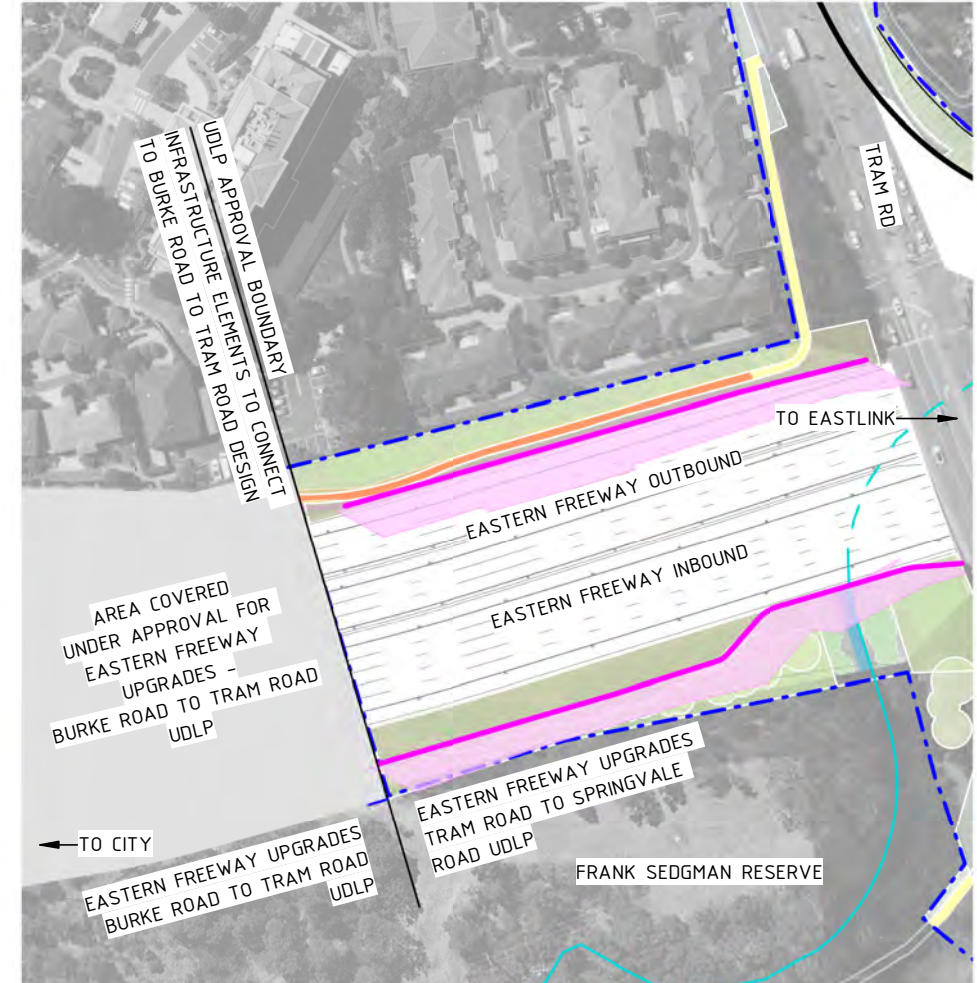
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-DRG-PLA-4001	REVISION 2
---------------------------	--	---------------



1 OVERSHADOWING ANALYSIS - TRAM RD 9AM  
1 : 2000



2 OVERSHADOWING ANALYSIS - TRAM RD 12PM  
1 : 2000



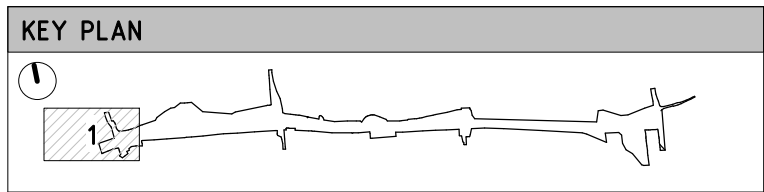
3 OVERSHADOWING ANALYSIS - TRAM RD 3PM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-01

Within GA-01, MRPP noise walls are placed along the north side and the Eastern Freeway Upgrades - Burke Road to Tram Road UDLP noise walls are placed along the south side. The overshadowing analysis diagrams evidence that no residential properties or SPOS are affected, therefore there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

- EXTENT OF EXISTING FENCE AND RETAINED NOISE WALL OVERSHADOWING
- EXTENT OF EXISTING BUILDING OVERSHADOWING
- EXTENT OF PROPOSED NOISE WALL OVERSHADOWING
- SPOS

**GENERAL LEGEND**

- PROPOSED NOISE WALLS
- EXISTING NOISE WALLS RETAINED
- FLOOD WALL/NOISE WALL COMBINED
- FLOOD WALL
- KOONUNG KOONUNG
- PROJECT BOUNDARY
- FLOOD CONTROL MEASURES TO THE SATISFACTION OF THE WATER AUTHORITY
- FOR LANDSCAPE TREATMENT REFER TO ATTACHMENT 2
- KOONUNG CREEK TRAIL (EXISTING)
- KOONUNG CREEK TRAIL (UPGRADED)
- ARTISTIC SURFACE TREATMENT
- COMPACTED GRAVEL REST POINTS AND ADDITIONAL PATHS
- PROPOSED ROAD BRIDGE

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

© North East Link Program

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

**DISCLAIMER**

Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

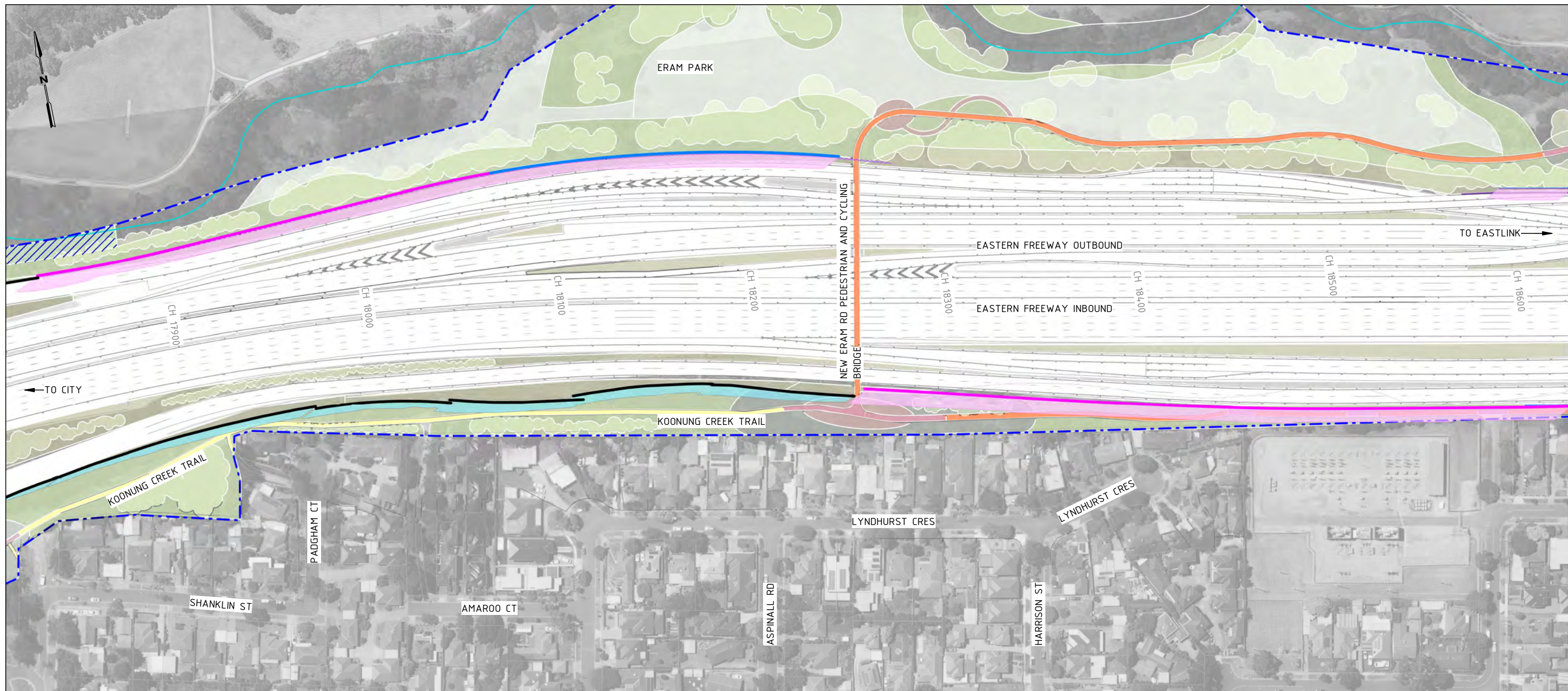
Tram to Springvale Alliance

CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:

EASTERN FREEWAY UPGRADES  
TRAM ROAD TO SPRINGVALE ROAD  
URBAN DESIGN & LANDSCAPE  
GA\_01 - OVERSHADOWING ANALYSIS TRAM RD - 9AM - 3PM

PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4002	REVISION: 2
---------------------------	--	----------------



1 OVERSHADOWING ANALYSIS - LYNDHURST CRES 9AM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-02

Within GA-02, the existing noise walls running along the south have been retained while MRPP noise walls are placed along both the north and south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, however no residential properties or SPOS are affected. Therefore, there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**

This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**

Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.

#### KEY PLAN



#### OVERSHADOWING LEGEND

- EXTENT OF EXISTING FENCE AND RETAINED NOISE WALL OVERSHADOWING
- EXTENT OF EXISTING BUILDING OVERSHADOWING
- EXTENT OF PROPOSED NOISE WALL OVERSHADOWING
- SPOS

#### GENERAL LEGEND

- PROPOSED NOISE WALLS
- EXISTING NOISE WALLS RETAINED
- FLOOD WALL/NOISE WALL COMBINED
- FLOOD WALL
- KOONUNG KOONUNG
- PROJECT BOUNDARY
- FLOOD CONTROL MEASURES TO THE SATISFACTION OF THE WATER AUTHORITY
- FOR LANDSCAPE TREATMENT REFER TO ATTACHMENT 2
- KOONUNG CREEK TRAIL (EXISTING)
- KOONUNG CREEK TRAIL (UPGRADED)
- ARTISTIC SURFACE TREATMENT
- COMPACTED GRAVEL REST POINTS AND ADDITIONAL PATHS
- PROPOSED ROAD BRIDGE

UDLP SUBMISSION  
NOT FOR CONSTRUCTION

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

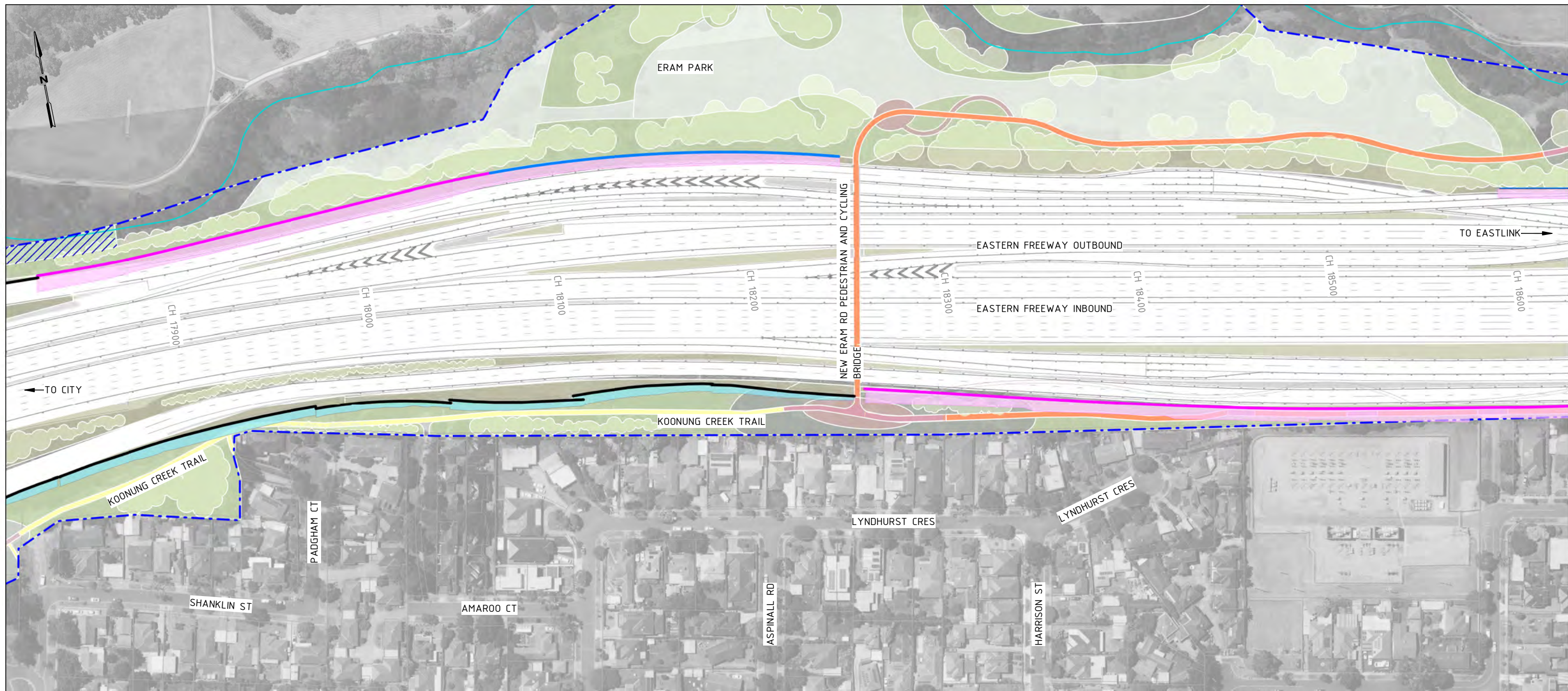
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:		
EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE		
GA_02 - OVERSHADOWING ANALYSIS - LYNDHURST CRES 9AM		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4003	REVISION 2



1 OVERSHADOWING ANALYSIS - LYNDHURST CRES 12PM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-02

Within GA-02, the existing noise walls running along the south have been retained while MRPP noise walls are placed along both the north and south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, however no residential properties or SPOS are affected. Therefore, there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



#### OVERSHADOWING LEGEND

- Extent of existing fence and retained noise wall overshadowing
- Extent of existing building overshadowing
- Extent of proposed noise wall overshadowing
- SPOS

#### GENERAL LEGEND

- Proposed noise walls
- Existing noise walls retained
- Flood wall/noise wall combined
- Flood wall
- Koonung Koonung
- Project boundary
- Flood control measures to the satisfaction of the water authority
- For landscape treatment refer to Attachment 2
- Koonung Creek Trail (Existing)
- Koonung Creek Trail (Upgraded)
- Artistic surface treatment
- Compacted gravel rest points and additional paths
- Proposed road bridge

UDLP SUBMISSION  
NOT FOR CONSTRUCTION

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:

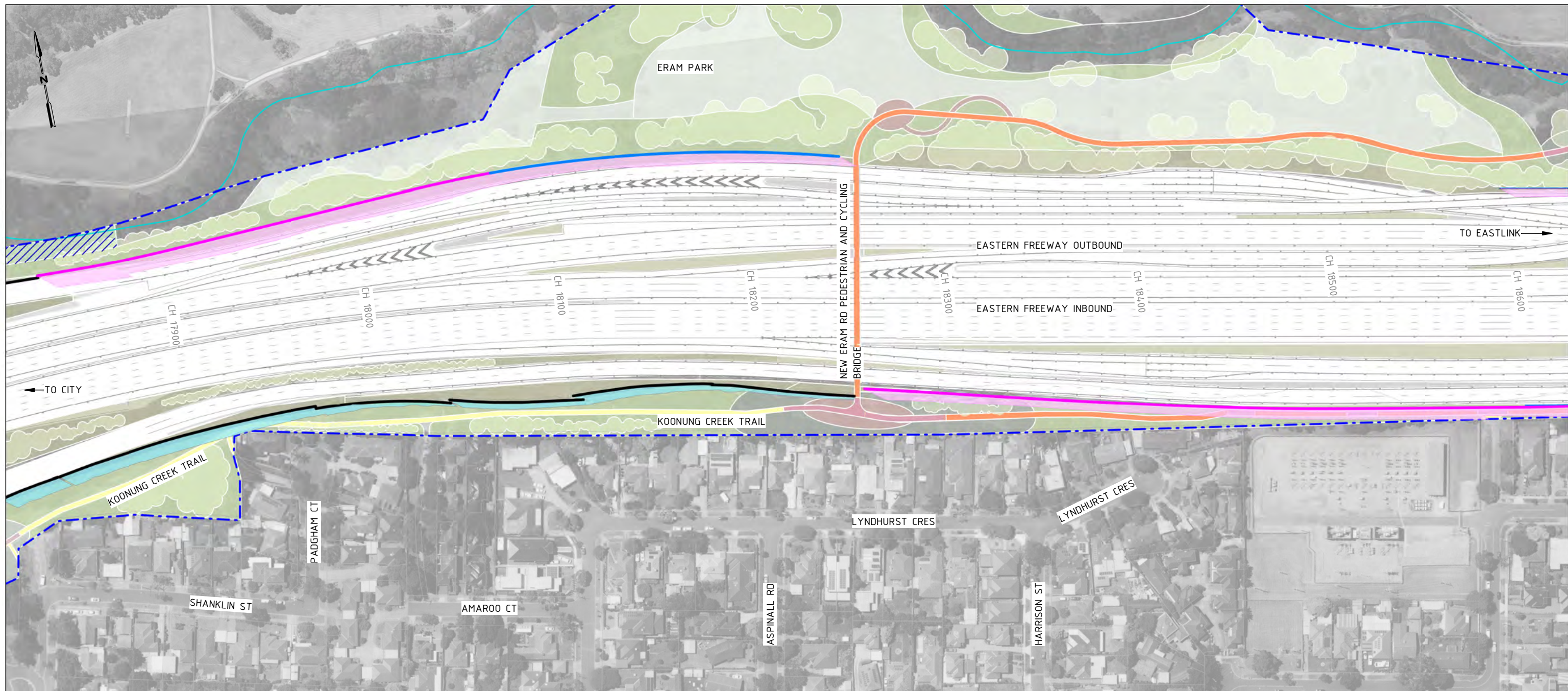
EASTERN FREEWAY UPGRADES  
TRAM ROAD TO SPRINGVALE ROAD  
URBAN DESIGN & LANDSCAPE  
GA\_02 - OVERSHADOWING ANALYSIS - LYNDHURST CRES 12PM

PROJECT CONTRACT: EAST

NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4004

REVISION: 2

NEL-EST-NEA-6920-UUD-MD3-0001.rvt



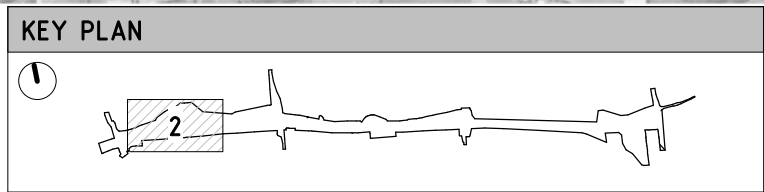
1 OVERSHADOWING ANALYSIS - LYNDHURST CRES 3PM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-02

Within GA-02, the existing noise walls running along the south have been retained while MRPP noise walls are placed along both the north and south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, however no residential properties or SPOS are affected. Therefore, there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

- Extent of existing fence and retained noise wall overshadowing
- Extent of existing building overshadowing
- Extent of proposed noise wall overshadowing
- SPOS

**GENERAL LEGEND**

- Proposed noise walls
- Existing noise walls retained
- Flood wall/noise wall combined
- Flood wall
- Koonung Koonung
- Project boundary
- Flood control measures to the satisfaction of the water authority
- For landscape treatment refer to Attachment 2
- Koonung Creek Trail (Existing)
- Koonung Creek Trail (Upgraded)
- Artistic surface treatment
- Compacted gravel rest points and additional paths
- Proposed road bridge

UDLP SUBMISSION  
NOT FOR CONSTRUCTION

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

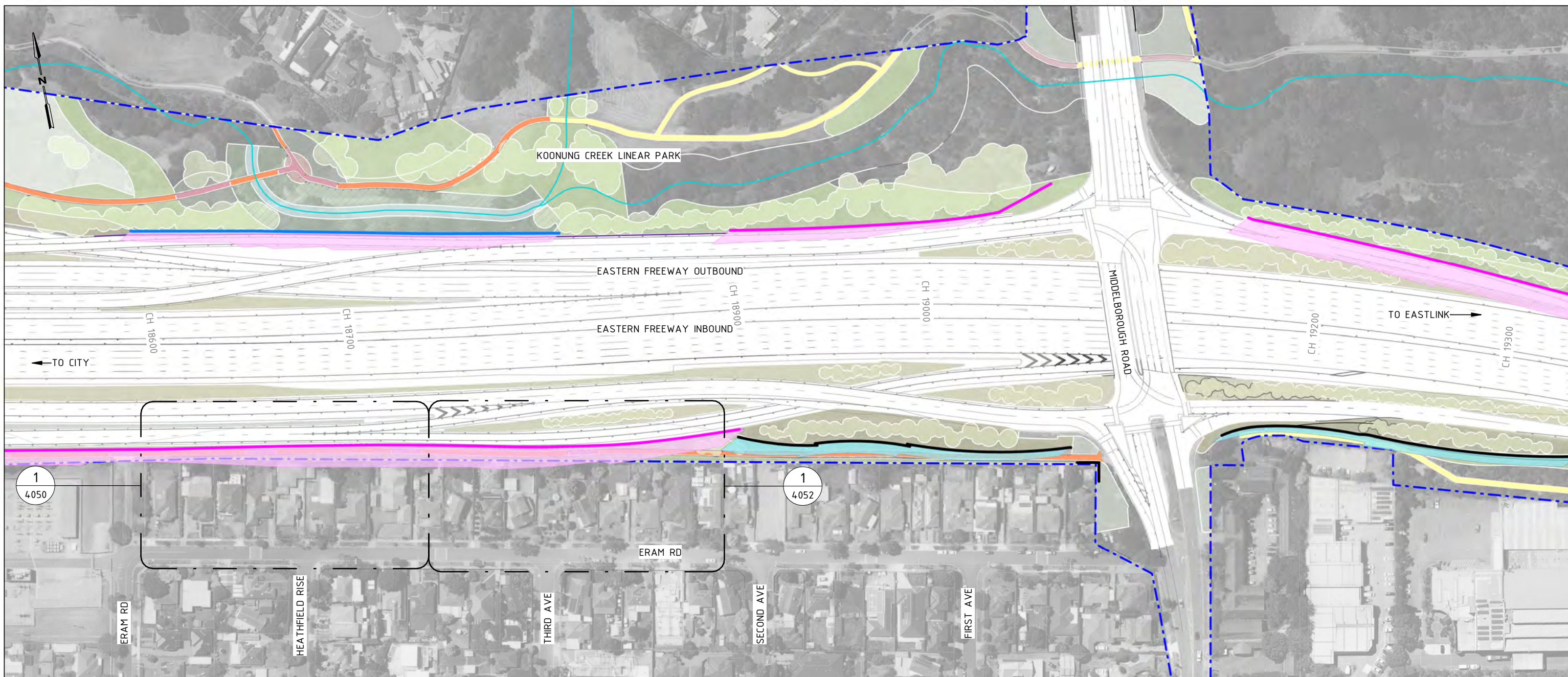
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

PROJECT CONTRACT: EAST		NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4005		REVISION: 2
------------------------	--	---	--	-------------



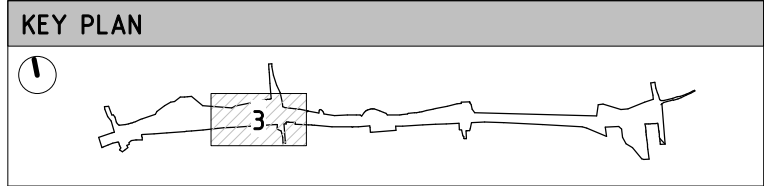
1 OVERSHADOWING ANALYSIS - ERAM RD 9AM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-03

Within GA-03, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along both the north and south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, as well encroachment into SPOS of residential properties on Eram Rd. A focused analysis is required and has been prepared for this area between 9AM and 2PM, refer to drawings 4050-4053 for Type 1, 4056-4059 for Type 3 and 4062-4065 for Type 5 assessments.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd.  
Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

- Extent of existing fence and retained noise wall overshadowing
- Extent of existing building overshadowing
- Extent of proposed noise wall overshadowing
- SPOS

**GENERAL LEGEND**

- Proposed noise walls
- Existing noise walls retained
- Flood wall/noise wall combined
- Flood wall
- Koonung Koonung
- Project boundary
- Flood control measures to the satisfaction of the water authority
- For landscape treatment refer to Attachment 2
- Koonung Creek Trail (Existing)
- Koonung Creek Trail (Upgraded)
- Artistic surface treatment
- Compacted gravel rest points and additional paths
- Proposed road bridge

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

© North East Link Program

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

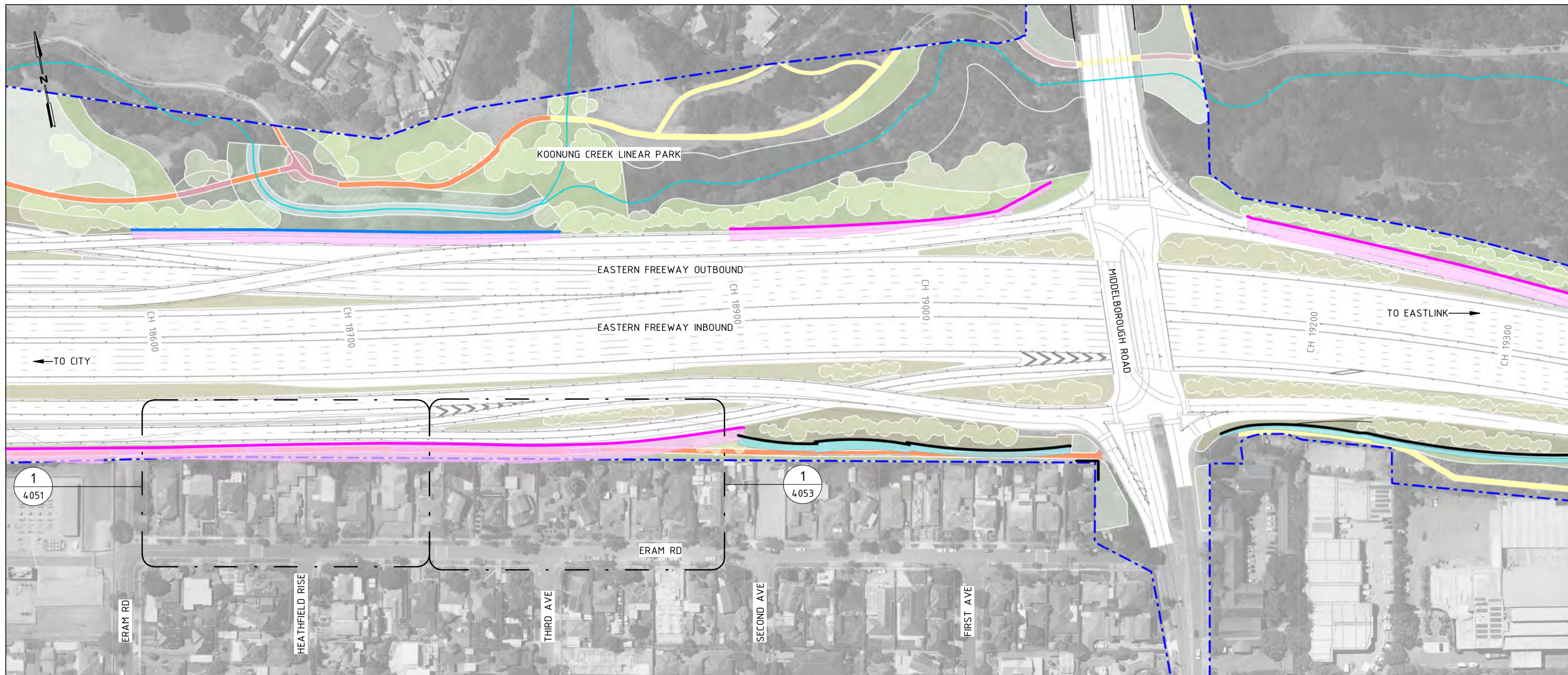
Tram to Springvale Alliance

CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:

EASTERN FREEWAY UPGRADES  
TRAM ROAD TO SPRINGVALE ROAD  
URBAN DESIGN & LANDSCAPE  
GA\_03 - OVERSHADOWING ANALYSIS - ERAM RD 9AM

PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4006	REVISION: 2
------------------------	---	-------------



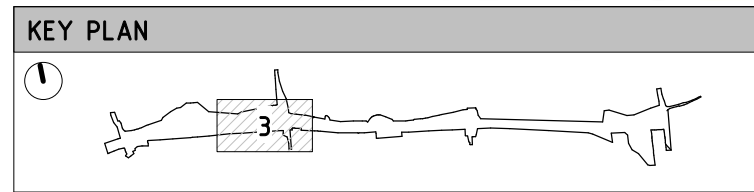
1 OVERSHADOWING ANALYSIS - ERAM RD 12PM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-03

Within GA-03, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along both the north and south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, as well encroachment into SPOS of residential properties on Eram Rd. A focused analysis is required and has been prepared for this area between 9AM and 2PM, refer to drawings 4050-4053 for Type 1, 4056-4059 for Type 3 and 4062-4065 for Type 5 assessments.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



OVERSHADOWING LEGEND			
	EXTENT OF EXISTING FENCE AND RETAINED NOISE WALL OVERSHADOWING		EXTENT OF PROPOSED NOISE WALL OVERSHADOWING
	EXTENT OF EXISTING BUILDING OVERSHADOWING		SPOS

GENERAL LEGEND			
	PROPOSED NOISE WALLS		FOR LANDSCAPE TREATMENT REFER TO ATTACHMENT 2
	EXISTING NOISE WALLS RETAINED		KOONUNG CREEK TRAIL (EXISTING)
	FLOOD WALL/NOISE WALL COMBINED		KOONUNG CREEK TRAIL (UPGRADED)
	FLOOD WALL		ARTISTIC SURFACE TREATMENT
	KOONUNG KOONUNG		COMPACTED GRAVEL REST POINTS AND ADDITIONAL PATHS
	PROJECT BOUNDARY		PROPOSED ROAD BRIDGE
	FLOOD CONTROL MEASURES TO THE SATISFACTION OF THE WATER AUTHORITY		

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

© North East Link Program

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

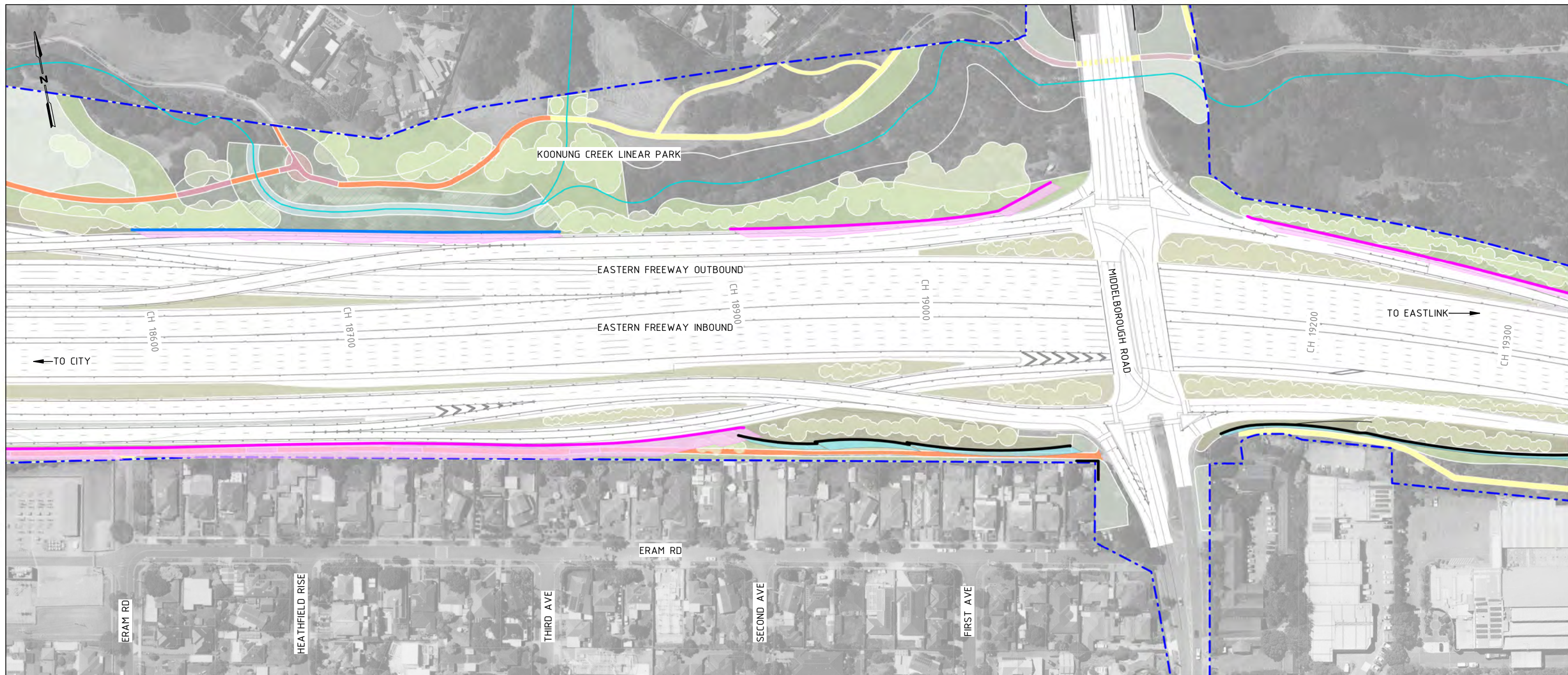
Tram to Springvale Alliance

CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:

EASTERN FREEWAY UPGRADES  
TRAM ROAD TO SPRINGVALE ROAD  
URBAN DESIGN & LANDSCAPE  
GA\_03 - OVERSHADOWING ANALYSIS - ERAM RD 12PM

PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4007	REVISION: 2
---------------------------	--	----------------



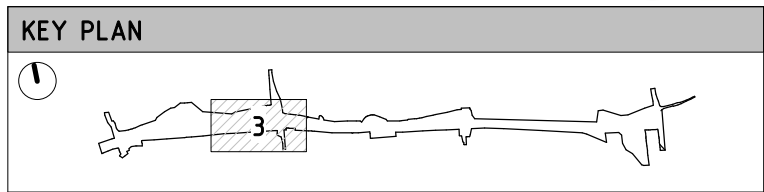
1 OVERSHADOWING ANALYSIS - ERAM RD 3PM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-03

Within GA-03, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along both the north and south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, as well encroachment into SPOS of residential properties on Eram Rd. A focused analysis is required and has been prepared for this area between 9AM and 2PM, refer to drawings 4050-4053 for Type 1, 4056-4059 for Type 3 and 4062-4065 for Type 5 assessments.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd.  
Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

- Extent of existing fence and retained noise wall overshadowing
- Extent of existing building overshadowing
- Extent of proposed noise wall overshadowing
- SPOS

**GENERAL LEGEND**

- Proposed noise walls
- Existing noise walls retained
- Flood wall/noise wall combined
- Flood wall
- Koonung Koonung
- Project boundary
- Flood control measures to the satisfaction of the water authority
- For landscape treatment refer to Attachment 2
- Koonung Creek Trail (Existing)
- Koonung Creek Trail (Upgraded)
- Artistic surface treatment
- Compacted gravel rest points and additional paths
- Proposed road bridge

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

© North East Link Program

MAJOR ROAD PROJECTS VICTORIA

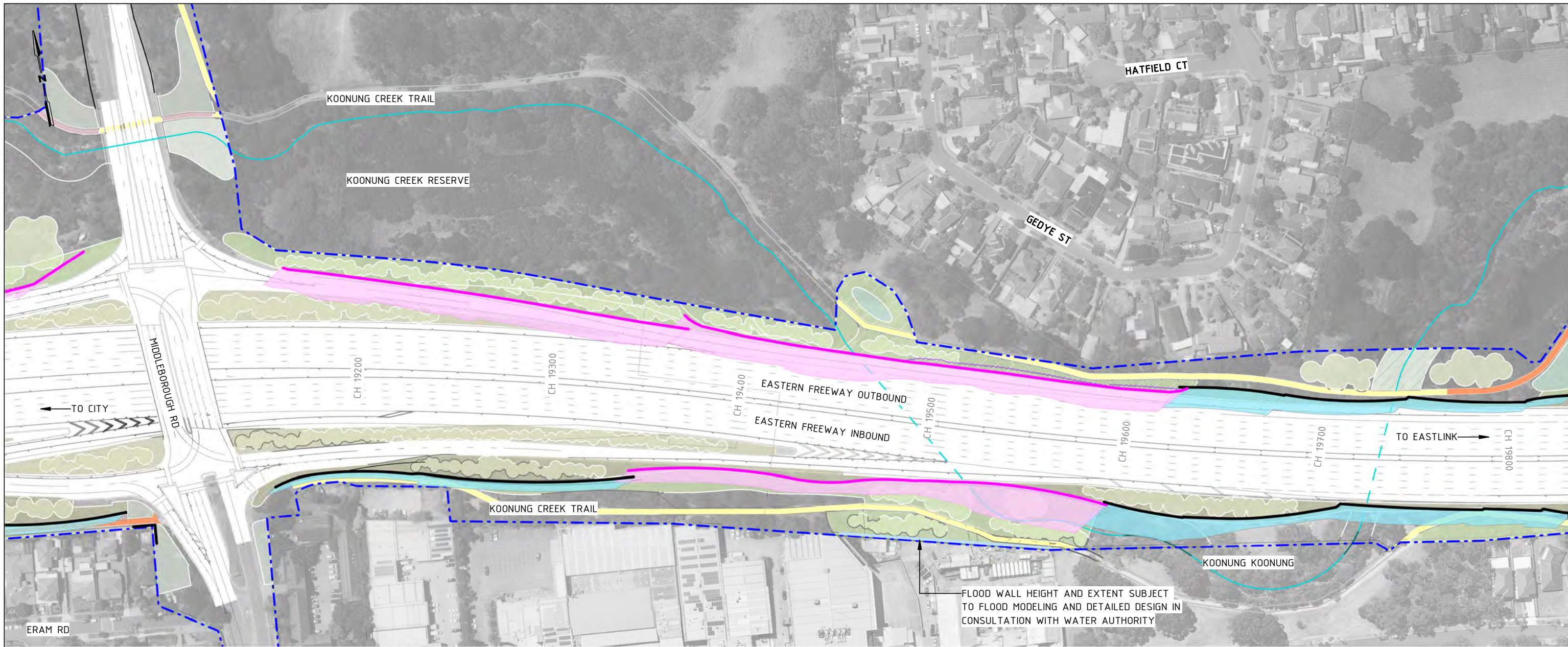
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE GA_03 - OVERSHADOWING ANALYSIS - ERAM RD 3PM		DTP No.:
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4008	REVISION 2



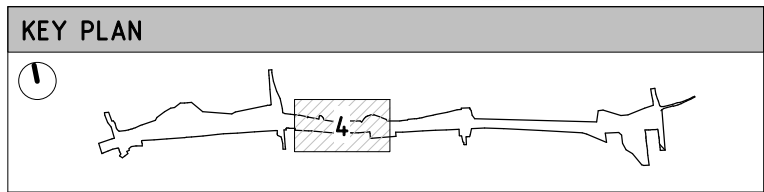
1 OVERSHADOWING ANALYSIS MIDDLEBOROUGH RD 9AM  
1 : 2000

**AREA WIDE OVERSHADOWING ANALYSIS: GA-04**

Within GA-04, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along both the north and south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, however no residential properties or SPOS are affected. Therefore, there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

- Extent of existing fence and retained noise wall overshadowing (light blue)
- Extent of existing building overshadowing (orange)
- Extent of proposed noise wall overshadowing (pink)
- SPOS (hatched pattern)

**GENERAL LEGEND**

- Proposed noise walls (pink line)
- Existing noise walls retained (black line)
- Flood wall/noise wall combined (blue line)
- Flood wall (light blue line)
- Koonung Koonung (cyan area)
- Project boundary (dashed blue line)
- Flood control measures to the satisfaction of the water authority (hatched area)
- For landscape treatment refer to Attachment 2 (green area)
- Koonung Creek Trail (Existing) (yellow line)
- Koonung Creek Trail (Upgraded) (orange line)
- Artistic surface treatment (red area)
- Compacted gravel rest points and additional paths (brown area)
- Proposed road bridge (grey area)

UDLP SUBMISSION  
NOT FOR CONSTRUCTION

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

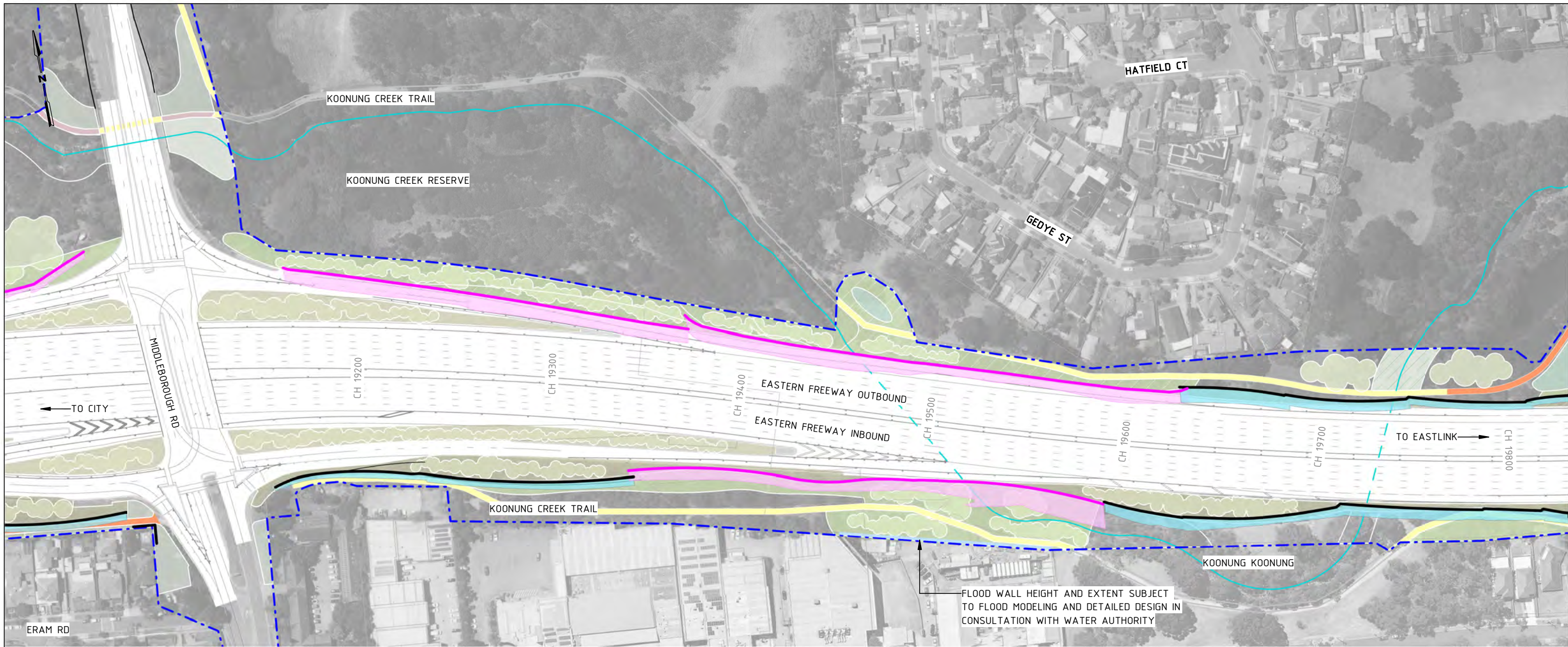
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREeway UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE		DTP No.:
GA_04 - OVERSHADOWING ANALYSIS - MIDDLEBOROUGH RD 9AM		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4009	REVISION: 2



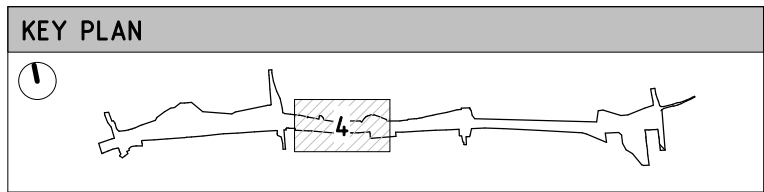
1 OVERSHADOWING ANALYSIS MIDDLEBOROUGH RD 12PM  
1 : 2000

**AREA WIDE OVERSHADOWING ANALYSIS: GA-04**

Within GA-04, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along both the north and south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, however no residential properties or SPOS are affected. Therefore, there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd.  
Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

- Extent of existing fence and retained noise wall overshadowing
- Extent of existing building overshadowing
- Extent of proposed noise wall overshadowing
- SPOS

**GENERAL LEGEND**

- Proposed noise walls
- Existing noise walls retained
- Flood wall/noise wall combined
- Flood wall
- Koonung Koonung
- Project boundary
- Flood control measures to the satisfaction of the water authority
- For landscape treatment refer to Attachment 2
- Koonung Creek Trail (Existing)
- Koonung Creek Trail (Upgraded)
- Artistic surface treatment
- Compacted gravel rest points and additional paths
- Proposed road bridge

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

© North East Link Program

MAJOR ROAD PROJECTS VICTORIA

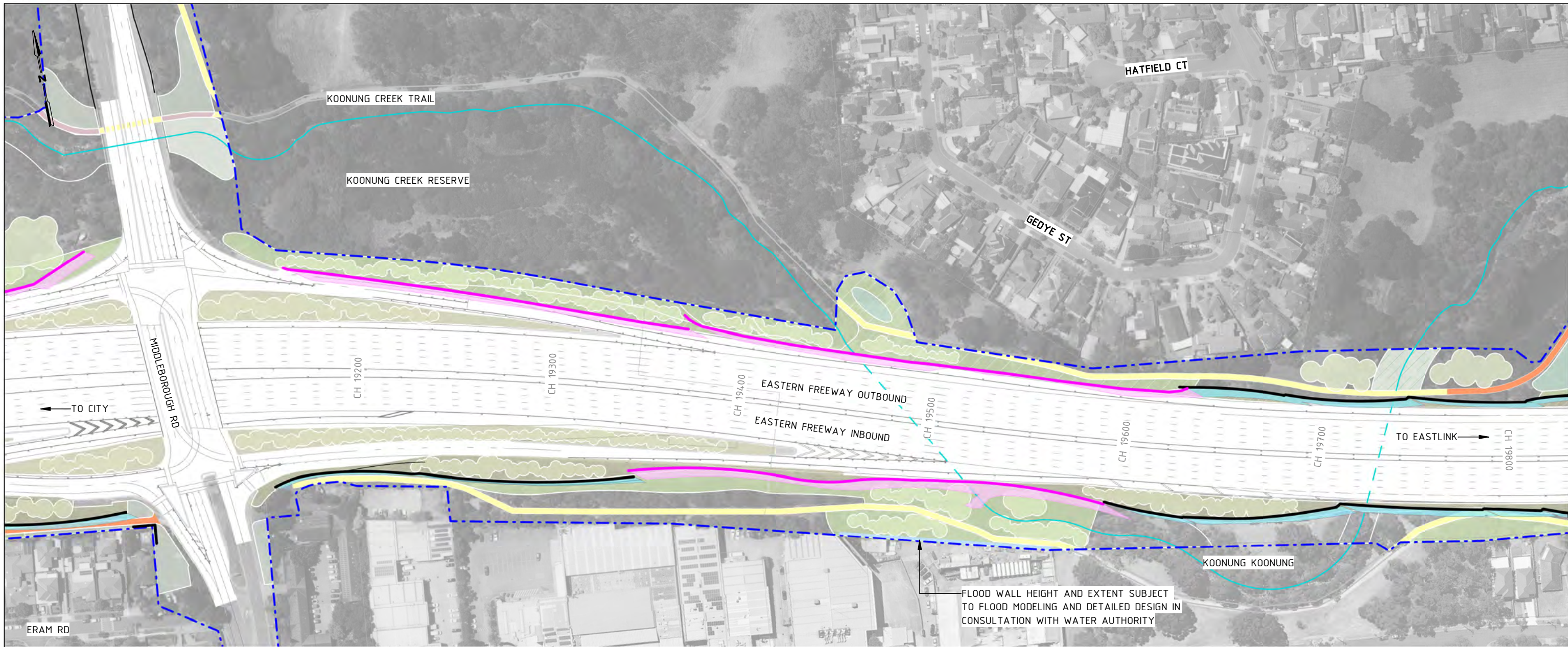
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE GA_04 - OVERSHADOWING ANALYSIS - MIDDLEBOROUGH RD 12PM		DTP No.:
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4010	REVISION 2



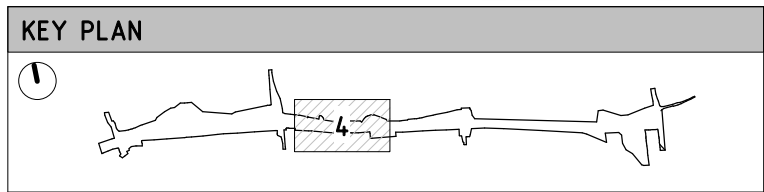
1 OVERSHADOWING ANALYSIS MIDDLEBOROUGH RD 3PM  
1 : 2000

**AREA WIDE OVERSHADOWING ANALYSIS: GA-04**

Within GA-04, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along both the north and south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, however no residential properties or SPOS are affected. Therefore, there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd.  
Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

- Extent of existing fence and retained noise wall overshadowing (light blue)
- Extent of existing building overshadowing (orange)
- Extent of proposed noise wall overshadowing (pink)
- SPOS (cross-hatched)

**GENERAL LEGEND**

- Proposed noise walls (pink)
- Existing noise walls retained (black)
- Flood wall/noise wall combined (blue)
- Flood wall (light blue)
- Koonung Koonung (cyan)
- Project boundary (dashed blue)
- Flood control measures to the satisfaction of the water authority (orange)
- For landscape treatment refer to Attachment 2 (green)
- Koonung Creek Trail (Existing) (yellow)
- Koonung Creek Trail (Upgraded) (orange)
- Artistic surface treatment (purple)
- Compacted gravel rest points and additional paths (brown)
- Proposed road bridge (grey)

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

© North East Link Program

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

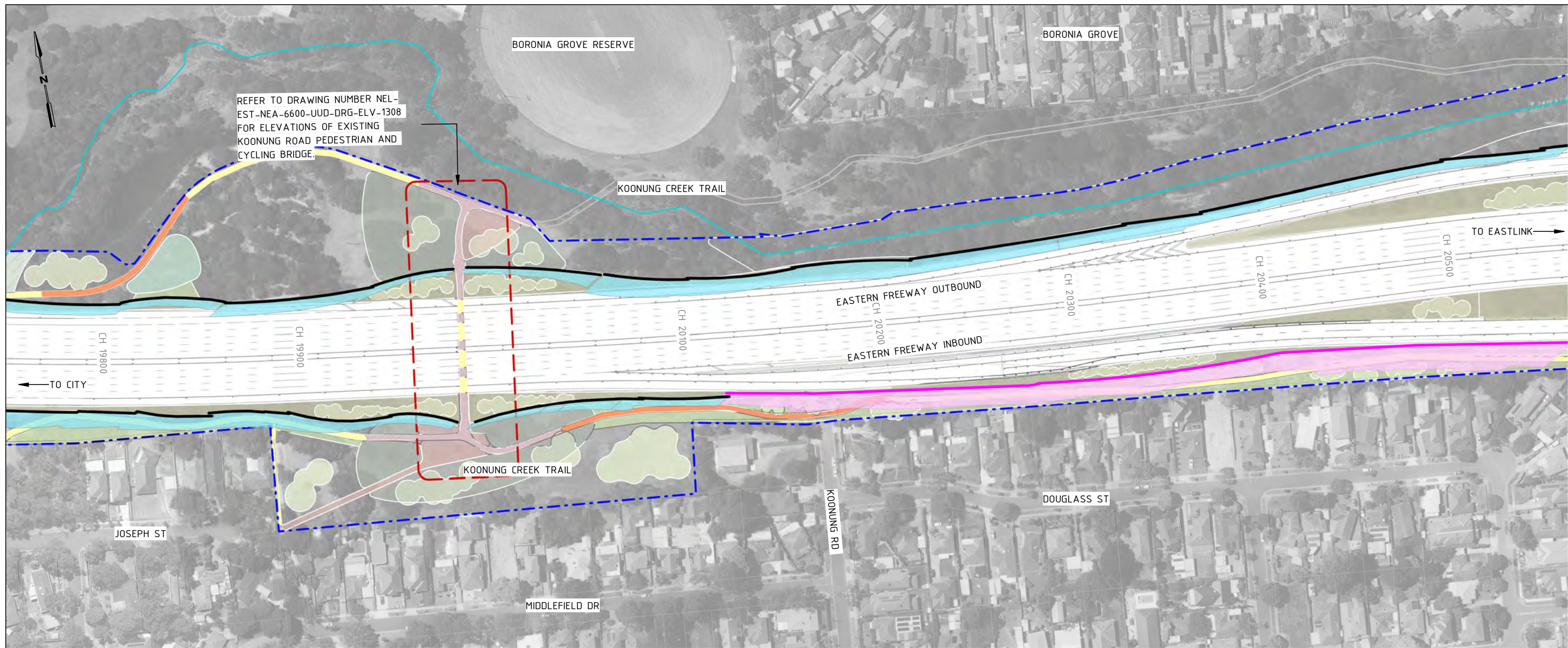
CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:

**EASTERN FREEWAY UPGRADES  
TRAM ROAD TO SPRINGVALE ROAD  
URBAN DESIGN & LANDSCAPE  
GA\_04 - OVERSHADOWING ANALYSIS - MIDDLEBOROUGH RD 3PM**

PROJECT CONTRACT: EAST  
NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4011  
REVISION: 2

NEL-EST-NEA-6920-UUD-MD3-0001.rvt



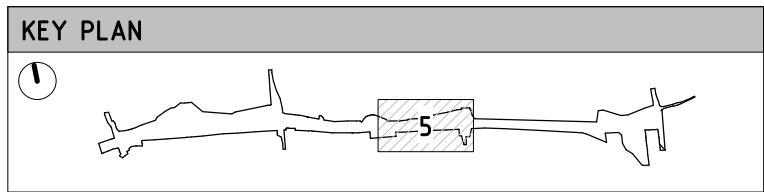
1 OVERSHADOWING ANALYSIS KOONUNG RD BRIDGE 9A  
1 : 2000

**AREA WIDE OVERSHADOWING ANALYSIS: GA-05**

Within GA-05, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, however no residential properties or SPOS are affected. Therefore, there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**  
 This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd.  
 Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

Assumed noise wall heights:  
 Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

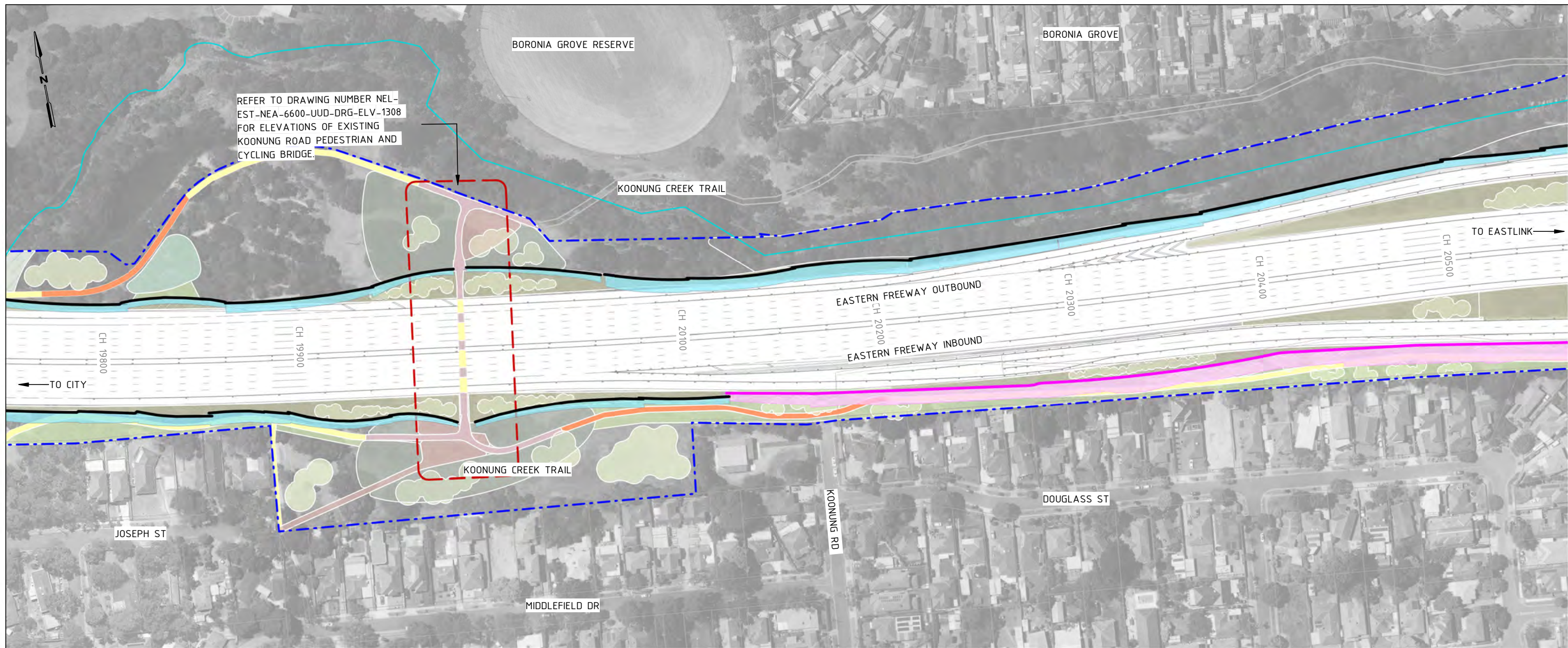
- Extent of existing fence and retained noise wall overshadowing
- Extent of existing building overshadowing
- Extent of proposed noise wall overshadowing
- SPOS

**GENERAL LEGEND**

- Proposed noise walls
- Existing noise walls retained
- Flood wall/noise wall combined
- Flood wall
- Koonung Koonung
- Project boundary
- Flood control measures to the satisfaction of the water authority
- For landscape treatment refer to Attachment 2
- Koonung Creek Trail (Existing)
- Koonung Creek Trail (Upgraded)
- Artistic surface treatment
- Compacted gravel rest points and additional paths
- Proposed road bridge

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

© North East Link Program		<b>DISCLAIMER</b>		<b>MAJOR ROAD PROJECTS VICTORIA</b>		<b>EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN &amp; LANDSCAPE GA_05 - OVERSHADOWING ANALYSIS - KOONUNG RD BRIDGE 9AM</b>	
Conditions of Use: This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade. Recipients of this document: Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.		COORDINATE SYSTEM: HEIGHT DATUM (m):		DRAWN: SIZE: A3 SCALE: 1:2000		CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt	
2 ISSUED FOR APPROVAL 01/04/26		1 UDLP FINAL SUBMISSION 19/12/25		0 ISSUE FOR PUBLIC EXHIBITION 01/09/25		PROJECT CONTRACT: EAST	
REV. DESCRIPTION REVISIONS		DATE		DTP No.:		NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4012	
2/04/2026 12:14:05 PM				Tram to Springvale Alliance		REVISION 2	



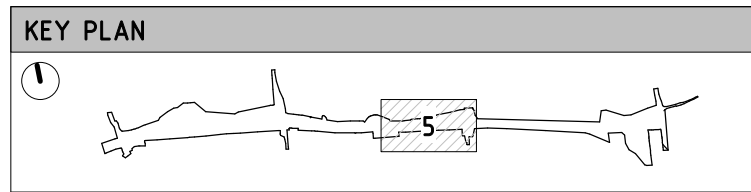
1 OVERSHADOWING ANALYSIS KOONUNG RD BRIDGE 12PM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-05

Within GA-05, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, however no residential properties or SPOS are affected. Therefore, there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

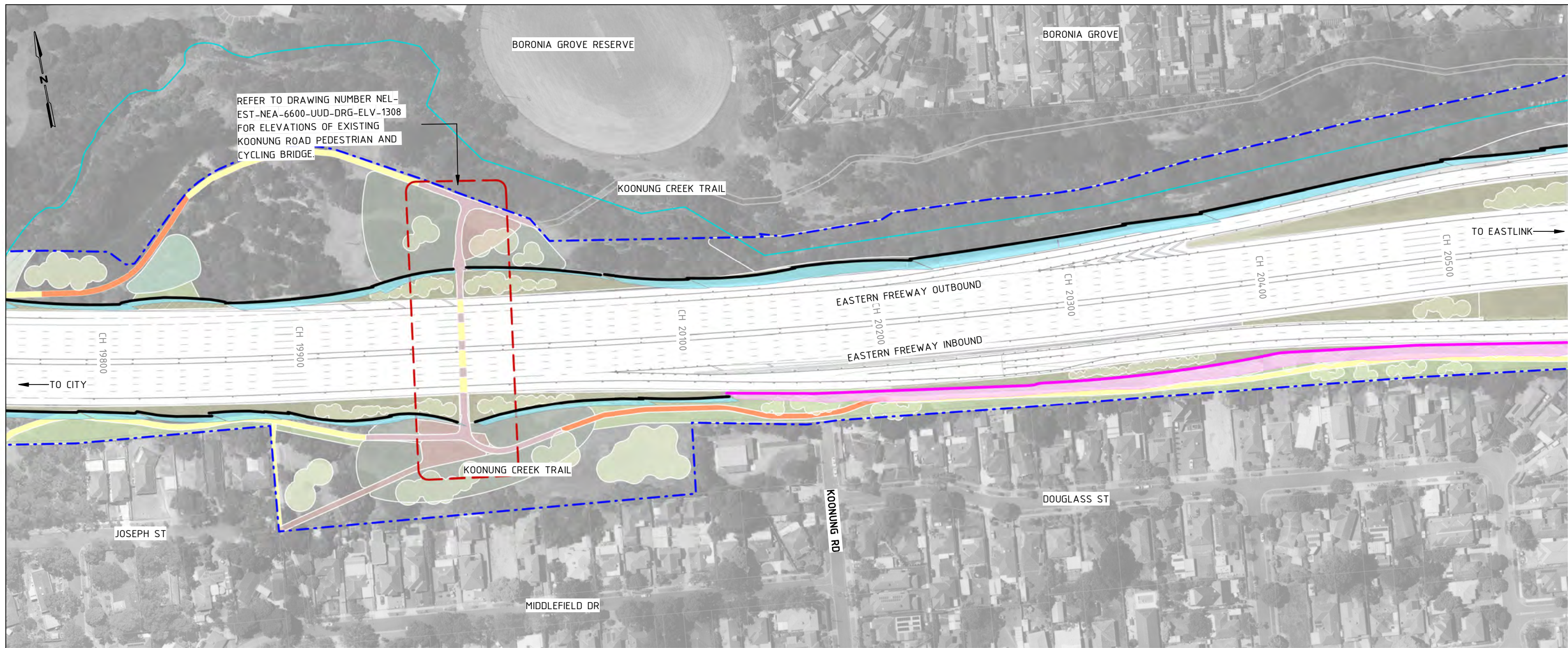
- Extent of existing fence and retained noise wall overshadowing
- Extent of existing building overshadowing
- Extent of proposed noise wall overshadowing
- SPOS

**GENERAL LEGEND**

- Proposed noise walls
- Existing noise walls retained
- Flood wall/noise wall combined
- Flood wall
- Koonung Koonung
- Project boundary
- Flood control measures to the satisfaction of the water authority
- For landscape treatment refer to Attachment 2
- Koonung Creek Trail (Existing)
- Koonung Creek Trail (Upgraded)
- Artistic surface treatment
- Compacted gravel rest points and additional paths
- Proposed road bridge

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

© North East Link Program		<b>DISCLAIMER</b>		<b>MAJOR ROAD PROJECTS VICTORIA</b>		<b>EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN &amp; LANDSCAPE</b>	
Conditions of Use: This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade. Recipients of this document: Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.		COORDINATE SYSTEM: HEIGHT DATUM (m):		DRAWN: SIZE: A3 SCALE: 1:2000		CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt	
2 ISSUED FOR APPROVAL 01/04/26		1 UDLP FINAL SUBMISSION 19/12/25		0 ISSUE FOR PUBLIC EXHIBITION 01/09/25		DTP No.:	
REV. DESCRIPTION REVISIONS DATE		EAST		PROJECT CONTRACT:		NELP DRAWING No.:	
2/04/2026 12:14:34 PM		1		2		3	
1		2		3		4	
5		6		7		8	
9		10		11		12	
1		2		3		4	
5		6		7		8	
9		10		11		12	



1 OVERSHADOWING ANALYSIS KOONUNG RD BRIDGE 3PM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-05

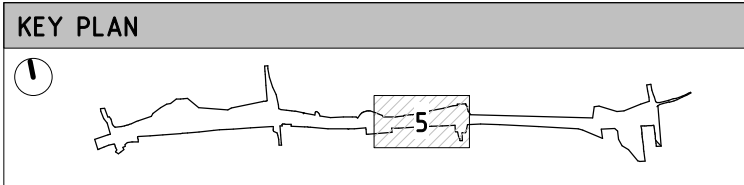
Within GA-05, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, however no residential properties or SPOS are affected. Therefore, there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**

This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**

Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

- Extent of existing fence and retained noise wall overshadowing
- Extent of existing building overshadowing
- Extent of proposed noise wall overshadowing
- SPOS

**GENERAL LEGEND**

- Proposed noise walls
- Existing noise walls retained
- Flood wall/noise wall combined
- Flood wall
- Koonung Koonung
- Project boundary
- Flood control measures to the satisfaction of the water authority
- For landscape treatment refer to Attachment 2
- Koonung Creek Trail (Existing)
- Koonung Creek Trail (Upgraded)
- Artistic surface treatment
- Compacted gravel rest points and additional paths
- Proposed road bridge

UDLP SUBMISSION  
NOT FOR CONSTRUCTION

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

© North East Link Program

MAJOR ROAD PROJECTS VICTORIA

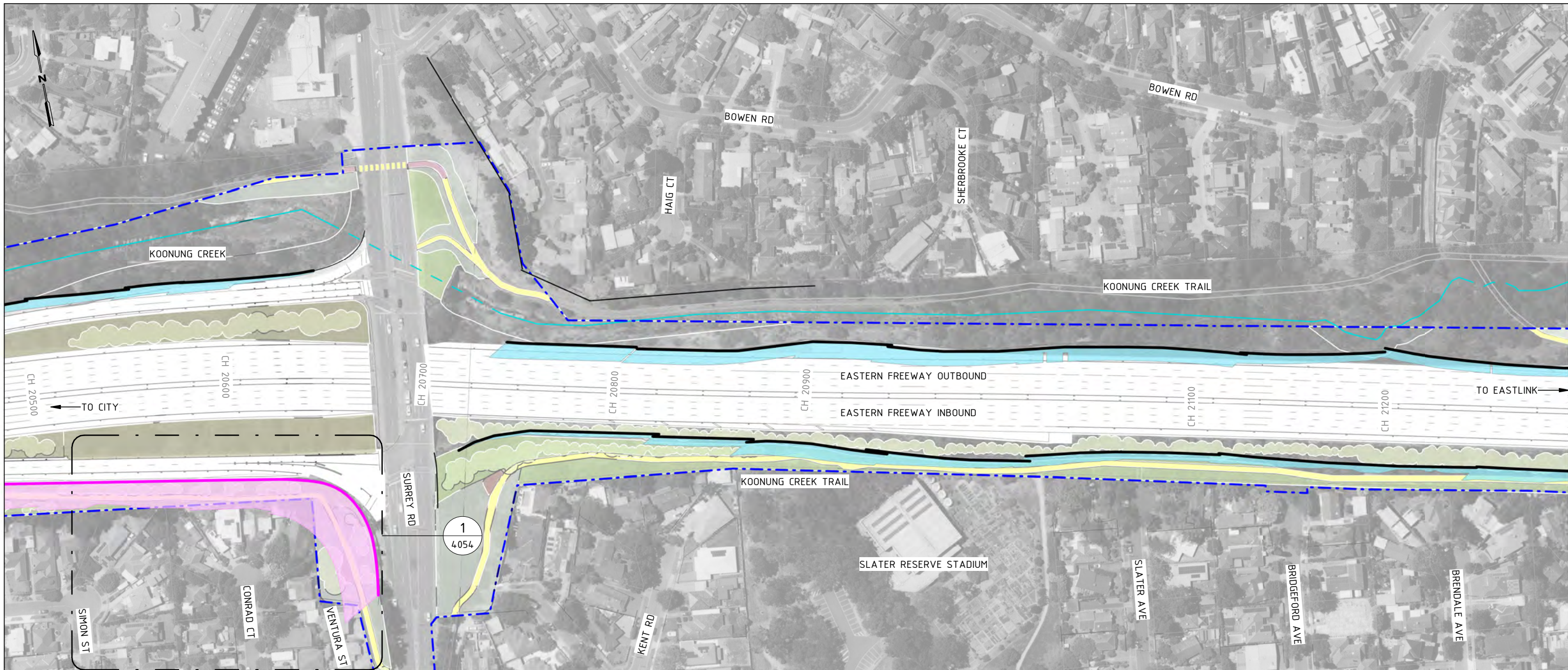
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:		EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE	
PROJECT CONTRACT: EAST		GA_05 - OVERSHADOWING ANALYSIS - KOONUNG RD BRIDGE 3PM	
NELP DRAWING No.:		REVISION	
NEL-EST-NEA-6600-UUD-PLA-4014		2	



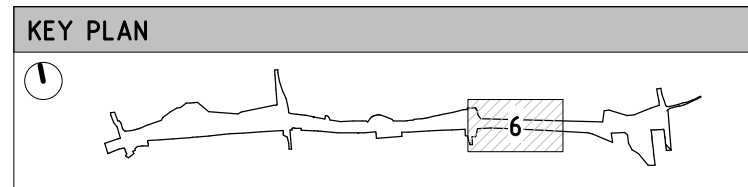
1 OVERSHADOWING ANALYSIS CONRAD CT 9AM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-06

Within GA-06, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along both the north and south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, as well encroachment into SPOS of residential properties along Conrad Ct, Simon St, and Ventura St. A focused analysis is required and has been prepared for this area between 9AM and 12PM, refer to drawings 4054-4055 for Type 1, 4060-4061 for Type 3 and 4066-4067 for Type 5 assessments.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



OVERSHADOWING LEGEND	
	EXTENT OF EXISTING FENCE AND RETAINED NOISE WALL OVERSHADOWING
	EXTENT OF PROPOSED NOISE WALL OVERSHADOWING
	EXTENT OF EXISTING BUILDING OVERSHADOWING
	SPOS

GENERAL LEGEND	
	PROPOSED NOISE WALLS
	EXISTING NOISE WALLS RETAINED
	FLOOD WALL/NOISE WALL COMBINED
	FLOOD WALL
	KOONUNG KOONUNG
	PROJECT BOUNDARY
	FLOOD CONTROL MEASURES TO THE SATISFACTION OF THE WATER AUTHORITY
	FOR LANDSCAPE TREATMENT REFER TO ATTACHMENT 2
	KOONUNG CREEK TRAIL (EXISTING)
	KOONUNG CREEK TRAIL (UPGRADED)
	ARTISTIC SURFACE TREATMENT
	COMPACTED GRAVEL REST POINTS AND ADDITIONAL PATHS
	PROPOSED ROAD BRIDGE

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

© North East Link Program

MAJOR ROAD PROJECTS VICTORIA

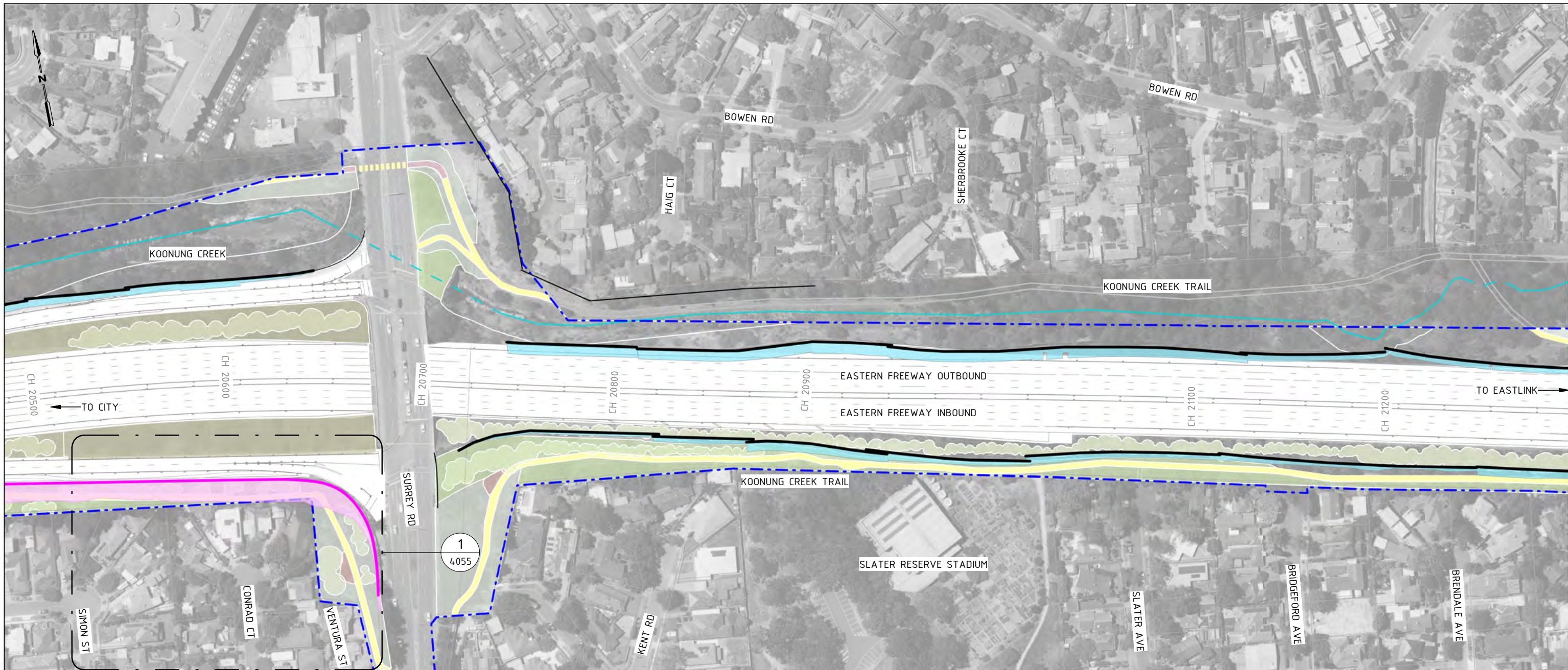
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE GA_06 - OVERSHADOWING ANALYSIS - CONRAD CT BRIDGE 9AM	
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4015
DTP No.:	REVISION 2



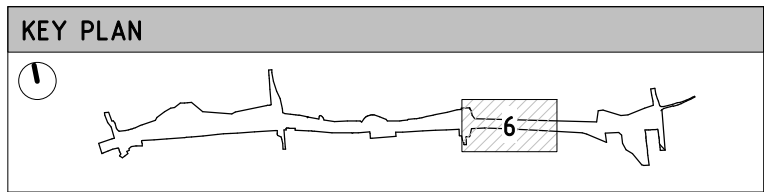
1 OVERSHADOWING ANALYSIS CONRAD CT 12PM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-06

Within GA-06, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along both the north and south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, as well encroachment into SPOS of residential properties along Conrad Ct, Simon St, and Ventura St. A focused analysis is required and has been prepared for this area between 9AM and 12PM, refer to drawings 4054-4055 for Type 1, 4060-4061 for Type 3 and 4066-4067 for Type 5 assessments.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

- Extent of existing fence and retained noise wall overshadowing (light blue dashed line)
- Extent of existing building overshadowing (orange dashed line)
- Extent of proposed noise wall overshadowing (pink solid line)
- SPOS (cross-hatched area)

**GENERAL LEGEND**

- Proposed noise walls (pink solid line)
- Existing noise walls retained (black solid line)
- Flood wall/noise wall combined (blue solid line)
- Flood wall (light blue solid line)
- Koonung Koonung (cyan solid line)
- Project boundary (blue dashed line)
- Flood control measures to the satisfaction of the water authority (blue diagonal lines)
- For landscape treatment refer to Attachment 2 (green solid area)
- Koonung Creek Trail (Existing) (yellow solid line)
- Koonung Creek Trail (Upgraded) (orange solid line)
- Artistic surface treatment (red solid area)
- Compacted gravel rest points and additional paths (brown solid area)
- Proposed road bridge (grey solid area)

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

© North East Link Program

MAJOR ROAD PROJECTS VICTORIA

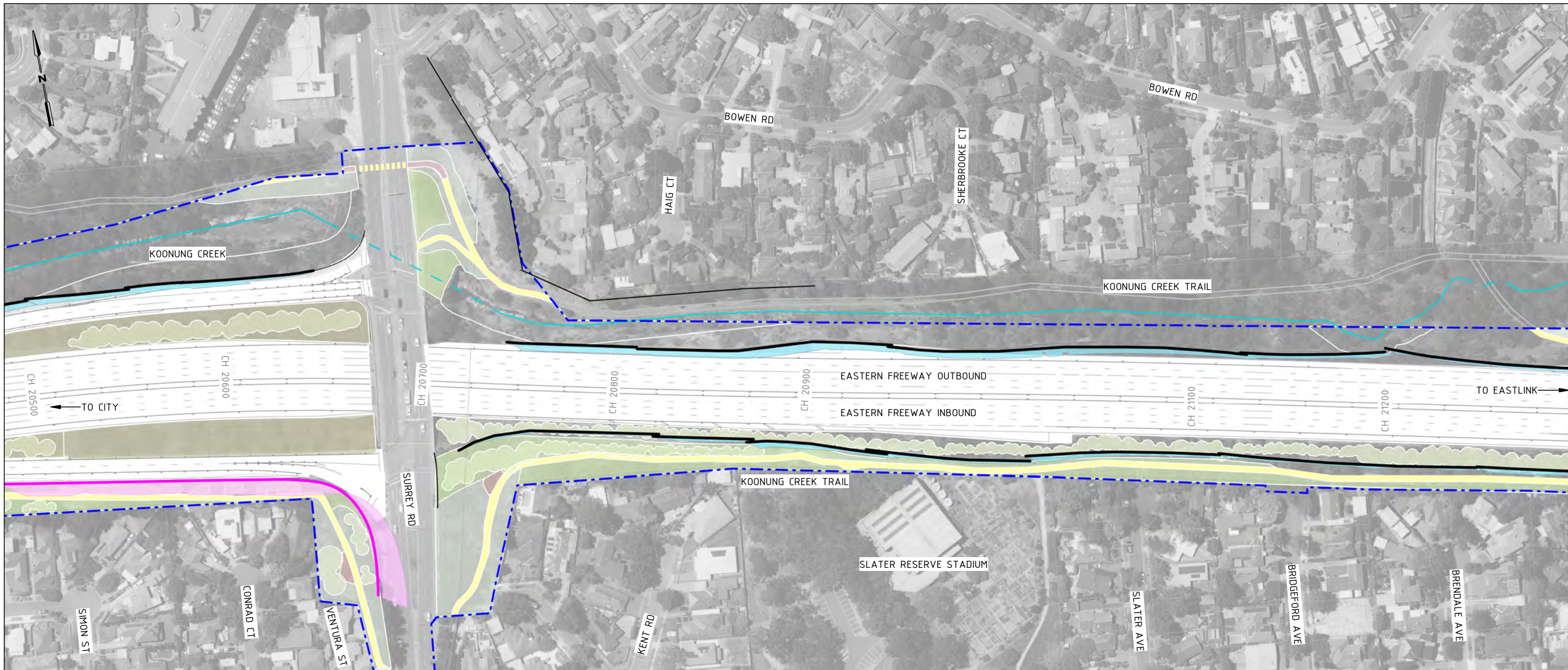
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE		DTP No.:
GA_06 - OVERSHADOWING ANALYSIS - CONRAD CT BRIDGE 12PM		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4016	REVISION: 2



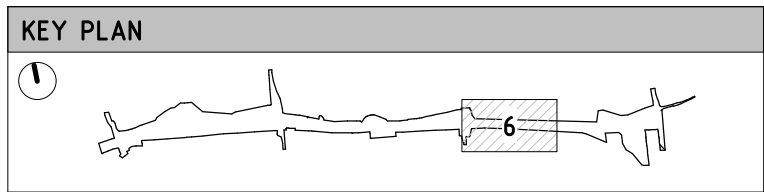
1 OVERSHADOWING ANALYSIS CONRAD CT 3PM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-06

Within GA-06, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along both the north and south sides. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, as well encroachment into SPOS of residential properties along Conrad Ct, Simon St, and Ventura St. A focused analysis is required and has been prepared for this area between 9AM and 12PM, refer to drawings 4054-4055 for Type 1, 4060-4061 for Type 3 and 4066-4067 for Type 5 assessments.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

- Extent of existing fence and retained noise wall overshadowing
- Extent of existing building overshadowing
- Extent of proposed noise wall overshadowing
- SPOS

**GENERAL LEGEND**

- Proposed noise walls
- Existing noise walls retained
- Flood wall/noise wall combined
- Flood wall
- Koonung Koonung
- Project boundary
- Flood control measures to the satisfaction of the water authority
- For landscape treatment refer to Attachment 2
- Koonung Creek Trail (Existing)
- Koonung Creek Trail (Upgraded)
- Artistic surface treatment
- Compacted gravel rest points and additional paths
- Proposed road bridge

UDLP SUBMISSION  
NOT FOR CONSTRUCTION

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

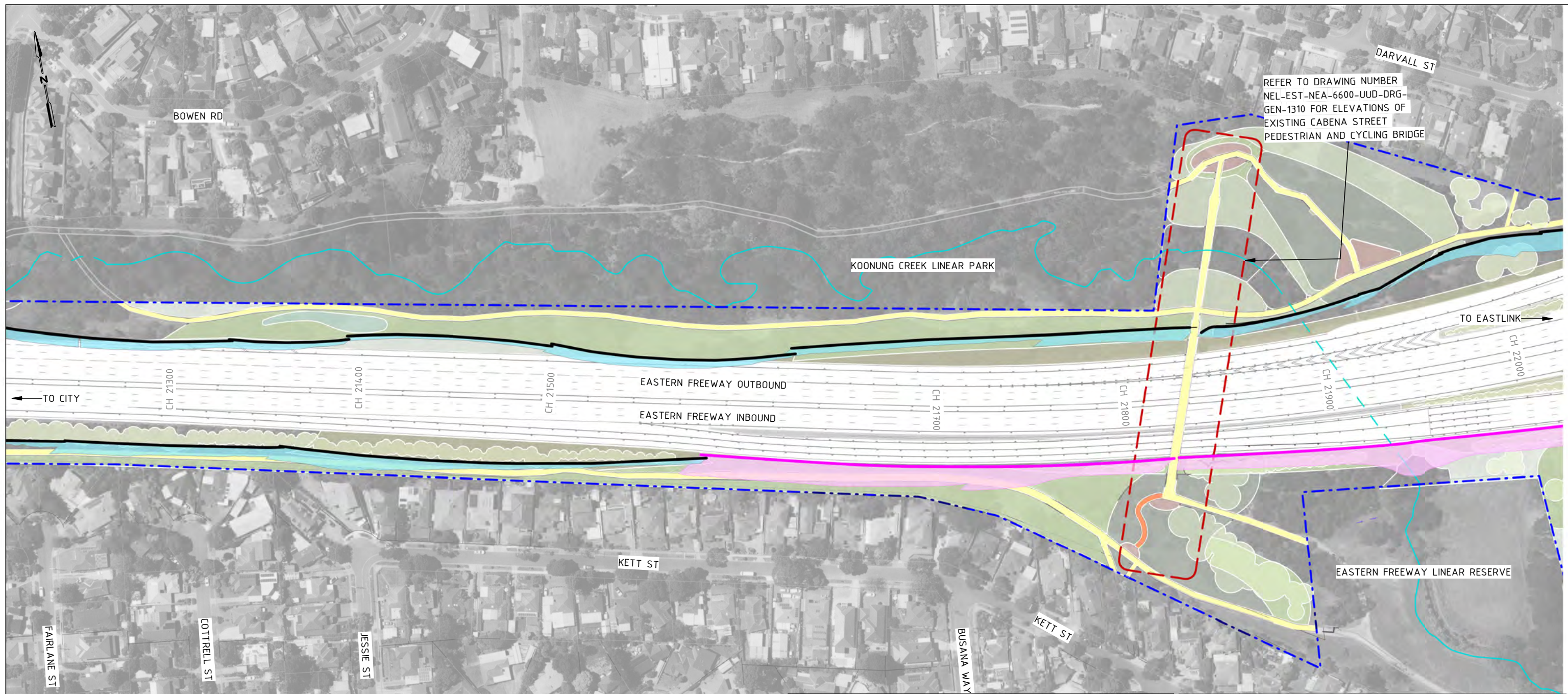
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:		EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE GA_06 - OVERSHADOWING ANALYSIS - CONRAD CT BRIDGE 3PM	
PROJECT CONTRACT: EAST	NELP DRAWING No.:	NEL-EST-NEA-6600-UUD-PLA-4017	REVISION 2



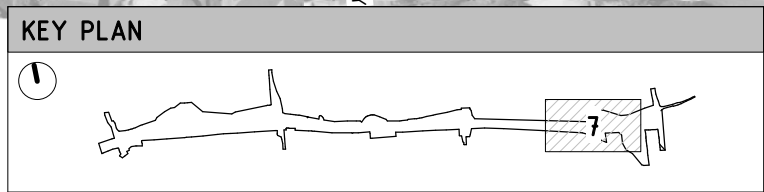
1 OVERSHADOWING ANALYSIS CABENA ST BRIDGE 9AM  
1 : 2000

**AREA WIDE OVERSHADOWING ANALYSIS: GA-07**

Within GA-07, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along both the south side. The overshadowing analysis diagrams evidence that no residential properties or SPOS are affected, therefore there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd.  
Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

- Extent of existing fence and retained noise wall overshadowing
- Extent of existing building overshadowing
- Extent of proposed noise wall overshadowing
- SPOS

**GENERAL LEGEND**

- Proposed noise walls
- Existing noise walls retained
- Flood wall/noise wall combined
- Flood wall
- Koonung Koonung
- Project boundary
- Flood control measures to the satisfaction of the water authority
- For landscape treatment refer to Attachment 2
- Koonung Creek Trail (Existing)
- Koonung Creek Trail (Upgraded)
- Artistic surface treatment
- Compacted gravel rest points and additional paths
- Proposed road bridge

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

© North East Link Program		
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25
REV.	DESCRIPTION	DATE
	REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

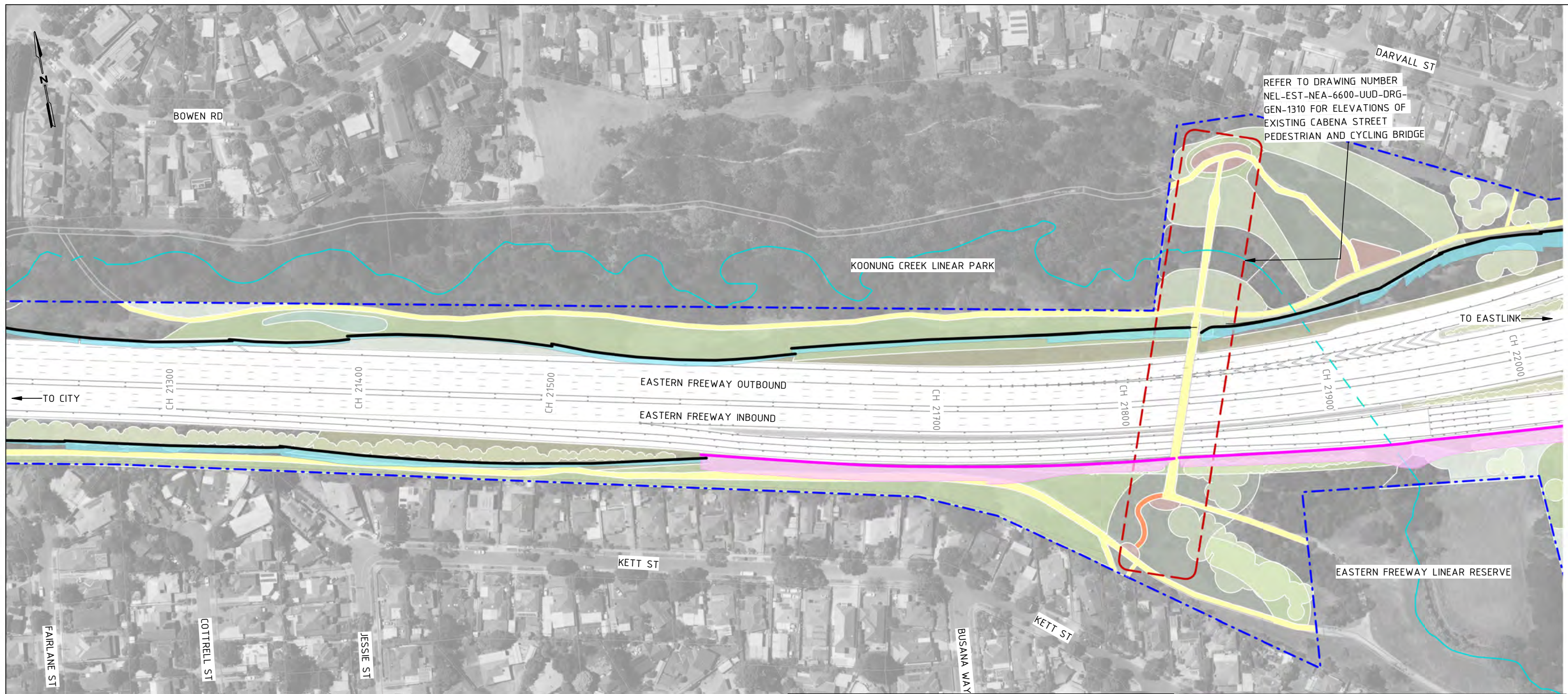
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREeway UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE GA_07 - OVERSHADOWING ANALYSIS - CABENA ST BRIDGE 9AM		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4018	REVISION 2



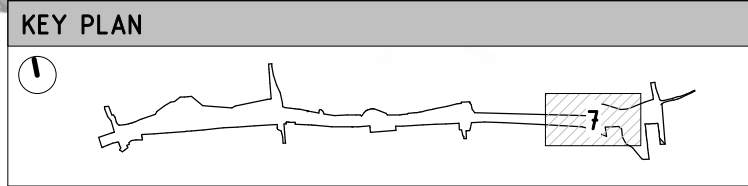
1 OVERSHADOWING ANALYSIS CABENA ST BRIDGE 12PM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-07

Within GA-07, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along both the south side. The overshadowing analysis diagrams evidence that no residential properties or SPOS are affected, therefore there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

- Extent of existing fence and retained noise wall overshadowing
- Extent of existing building overshadowing
- Extent of proposed noise wall overshadowing
- SPOS

**GENERAL LEGEND**

- Proposed noise walls
- Existing noise walls retained
- Flood wall/noise wall combined
- Flood wall
- Koonung Koonung
- Project boundary
- Flood control measures to the satisfaction of the water authority
- For landscape treatment refer to Attachment 2
- Koonung Creek Trail (Existing)
- Koonung Creek Trail (Upgraded)
- Artistic surface treatment
- Compacted gravel rest points and additional paths
- Proposed road bridge

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

© North East Link Program		
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25
REV.	DESCRIPTION	DATE
	REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

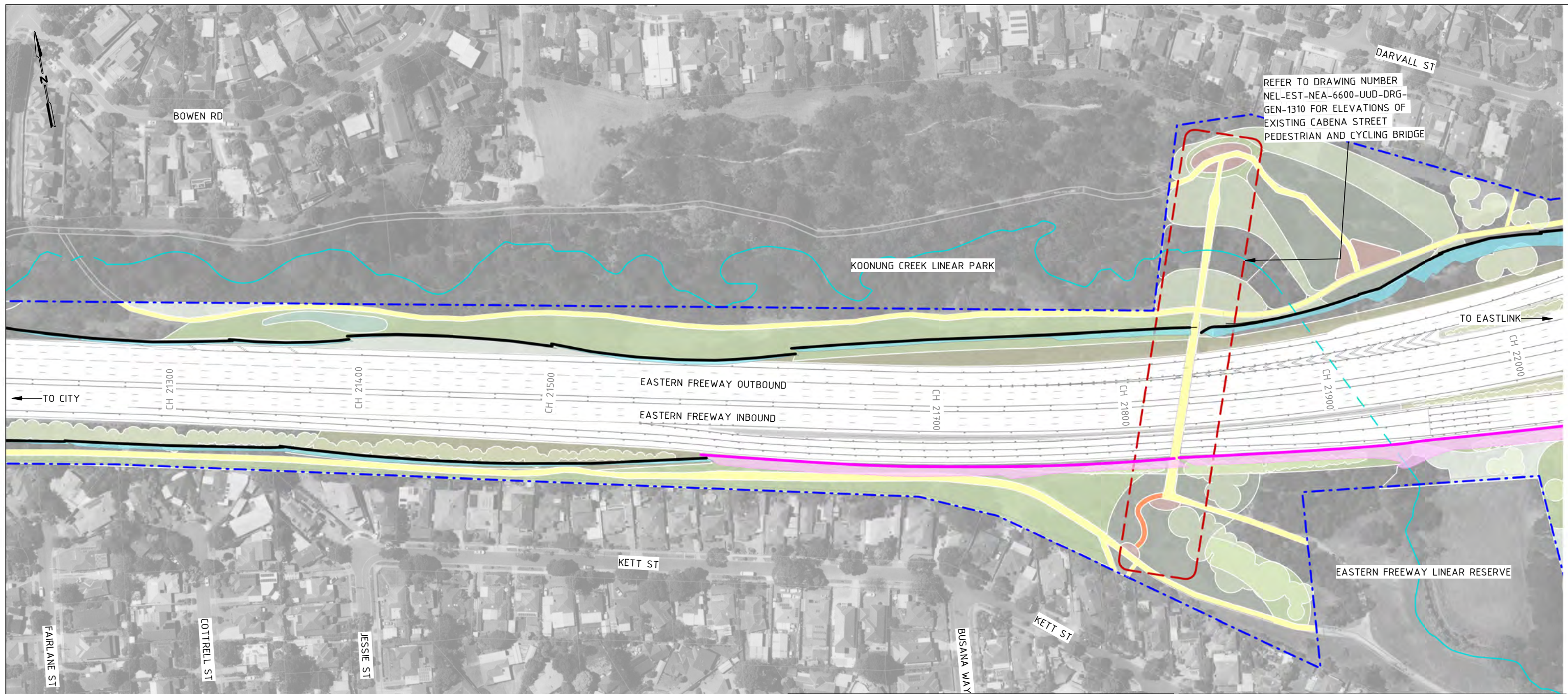
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREeway UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE GA_07 - OVERSHADOWING ANALYSIS - CABENA ST BRIDGE 12PM		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4019	REVISION 2



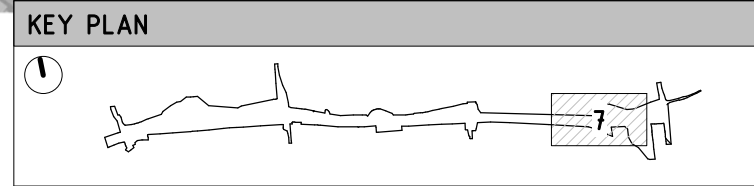
1 OVERSHADOWING ANALYSIS CABENA ST BRIDGE 3PM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-07

Within GA-07, the existing noise walls running along the north and south have been retained while MRPP noise walls are placed along both the south side. The overshadowing analysis diagrams evidence that no residential properties or SPOS are affected, therefore there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**OVERSHADOWING LEGEND**

- Extent of existing fence and retained noise wall overshadowing
- Extent of existing building overshadowing
- Extent of proposed noise wall overshadowing
- SPOS

**GENERAL LEGEND**

- Proposed noise walls
- Existing noise walls retained
- Flood wall/noise wall combined
- Flood wall
- Koonung Koonung
- Project boundary
- Flood control measures to the satisfaction of the water authority
- For landscape treatment refer to Attachment 2
- Koonung Creek Trail (Existing)
- Koonung Creek Trail (Upgraded)
- Artistic surface treatment
- Compacted gravel rest points and additional paths
- Proposed road bridge

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

© North East Link Program		
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25
REV.	DESCRIPTION	DATE
	REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

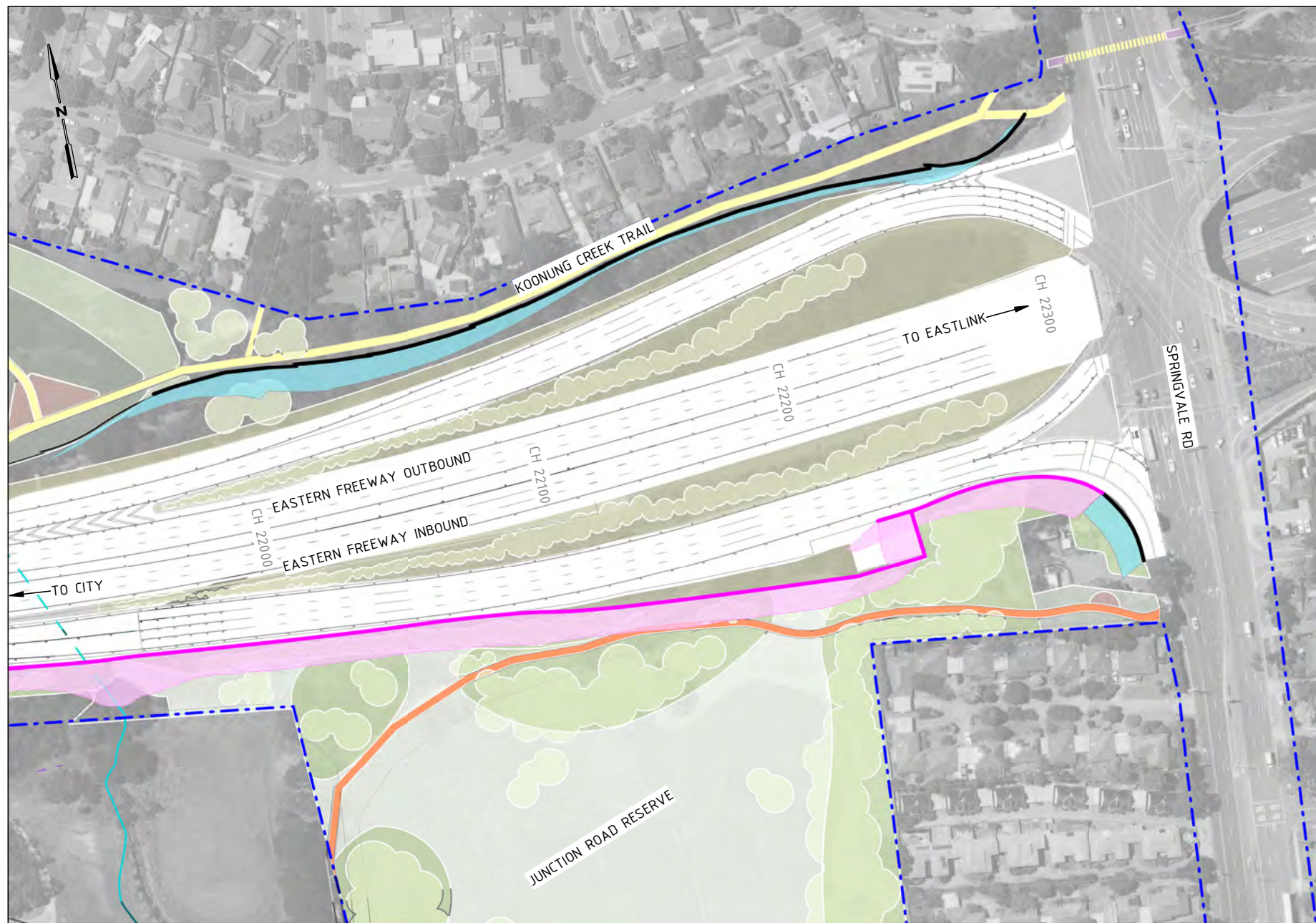
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREeway UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE GA_07 OVERSHADOWING ANALYSIS - CABENA ST BRIDGE 3PM		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4020	REVISION 2



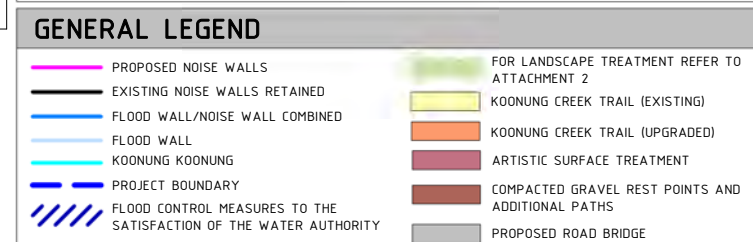
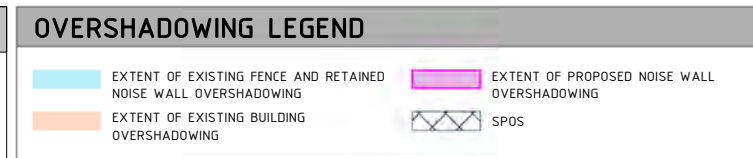
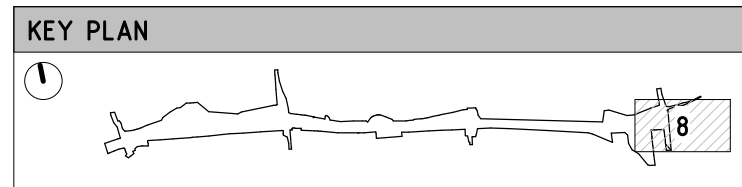
1 OVERSHADOWING ANALYSIS SPRINGVALE RD 9AM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-08

Within GA-08, the existing noise walls running along the north have been retained while MRPP noise walls are placed along the south side. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, however no residential properties or SPOS are affected. Therefore, there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

© North East Link Program

MAJOR ROAD PROJECTS VICTORIA

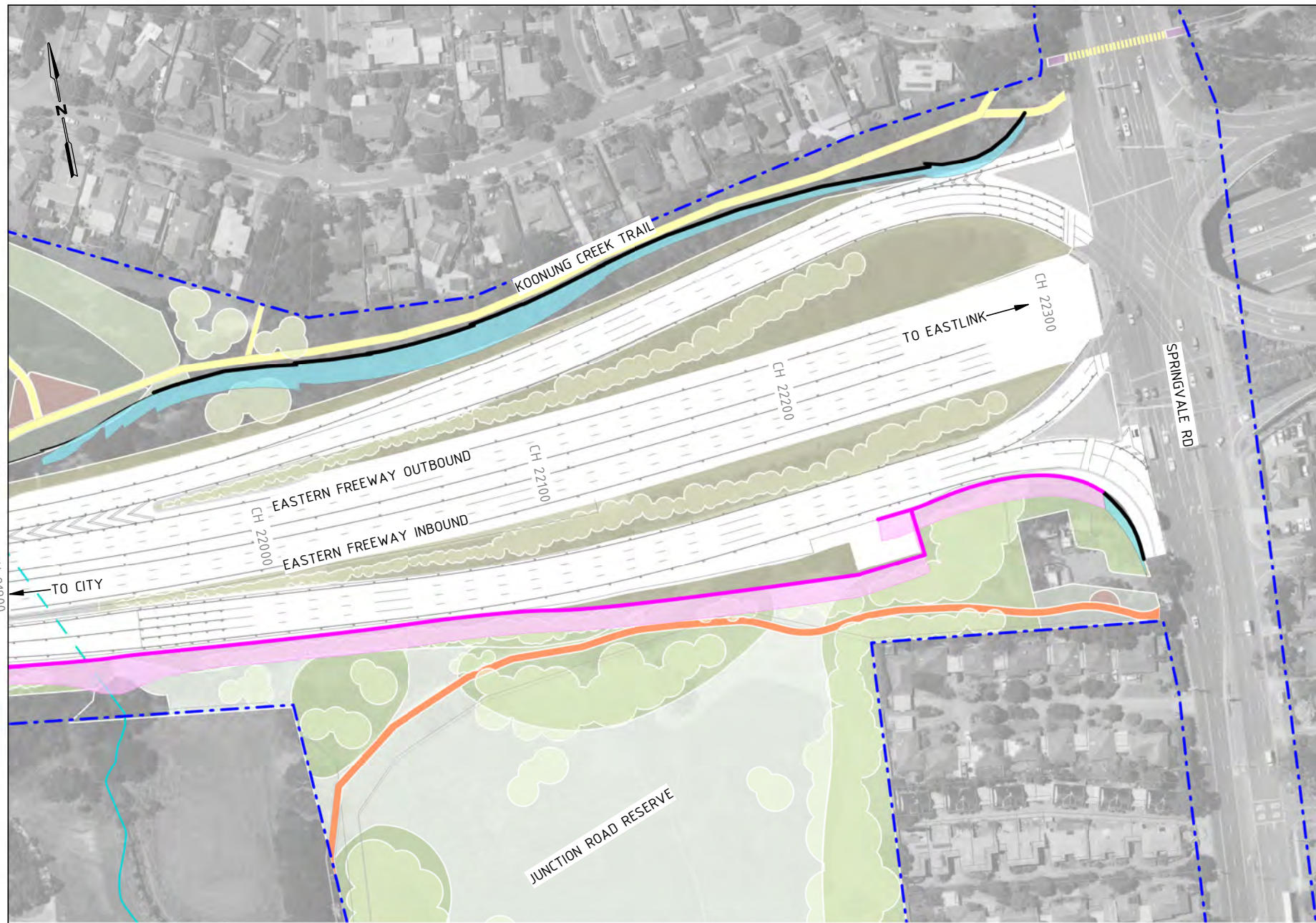
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE GA_08 OVERSHADOWING ANALYSIS - SPRINGVALE RD 9AM	
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4021
DTP No.:	REVISION 2



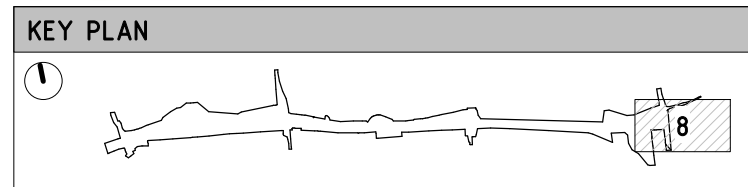
1 OVERSHADOWING ANALYSIS SPRINGVALE RD 12PM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-08

Within GA-08, the existing noise walls running along the north have been retained while MRPP noise walls are placed along the south side. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, however no residential properties or SPOS are affected. Therefore, there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



OVERSHADOWING LEGEND	
	EXTENT OF EXISTING FENCE AND RETAINED NOISE WALL OVERSHADOWING
	EXTENT OF EXISTING BUILDING OVERSHADOWING
	EXTENT OF PROPOSED NOISE WALL OVERSHADOWING
	SPOS

GENERAL LEGEND	
	PROPOSED NOISE WALLS
	EXISTING NOISE WALLS RETAINED
	FLOOD WALL/NOISE WALL COMBINED
	FLOOD WALL
	KOONUNG KOONUNG
	PROJECT BOUNDARY
	FLOOD CONTROL MEASURES TO THE SATISFACTION OF THE WATER AUTHORITY
	FOR LANDSCAPE TREATMENT REFER TO ATTACHMENT 2
	KOONUNG CREEK TRAIL (EXISTING)
	KOONUNG CREEK TRAIL (UPGRADED)
	ARTISTIC SURFACE TREATMENT
	COMPACTED GRAVEL REST POINTS AND ADDITIONAL PATHS
	PROPOSED ROAD BRIDGE

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

DISCLAIMER	
Conditions of Use: This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade. Recipients of this document: Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.	
COORDINATE SYSTEM:	
HEIGHT DATUM (m):	DRAWN:

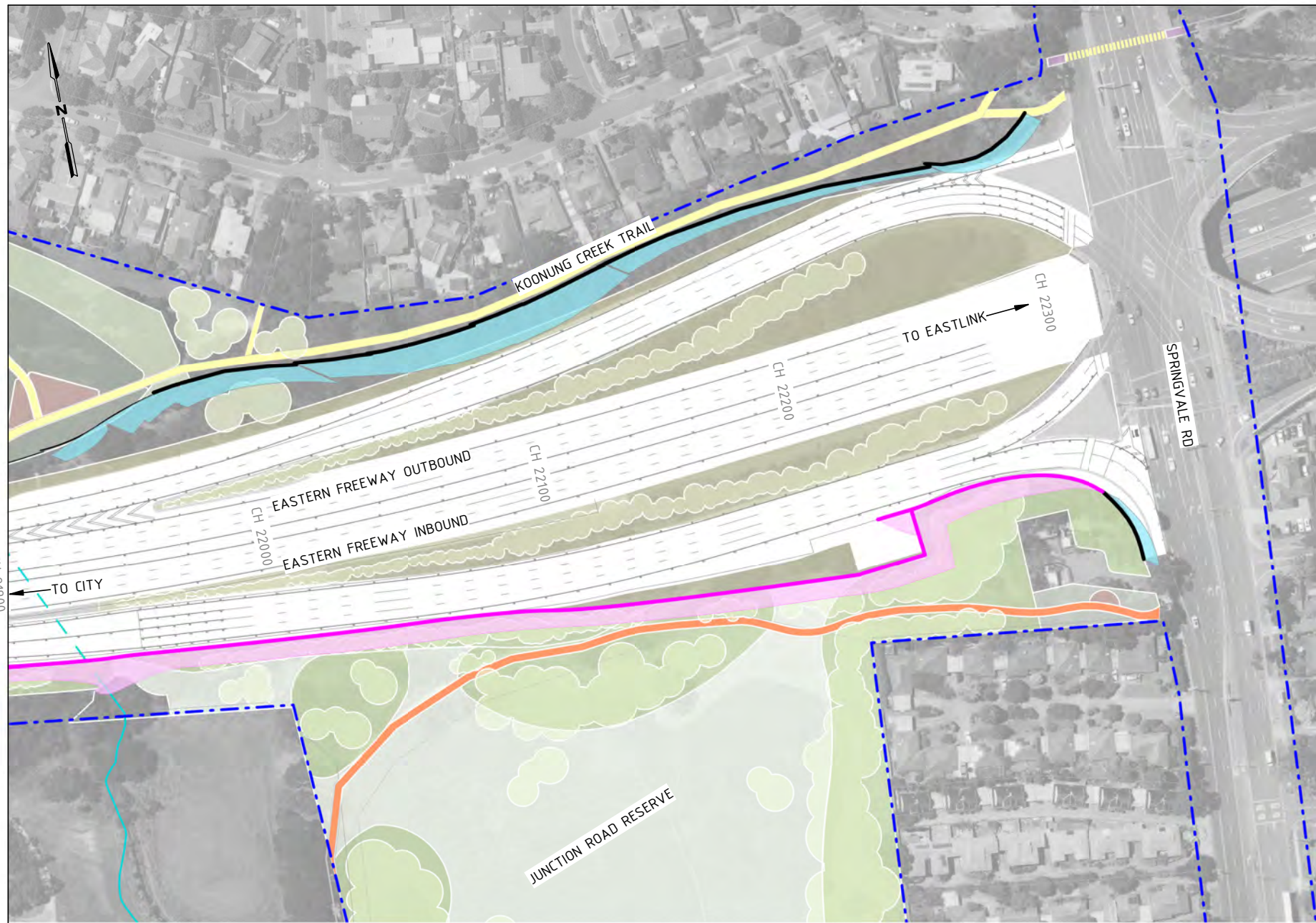
Tram to Springvale Alliance

EASTERN FREEWAY UPGRADES  
 TRAM ROAD TO SPRINGVALE ROAD  
 URBAN DESIGN & LANDSCAPE  
 GA\_08 OVERSHADOWING ANALYSIS - SPRINGVALE RD 12PM

DTP No.:

PROJECT CONTRACT: EAST      NEMP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4022      REVISION: 2

CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt



1 OVERSHADOWING ANALYSIS SPRINGVALE RD 3PM  
1 : 2000

### AREA WIDE OVERSHADOWING ANALYSIS: GA-08

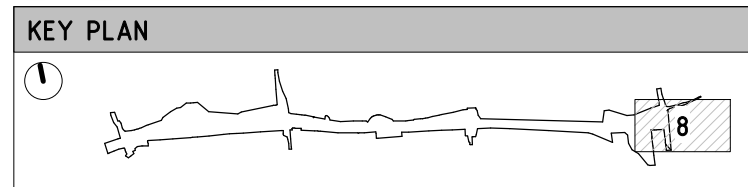
Within GA-08, the existing noise walls running along the north have been retained while MRPP noise walls are placed along the south side. The overshadowing analysis diagrams evidence the primary areas affected by shadows cast from the noise walls are the SUP paths, however no residential properties or SPOS are affected. Therefore, there is no indication that a focused analysis is required.

**Overshadowing disclaimer notes:**

This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**

Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



OVERSHADOWING LEGEND			
	EXTENT OF EXISTING FENCE AND RETAINED NOISE WALL OVERSHADOWING		EXTENT OF PROPOSED NOISE WALL OVERSHADOWING
	EXTENT OF EXISTING BUILDING OVERSHADOWING		SPOS

GENERAL LEGEND			
	PROPOSED NOISE WALLS		FOR LANDSCAPE TREATMENT REFER TO ATTACHMENT 2
	EXISTING NOISE WALLS RETAINED		KOONUNG CREEK TRAIL (EXISTING)
	FLOOD WALL/NOISE WALL COMBINED		KOONUNG CREEK TRAIL (UPGRADED)
	FLOOD WALL		ARTISTIC SURFACE TREATMENT
	KOONUNG KOONUNG		COMPACTED GRAVEL REST POINTS AND ADDITIONAL PATHS
	PROJECT BOUNDARY		PROPOSED ROAD BRIDGE
	FLOOD CONTROL MEASURES TO THE SATISFACTION OF THE WATER AUTHORITY		

**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

2/04/2026 12:18:34 PM

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

© North East Link Program

MAJOR ROAD PROJECTS VICTORIA

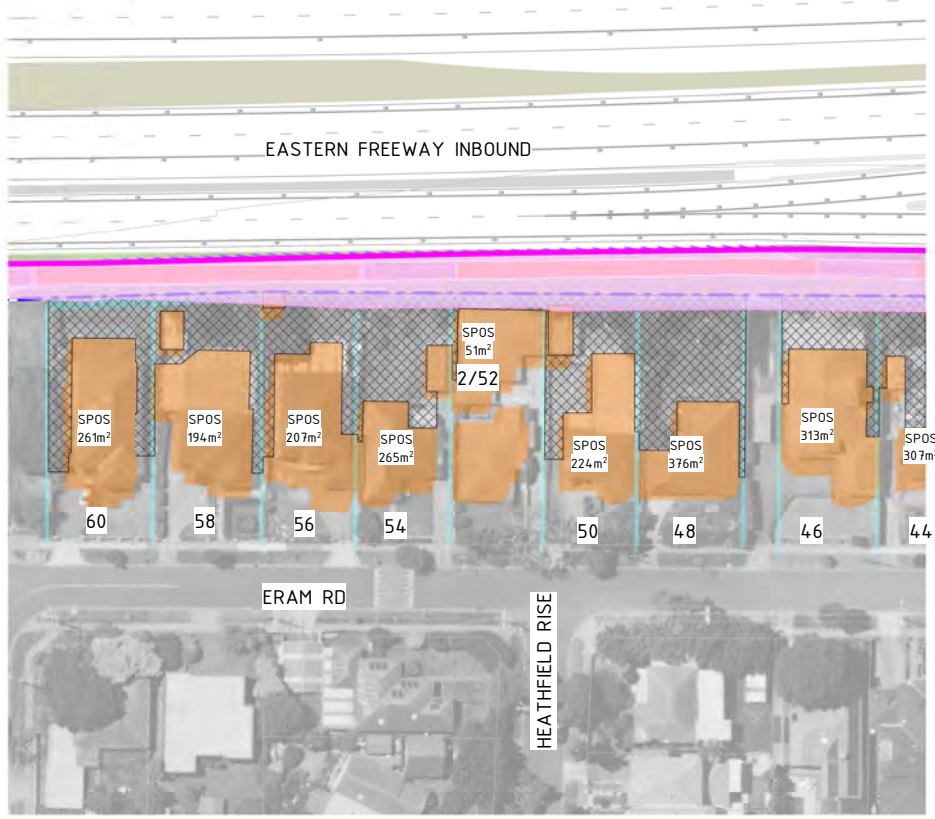
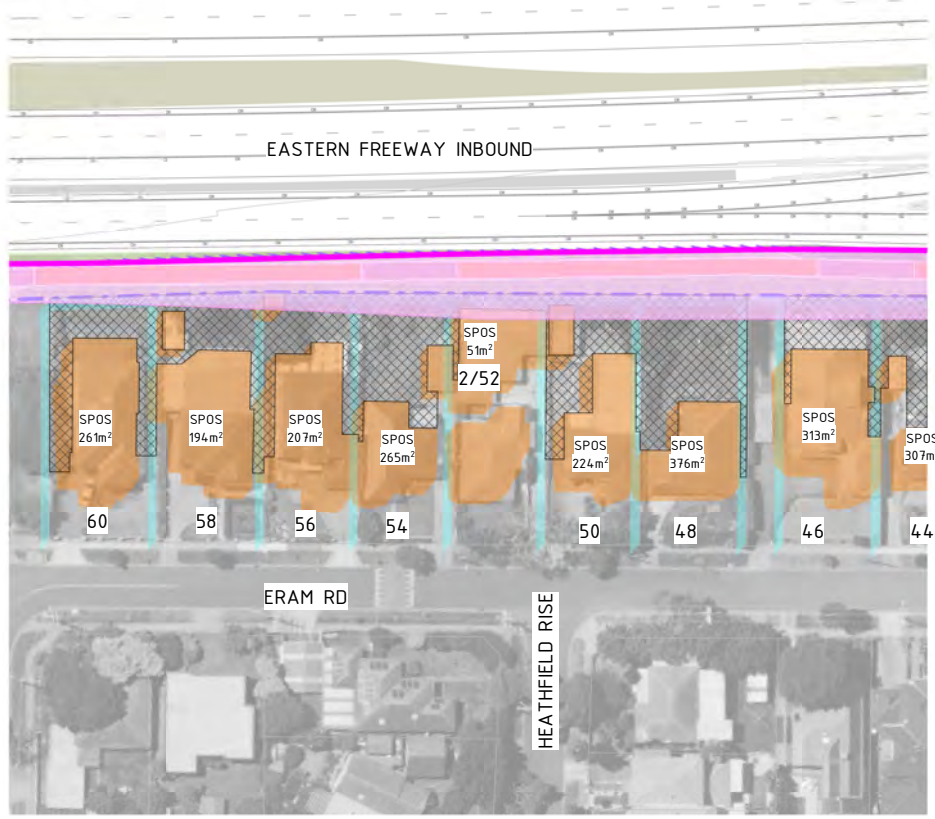
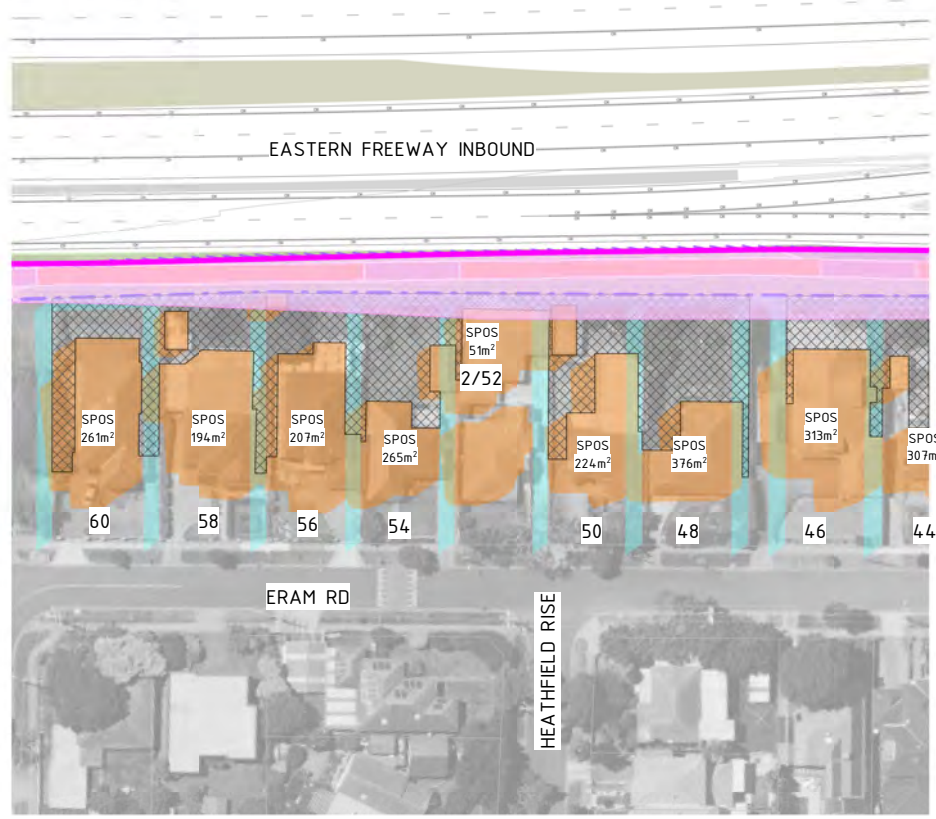
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE GA_08 OVERSHADOWING ANALYSIS - SPRINGVALE RD 3PM		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4023	REVISION 2



1 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 9AM - T1  
4006 1 : 1250

2 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 10AM - T1  
1 : 1250

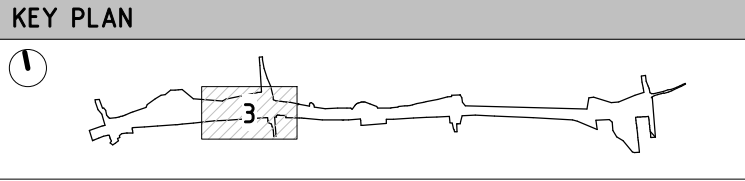
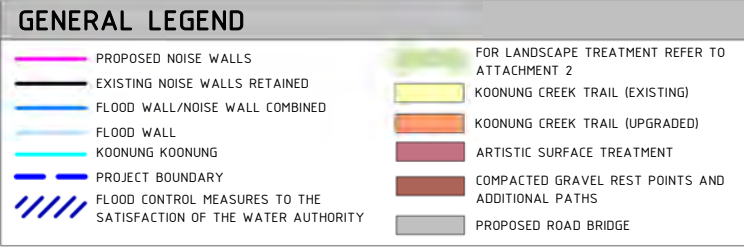
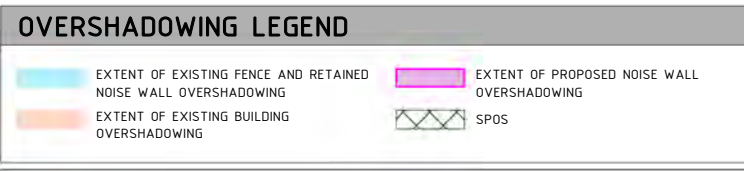
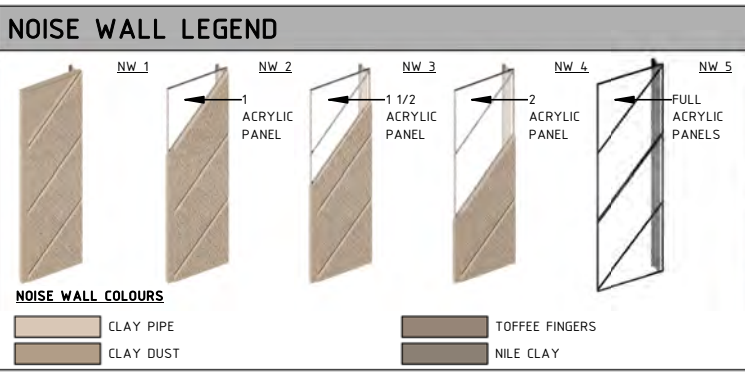
3 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 11AM - T1  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-03 ERAM RD 01 - SOLID WALL TREATMENT TYPE 1 - 9AM - 11AM

The overshadowing analysis diagrams identify additional overshadowing of SUP paths as well as some overshadowing of SPOS of adjacent private properties. Based on this focused analysis, additional diagrams have been prepared that incorporate the use of mitigation measures such as acrylic treatment (Refer to drawings 4056 and 4062).

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



UDLP SUBMISSION  
NOT FOR CONSTRUCTION

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

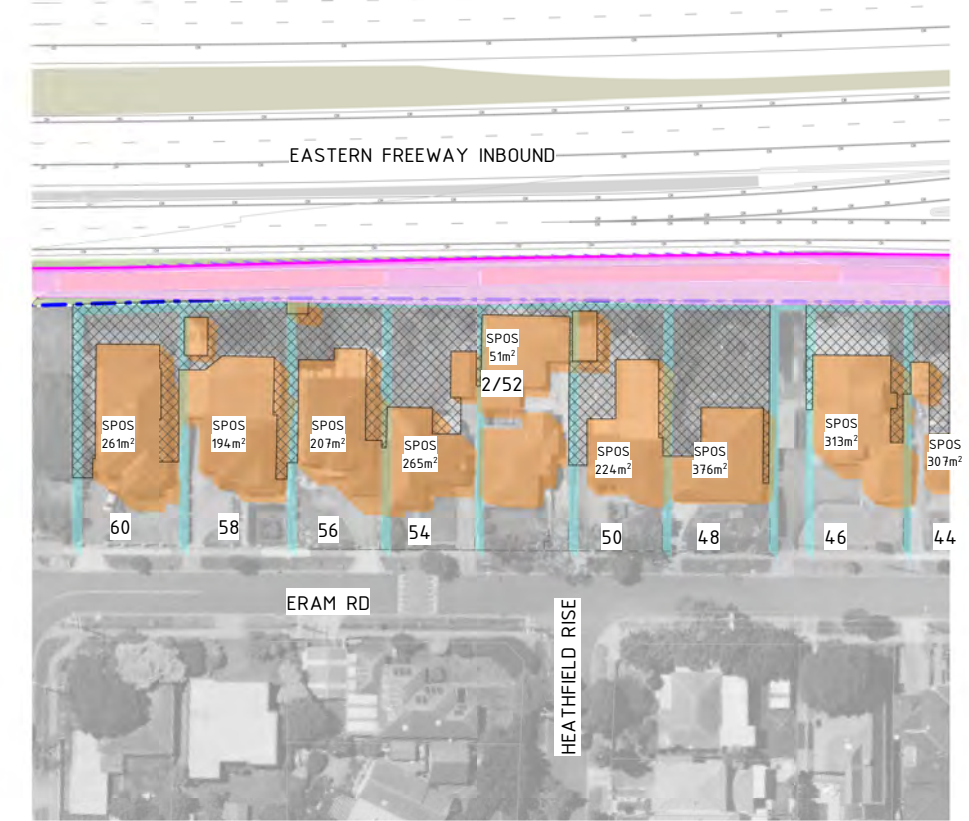
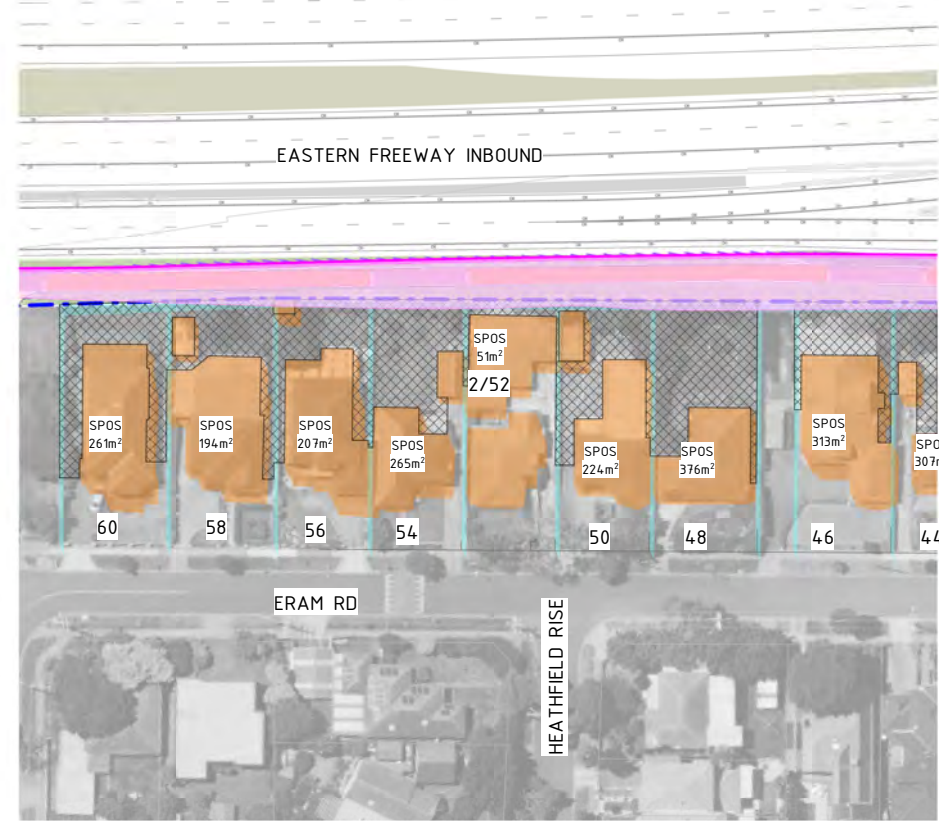
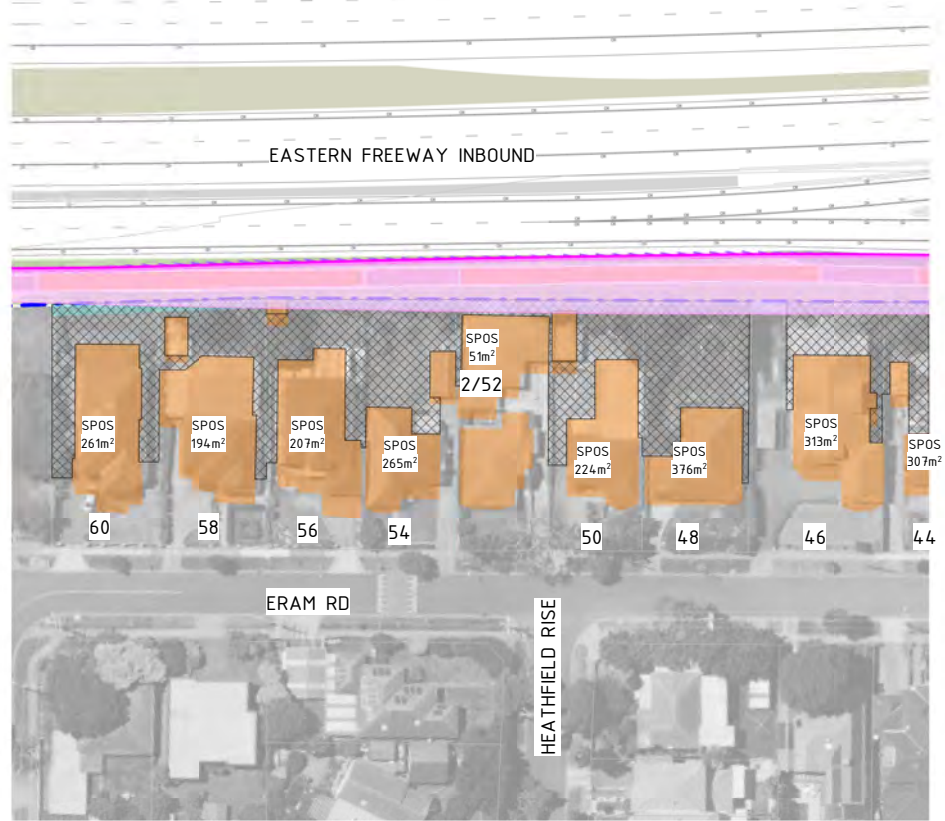
DTP No.:

EASTERN FREEWAY UPGRADES  
TRAM ROAD TO SPRINGVALE ROAD  
URBAN DESIGN & LANDSCAPE

GA\_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 9AM-11AM - TYPE 1 ASSESSMENT

PROJECT CONTRACT: EAST NELS DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4050 REVISION 2

NEL-EST-NEA-6920-UUD-MD3-0001.rvt



1 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 12PM - T1  
4007 1 : 1250

2 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 1 PM - T1  
1 : 1250

3 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 2 PM. - T1  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-03 ERAM RD 01 - SOLID WALL TREATMENT TYPE 1 - 12PM - 2PM

The overshadowing analysis diagrams identify additional overshadowing of SUP paths as well as some overshadowing of SPOS of adjacent private properties. Based on this focused analysis, additional diagrams have been prepared that incorporate the use of mitigation measures such as acrylic treatment (Refer to drawings 4057 and 4063).

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows.

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.

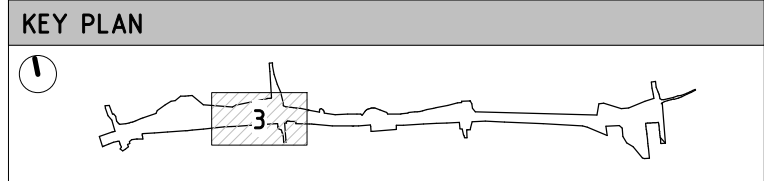
#### NOISE WALL LEGEND

#### OVERSHADOWING LEGEND

- Extent of existing fence and retained noise wall overshadowing
- Extent of existing building overshadowing
- Extent of proposed noise wall overshadowing
- SPOS

#### GENERAL LEGEND

- Proposed noise walls
- Existing noise walls retained
- Flood wall/noise wall combined
- Flood wall
- Koonung Koonung
- Project boundary
- Flood control measures to the satisfaction of the water authority
- For landscape treatment refer to Attachment 2
- Koonung Creek Trail (Existing)
- Koonung Creek Trail (Upgraded)
- Artistic surface treatment
- Compacted gravel rest points and additional paths
- Proposed road bridge



UDLP SUBMISSION  
NOT FOR CONSTRUCTION

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	DESCRIPTION	DATE

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:

EASTERN FREEWAY UPGRADES  
TRAM ROAD TO SPRINGVALE ROAD  
URBAN DESIGN & LANDSCAPE

GA\_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 12PM-2PM - TYPE 1 ASSESSMENT

PROJECT CONTRACT: EAST NELS DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4051 REVISION: 2



1 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 9AM - T1  
4006 1 : 1250

2 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 10AM - T1  
1 : 1250

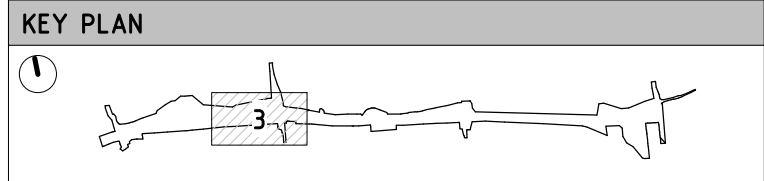
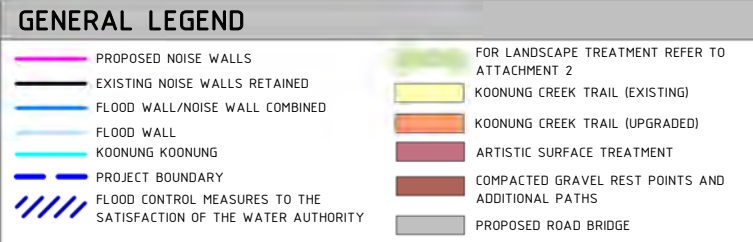
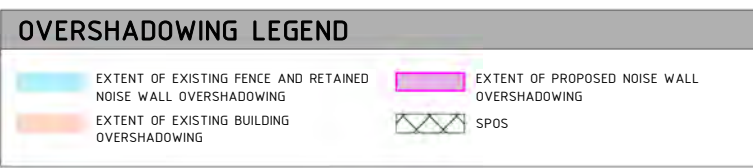
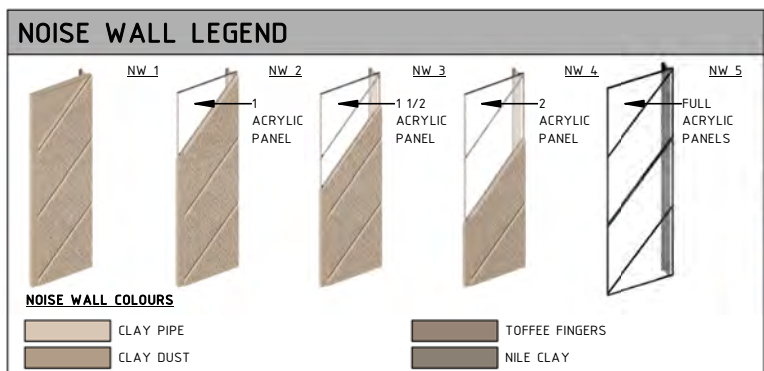
3 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 11AM - T1  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-03 ERAM RD 02 - SOLID WALL TREATMENT TYPE 1 - 9AM - 11AM

The overshadowing analysis diagrams identify additional overshadowing of SUP paths as well as some overshadowing of SPOS of adjacent private properties. Based on this focused analysis, additional diagrams have been prepared that incorporate the use of mitigation measures such as acrylic treatment (Refer to drawings 4058 and 4064).

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



UDLP SUBMISSION  
NOT FOR CONSTRUCTION

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREeway UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE		
GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 9AM-11AM - TYPE 1 ASSESSMENT		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4052	REVISION 2



1 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 12PM - T1  
4007 1 : 1250

2 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 1PM - T1  
1 : 1250

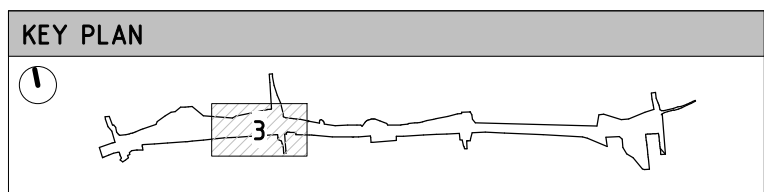
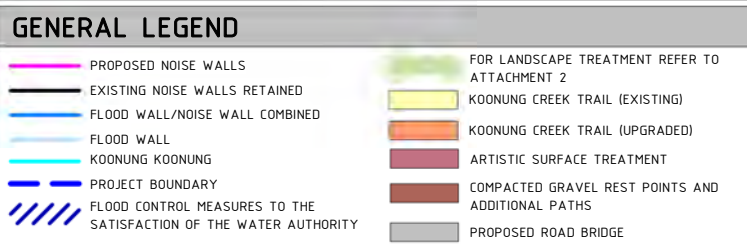
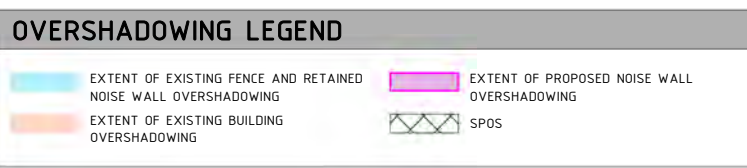
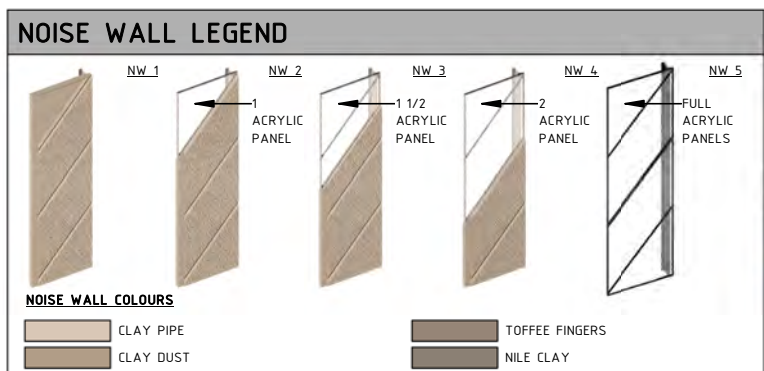
3 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 2PM - T1  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-03 ERAM RD 02 - SOLID WALL TREATMENT TYPE 1 - 12PM - 2PM

The overshadowing analysis diagrams identify additional overshadowing of SUP paths as well as some overshadowing of SPOS of adjacent private properties. Based on this focused analysis, additional diagrams have been prepared that incorporate the use of mitigation measures such as acrylic treatment (Refer to drawings 4059 and 4065).

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



UDLP SUBMISSION  
NOT FOR CONSTRUCTION

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	DESCRIPTION	DATE

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

© North East Link Program

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

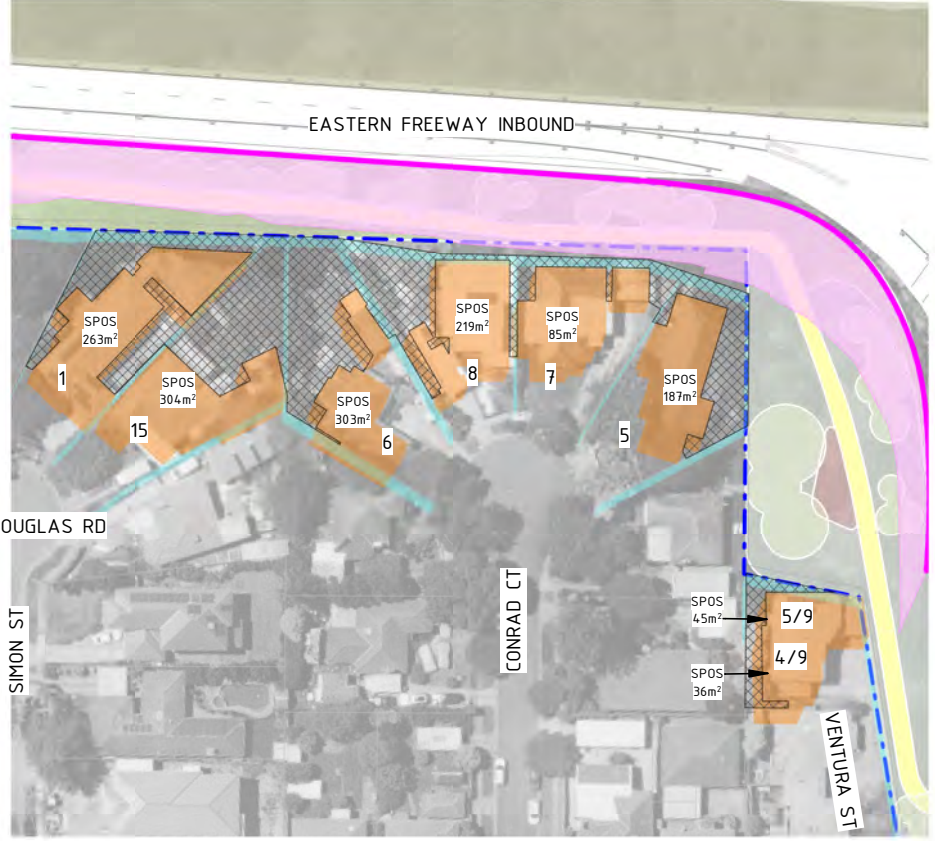
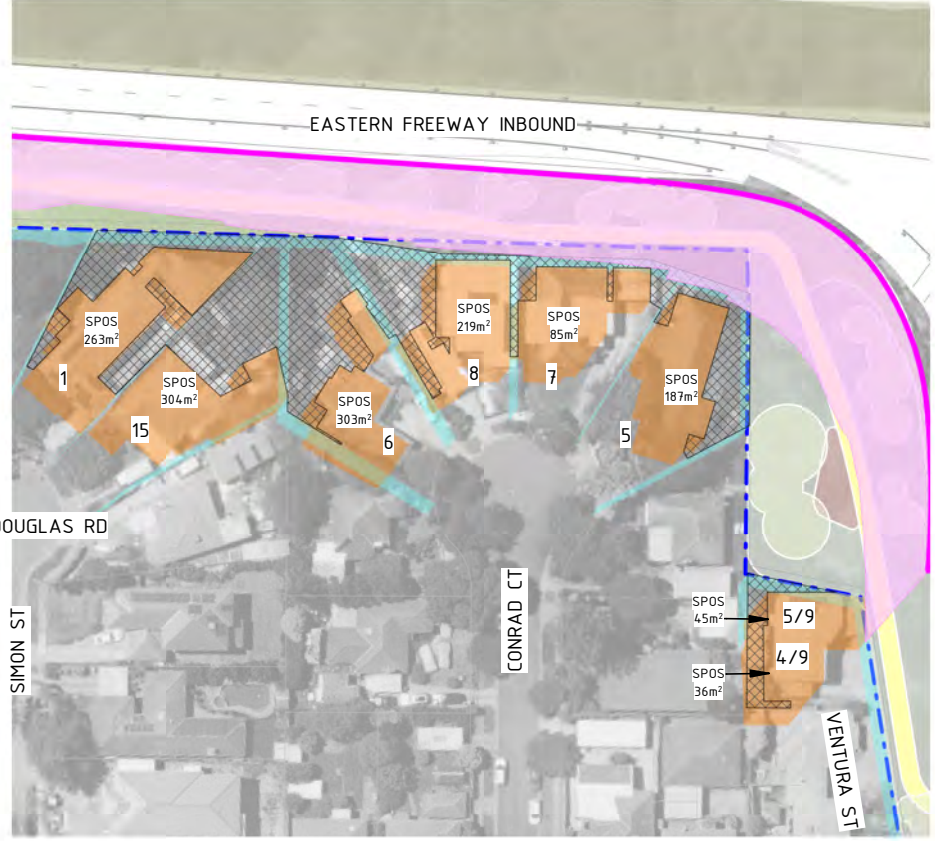
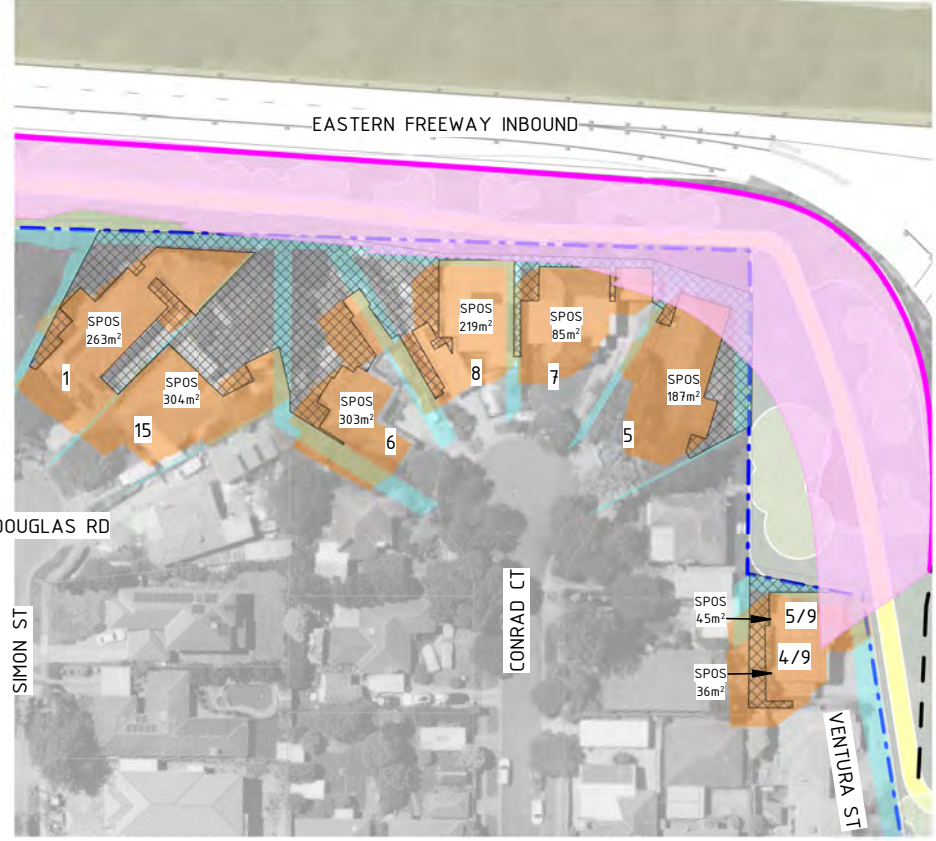
SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:

EASTERN FREEWAY UPGRADES  
TRAM ROAD TO SPRINGVALE ROAD  
URBAN DESIGN & LANDSCAPE

GA\_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 12PM-2PM - TYPE 1 ASSESSMENT

PROJECT CONTRACT: EAST NELS DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4053 REVISION: 2



1 FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 9AM - T1  
4015 1 : 1250

2 FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 10AM - T1  
1 : 1250

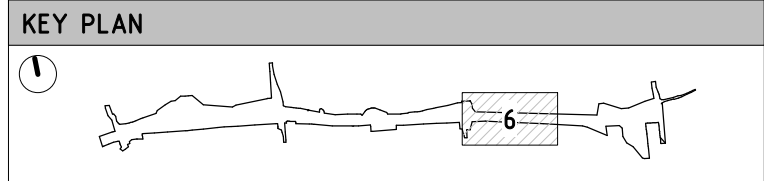
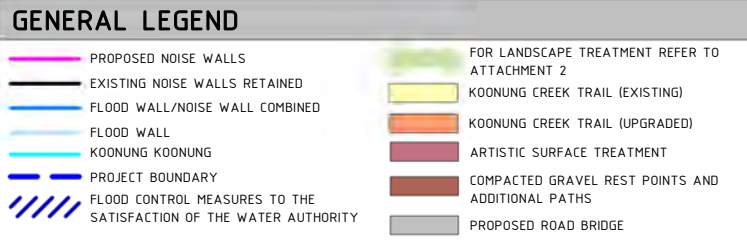
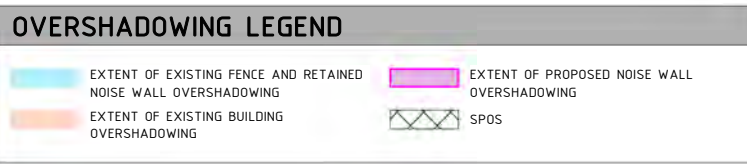
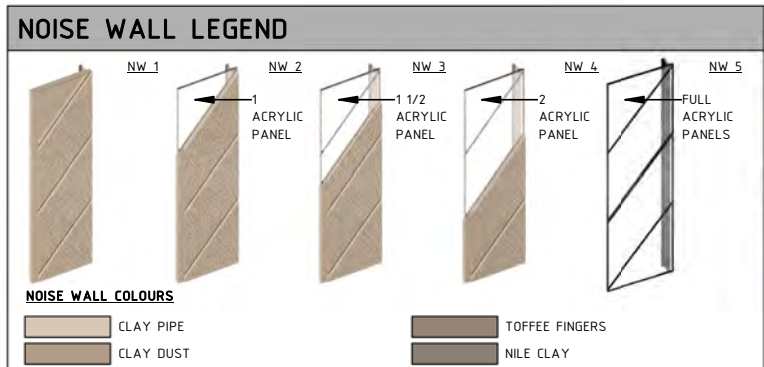
3 FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 11AM - T1  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-06 - CONRAD CT - SOLID WALL TREATMENT TYPE 1 - 9AM - 11AM

The overshadowing analysis diagrams identify additional overshadowing of SUP paths as well as some overshadowing of SPOS of adjacent private properties along Douglas Road, Simon Street, Conrad Court and Ventura Street. Based on this focused analysis, additional diagrams have been prepared that incorporate the use of mitigation measures such as acrylic treatment (Refer to drawing 4060 and 4066).

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



UDLP SUBMISSION  
NOT FOR CONSTRUCTION

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

© North East Link Program

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREeway UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE	
GA_06 - FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 9AM-11AM - TYPE 1 ASSESSMENT	
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4054
REVISION: 2	DTP No.:



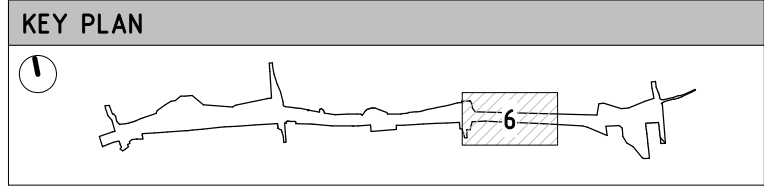
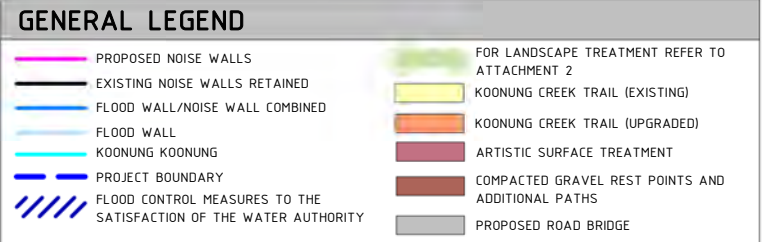
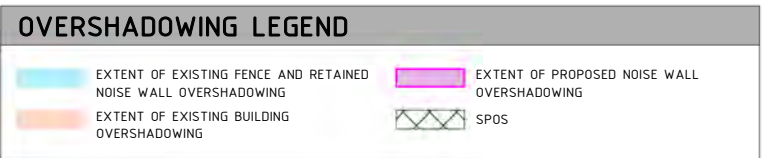
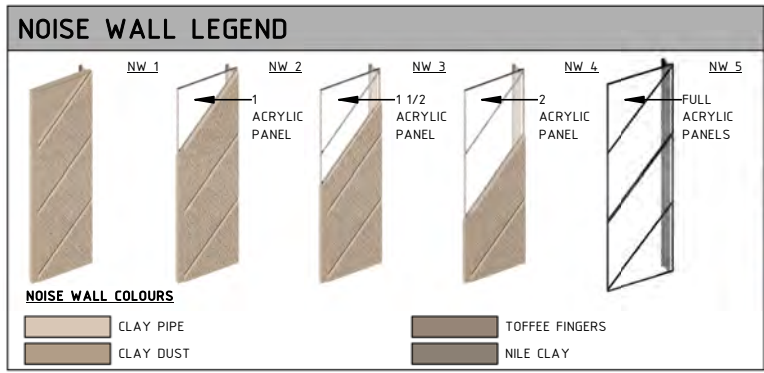
1 FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 12PM - T1  
4016 1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-06 - CONRAD CT - SOLID WALL TREATMENT TYPE 1 - 12PM

The overshadowing analysis diagrams identify additional overshadowing of SUP paths as well as some overshadowing of SPOS of adjacent private properties along Douglas Road, Simon Street, Conrad Court and Ventura Street. Based on this focused analysis, additional diagrams have been prepared that incorporate the use of mitigation measures such as acrylic treatment (Refer to drawing 4061 and 4067).

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

© North East Link Program

MAJOR ROAD PROJECTS VICTORIA

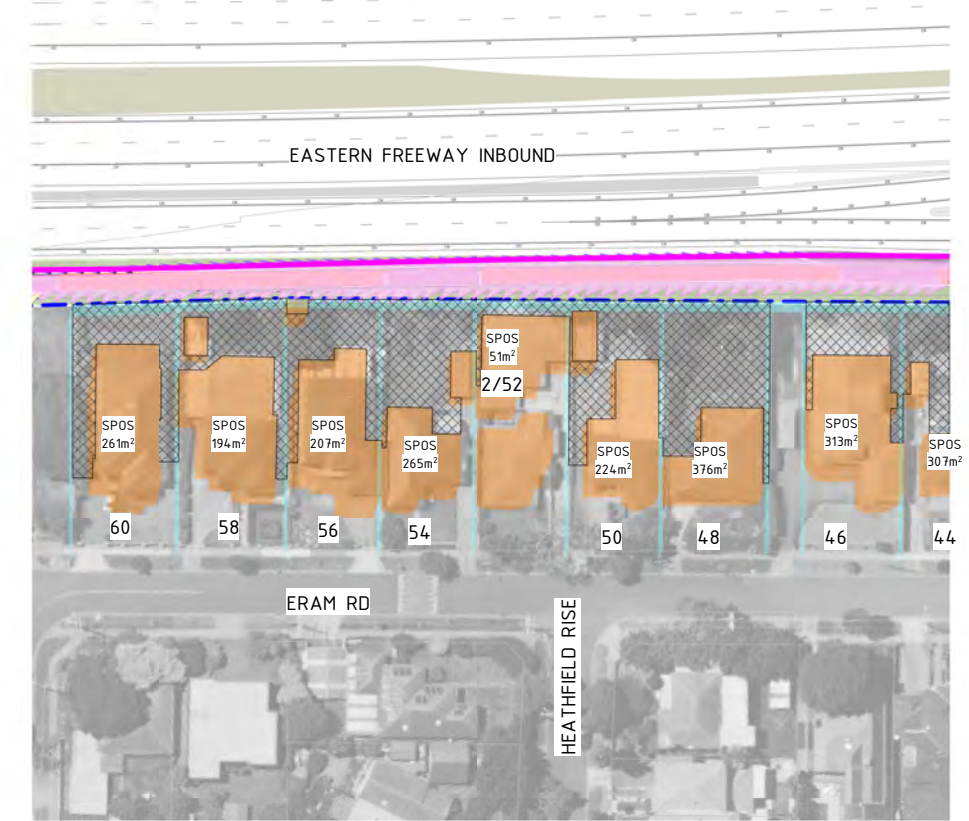
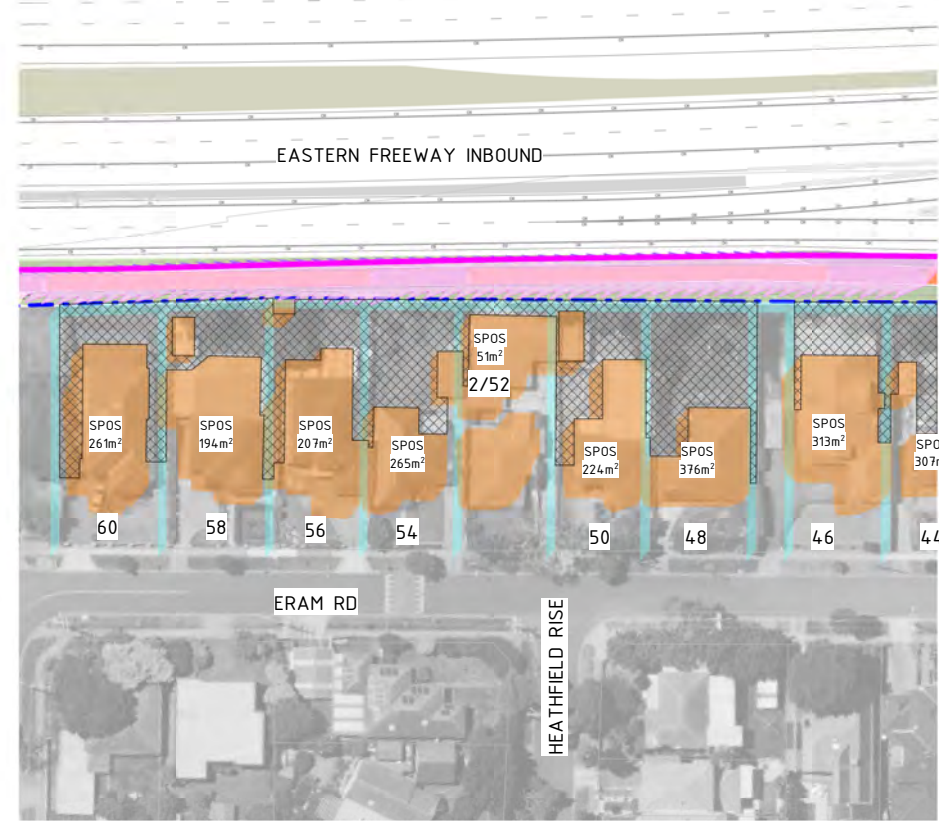
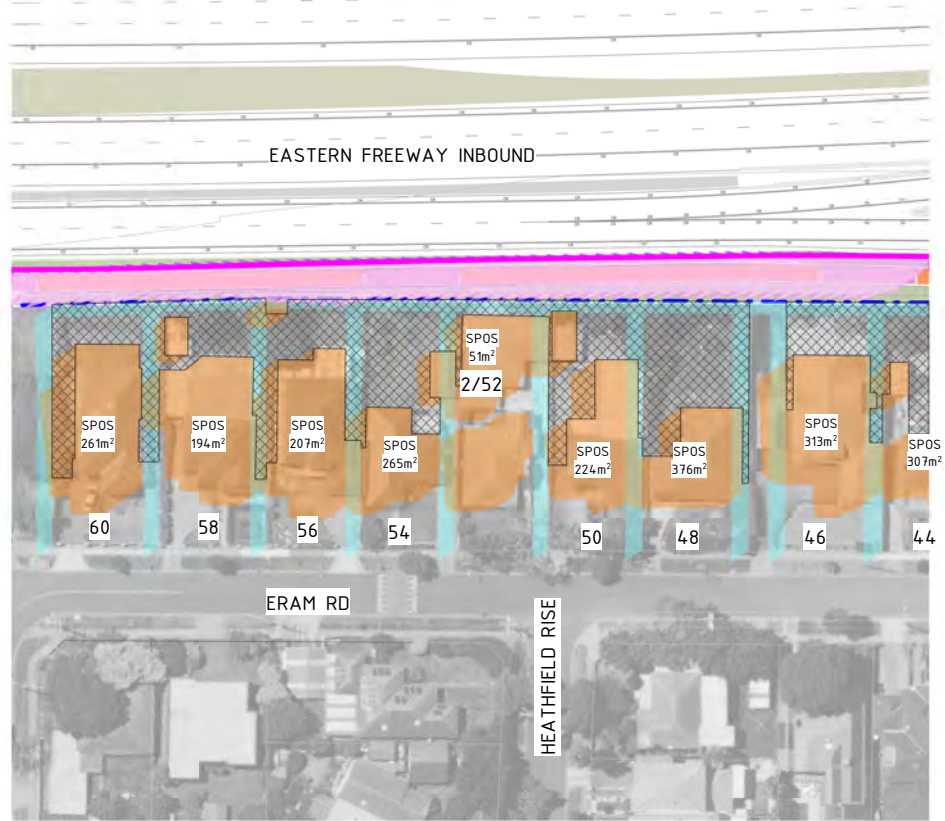
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREeway UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE		
GA_06 - FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 12PM - TYPE 1 ASSESSMENT		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4055	REVISION 2



1 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 9AM - T3  
1 : 1250

2 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 10AM - T3  
1 : 1250

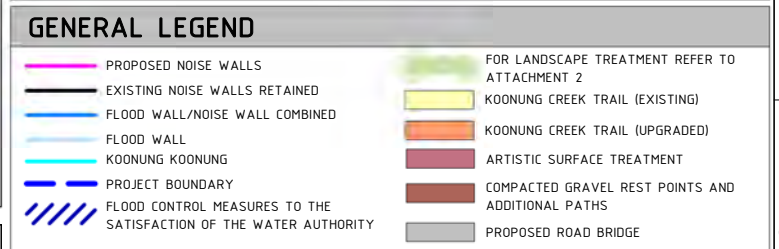
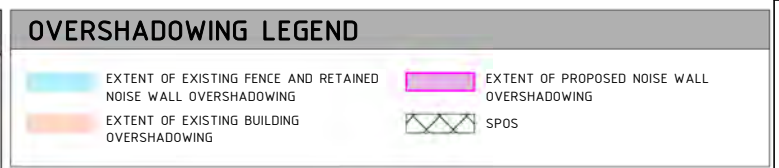
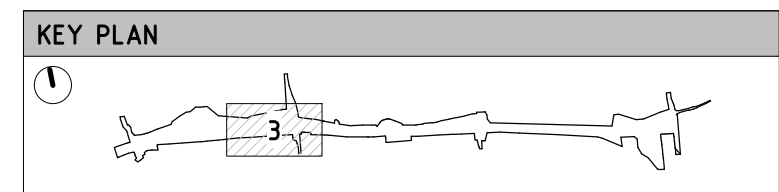
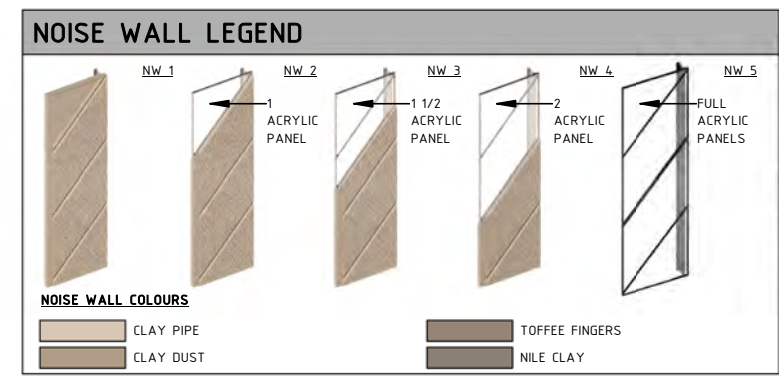
3 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 11AM - T3  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-03 - ERAM RD 01 - ACRYLIC TREATMENT TYPE 3 - 9AM - 11AM

The Focused Analysis of properties along Eram Road demonstrated that no overshadowing of SPOS of adjacent private properties would occur following the application of noise wall Type 3 design. The noise wall plans in Attachment 1 to this UDLP indicate that noise wall types 3-5 would be installed. Noise wall Type 4 and Type 5 will result in less overshadowing as they have a greater acrylic to solid ratio compared to Type 3. This is demonstrated through the additional Focused Analysis of Type 5 that has been conducted in this area (refer to drawing 4062).

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

© North East Link Program		
2	ISSUED FOR APPROVAL	01/04/26
REV.	DESCRIPTION	DATE
	REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

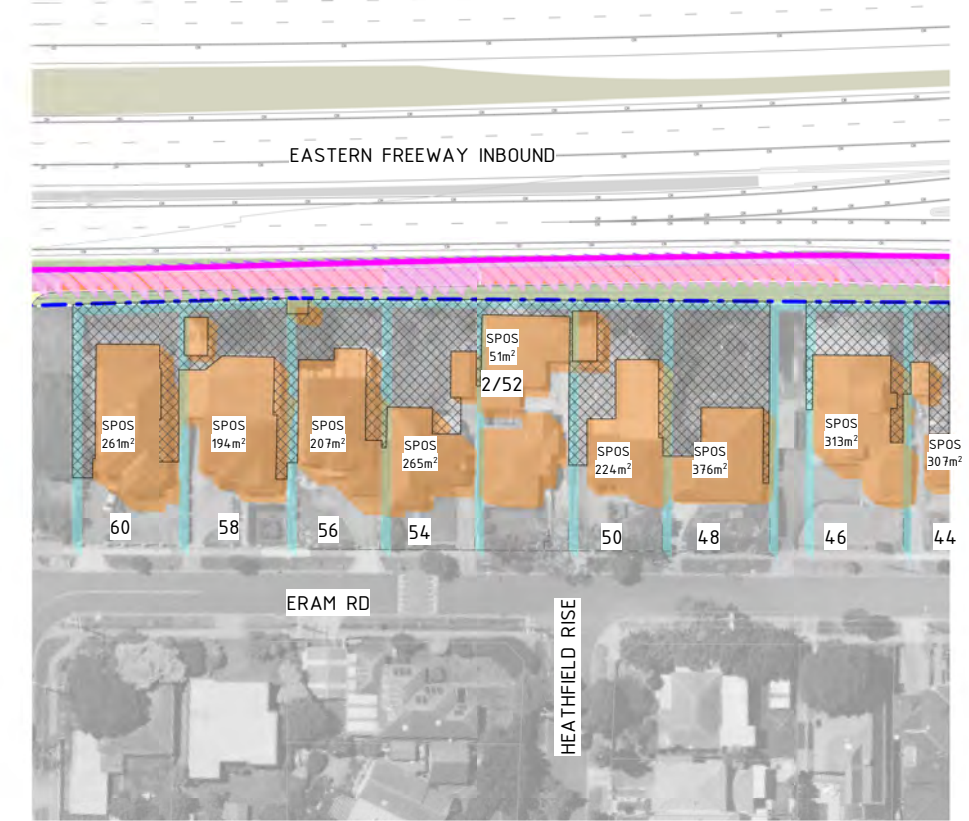
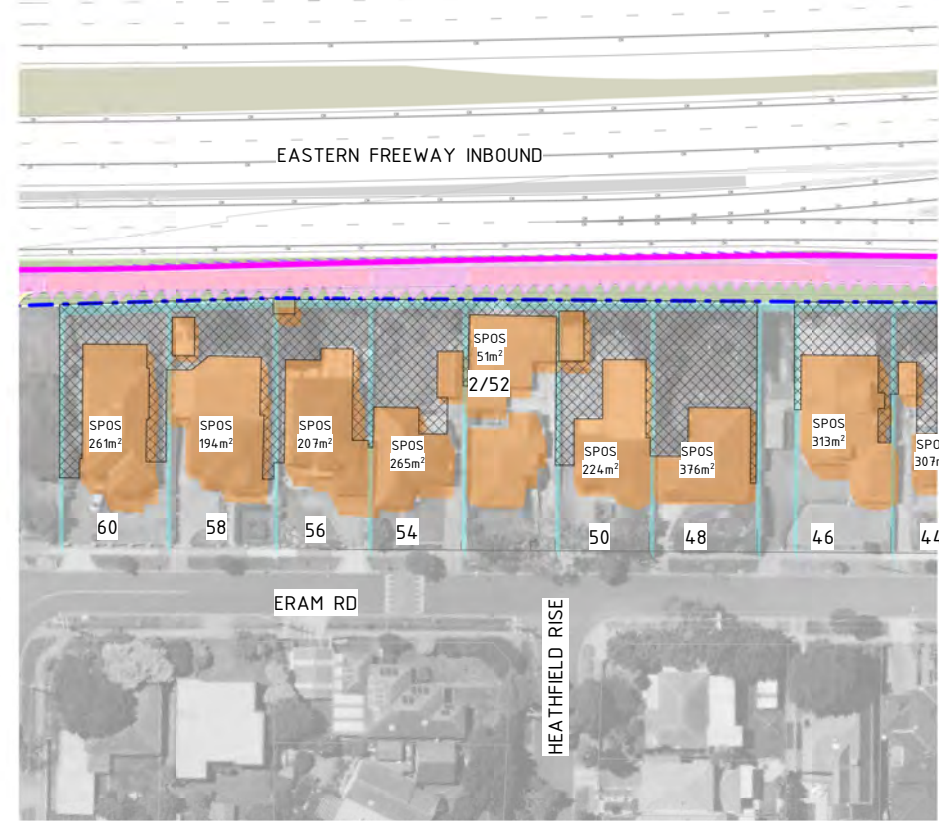
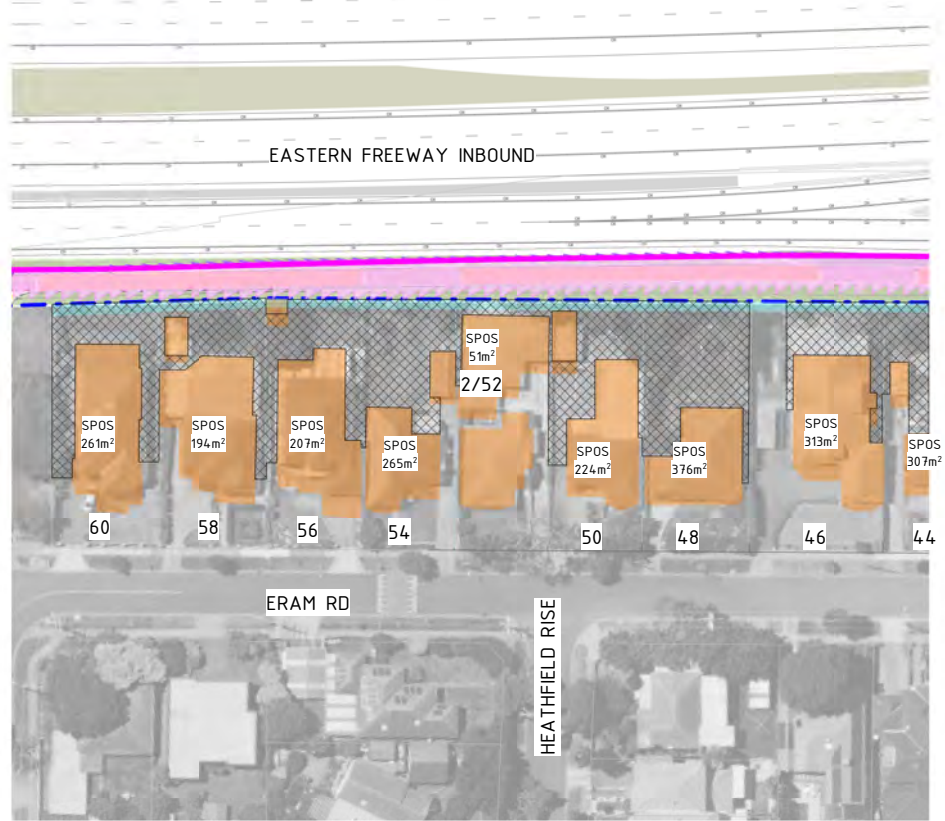
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:		
EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE		
GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 9AM-11AM - TYPE 3 ASSESSMENT		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4056	REVISION 2



1 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 12PM - T3  
1 : 1250

2 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 1PM - T3  
1 : 1250

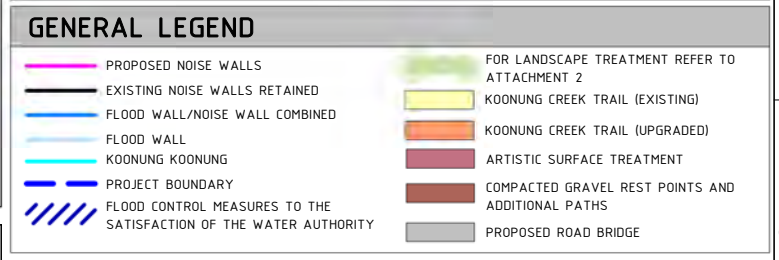
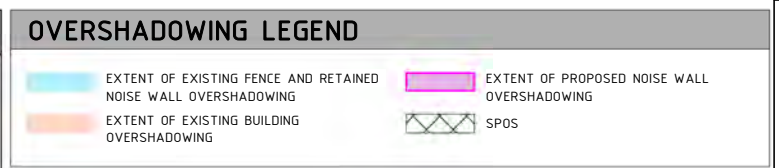
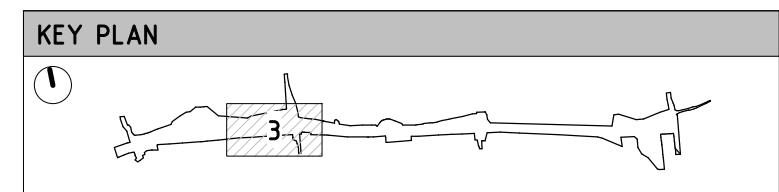
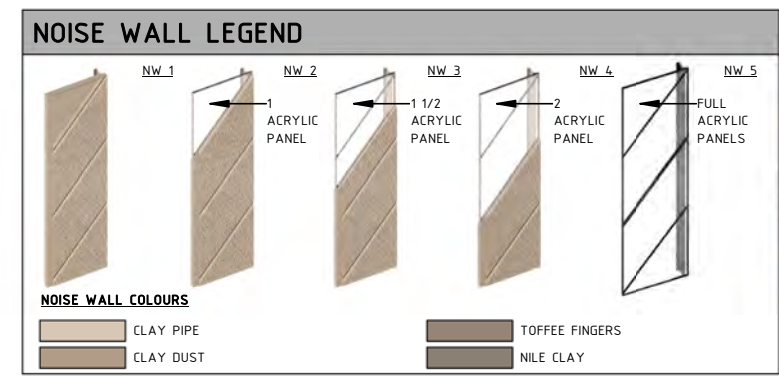
3 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 2PM - T3  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-03 - ERAM RD 01 - ACRYLIC TREATMENT TYPE 3 - 12PM - 2PM

The Focused Analysis of properties along Eram Road demonstrated that no overshadowing of SPOS of adjacent private properties would occur following the application of noise wall Type 3 design. The noise wall plans in Attachment 1 to this UDLP indicate that noise wall types 3-5 would be installed. Noise wall Type 4 and Type 5 will result in less overshadowing as they have a greater acrylic to solid ratio compared to Type 3. This is demonstrated through the additional Focused Analysis of Type 5 that has been conducted in this area (refer to drawing 4063).

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



UDLP SUBMISSION  
NOT FOR CONSTRUCTION

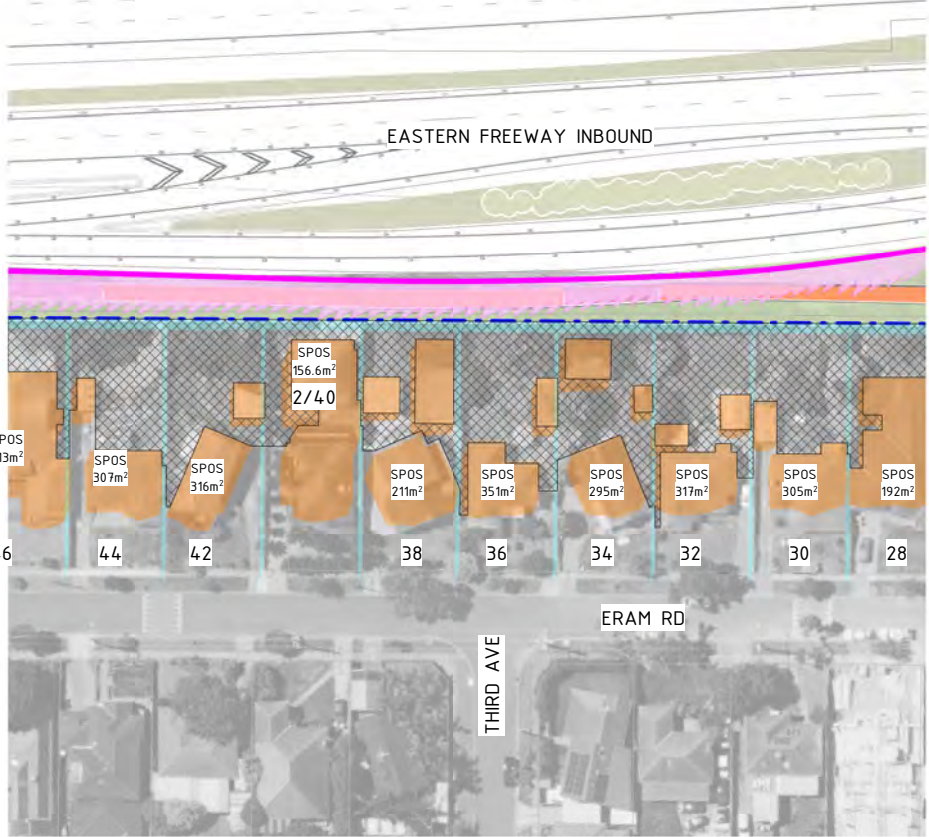
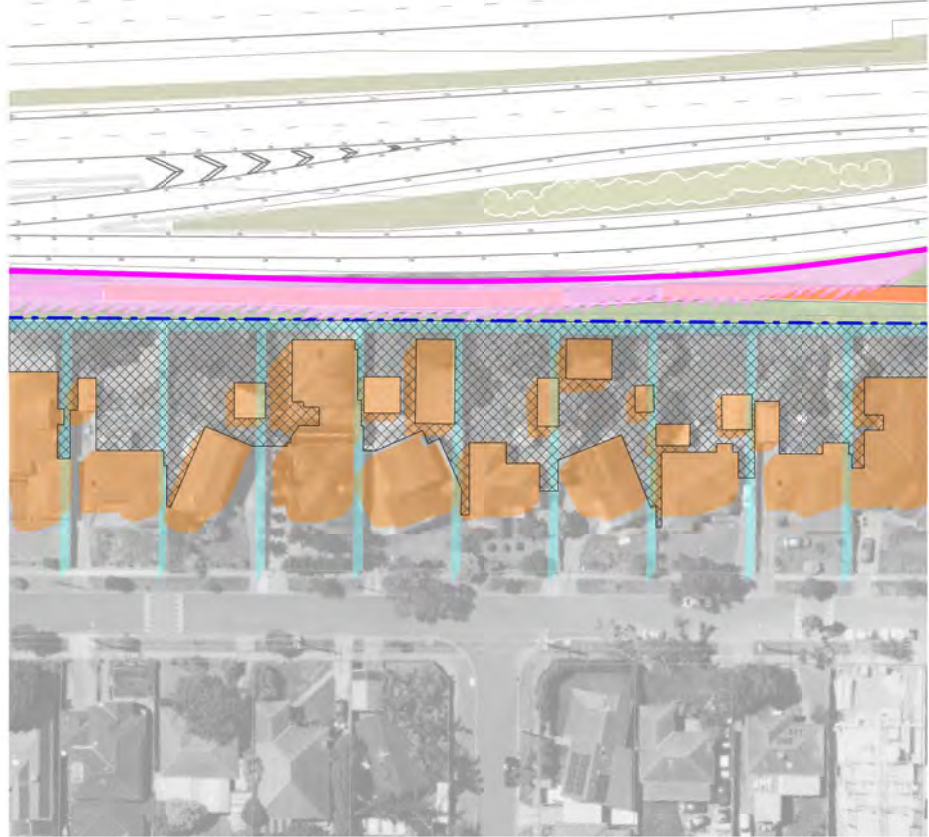
NEL-EST-NEA-6920-UUD-MD3-0001.rvt

© North East Link Program		
2	ISSUED FOR APPROVAL	01/04/26
REV.	DESCRIPTION	DATE
	REVISIONS	

<b>DISCLAIMER</b>	
Conditions of Use: This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade. Recipients of this document: Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.	
COORDINATE SYSTEM:	
HEIGHT DATUM (m):	DRAWN:

Tram to Springvale Alliance	
SIZE: A3	SCALE: 1:2000
CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt	

EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE	
<b>GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 12PM-2PM - TYPE 3 ASSESSMENT</b>	
PROJECT CONTRACT:	NELP DRAWING No.:
EAST	NEL-EST-NEA-6600-UUD-PLA-4057
DTP No.: EASTERN FREeway UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE <b>GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 12PM-2PM - TYPE 3 ASSESSMENT</b>	
REVISION	2



1 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 9AM - T3  
1 : 1250

2 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 10AM - T3  
1 : 1250

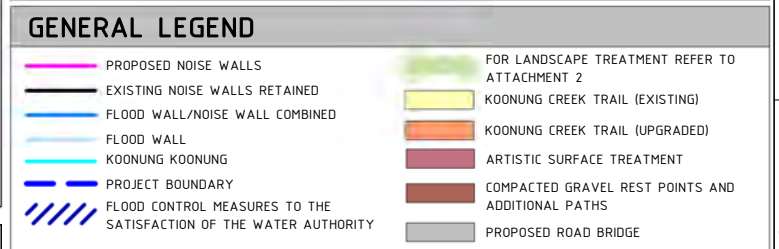
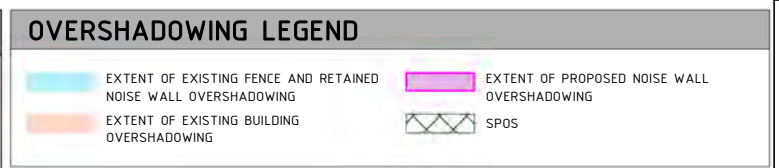
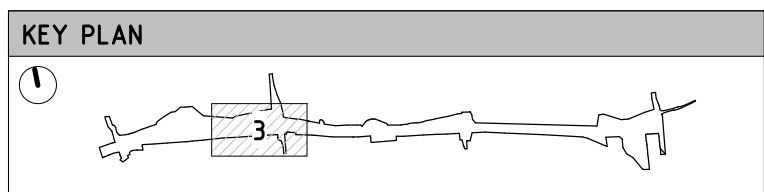
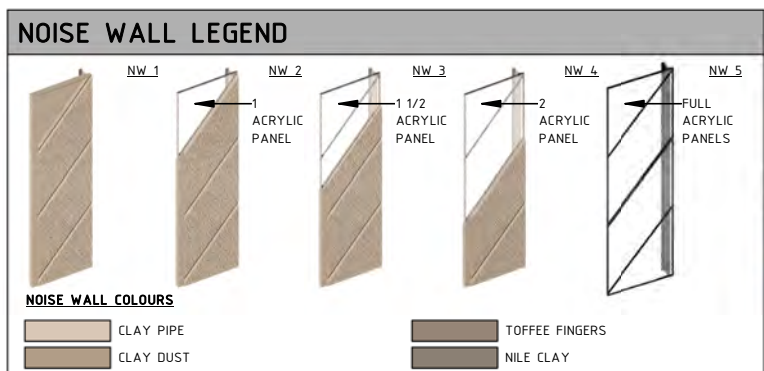
3 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 11AM - T3  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-03 - ERAM RD 02 - ACRYLIC TREATMENT TYPE 3 - 9AM - 11AM

The Focused Analysis of properties along Eram Road demonstrated that no overshadowing of SPOS of adjacent private properties would occur following the application of noise wall Type 3 design. The noise wall plans in Attachment 1 to this UDLP indicate that noise wall types 3-5 would be installed. Noise wall Type 4 and Type 5 will result in less overshadowing as they have a greater acrylic to solid ratio compared to Type 3. This is demonstrated through the additional Focused Analysis of Type 5 that has been conducted in this area (refer to drawing 4064).

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

© North East Link Program		
2	ISSUED FOR APPROVAL	01/04/26
REV.	DESCRIPTION	DATE
	REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

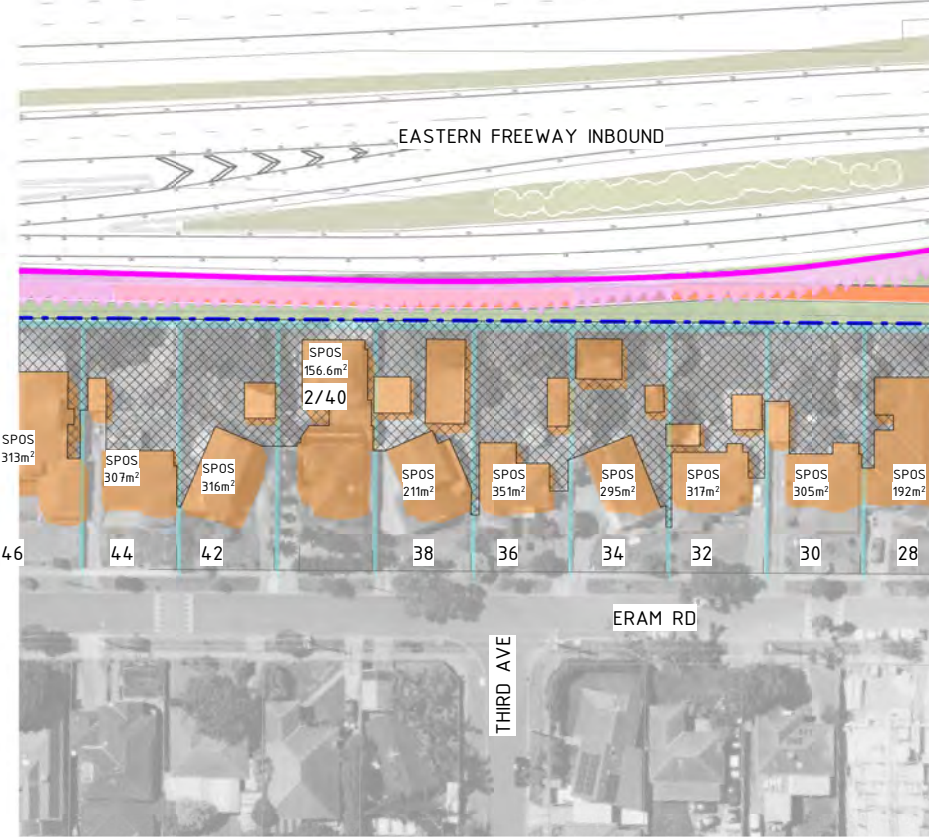
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:		
EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE		
GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 9AM-11AM - TYPE 3 ASSESSMENT		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4058	REVISION 2



1 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 12PM - T3  
1 : 1250

2 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 1PM - T3  
1 : 1250

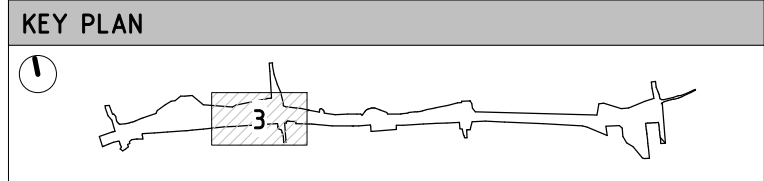
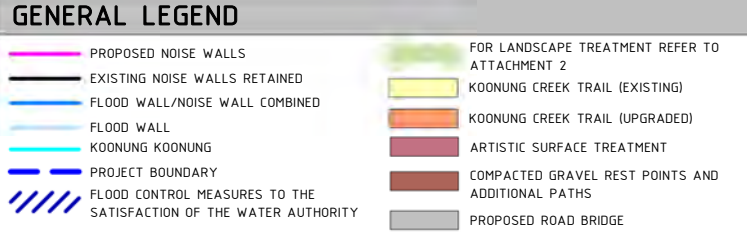
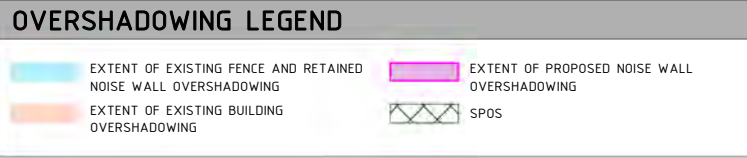
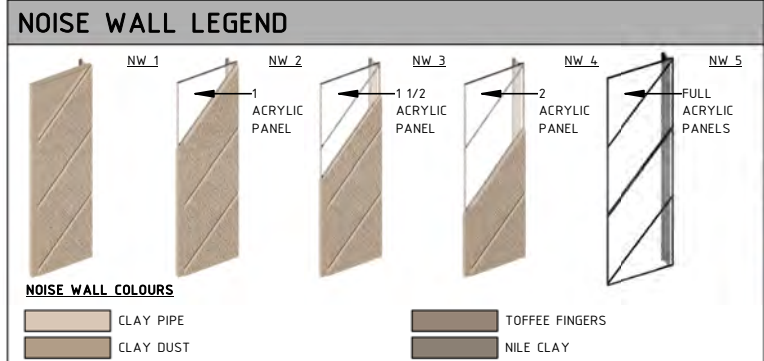
3 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 2PM - T3  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-03 - ERAM RD 02 - ACRYLIC TREATMENT TYPE 3 - 12PM - 2PM

The Focused Analysis of properties along Eram Road demonstrated that no overshadowing of SPOS of adjacent private properties would occur following the application of noise wall Type 3 design. The noise wall plans in Attachment 1 to this UDLP indicate that noise wall types 3-5 would be installed. Noise wall Type 4 and Type 5 will result in less overshadowing as they have a greater acrylic to solid ratio compared to Type 3. This is demonstrated through the additional Focused Analysis of Type 5 that has been conducted in this area (refer to drawing 4065).

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



UDLP SUBMISSION  
NOT FOR CONSTRUCTION

© North East Link Program		
2	ISSUED FOR APPROVAL	01/04/26
REV.	DESCRIPTION	DATE
	REVISIONS	

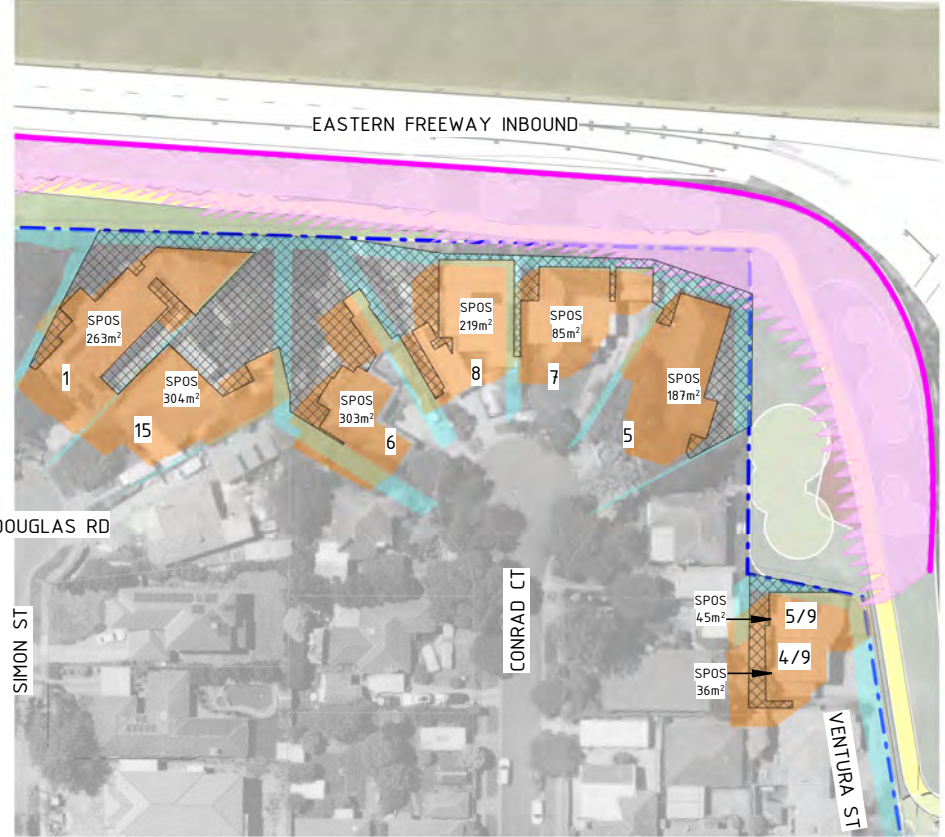
<b>DISCLAIMER</b>	
Conditions of Use: This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade. Recipients of this document: Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.	
COORDINATE SYSTEM:	
HEIGHT DATUM (m):	DRAWN:

Tram to Springvale Alliance

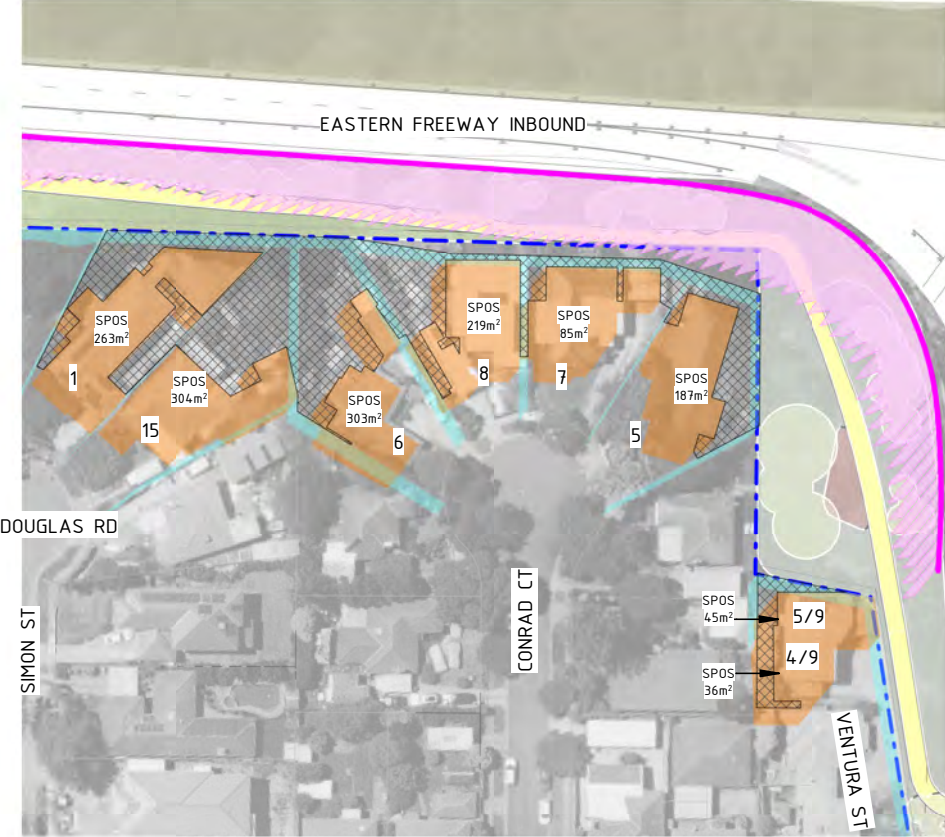
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

SIZE: A3 | SCALE: 1:2000 | CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

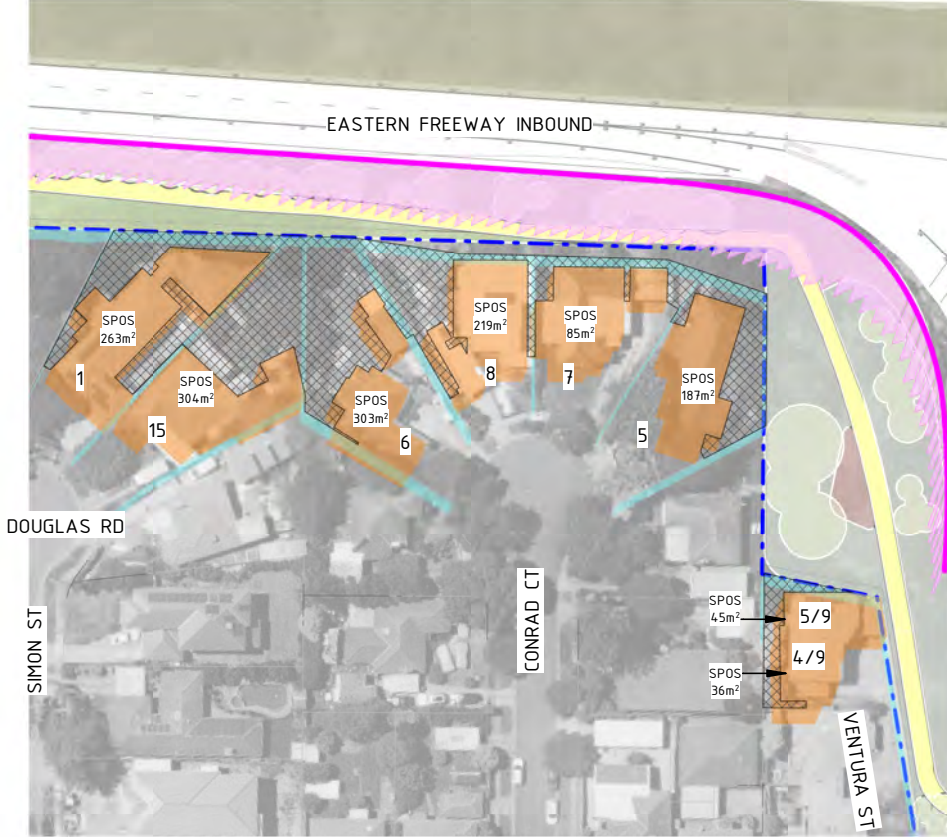
DTP No.:		
EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE		
GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 12PM-2PM - TYPE 3 ASSESSMENT		
PROJECT CONTRACT:	NELP DRAWING No.:	REVISION
EAST	NEL-EST-NEA-6600-UUD-PLA-4059	2



1 FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 9AM - T3  
1 : 1250



2 FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 10AM - T3  
1 : 1250



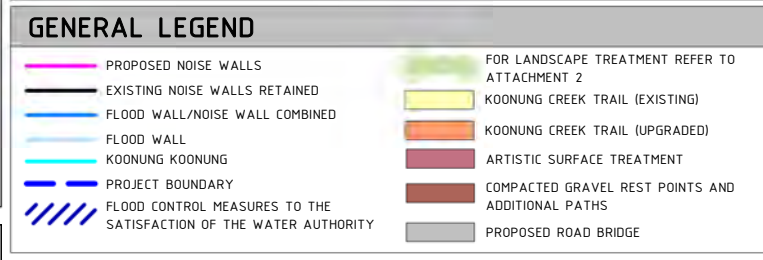
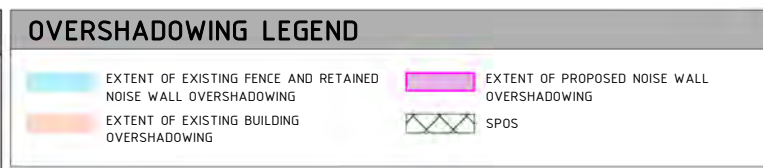
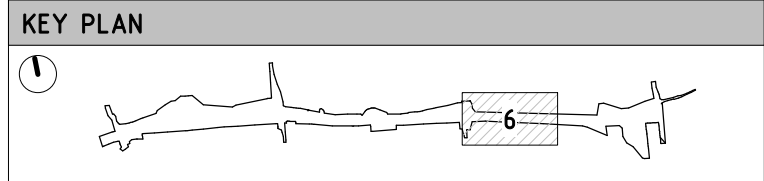
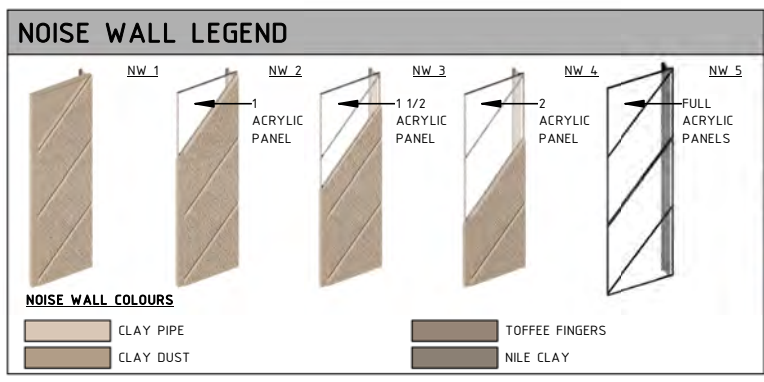
3 FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 11AM - T3  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-06 - CONRAD CT - ACRYLIC TREATMENT TYPE 3 - 9AM - 11AM

The Focused Analysis of properties along Conrad Court demonstrated that no overshadowing of SPOS of adjacent private properties would occur following the application of noise wall Type 3 design. The noise wall plans in Attachment 1 to this UDLP indicate that noise wall types 3-5 would be installed. Noise wall Type 4 and Type 5 will result in less overshadowing as they have a greater acrylic to solid ratio compared to Type 3. This is demonstrated through the additional Focused Analysis of Type 5 that has been conducted in this area (refer to drawing 4066).

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

© North East Link Program		
2	ISSUED FOR APPROVAL	01/04/26
REV.	DESCRIPTION	DATE
	REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:		
EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE		
GA_06 - FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 9AM-11AM - TYPE 3 ASSESSMENT		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4060	REVISION 2



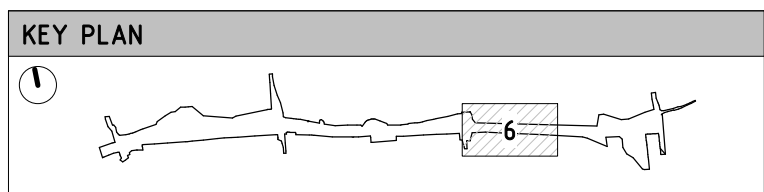
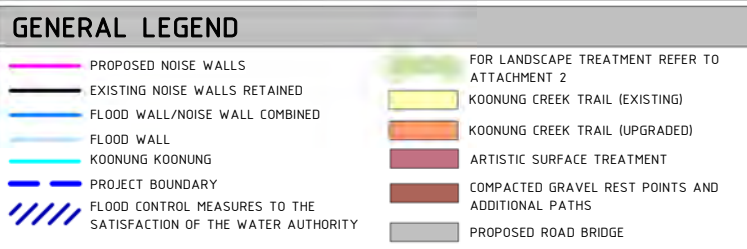
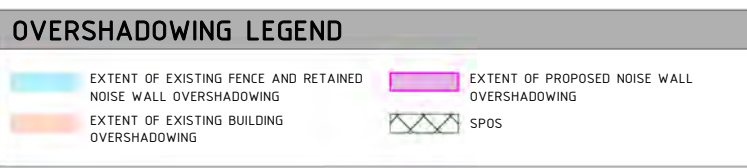
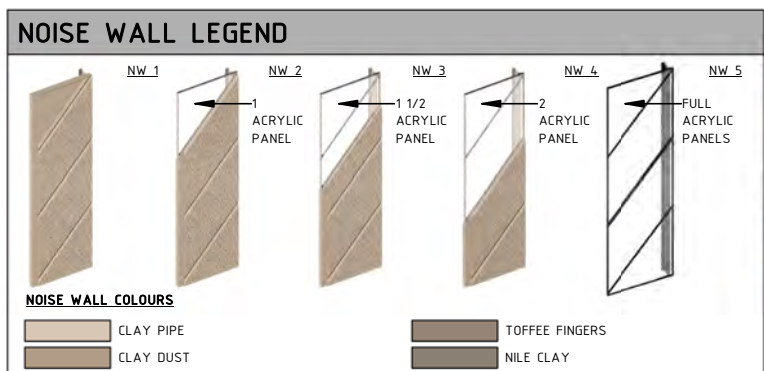
1 FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 12PM - T3  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-06 - CONRAD CT - ACRYLIC TREATMENT TYPE 3 - 12PM

The Focused Analysis of properties along Conrad Court demonstrated that no overshadowing of SPOS of adjacent private properties would occur following the application of noise wall Type 3 design. The noise wall plans in Attachment 1 to this UDLP indicate that noise wall types 3-5 would be installed. Noise wall Type 4 and Type 5 will result in less overshadowing as they have a greater acrylic to solid ratio compared to Type 3. This is demonstrated through the additional Focused Analysis of Type 5 that has been conducted in this area (refer to drawing 4067).

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

© North East Link Program		
2	ISSUED FOR APPROVAL	01/04/26
REV.	DESCRIPTION	DATE
	REVISIONS	

<b>DISCLAIMER</b>	
Conditions of Use: This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade. Recipients of this document: Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.	
COORDINATE SYSTEM:	
HEIGHT DATUM (m):	DRAWN:

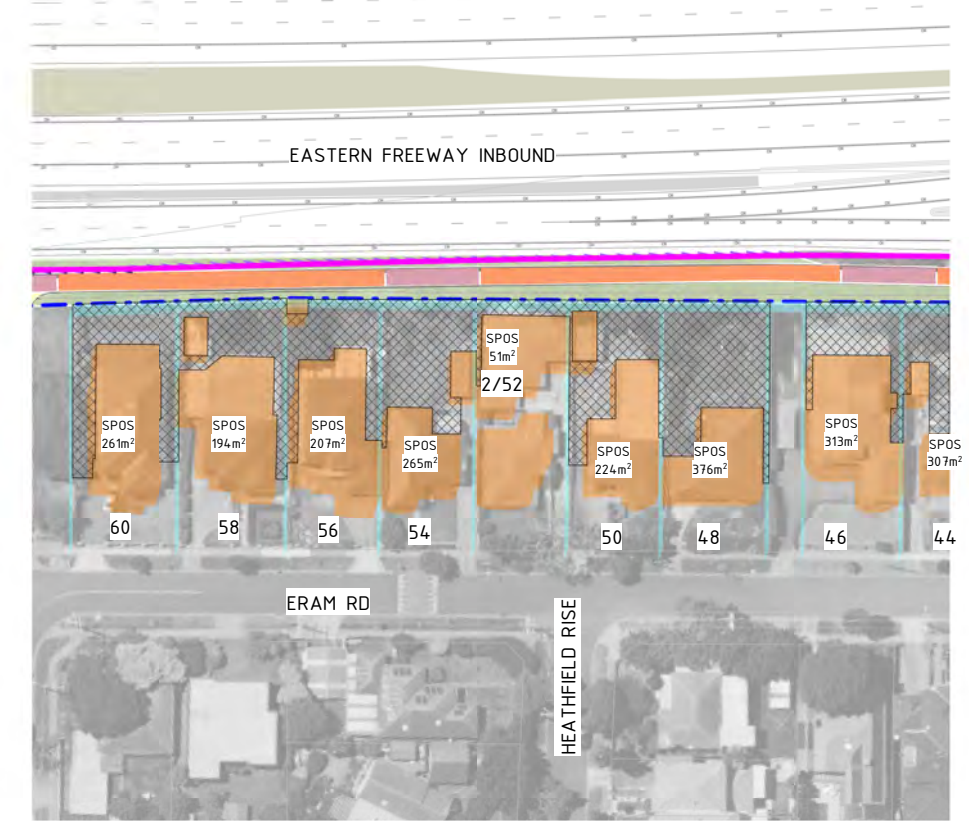
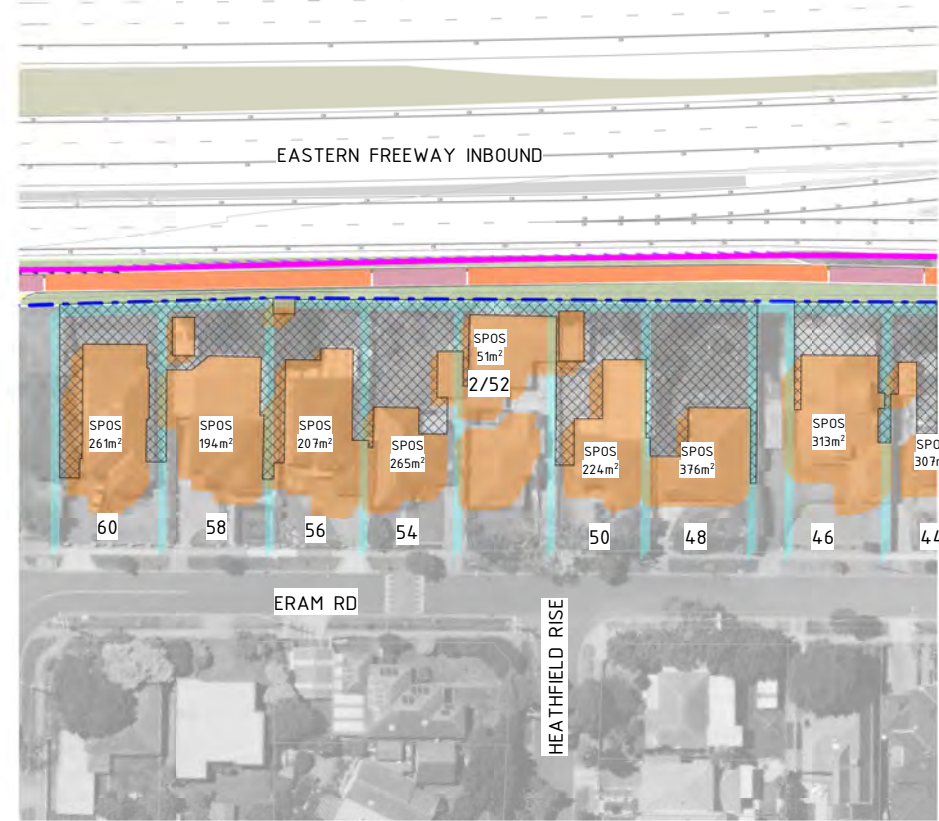
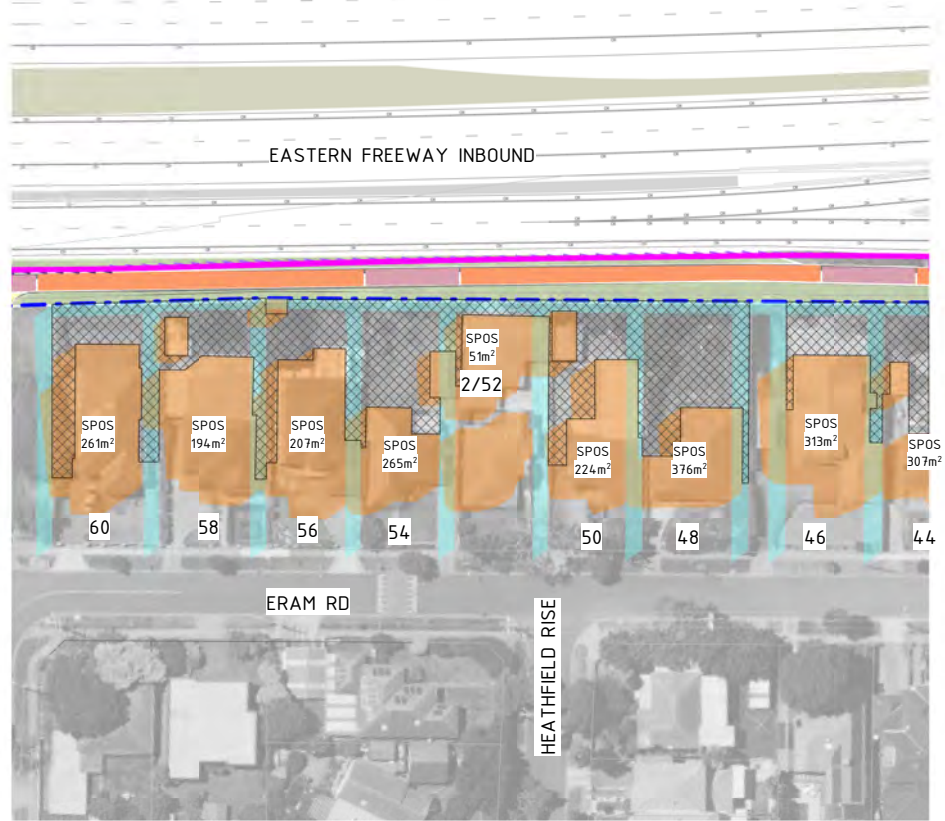
Tram to Springvale Alliance	
SIZE: A3	SCALE: 1:2000
CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt	

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE		
GA_06 - FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 12PM - TYPE 3 ASSESSMENT		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4061	REVISION: 2



1 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 9AM - T5  
1 : 1250

2 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 10AM - T5  
1 : 1250

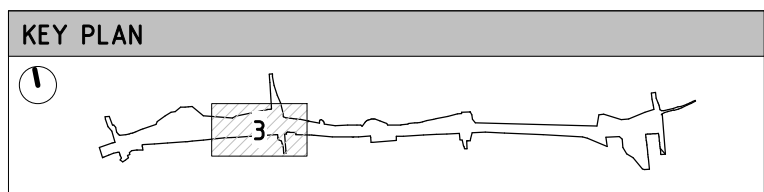
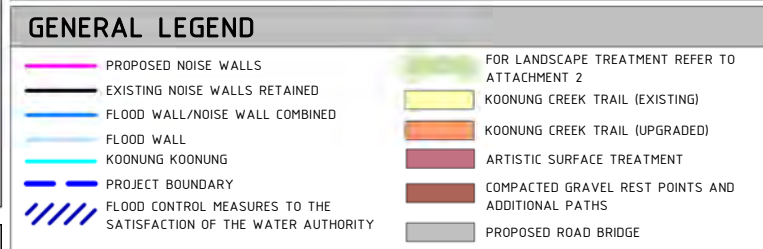
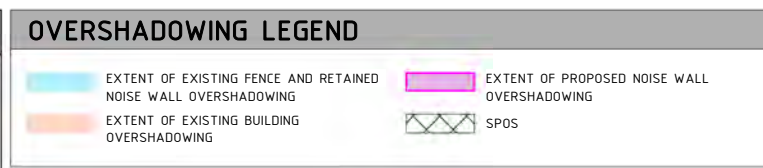
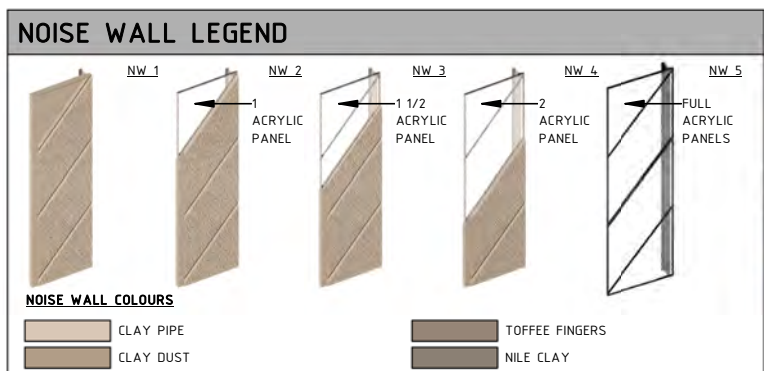
3 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 11AM - T5  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-03 - ERAM RD 01 - ACRYLIC TREATMENT TYPE 5 - 9AM - 11AM

The Focused Analysis of properties along Eram Road revealed no overshadowing following the application of an acrylic noise wall Type 5 within the design; as seen in Figures above. Although there are no shadows cast from noise walls, properties have been identified as directly affected by the use of acrylic panels casting light into SPOS. Ongoing consultation will be undertaken with these properties. This complies with the requirements of EPR LP4, as the total percentage of SPOS directly affected by shadowing is less than 50% of the SPOS.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

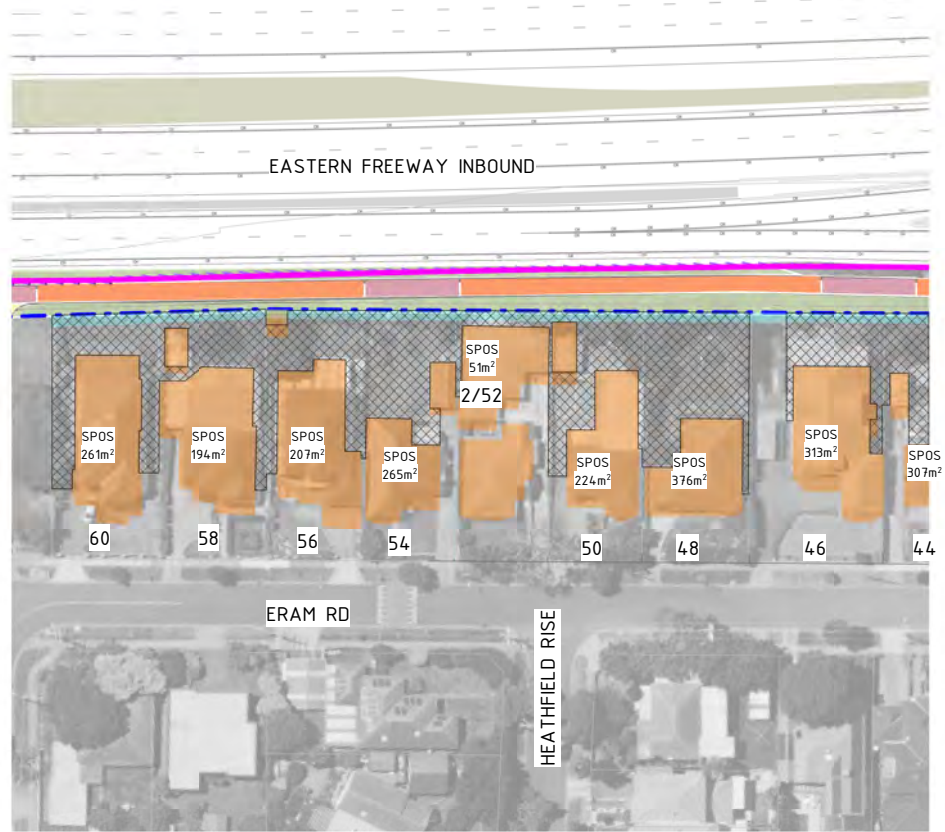
NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

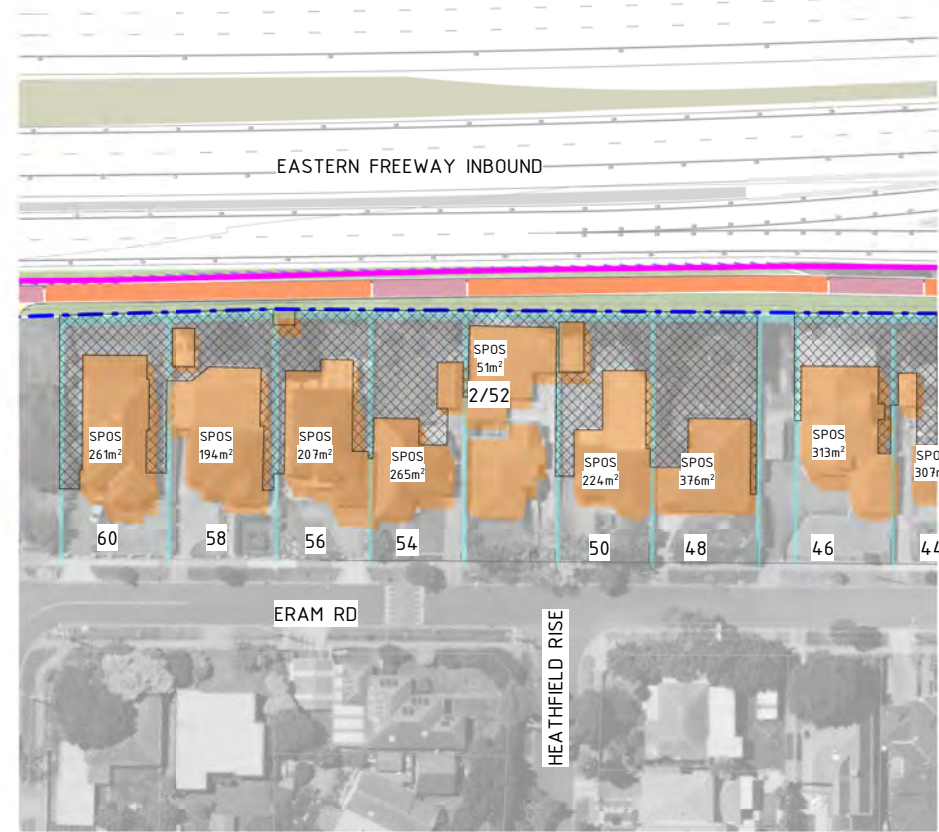
**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.  
COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA  
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY  
VICTORIA'S BIG BUILD  
Tram to Springvale Alliance  
SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

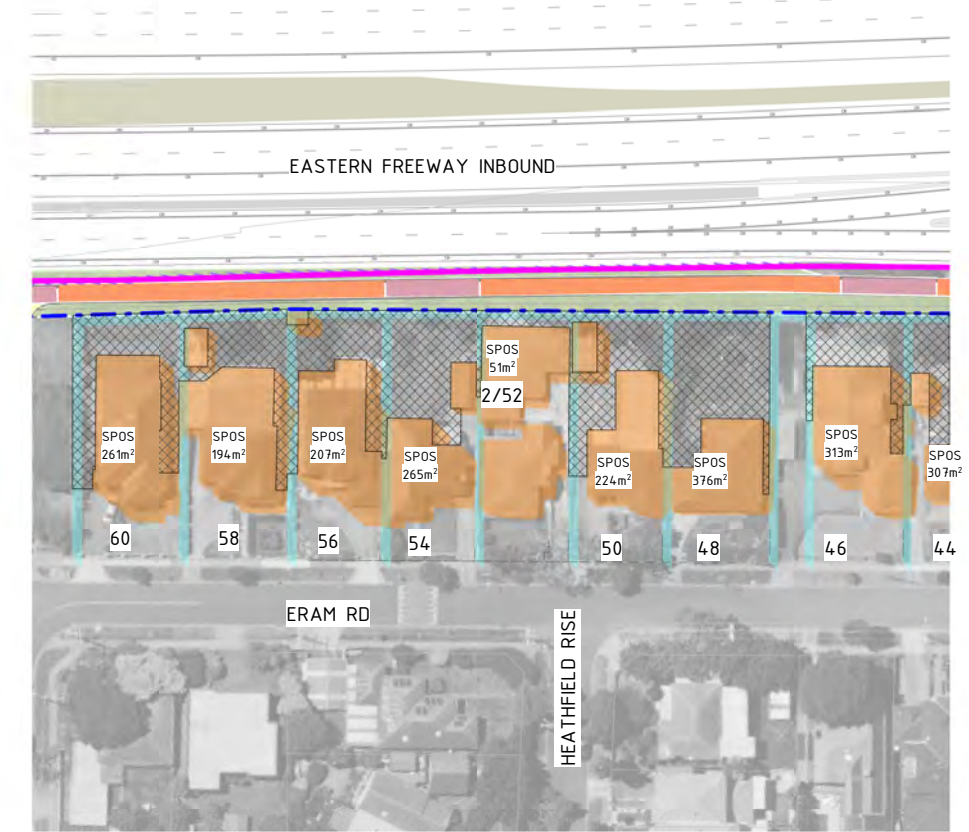
DTP No.:  
EASTERN FREEWAY UPGRADES  
TRAM ROAD TO SPRINGVALE ROAD  
URBAN DESIGN & LANDSCAPE  
GA\_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 9AM-11AM - TYPE 5 ASSESSMENT  
PROJECT CONTRACT: EAST  
NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4062  
REVISION: 2



1 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 12PM  
1 : 1250



2 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 1PM  
1 : 1250



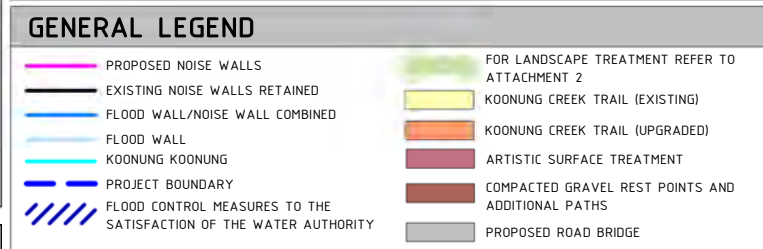
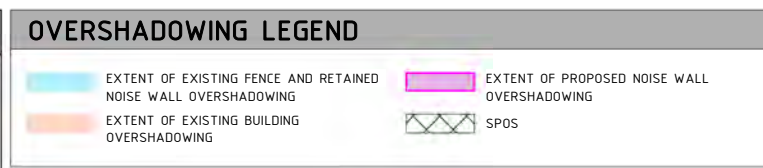
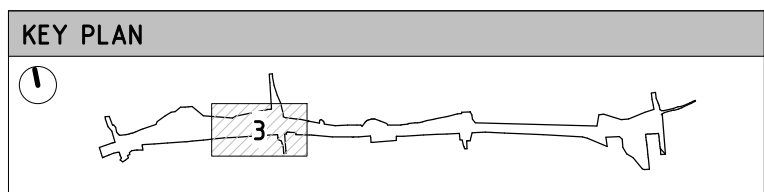
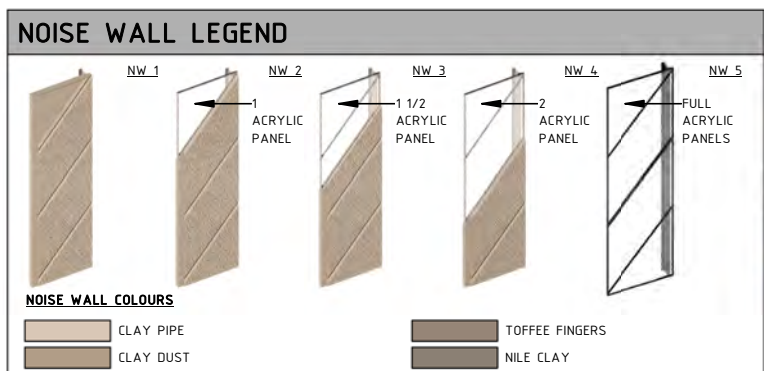
3 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 2PM  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-03 - ERAM RD 01 - ACRYLIC TREATMENT TYPE 5 - 12PM - 2PM

The Focused Analysis of properties along Eram Road revealed no overshadowing following the application of an acrylic noise wall Type 5 within the design; as seen in Figures above. Although there are no shadows cast from noise walls, properties have been identified as directly affected by the use of acrylic panels casting light into SPOS. Ongoing consultation will be undertaken with these properties. This complies with the requirements of EPR LP4, as the total percentage of SPOS directly affected by shadowing is less than 50% of the SPOS.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

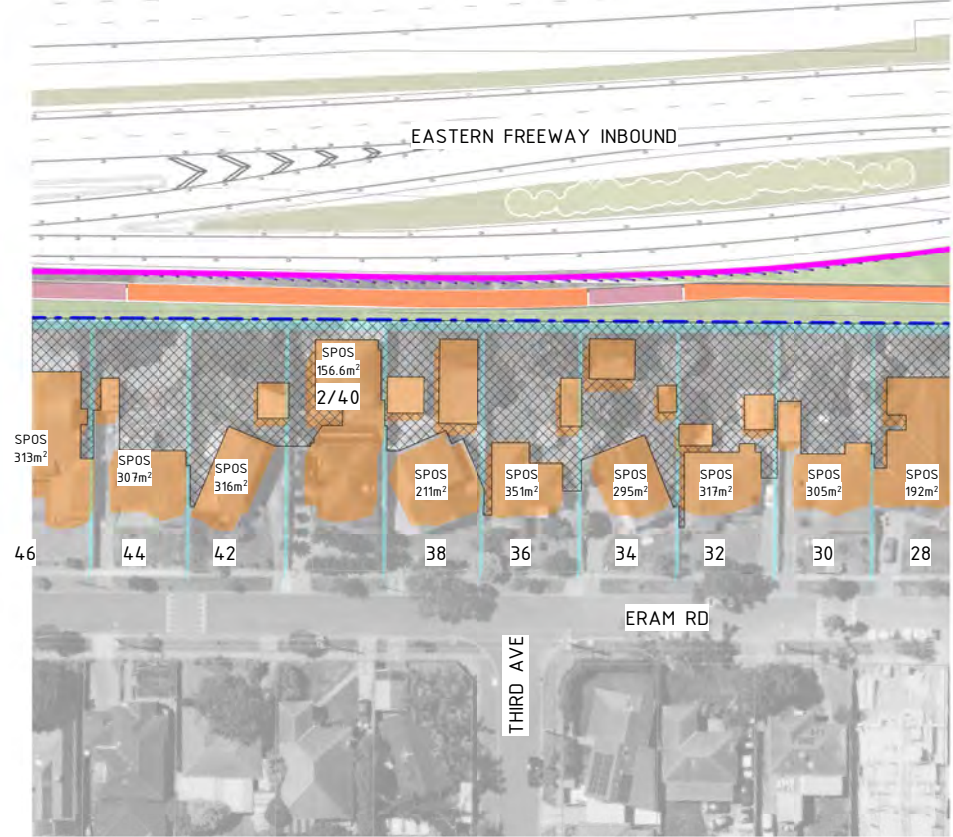
REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

2/04/2026 12:24:33 PM

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.  
COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA  
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY  
VICTORIA'S BIG BUILD  
Tram to Springvale Alliance  
SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:  
EASTERN FREEWAY UPGRADES  
TRAM ROAD TO SPRINGVALE ROAD  
URBAN DESIGN & LANDSCAPE  
GA\_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 01 12PM-2PM - TYPE 5 ASSESSMENT  
PROJECT CONTRACT: EAST  
NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4063  
REVISION: 2



1 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 9AM  
1 : 1250

2 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 10AM  
1 : 1250

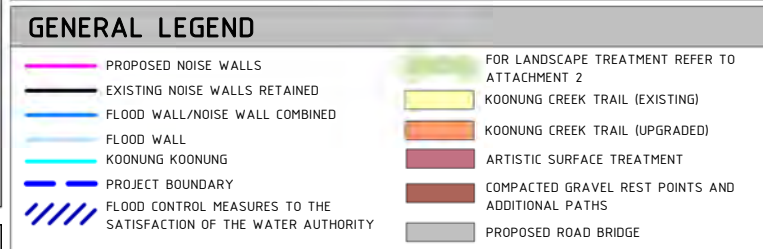
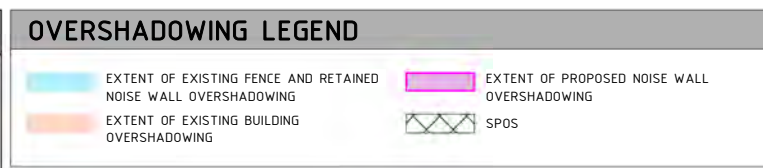
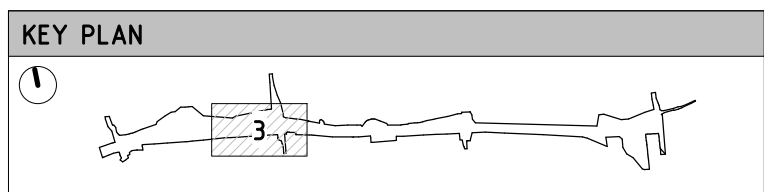
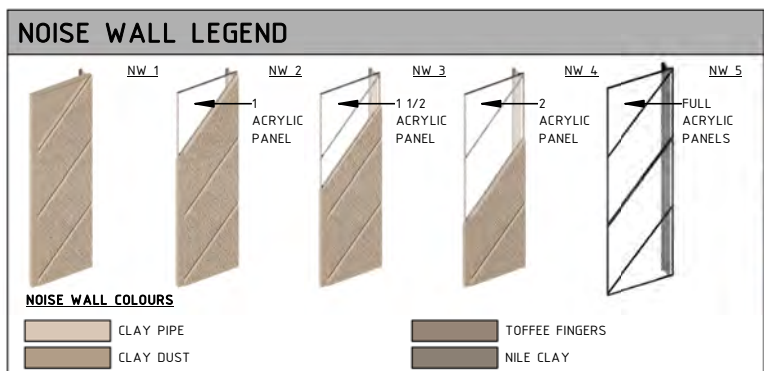
3 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 11AM  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-03 - ERAM RD 02 - ACRYLIC TREATMENT TYPE 5 - 9AM - 11AM

The Focused Analysis of properties along Eram Road revealed no overshadowing following the application of an acrylic noise wall Type 5 within the design; as seen in Figures above. Although there are no shadows cast from noise walls, properties have been identified as directly affected by the use of acrylic panels casting light into SPOS. Ongoing consultation will be undertaken with these properties. This complies with the requirements of EPR LP4, as the total percentage of SPOS directly affected by shadowing is less than 50% of the SPOS.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

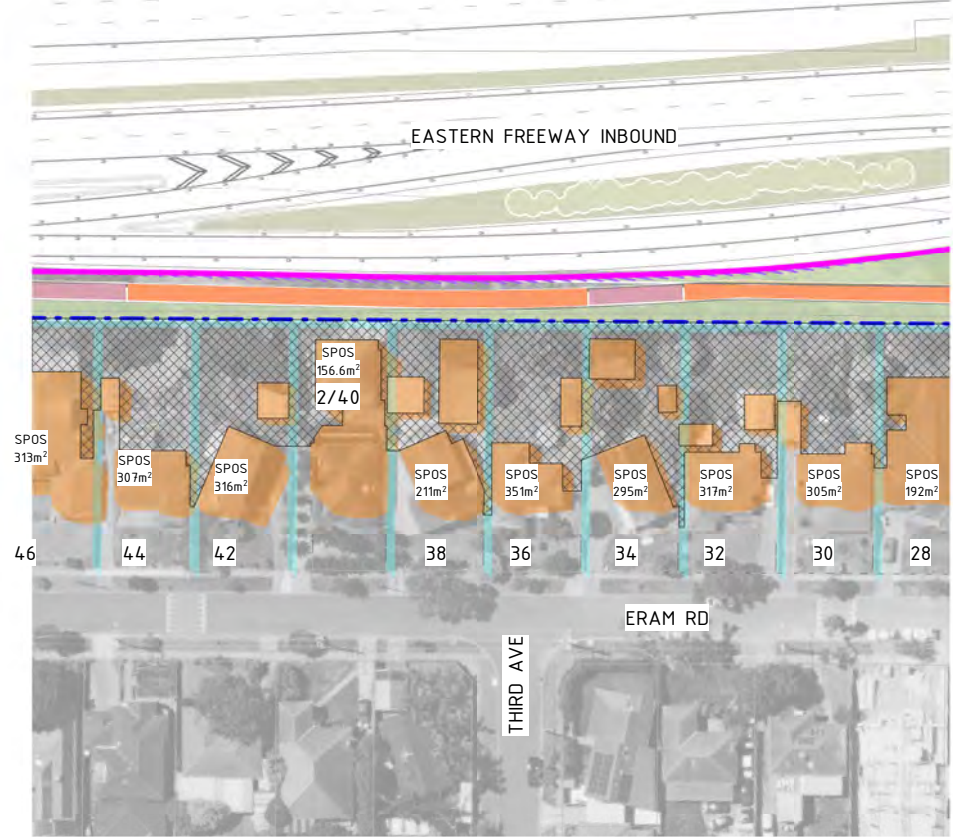
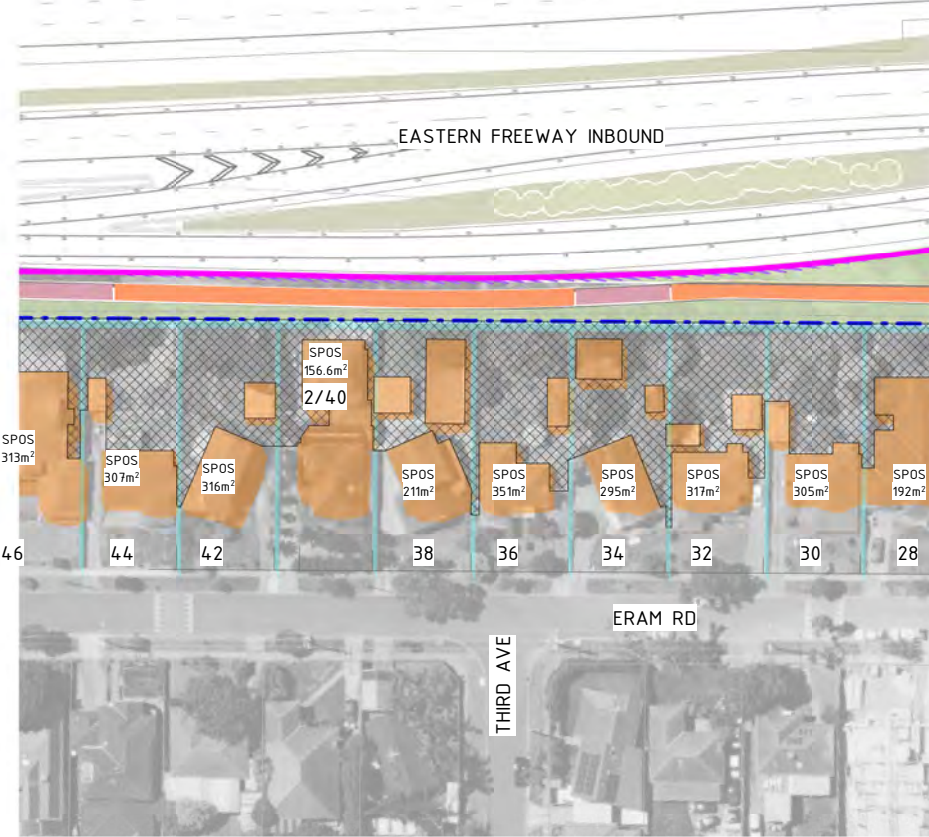
NEL-EST-NEA-6920-UUD-MD3-0001.rvt

© North East Link Program		
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25
REV.	DESCRIPTION	DATE
	REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.  
COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA  
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY  
VICTORIA'S BIG BUILD  
Tram to Springvale Alliance  
SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:		
EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE		
GA_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 9AM-11AM - TYPE 5 ASSESSMENT		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4064	REVISION 2



1 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 12PM  
4007 1 : 1250

2 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 1PM  
1 : 1250

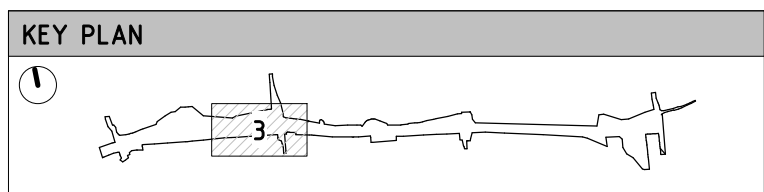
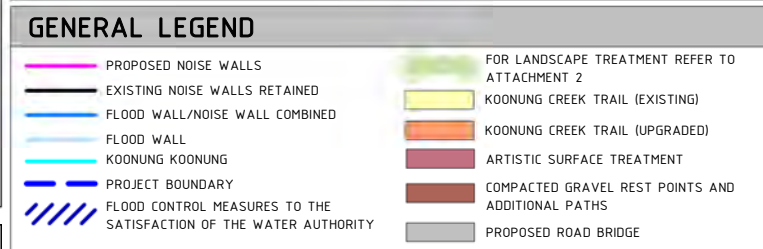
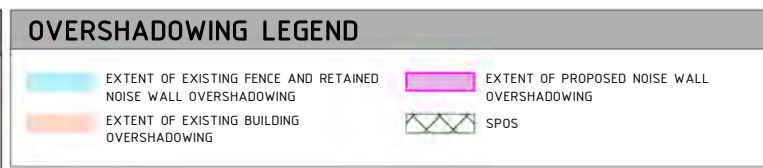
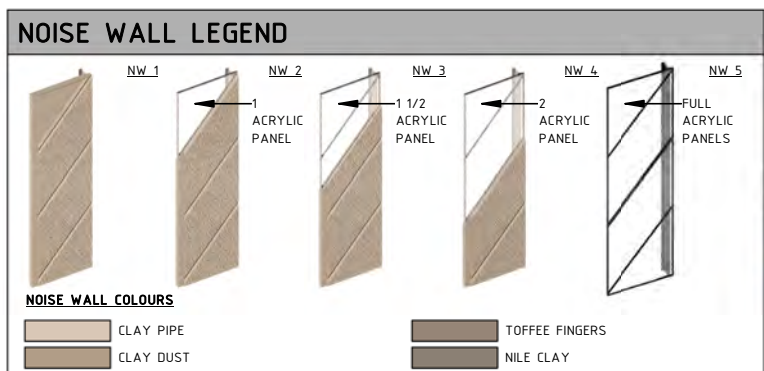
3 FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 2PM  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-03 - ERAM RD 02 - ACRYLIC TREATMENT TYPE 5 - 12PM - 2PM

The Focused Analysis of properties along Eram Road revealed no overshadowing following the application of an acrylic noise wall Type 5 within the design; as seen in Figures above. Although there are no shadows cast from noise walls, properties have been identified as directly affected by the use of acrylic panels casting light into SPOS. Ongoing consultation will be undertaken with these properties. This complies with the requirements of EPR LP4, as the total percentage of SPOS directly affected by shadowing is less than 50% of the SPOS.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows.

Assumed noise wall heights:  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



UDLP SUBMISSION  
NOT FOR CONSTRUCTION

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	DESCRIPTION	DATE

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

DTP No.:

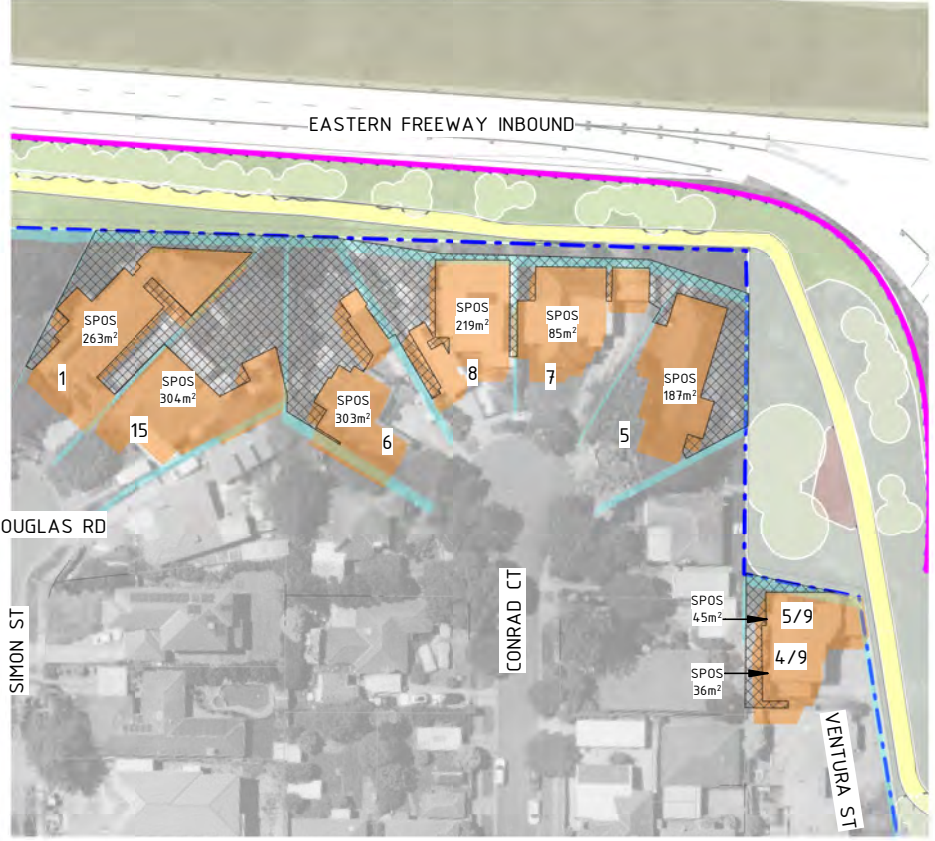
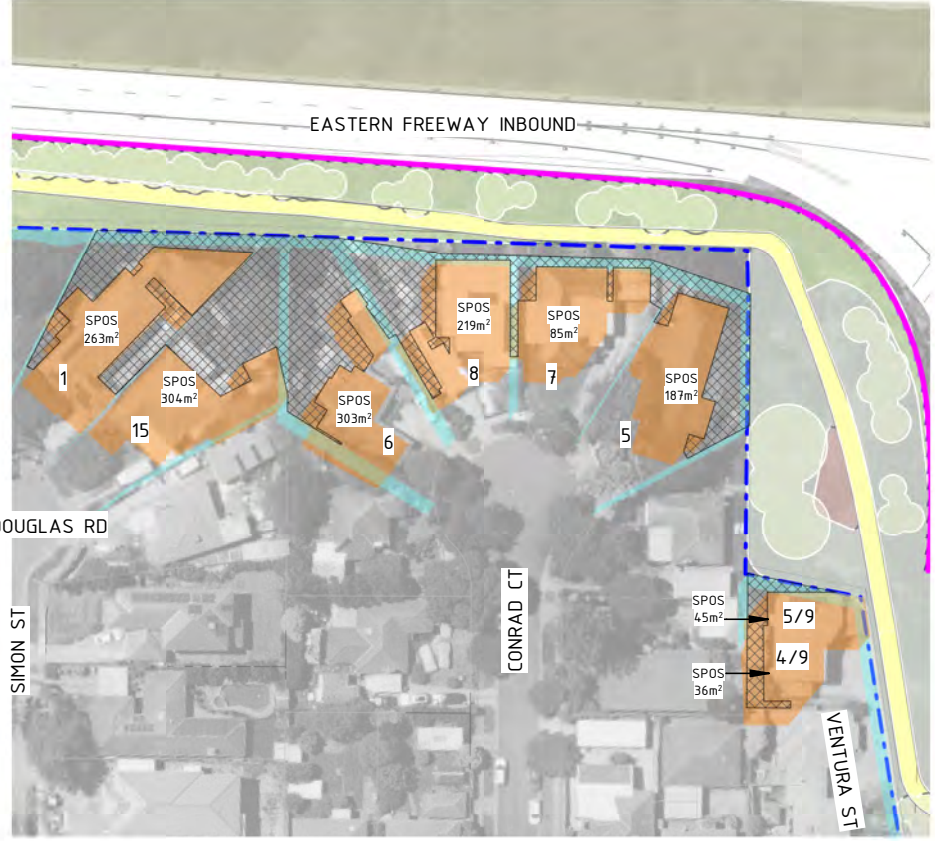
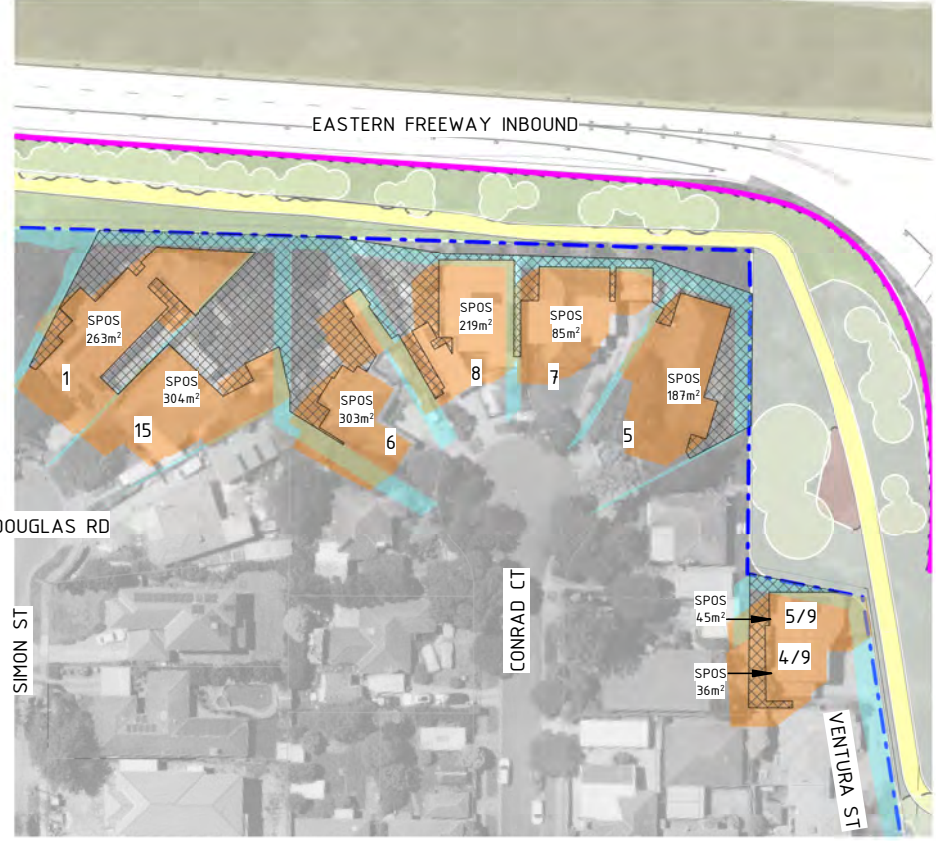
EASTERN FREEWAY UPGRADES  
TRAM ROAD TO SPRINGVALE ROAD  
URBAN DESIGN & LANDSCAPE

GA\_03 - FOCUSED OVERSHADOWING ANALYSIS - ERAM RD 02 12PM-2PM - TYPE 5 ASSESSMENT

PROJECT CONTRACT: EAST

NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4065

REVISION: 2



1 FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 9AM  
1 : 1250

2 FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 10AM  
1 : 1250

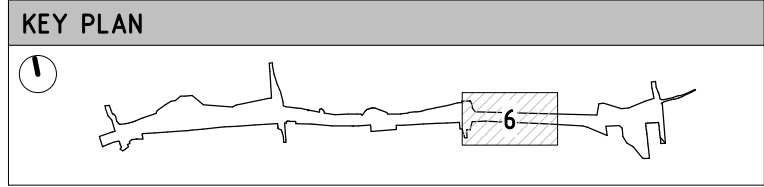
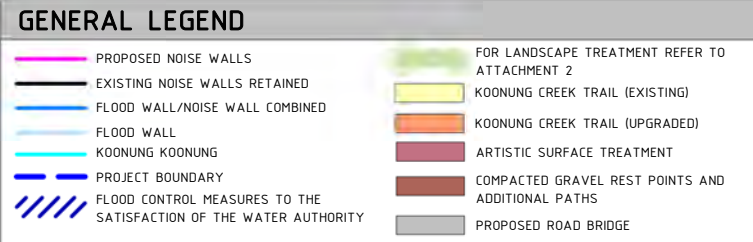
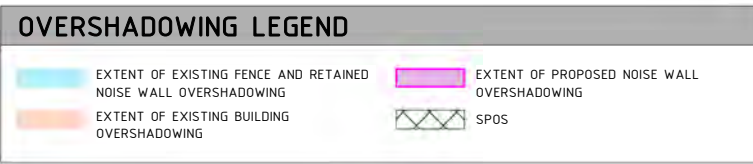
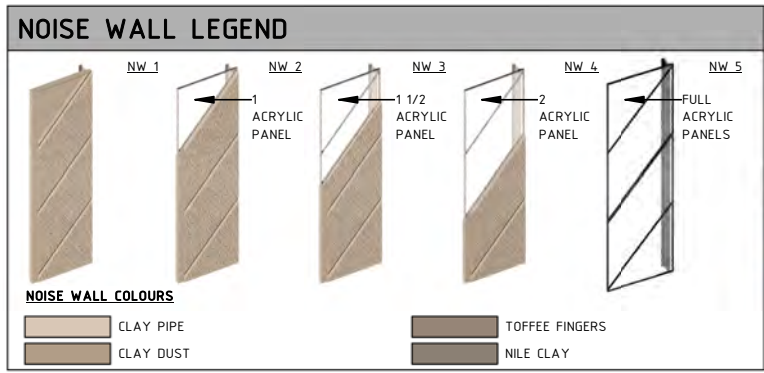
3 FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 11AM  
1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-06 - CONRAD CT - ACRYLIC TREATMENT TYPE 5 - 9AM - 11AM

The Focused Analysis of properties along Douglas Rd, Simon St, Conrad Ct and Ventura St revealed no overshadowing following the application of an acrylic noise wall Type 5 within the design; as seen in Figures above. Although there are no shadows cast from noise walls, properties have been identified as directly affected by the use of acrylic panels casting light into SPOS. Ongoing consultation will be undertaken with these properties. This complies with the requirements of EPR LP4, as the total percentage of SPOS directly affected by shadowing is less than 50% of the SPOS.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

REV.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25

REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

© North East Link Program

MAJOR ROAD PROJECTS VICTORIA

VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY

VICTORIA'S BIG BUILD

Tram to Springvale Alliance

SIZE: A3 SCALE: 1:2000 CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE	
GA_06 - FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 9AM-11AM - TYPE 5 ASSESSMENT	
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4066
DTP No.:	REVISION: 2



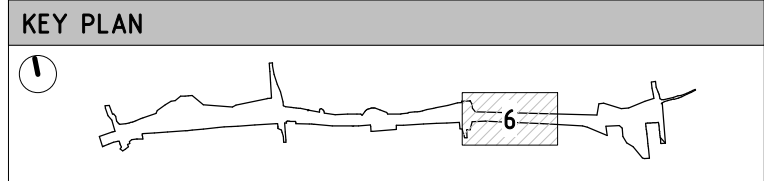
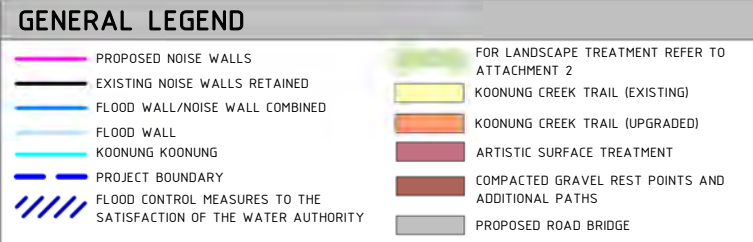
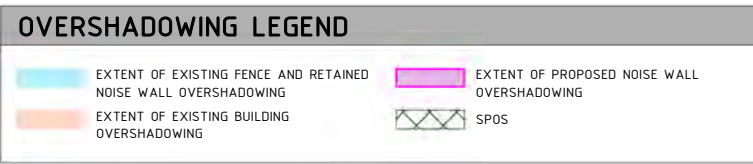
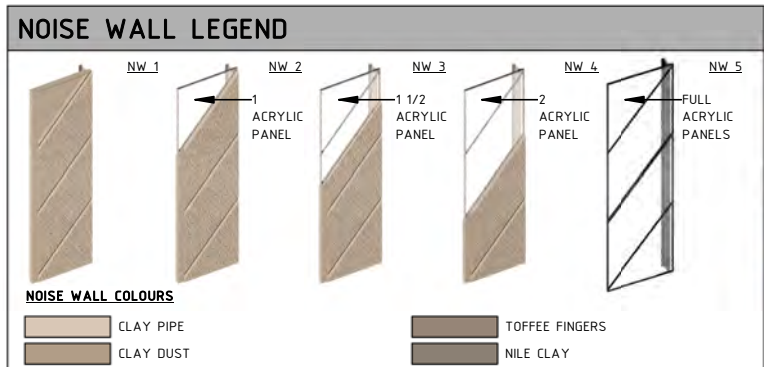
1 FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 12PM  
4016 1 : 1250

### FOCUSED OVERSHADOWING ANALYSIS: GA-06 - CONRAD CT - ACRYLIC TREATMENT TYPE 5 - 12PM

The Focused Analysis of properties along Douglas Rd, Simon St, Conrad Ct and Ventura St revealed no overshadowing following the application of an acrylic noise wall Type 5 within the design; as seen in Figures above. Although there are no shadows cast from noise walls, properties have been identified as directly affected by the use of acrylic panels casting light into SPOS. Ongoing consultation will be undertaken with these properties. This complies with the requirements of EPR LP4, as the total percentage of SPOS directly affected by shadowing is less than 50% of the SPOS.

**Overshadowing disclaimer notes:**  
This analysis was conducted from the hours of 9:00am and 3:00pm on September 22nd. Overshadowing diagrams have been drafted for the purposes of depicting shadowing effects from major built structures and therefore do not illustrate shadows cast from minor elements including trees, gantries, light poles and low height retaining walls. This analysis is subject to site surveys which are to be undertaken during the design development phase of the Project. Surveys will be used to verify site information including the location of existing buildings and associated private open space, heights of existing fences, site levels and habitable room windows

**Assumed noise wall heights:**  
Noise wall heights are indicative ranging from 6M to 10M, refer to Drawing Numbers 1400-1407. To ensure full compliance with EPR LP4 the overshadowing analysis has been based on a 'worst case scenario' noise wall outcome where they are at their UDLP indicative heights. Analysis has been conducted with walls constructed of 100% solid materials and with walls with acrylic treatment to demonstrate overshadowing mitigation. It is noted that nominal noise wall heights may be reduced subject to further design development based on noise modeling and advice from acoustic engineers. This in turn will reduce amenity impacts such as overshadowing.



**UDLP SUBMISSION  
NOT FOR CONSTRUCTION**

NEL-EST-NEA-6920-UUD-MD3-0001.rvt

© North East Link Program		
2	ISSUED FOR APPROVAL	01/04/26
1	UDLP FINAL SUBMISSION	19/12/25
0	ISSUE FOR PUBLIC EXHIBITION	01/09/25
REV.	DESCRIPTION	DATE
	REVISIONS	

**DISCLAIMER**  
Conditions of Use:  
This Document has been developed for the purposes of the North East Link Project and Eastern Freeway Tram to Springvale Upgrade.  
Recipients of this document:  
Are subject to obligations of confidentiality in relation to this document, and information handling obligations indicated by the Protective Marking Security Classification as per Department of Transport Information Security Policy, and may not rely upon the information contained in this document, and must rely absolutely on their own opinion and professional advice.

COORDINATE SYSTEM:  
HEIGHT DATUM (m): DRAWN:

MAJOR ROAD PROJECTS VICTORIA  
VICTORIAN INFRASTRUCTURE DELIVERY AUTHORITY  
VICTORIA'S BIG BUILD  
BIG BUILD EASTERN FREEWAY  
Tram to Springvale Alliance  
CAD FILE: NEL-EST-NEA-6920-UUD-MD3-0001.rvt

EASTERN FREEWAY UPGRADES TRAM ROAD TO SPRINGVALE ROAD URBAN DESIGN & LANDSCAPE GA_06 - FOCUSED OVERSHADOWING ANALYSIS - CONRAD CT 12PM - TYPE 5 ASSESSMENT		
PROJECT CONTRACT: EAST	NELP DRAWING No.: NEL-EST-NEA-6600-UUD-PLA-4067	REVISION 2

[bigbuild.vic.gov.au/roads](https://bigbuild.vic.gov.au/roads)

1800 105 105 (call anytime)

[contact@bigbuild.vic.gov.au](mailto:contact@bigbuild.vic.gov.au)



For languages other than English please call 9209 0147



Please contact us if you would like this information in an accessible format.  
If you need assistance due to a hearing or speech impairment, visit [relayservice.gov.au](https://relayservice.gov.au)

