North East Link Inquiry and Advisory Committee

Expert Witness Statement of Kevin Begg

1. Introduction

1.1 GHD prepared the Urban Design Strategy (UDS) for the North East Link (Project) contained in Attachment II (Urban Design Strategy) to the Environment Effects Statement (EES) for the Project.

1.2 I have been instructed by Clayton Utz on behalf of NELP to review and respond to the public submissions relevant to the Urban Design Strategy and give evidence on the environmental effects of the Project relevant to my area of expertise.

2. Qualifications and experience

2.1 Annexure A contains a statement setting out my qualifications and experience, and the other matters raised by Planning Panels Victoria’s Guide to Expert Evidence. A copy of my curriculum vitae is provided as Annexure B.

3. Preparation of Urban Design Strategy

3.1 The role that I had in preparing the Urban Design Strategy was co-author and reviewer. Other significant contributors to the Urban Design Strategy and their expertise is set out as follows:

(a) Pru Smith – Technical Director of Urban Design, GHD

Pru has over 20 years of experience in urban design and landscape architecture within the private and public sector. She has been involved in a range of projects from the master planning of cities and residential communities to the construction of public spaces. She also has managed, developed and implemented various land use policies, plans and strategies.

3.2 I adopt the Urban Design Strategy, in combination with this statement, as my written expert evidence for the purposes of the North East Link Inquiry and Advisory Committee’s inquiry into the environmental effects of the Project.

4. Further work since preparation of the Urban Design Strategy

4.1 Since the Urban Design Strategy was finalised, I have not undertaken any further work in relation to the matters addressed in the Urban Design Strategy for the Project.

5. Summary of key issues, opinions and recommendations

5.1 Key issues

The written submissions raise a large number of issues relevant to urban design. These issues are element-specific (e.g., issues about noise walls or open space) and often location-specific (e.g., particular to Watsonia or Estelle Street).

5.2 Opinions and recommendations

An Urban Design Strategy (UDS) has been prepared for the project. It is, essentially, the design brief for urban design, landscape architecture and architecture, establishing performance-based requirements.

Urban design issues raised in the written submissions are addressed in the UDS. Section 6.2 below summarises each issue, provides a response and identifies relevant clauses in the UDS.
The ultimate design for the project will be required to implement and comply with the requirements of the UDS as approved by the Minister for Planning under the Incorporated Document.

Stakeholders and the community will be able to review and comment on the urban design and landscape plans prepared for the project, through the Secondary Consent process set out in the Incorporated Document. UDAP will also have a role in reviewing these plans for compliance with the UDS before being submitted to the Minister for Planning for approval.

6. **Submissions**

**Submissions received**

6.1 I have read the public submissions to the EES, draft planning scheme amendment and works approval application and identified those that are relevant to the Urban Design Strategy and my area of expertise. These include the following submissions clustered into themes:

(a) **Status of Urban Design Strategy and Reference Design**

Submissions 316, 340, 406, 415, 490, 514, 549, 586, 629, 651, 678, 683, 691, 716, 778 and 800.

(b) **Macorna Street pedestrian bridge**

Submissions 439, 494 and 663.

(c) **Yando Street pedestrian bridge**

Submissions 37, 395, 397 and 641.

(d) **Watsonia precinct**


(e) **Land bridges and road trench**

Submissions 298, 299, 323, 461, 521, 582, 586, 642, 679, 716, 786 and 849.

(f) **Borlase Reserve**


(g) **Long tunnel options**


(h) **Manningham interchange**


(i) **Bridge Street tree**


(j) Bulleen Art and Garden

(k) Avon Street precinct
Submissions 294, 492, 588, 589, 596, 732, 789 and 841.

(l) Bulleen interchange
Submissions 17, 25, 316, 340, 411, 453, 480, 639, 655, 716, 718, 746, 766, 855 and 859.

(m) Estelle Street precinct
Submissions 35, 150, 208, 216, 217, 218, 252, 484, 514, 520, 617, 649, 651, 717, 745, 752, 820, 838 and 858.

(n) Mountain View Road precinct
Submissions 27, 135, 143, 240, 247, 284, 498, 738 and 862.

(o) Koonung Creek Reserve

(p) Outhwaite Avenue precinct
Submission 760.

(q) Eram Road precinct
Submissions 30, 162, 166, 173, 174, 175, 178, 180, 192, 213, 225, 228, 380, 436, 468, 571, 625, 731, 734, 740, 767, 769, 818 and 850.

(r) Eram Park
Submission 625

(s) Eastern Freeway
Submission 3, 716, 800

(t) Open space
Submissions 4, 7, 8, 25, 49, 82, 102, 105, 114, 125, 146, 153, 168, 177, 184, 194, 202, 211, 214, 221, 230, 235, 262, 286, 301, 381, 384, 386, 387, 388, 410, 411,
Summary of issues and response to issues raised

6.2 Set out below are issues raised in the written submissions that are relevant to the Urban Design Strategy and my comments and response to these issues.

(a) Urban Design Strategy relative to the Reference Design

NELP has established various processes and tools, to deliver high quality, integrated urban design outcomes in the project. The primary process to guide and assess proposals is interaction with the NELP Urban Design Advisory Panel (UDAP). UDAP uses performance-based requirements as tools to influence and assess design proposals.

Urban Design Advisory Panel (UDAP)

The Urban Design Advisory Panel is a group of experienced practitioners with training in urban design, architecture, landscape architecture and strategic planning. They come from various government authorities and statutory bodies including the North East Link Project, Office of the Victorian Government Architect, Department of Transport (VicRoads and Public Transport Victoria), VicTrack, Melbourne Water, Parks Victoria, Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation (WWCHAC) and Local Government Authorities.

The primary focus of UDAP is to ensure that the proposed design achieves the design intent that is outlined in the performance-based requirements.

On projects of this nature, UDAP is typically involved in all phases of development including design, documentation and construction.

Urban Design Strategy (UDS)

The NELP UDS uses various performance-based requirements to define the aspirations and requirements to be delivered in the urban design for the project. These requirements are divided into three categories:

- corridor-wide requirements including high-level design aspirations and expectations
• site-specific requirements for locations across the entire project area
• detailed requirements and visual benchmarks

The Urban Design Strategy establishes project requirements for urban design, architecture and landscape design. Essentially, it is the brief for contractors to follow, and includes performance based requirements rather than prescriptive requirements, to provide flexibility for the contractors to innovate and develop a unique design concept.

In simple terms:

• The Urban Design Strategy sets out project requirements
• The reference design is a functional design that illustrates one way to achieve certain technical requirements
• The successful contractor will prepare Urban Design and Landscape Plans which will illustrate the preferred design and be based on the Urban Design Strategy.
• The Minister and broader community will review the Urban Design and Landscape Plans through the secondary consent process.

(i) ISSUE: Concern that the reference design does not adequately reflect the aspirations of the Urban Design Strategy and there are no urban design concept designs exhibited as part of the EES.

RESPONSE: The reference design is a functional design and does not include urban design concept designs. This approach has been undertaken to provide flexibility for the contractors to innovate and develop unique design concepts. Urban design concepts developed by the contractors would be in accordance with the Urban Design Strategy. The preferred design, in the form of Urban Design Landscape Plans, would be available for public review and comment during the Secondary Consent process.

(ii) ISSUE: Concern that the Urban Design Strategy is too general and not site-specific enough.

RESPONSE: The Urban Design Strategy does specifically address both the project area and the outcomes required for the project.

The corridor-wide section of the document focuses on issues relevant to the north east of Melbourne, including Key Direction 5 which introduces the three character areas of Ridgeline, Yarra River Valley and Koonung Creek Valley. The eight principles are universal and have been used effectively across projects in the Major Transport Infrastructure Program. They provide a framework to discuss the broad range of issues and objectives in urban design, landscape and architecture across the project.

The site-specific section from page 27 to page 81 includes maps and text that detail very local requirements at specific geographic areas.

The detailed requirements and benchmarks section is more general but the elements addressed in this section have been selected because of their expected use in the project.

(iii) ISSUE: Request that all urban design led initiatives included in the EES, together with any other such other initiatives that may be determined to be desirable by the IAC, must be specified as “requirements” for the
Project, rather than matters that are to be considered, but not necessarily delivered, as part of the Project.

RESPONSE: Any urban design initiatives that may be determined to be desirable by the IAC that are not already appropriately addressed in the Urban Design Strategy and EPRs, could be included into the UDS and EPRs as project requirements, as an outcome of the EES assessment process.

(iv) ISSUE: Concern that the Urban Design Strategy does not critique the reference design in any way.

RESPONSE: The Urban Design Strategy does not “critique” the reference design in any way. The UDS is the urban design project brief. The reference design is one way to achieve certain technical requirements. Design proposals from contractors would be in accordance with the requirements in the Urban Design Strategy.

(v) ISSUE: Request that the North East Link Project and selected bid team must have appropriately trained and skilled landscape architects and urban design professionals involved to the end of the project.

RESPONSE: The North East Link Project team does include appropriately trained and skilled landscape architects and urban design professionals. The selected bid team would also have appropriately trained and skilled landscape architects and urban design professionals.

Typically, these roles are maintained to the end of the project, through design development, documentation and construction, including the critical phases of landscape construction.

(vi) ISSUE: Concern that the current EES documents are too rigid in seeming to require literal adoption of overly complex road geometry design when better urban design outcomes could be achieved with different road geometry and reduced traffic capacity solutions.

RESPONSE: Key Direction 1 on page 15 of the Urban Design Strategy states that “the project must demonstrate the effective integration of engineering and urban design to deliver an innovative and balanced design solution”. Also, “this key direction requires proponents to move beyond a business as usual and engineering centred approach to design and address challenges using a multi-disciplinary, innovative framework of three-dimensional design thinking”. It is expected that road geometry and traffic capacity would be addressed holistically with urban design to achieve a balanced outcome for the entire community.

(vii) ISSUE: Concern that the broad principles in the Urban Design Strategy will not be sufficient to require the final design to deliver a high-quality design outcome.

RESPONSE: A high-quality design outcome would be achieved using all three tiers of requirements in the Urban Design Strategy, including corridor-wide requirements and high level principles, site-specific requirements and detailed requirements. Each tier plays a particular role addressing a particular scale of element or place.

(b) Macorna Street pedestrian bridge

(i) ISSUE: Concern that noise walls will be located closer to houses with new shared use path adjacent back fences, creating issues of security, privacy, overshadowing and visual impact.
RESPONSE: New noise walls would be constructed in this area, to replace the existing timber noise walls and accommodate more road lanes. Requirements in the Urban Design Strategy require the noise walls to be high quality and context sensitive, minimising visual impact and overshadowing and maintenance. Landscaping could be used to soften the appearance of the noise walls, reduce the perceived height and bulk, and better integrate the structures into the surrounding area. Transparent material could be used, to take advantage of scenic and adjacent views of surrounding landscape, reduce the perceived height of the structures, and minimise overshadowing. Noise walls and associated landscape could be designed to locate any acrylic component at a height that would discourage vandalism.

A new shared use path would be constructed in the land between residential back fences and the freeway noise walls, connecting AK Lines Reserve and the Macorna Street pedestrian bridge via the Gillingham Street playground. Any loss of privacy from a new shared use path could be addressed with appropriately screening and fencing.

Relevant UDS clauses:

- Map R1 M80. Pages 32-33
- Place Specific Requirements 3A: minimise overlooking and overshadowing, 3B: reinstate freeway planting, 3C: integrate and transition noise walls, 3D: high quality noise walls, 3F: reinstate buffer planting, 3G: minimise overshadowing. Page 33
- Detailed Requirements and Benchmarks 9: Walls, fencing, barriers and screens. Page 92 – 93
- Detailed Requirements and Benchmarks 9.4. Interfaces. Page 92

(ii) ISSUE: Concern about loss of privacy and overlooking from any new pedestrian bridge into private property.

RESPONSE: A new walking and cycling connection across the freeway corridor would be provided near Macorna Street, to maintain local connectivity across an increased number of freeway lanes. Maintaining privacy and minimising overshadowing and visual impact are requirements of the Urban Design Strategy. This could be accomplished with privacy screens on any new pedestrian bridge and screen planting.

Relevant UDS clauses:

- Place Specific Requirement 3A: Minimise overlooking and overshadowing. Page 33
- Detailed Requirements and Benchmarks 14: Walking and cycling bridges. Page 97
- Detailed Requirements and Benchmarks 14.4: Minimising impacts. Page 97

(iii) ISSUE: Concern about visual impact due to loss of trees and vegetation. Concerns there will be no trees planted in the public land north of the back fences.

RESPONSE: Trees would be planted in appropriate areas along the project, to replace any trees removed, at a ratio of at least two new amenity trees for every one removed while achieving an overall net gain
in tree canopy cover by 2045. These trees would be planted as close as possible to the areas from where other trees were removed, to mitigate the visual impact. Lower vegetation would also be replaced. This would include planting in the area north of back fences and alongside a new shared use path, where there is space and it does not present a risk for cyclists.

Relevant UDS clauses:

- **Place Specific Requirement 3F**: Landscape buffer. Page 33
- **Detailed Requirements and Benchmarks 17**: Landscape. Page 101 and 102

(iv) **ISSUE**: Concern about adequate maintenance of the public area between the back fences and the noise wall

RESPONSE: All areas of the project would be allocated to particular organisations to maintain.

Relevant UDS clauses:

- **Objective 4.4 Whole of life. Page 12**

(v) **ISSUE**: Preference for an underpass beneath the freeway.

RESPONSE: The existing ground levels and proposed road levels in this area would most likely preclude the construction of a pedestrian underpass beneath the road corridor. A pedestrian underpass would involve long trenched ramps and potentially blind corners that would be less safe and less welcoming than a pedestrian bridge.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 15. Walking and cycling underpasses. Page 99**

(c) **Yando Street pedestrian bridge**

(i) **ISSUE**: Concern about loss of privacy and overlooking from any new pedestrian bridge into private property.

RESPONSE: Maintaining privacy and minimising overlooking and visual impact are requirements of the Urban Design Strategy. This could be accomplished with privacy screens on any new pedestrian bridge and screen planting.

Relevant UDS clauses:

- **Map R2 M80 Interchange. Pages 34-35**
- **Place Specific Requirement 3N**: Minimise overlooking and overshadowing. Page 35
- **Detailed Requirements and Benchmarks 9.7**: Privacy screens. Page 92
- **Detailed Requirements and Benchmarks 14.4**: Minimising impacts. Page 97

(ii) **ISSUE**: Preference to upgrade the underpass, potentially with a sump pump, in lieu of building an overpass bridge.
RESPONSE: A walking and cycling connection across the freeway corridor between Yando Street and Hakea Street would be maintained and enhanced in the immediate area. This could be an underpass or pedestrian bridge or at grade alternative. The existing underpass is very long and narrow. The Urban Design Strategy calls for underpasses to be generously proportioned with minimised length and good lighting for enhanced safety.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 15. Walking and cycling underpasses. Page 99**

(iii) **ISSUE: Preference that the western end of the pedestrian overpass includes stairs as well as a ramp.**

RESPONSE: The reference design includes both a stair and a ramp at the western end of the pedestrian overpass.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 14.5: Access. Page 97**

(d) **Watsonia precinct**

(i) **ISSUE: Concern that the reference design for the Project and the alternate design around Watsonia each worsens the existing substandard arrangements in the area, rather than providing enhancements, which are to be legitimately expected in a Project of this size with this level of impact.**

RESPONSE: NELP has exhibited an alternative design for the Watsonia precinct with the road trench extending north and a land bridge connecting Elder Street with the entrance to the Watsonia Station car park. This design maintains key functionality of the area with pedestrians, cyclists and cars crossing the freeway corridor at ground level with landscaped areas to the side. This design would not “worsen the existing substandard arrangements in the area”. An at grade pedestrian and cycling crossing over a land bridge at Elder Street would be an improvement on the existing intersection at Elder Street and Greensborough Road because there would be fewer lanes and slip lanes for pedestrians and cyclists to cross.

Relevant UDS clauses:

- **Values & priorities 4.2: Watsonia Neighbourhood Centre. Page 29**
- **Map R4 Watsonia Neighbourhood Centre. Pages 38-39**
- **Map R5 South of Watsonia Station. Pages 40-41**
- **Detailed Requirements and Benchmarks 3. Land Bridges. Page 86**

(ii) **ISSUE: Concern that the alternate design for Watsonia including a land bridge at Elder Street and a new multi-deck car park at Watsonia station, as presented to the community in early 2019, will not form part of the reference design.**
RESPONSE: The alternative design for the Watsonia precinct provides greater alignment with the Urban Design Strategy, better addressing issues such as connectivity and safety, and is being assessed as part of the EES process.

(iii) ISSUE: Concern that the proposed design around Watsonia fails to future proof the opportunities and improvements identified in the community driven vision for the centre “Picture Watsonia”.

RESPONSE: The reference design and requirements in the Urban Design Strategy do not fail to futureproof the initiatives identified in the current strategic plan for Watsonia. These initiatives include:

*Picture Watsonia page 39*
- Opportunity 9. simplify intersection to Greensborough Highway to make the area more pedestrian friendly & slow traffic.
- Opportunity 10. relocate some large-format uses from the centre of the shopping street to the area near the intersection with the highway. This would make the central land available for uses that are better suited the shopping street. Possibilities for land swaps might exist.
- Opportunity 12. strengthen connection between the western side of Watsonia to the village & train station.
- Opportunity 13. make use of the power easement land to form connections within Watsonia and to the surrounding areas.
- Opportunity 14. find additional uses for the commuter car park land in the longer term by building over car parking, link to main street with multiple walkways. Explore uses that would create job opportunities locally such as office space (shown with pink dotted line).

*Picture Watsonia page 40*
- Short term opportunity 8. Improve pedestrian access to the station and main street from the eastern side of the highway: work with VicRoads to reduce the number of lanes of traffic that pedestrians need to cross by reconfiguring the vehicular entrance to the commuter car park

*Picture Watsonia page 44*
- Long term opportunity 22. Develop the land on the eastern side of the railway line.

Picture Watsonia proposes a pedestrian bridge over Greensborough Road along the power easement. The reference design alleviates the need for a pedestrian bridge in this location which would require extensive ramps to get up and over the road.

Relevant UDS clauses:
- **Values & priorities 4.2**: Watsonia Neighbourhood. Page 29
- **Place Specific Requirement 1A**: Watsonia Station. Page 39

(iv) ISSUE: Request to provide a direct and unobstructed shared user path across North East Link and the railway to connect from the east side of North East Link to Watsonia Activity Centre and Watsonia Railway Station.

RESPONSE: The Urban Design Strategy calls for a new walking and cycling link from the east side of the road corridor, across Greensborough Road and connecting to the Watsonia Station and the Watsonia Neighbourhood Centre. This link would include pedestrian connections to Watsonia Station platforms that address key desire lines,
enhance sight lines, wayfinding and legibility for walking and link to the walking and cycling paths.

Relevant UDS clauses:

- **Place Specific Requirement 2C**: New walking and cycling link. Page 39

**(v)** ISSUE: Concern about the proposed multi-storey car park near Watsonia Station.

RESPONSE: A well designed multi-storey car park near Watsonia Station could add to the area’s sense of identity, vibrancy and safety. A gateway precinct at the intersection of Greensborough Road and Watsonia Road may or may not use the car parking structure to define a gateway experience – this could be achieved using landscape design, for example. Any multi-storey car park should have an architecturally sensitive design that enhances the local identity of Watsonia. There is no restriction or direction on locating the car park above or below ground.

Relevant UDS clauses:

- **Objective 3.4**: Minimise footprint. Page 13

**(vi)** ISSUE: Concern about new noise walls in the area including visual impact, aesthetics, overshadowing and maintenance – particularly any acrylic component.

RESPONSE: New noise walls would be constructed in this area, to replace the existing timber noise walls and earth mounds and protect existing residences. Requirements in the Urban Design Strategy require the noise walls to be high quality and context sensitive, minimising visual impact and overshadowing and maintenance. Landscaping could be used to soften the appearance of the noise walls, reduce the perceived height and bulk, and better integrate the structures into the surrounding area. Transparent material could be used, to take advantage of scenic and adjacent views of surrounding landscape, reduce the perceived height of the structures, and minimise overshadowing. Noise walls and associated landscape could be designed to locate any acrylic component at a height that would discourage vandalism.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 9**: Walls, fencing, barriers & screens. Page 92 and 93

**(vii)** ISSUE: Concern about visual impact due to loss of vegetation and trees.

RESPONSE: The Urban Design Strategy calls for the removal of mature trees, planted and remnant native trees and remnant vegetation, (particularly large amenity trees, heritage vegetation and vegetation within or connected to open space) to be minimised. New tree planting and vegetation is to be prioritised within the project corridor, including adjoining streets, medians, buffers and in carparks, to support the urban forest. Trees would be planted in appropriate areas along the project, to replace any trees removed, at a ratio of at least two new amenity trees for every one removed, while achieving an overall net gain in tree canopy by 2045. These trees and lower vegetation would be planted as close as possible to the areas from where other trees were removed, to mitigate the visual impact.

Relevant UDS clauses:
- **Detailed Requirements and Benchmarks 17**: Landscape. Page 101 and 102
- **Detailed Requirements & Benchmarks 17.4**: Minimising loss. Page 101
- **Detailed Requirements and Benchmarks 17.6**: Visual mitigation. Page 101
- **Detailed Requirements and Benchmarks 17.8**: Urban forest. Page 101

(viii) **ISSUE**: Concern about security and privacy with a new shared use path between properties on Ibbottson Street and the rail line.

RESPONSE: A new shared use path would be constructed in the land between residential back fences and the rail corridor, connecting AK Lines Reserve and the Watsonia library. Any loss of privacy from a new shared use path could be addressed with screening and fencing.

Relevant UDS clauses:
- **Detailed Requirements and Benchmarks 9.4**: Interfaces. Page 92
- **Detailed Requirements and Benchmarks 13**: Walking & cycling infrastructure. Page 96

(e) **Land bridges and road trench**

(i) **ISSUE**: Concern that the land bridges will not provide adequate connectivity across the road corridor and will not alleviate severance of the community.

RESPONSE: Land bridges have been included in the reference design, in lieu of road bridges and pedestrian bridges, to provide pedestrian, cyclist and driver connectivity across the freeway corridor. Land bridges would maintain or improve connectivity across the road corridor and minimise severance of the community by providing more open space for people to cross. At the simplest level, more, wider connections are better than fewer, narrower connections.

Relevant UDS clauses:
- **Map R5** South of Watsonia Station. Pages 40-41
- **Map R6** Simpson Barracks. Pages 42-43
- **Objective 3.1**: Integration with context. Page 12
- **Key direction 2**: Support a natural and connected corridor. Page 16
- **Place Specific Requirement 1A**: Open space and planting opportunities. Page 41
- **Detailed Requirements and Benchmarks 3**: Land Bridges. Page 86
- **Detailed Requirements and Benchmarks 3.1**: Community connections. Page 86
(ii) **ISSUE:** Concern that the land bridges will not provide useful community spaces, and will be excessively noisy and unsafe.

RESPONSE: Additional open space on top of land bridges would provide useful community spaces for the local area. Each land bridge would provide approximately 60 metres x 40 metres of at grade open space that would accommodate trees, landscaped areas, grassed areas, and bicycle and walking paths. They would be comparable in size to:

- the Gillingham Street playground in Watsonia North
- the open space between Winsor Reserve and Greensborough Road in Macleod
- the landscaped area between the Arts Centre and Hamer Hall
- approximately four basketball courts clustered together
- slightly less than half a soccer pitch

Land bridges near Elder Street and Yallambie Road would also accommodate road connections with parkland.

The Urban Design Strategy requires that the design promotes and enables the positive use of public open space with the resulting spaces being useful, attractive, activated, safe and sustainable. Also, new spaces created around the project feel safe, comfortable and welcoming to users during both day time and night time, maximising passive surveillance, clear sight lines and appropriate lighting. This would be achieved through landscape design.

Noise mitigation would be addressed similar to other areas adjacent the road cutting.

The Urban Design Strategy does not provide direction on the possible future use of the open space on the land bridges.

*Relevant UDS clauses:*

- **Place Specific Requirement 1A:** Open space and planting opportunities. Page 41
- **Detailed Requirements and Benchmarks 4:** Open cuttings. Page 87
- **Detailed Requirements & Benchmarks 7.3** Positive use of space. Page 90
- **Detailed Requirements & Benchmarks 7.5** Safety. Page 90

(iii) **ISSUE:** Concern that the land bridges do not connect existing open spaces adjacent the NEL corridor.

RESPONSE: The Urban Design Strategy calls for land bridges to align with existing adjacent open space, to consolidate parkland and connect them in a green network. There is flexibility in the alignment of the land bridges between Blamey Road and Watsonia Road, to establish the optimum arrangement.
(iv) ISSUE: Concern that no sustainable ecosystem or tree can survive on top of the land bridges.

RESPONSE: The Urban Design Strategy calls for appropriate soil depth on land bridges to support the healthy growth of trees, understorey planting and grass. This is typically established as a minimum soil depth of 1500mm for trees and 400mm for lower planting.

Relevant UDS clauses:

- **Place Specific Requirement 1A**: Open space and planting opportunities. Page 41
- **Detailed Requirements and Benchmarks 3.2**: Green links. Page 84

(v) ISSUE: Request to provide landscaping along the entire length of the road alignments and include large spreading canopy trees of a commensurate scale to the road reservation. VicRoads clear zones will need to be considered. Where sufficient space cannot be provided to satisfy clear zone requirements guard rails will need to be provided. Boulevard planting must be considered a key priority to ensure a high level of visual amenity.

RESPONSE: New tree planting and vegetation is to be prioritised within the project corridor, including adjoining streets, medians, buffers and in carparks, to support the urban forest. This would include the establishment of boulevards with canopy trees of a scale commensurate to the road reservation, where possible.

The Urban Design Strategy specifically calls for the establishment of an avenue of trees along Greensborough Road.

The location of new street trees must consider safety requirements such as tree setback from kerb edge in an integrated manner, to provide the outcome of a safe, well treed boulevard.

Relevant UDS clauses:

- **Key Direction 1**: Develop an integrated design response. Page 15
- **Place Specific Requirement 3D**: Landscaping along Greensborough. Page 43
- **Detailed Requirements and Benchmarks 8**: Local streets & neighbourhoods. Page 91
- **Detailed Requirements and Benchmarks 8.2**: Boulevards and streetscapes. Page 91
ISSUE: Concern that the road design of the interchange is inefficient and should be minimised.

RESPONSE: Corridor-wide objectives in the Urban Design Strategy call for the design footprint to be minimised. This includes the design of interchanges where the engineering and urban design must be developed in an integrated way to provide a balanced solution that functions well for road vehicles and minimises impact on the surrounding area including Borlase Reserve and Simpson Barracks.

Relevant UDS clauses:
- Map R7 Lower Plenty Road Interchange. Pages 44-45
- Objective 3.4 Minimise footprint. Page 13
- Key Direction 1: Develop an integrated design response. Page 15
- Detailed Requirements and Benchmarks 7.1: Integration with surroundings. Page 90

ISSUE: Concern about removal of parkland in the area.

RESPONSE: Environmental Performance Requirement LP1 calls for the design footprint to be minimised, to avoid, to the extent practicable, the temporary and permanent impact on parkland and open space. This is supported by the Urban Design Strategy, which calls for the design footprint to be minimised and for the open space functions within and along the project to be maintained.

Relevant UDS clauses:
- Objective 3.4: Minimise footprint. Page 12
- Key Direction 2: Support a natural & connected corridor. Page 16
- Detailed Requirements and Benchmarks 7.1: Integration with surroundings. Page 90

ISSUE: Concern about the visual impact due to loss of vegetation and trees.

RESPONSE: The Urban Design Strategy calls for the removal of mature trees, planted and remnant native trees and remnant vegetation, to be minimised. Trees would be planted in appropriate areas along the project, to replace any trees removed, at a ratio of two new amenity trees for every one removed, while achieving an overall net gain in tree canopy cover by 2045. These trees would be planted as close as possible to the areas from where other trees were removed, to mitigate the visual impact. Lower vegetation would also be replaced.

Relevant UDS clauses:
- Objective 1.3 Landscape and visual amenity. Page 12
• **Place Specific Requirement 3A**: Additional buffer planting. Page 45

• **Detailed Requirements and Benchmarks 17.** Landscape. Page 101 and 102

• **Detailed Requirements & Benchmarks 17.1**: Green corridors. Page 101

• **Detailed Requirements & Benchmarks 17.4**: Minimising loss. Page 101

(iv) **ISSUE**: Concern about the loss of amenity by relocating Banyule Creek underground into a pipe.

RESPONSE: The Urban Design Strategy calls for the project to minimise any undergrounding of Banyule Creek.

Relevant UDS clauses:

• **Place Specific Requirement 3B**: Minimise impacts to Banyule Creek. Page 45

• **Place Specific Requirement 3D**: Opportunity: * Banyule Creek to the south of Lower Plenty Road. Page 45

• **Detailed Requirements and Benchmarks 18.** Water. Page 103

• **Detailed Requirements and Benchmarks 18.3**: Daylight waterways. Page 103

(v) **ISSUE**: Request to employ Water Sensitive Urban Design into the precinct.

RESPONSE: The Urban Design Strategy encourages the use of Water Sensitive Urban Design through the precinct, in Place Specific Requirements. More generally, the Urban Design Strategy calls for Water Sensitive Urban Design to be used to integrate water management objectives into the project’s urban design and achieve a broad range of community and environmental benefits. This includes the use of passive irrigation techniques, and the incorporation of Water Sensitive Urban Design infrastructure such as swales, bio-filtration systems (rain gardens) and wetlands.

Relevant UDS clauses:

• **Place Specific Requirement 2A**: Opportunity: * Water Sensitive Urban Design infrastructure. Page 45

• **Detailed Requirements and Benchmarks 18.1**: Water sensitive design. Page 103

• **Detailed Requirements and Benchmarks 18.6**: Maximise community and environmental benefits. Page 104

(vi) **ISSUE**: Concern about loss of access from residences to parkland, where they currently have safe and direct access to open space.

RESPONSE: The Urban Design Strategy calls for access to public open space within and at the interface of the project to be enhanced. Safe and accessible walking and cycling links to open space must be maintained.
Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 7.1**: Integration with surroundings. Page 90

**(vii)** ISSUE: Concern about loss of pedestrian and cycling access across Borlase Reserve from the east to Greensborough Road. Request to maintain pedestrian access in the area with a path from Coleen Street across to Greensborough Road.

RESPONSE: The Urban Design Strategy calls for a walking and cycling link across Borlase Reserve from Drysdale Street to Moorwatha Streets. It also notes the opportunity for a formal path link from Coleen Street to Erskine Road that follows the existing pedestrian desire line.

Relevant UDS clauses:

- **Place Specific Requirement 1B**: New east-west walking and cycling. Page 45
- **Place Requirement 1D**: Walking and cycling link. Page 45
- **Place Requirement 1H**: Opportunity: Path link from Coleen Street. Page 45
- **Detailed Requirements and Benchmarks 13**: Walking & cycling infrastructure. Page 96

**(g)** Long tunnel options

**(i)** ISSUE: Preference to extend the bored tunnel portion of the project from Lower Plenty Road north to Grimshaw Street or the M80, using with the Banyule Council BabEng design or the SMART Taxpayer design (community design), to minimise impact on the areas around Borlase Reserve, Simpson Barracks and Watsonia Village.

RESPONSE: Longer tunnels do provide greater opportunity for urban design benefits such as greater pedestrian and cycling connectivity across the road corridor and more space for parkland. These local benefits might be offset with the loss of open space near the tunnel portal and location of the ventilation structure and ventilation building closer to houses and schools. Each option needs to be carefully considered with a balanced approach to evaluation.

Relevant UDS clauses:

- **Objective 3.4**: Minimise footprint. Page 13
- **Key Direction 1**: Develop an integrated design response. Page 15

**(h)** Manningham Interchange

**(i)** ISSUE: Request that the eventual use of the Bulleen Industrial Precinct land should support the development of a Cultural Precinct (or Cultural Core as it is named in the DELWP ‘Yarra River – Bulleen Precinct – Land Use Framework Plan’) centred on the relationship between the arts, nature and Traditional Owner heritage.

RESPONSE: The Urban Design Strategy calls for the project design to have regard to relevant State and local government strategic land use plans. This would include the DELWP ‘Yarra River – Bulleen Precinct –
Land Use Framework Plan’. The project should not preclude the broader strategic plan for the area, and complement or positively contribute to it where possible.

The Urban Design Strategy does not direct any future land use for the precinct, including the development of a cultural precinct. This strategic planning would be undertaken by DELWP and other relevant parties.

Relevant UDS clauses:

- **Map Y1 Manningham Road Interchange. Pages 52-53**
- **Objective 3.3: Strategic alignment. Page 12**
- **Key Direction 4: Provide a great experience for road users. Page 20**
- **Place Specific Requirement 1A: High quality navigational. Page 53**
- **Place Specific Requirement 4A: Manningham Road Interchange. Page 53**

(ii) **ISSUE:** Request that any new buildings, technical shelters, compounds and permanent structures (including ventilation structures) at the Manningham Interchange should not interrupt sightlines from Heide and should be sensitively designed with regard to their surroundings.

Concern about the siting of ventilation structures and substations within public open space where the visual bulk and size of the ventilation structures do not respond to the landscape character of their locations.

**RESPONSE:** The Urban Design Strategy requires that any ventilation building, ventilation structure and associated ancillary buildings in the area are sensitively sited and designed, and well integrated into the surrounding landscape, to minimise negative impact on the surrounding area and adjacent communities. This includes the interface with Heide and Banksia Park.

The architectural form, texture, colour and lighting of the ventilation structure and associated buildings would be context sensitive, to ensure that the structures are high quality and make a positive contribution to the area.

Landscape design and siting would be employed to minimise the visual bulk of the buildings and ventilation structure. This could include the use of screening landforms and landscape buffers, and the partial burying of buildings.

Relevant UDS clauses:

- **Objective 1.3: Landscape and visual amenity. Page 12**
- **Detailed Requirements and Benchmarks 5. Ventilation structures, portals and tunnels. Page 88**
- **Detailed Requirements & Benchmarks 5.4 Ventilation structure design. Page 88**
- **Detailed Requirements and Benchmarks 6. Project buildings & ancillary structures. Page 89**
ISSUE: Concern that imposing noise and flood walls that do not respond in form, texture or colour to adjoining areas.

RESPONSE: The Urban Design Strategy requires that any noise walls in the area would be high quality and context sensitive, minimising visual impact and overshadowing and maintenance. Landscaping could be used to soften the appearance of the noise walls, reduce the perceived height and bulk, and better integrate the structures into the surrounding area. Transparent material could be used, to take advantage of scenic and adjacent views of surrounding landscape, reduce the perceived height of the structures, and minimise overshadowing. Noise walls and associated landscape could be designed to locate any acrylic component at a height that would discourage vandalism.

Similarly, the Urban Design Strategy requires that any flood walls are carefully integrated into the surrounding area. This could include earth embankments, terracing and landscaping to make the flood walls disappear into the surrounding parkland, and minimise their perceived height.

Relevant UDS clauses:
- **Key direction 5**: Create a context sensitive design. Page 22
- **Detailed Requirements and Benchmarks 9**: Walls, fencing, barriers & screens. Page 92 and 93
- **Detailed Requirements and Benchmarks 9.8**: Flood walls and retaining walls. Page 93

ISSUE: Request that the Manningham Interchange includes a green belt made up of mature trees and new plants that conform with local flora in keeping with surrounding parks.

RESPONSE: The Urban Design Strategy requires that the interface of the Yarra Valley parkland and the Manningham interchange precinct, which is currently industrial, be improved. This could include substantial planting to make the interchange area blend in with the parkland. The establishment of any landscape areas in the interchange should not preclude strategic planning directions that would be established by DELWP and other stakeholders.

Relevant UDS clauses:
- **Key direction 2**: Support a natural and connected corridor. Page 16
- **Place Specific Requirement 3A**: Interface of the Yarra Valley Parklands with the interchange. Page 53
- **Detailed Requirements and Benchmarks 17.1**: Green corridors. Page 101
- **Detailed Requirements and Benchmarks 17.10**: Plant selection. Page 102

ISSUE: Request that the lower western portion of the Drive-in site should be handed back to the public, (perhaps transferring it to Parks Victoria) after being planted with native shrubs and trees.

RESPONSE: The former Bulleen Drive-in site is nominated in the Mapbook as a potential construction compound. Land surplus to
permanent infrastructure requirements could be returned to parkland after construction. This could be integrated with the existing parkland between the Yarra River and the Drive-in site that is vegetated and identified in the Mapbook as a no go zone.

The Urban Design Strategy does not direct any future land use for the precinct, including the development of parkland on the former Bulleen Drive-in site. This strategic planning would be undertaken by DELWP and other relevant parties.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 7.1: Integration with surroundings. Page 90**

(i) **Bridge Street tree**

(i) **ISSUE:** Request to retain the 300 year old river red gum on the corner of Bridge Street and Manningham Road.

**RESPONSE:** The river red gum located on the corner of Manningham Road and Bridge Street does contribute to the identity of the local area. As such, the Urban Design Strategy requests that contractors try to retain the tree and demonstrate their efforts to do so.

Relevant UDS clause:

- **Map Y1 Manningham Road Interchange. Pages 52-53**

- **Place Specific Requirement 1B: Significant River Red Gum tree. Page 53**

- **Detailed Requirements and Benchmarks 14.4. Minimising loss. Page 101**

(ii) **ISSUE:** Preference for the tree should be interpreted in an appropriate location, and the timber should be made available for a purpose which benefits the community, in consultation with the local community and Council, if the tree cannot be retained.

**RESPONSE:** If the tree needs to be removed, the Urban Design Strategy calls for the reuse of the material. This could include seed collection for growing new tree stock, and reuse of timber for appropriate community initiatives such as public art or habitat establishment.

Relevant UDS clauses:

- **Section 7.2: Waste generation and reuse. Page 108**

(j) **Bulleen Art and Garden**
(i) **ISSUE:** Request to adjust the Urban Design Strategy to recognise BAAG as a key landmark that contributes to the distinctive existing character and identity of the locality and as an important element of the proposed cultural precinct.

RESPONSE: Bulleen Art and Garden has been identified on the appropriate precinct map in the Urban Design Strategy. As a private commercial entity, it does contribute to the identity of the local area.

*Relevant UDS maps:*
- *Map Y1* Manningham Road Interchange. Pages 52-53

(k) **Avon Street precinct**

(i) **ISSUE:** Preference that Avon Street be closed and made into a cul-de-sac that includes a raised and wide garden bed containing trees for a “Green Wall” at street entrance and that this area be landscaped.

RESPONSE: If Avon Street is turned into a cul-de-sac, the resulting space between the dead end and Bulleen Road could be landscaped to screen views of traffic, mitigate glare from head lights and improve local amenity with additional trees and vegetation.

*Relevant UDS clauses:*
- *Map Y1* Manningham Road Interchange. Pages 52-53

(ii) **ISSUE:** Request that major re-planting of trees occurs along Bulleen Road to replace the loss of mature species (this refers to area across the road from Avon Street).

RESPONSE: The Urban Design Strategy calls for the planting of large canopy trees along Bulleen Road.

*Relevant UDS clauses:*
- *Place Specific Requirement 3B: Roadside planting.* Page 53
- *Detailed Requirements and Benchmarks 8. Local streets & neighbourhoods.* Page 91
- *Detailed Requirements and Benchmarks 8.2: Boulevards and streetscapes.* Page 91

(l) **Bulleen Interchange**

(i) **ISSUE:** Concern that the land to accommodate the Bulleen interchange is too great and should be minimised, to minimise the impact on Koonung Creek Reserve, Freeway Golf, Bulleen Park, Boroondara Tennis Centre, and Bulleen Swim Centre.

Corridor-wide objectives in the Urban Design Strategy call for the design footprint to be minimised. This includes the design of the interchange at the Eastern Freeway where the engineering and urban design must be developed in an integrated way to provide a balanced solution that functions well for road vehicles and minimises impact on the surrounding area including Koonung Creek Reserve, Freeway Public Golf Course, Bulleen Park and adjacent school sporting grounds.
Relevant UDS clauses:

- **Map Y3 Eastern Freeway Interchange. Pages 56-57**
- **Objective 3.4: Minimise footprint. Page 13**
- **Key Direction 1: Develop an integrated design response. Page 15**
- **Detailed Requirements and Benchmarks 7.1: Integration with surroundings. Page 90**

(ii) **ISSUE:** Preference for the Bulleen interchange to be underground.

RESPONSE: Longer tunnels and underground interchanges at the Eastern Freeway do provide greater opportunity for urban design benefits such as more space for parkland and sporting facilities. These local benefits might be offset with the loss of open space near the tunnel portal and location of the ventilation structure and ventilation building closer to houses. Each option needs to be carefully considered with a balanced approach to evaluation.

Relevant UDS clauses:

- **Objective 3.4: Minimise footprint. Page 13**
- **Key Direction 1: Develop an integrated design response. Page 15**

(iii) **ISSUE:** Request to extend the tunnel and locate the portal 1.5 kilometres east, in the Eastern Freeway (Willow Bend option).

RESPONSE: Similarly, longer tunnels to the Eastern Freeway near Willow Bend do provide greater opportunity for urban design benefits such as more space for parkland and sporting facilities, with less impact on the Bulleen Road precinct. These local benefits might be offset with the loss of open space near the tunnel portal and location of the ventilation structure and ventilation building closer to houses. Each option needs to be carefully considered with a balanced approach to evaluation.

Relevant UDS clauses:

- **Objective 3.4: Minimise footprint. Page 13**
- **Key Direction 1: Develop an integrated design response. Page 15**

(iv) **ISSUE:** Concern about the siting of ventilation structures and substations within public open space.

RESPONSE: The Urban Design Strategy requires that any ventilation building and ventilation structure in the area are sensitively sited and designed, and well integrated into the surrounding landscape, to minimise negative impact on the surrounding area and adjacent communities.

The architectural form, texture, colour and lighting of the ventilation structure and associated buildings would be context sensitive, to ensure that the structures are high quality and make a positive contribution to the area.
Landscape design and siting would be employed to minimise the visual bulk of the buildings and ventilation structure. This could include the use of screening landforms and landscape buffers, and the partial burying of buildings. Siting will be crucial.

**Relevant UDS clauses:**

- **Objective 1.3: Landscape and visual amenity. Page 12**
- **Key direction 4: Provide a great experience for road users. Page 20**
- **Key direction 5: Create a context sensitive design. Page 22**
- **Detailed Requirements and Benchmarks 5. Ventilation structures, portals and tunnels. Page 88**
- **Detailed Requirements & Benchmarks 5.4 Ventilation structure design. Page 88**

**(v)** Concern that bulky concrete elevated road structures that have low aesthetic value and contrast with established landscape and neighbourhood settings and create spaces below that have not been addressed in relation to public space or solar access.

**RESPONSE:** The Urban Design Strategy calls for well-designed elevated road structures of high aesthetic value that integrate with the surrounding area. Structural solutions would have smooth transitions between elements, be durable and avoid the need for cladding. Appropriate materials, textures and finishes of piers would be used to deter graffiti. Solar access would be maximised to spaces below the structure.

Areas that would be under elevated road structures would accommodate a new bus interchange, commuter car parking, freeway reserve and some parkland areas. With sufficient clear height below the elevated structures, the resulting spaces lend themselves to a bus interchange and commuter car parking. Elevated structures would provide shade and weather protection for vehicles. Areas below structure in the freeway reserve would either be road or landscaped areas that are often treated with paving, gravel or similar. Planted areas can be viable in parkland areas adjacent to or under the edge of elevated structures.

**Relevant UDS clauses:**

- **Place Specific Requirement 3G: Elevated structures at the Eastern Freeway. Page 57**
- **Detailed Requirements and Benchmarks 1. Multi-span bridges. Page 84**
- **Detailed Requirements & Benchmarks 7.3 Positive use of space. Page 90**

**(vi)** Issue: Concern about imposing noise and flood walls that do not respond in form, texture or colour to adjoining areas.

**RESPONSE:** The Urban Design Strategy requires that any noise walls in the area would be high quality and context sensitive, minimising visual impact and overshadowing and maintenance. Landscaping could be used to soften the appearance of the noise walls, reduce the perceived height and bulk, and better integrate the structures into the surrounding
area. Transparent material could be used, to take advantage of scenic and adjacent views of surrounding landscape, reduce the perceived height of the structures, and minimise overshadowing. Noise walls and associated landscape could be designed to locate any acrylic component at a height that would discourage vandalism.

Similarly, the Urban Design Strategy requires that any flood walls are carefully integrated into the surrounding area. This could include earth embankments, terracing and landscaping to make the flood walls disappear into the surrounding landscape, and minimise their perceived height.

Relevant UDS clauses:

- **Key direction 5**: Create a context sensitive design. Page 22
- **Detailed Requirements and Benchmarks 9**: Walls, fencing, barriers & screens. Page 92 and 93
- **Detailed Requirements & Benchmarks 9.3**: Local context scale. Page 92
- **Detailed Requirements and Benchmarks 9.8**: Flood walls and retaining walls. Page 93
- **Detailed Requirements and Benchmarks 20.2**: Colour palette. Page 106

(vii) **ISSUE**: Request that the removal of large, significant trees along Bulleen Road be avoided.

RESPONSE: The Urban Design Strategy calls for the removal of mature trees, planted and remnant native trees and remnant vegetation, to be minimised. Trees would be planted in appropriate areas along the project, to replace any trees removed, at a ratio of two new amenity trees for every one removed, while achieving an overall net gain in tree canopy cover by 2045. These trees would be planted as close as possible to the areas from where other trees were removed, to mitigate the visual impact.

Relevant UDS clauses:

- **Place Specific Requirement 3B**: Roadside planting. Page 55
- **Detailed Requirements and Benchmarks 17**: Landscape. Page 101 and 102
- **Detailed Requirements & Benchmarks 17.1**: Green corridors. Page 101
- **Detailed Requirements & Benchmarks 17.4**: Minimising loss. Page 101

(m) **Estelle Street precinct**

(i) **ISSUE**: Concern about removal of parkland.

RESPONSE: Environmental Performance Requirement LP1 calls for the design footprint to be minimised, to avoid, to the extent practicable, the temporary and permanent impact on parkland and open space. This is supported by the Urban Design Strategy, which calls for the design
footprint to be minimised and for the open space functions within and along the project to be maintained.

Relevant UDS clauses:

- **Objective 3.4:** Minimise footprint. Page 12
- **Key Direction 2:** Support a natural & connected corridor. Page 16
- **Detailed Requirements and Benchmarks 7.1:** Integration with surroundings. Page 90

(ii) **ISSUE:** Concern about visual impact due to loss of vegetation and trees - particularly the four large gum trees in the area

The Urban Design Strategy calls for the removal of mature trees, planted and remnant native trees and remnant vegetation, to be minimised. Trees would be planted in appropriate areas along the project, to replace any trees removed, at a ratio of two new amenity trees for every one removed, while achieving an overall net gain in tree canopy cover by 2045. These trees would be planted as close as possible to the areas from where other trees were removed, to mitigate the visual impact.

Relevant UDS clauses:

- **Place Specific Requirement 5D:** Canopy tree planting. Page 71
- **Place Specific Requirement 5F:** Buffer landscape. Page 71
- **Place Specific Requirement 5I:** Vegetation. Page 71
- **Detailed Requirements and Benchmarks 17:** Landscape. Page 101 and 102
- **Detailed Requirements & Benchmarks 17.1:** Green corridors. Page 101
- **Detailed Requirements & Benchmarks 17.4:** Minimising loss. Page 101

(iii) **ISSUE:** Concern about removal of a shared use path and safe pedestrian connections through the area.

RESPONSE: The Urban Design Strategy calls for the retention of existing walking and cycling paths. If any path is impacted by the construction of new infrastructure then a new path must be provided, to maintain connectivity through the area.

Relevant UDS clauses:

- **Place Specific Requirement 5B:** Lighting and open sightlines. Page 71
- **Detailed Requirements and Benchmarks 13:** Walking & cycling infrastructure. Page 96
- **Detailed Requirements & Benchmarks 13.3:** Pathways and connection. Page 96
(iv) **ISSUE:** Concern about the visual impact and appearance of new noise walls with no space for landscape buffer.

**RESPONSE:** The Urban Design Strategy requires that any new noise walls in the area would be high quality and context sensitive, minimising visual impact and overshadowing and maintenance. Both sides of new noise walls must be designed to the same standard of quality.

Transparent material could be used, to take advantage of scenic and adjacent views of surrounding landscape, reduce the perceived height of the structures. Noise walls and associated landscape could be designed to locate any acrylic component at a height that would discourage vandalism.

Landscaping would be used to soften the appearance of the noise walls, reduce the perceived height and bulk, and better integrate the structures into the surrounding area.

**Relevant UDS clauses:**

- **Place Specific Requirement 5J:** Noise walls. Page 71
- **Detailed Requirements and Benchmarks 9. Walls, fencing, barriers & screens.** Page 92 and 93
- **Detailed Requirements and Benchmarks 9.1 Noise and visual mitigation.** Page 92
- **Detailed Requirements & Benchmarks 9.3 Local context scale.** Page 92

(v) **ISSUE:** Concern about equity with Koonung Creek Reserve, where 90% of the small linear park on the Bulleen side is removed and less than 20% of the park on the Balwyn North side is removed.

**RESPONSE:** Key direction 2 of the Urban Design Strategy calls for the function of the open space network to be maintained, including along the Koonung Creek Valley. It is important to adopt a balanced approach to the allocation of space along the freeway corridor, so that the open space network is maintained and communities on both sides are provided similar levels of amenity.

**Relevant UDS clauses:**

- **Objective 3.4:** Minimise footprint. Page 13
- **Key Direction 2:** Support a natural & connected corridor. Page 16
- **Key Direction 5:** Requirement 1.K: Optimise the existing open space functions. Page 26
- **Detailed Requirements and Benchmarks 7.1:** Integration with surroundings. Page 90

(vi) **ISSUE:** Concern about impact of a lay down area in Kampman Street during the construction period.

The Urban Design Strategy calls for temporary works such as construction compounds to be sited and designed to minimise impacts on local community facilities and open space such as the Koonung Reserve in Kampman Street. The landscape design and master planning
for the reinstatement of any reserve, post-construction, would be in accordance with the Urban Design Strategy.

Relevant UDS clauses:

- **Section 7.2 Using design to help manage construction impacts.** Page 107
- **Section 7.2: Protecting viability and amenity.** Page 107

(n) **Mountain View Road precinct**

(i) **ISSUE:** Concern that a new, taller noise wall will be located closer to houses by approximately 5 metres creating greater visual impact

RESPONSE: The Urban Design Strategy requires that any new noise walls in the area would be high quality and context sensitive, minimising visual impact and overshadowing and maintenance. Both sides of new noise walls must be designed to the same high standard of quality.

Transparent material could be used, to take advantage of scenic and adjacent views of surrounding landscape, reduce the perceived height of the structures. Noise walls and associated landscape could be designed to locate any acrylic component at a height that would discourage vandalism.

Landscaping would be used to soften the appearance of the noise walls, reduce the perceived height and bulk, and better integrate the structures into the surrounding area.

Relevant UDS clauses:

- **Map Y3 Eastern Freeway Interchange.** Page 56-57
- **Place Specific Requirement 5J: Noise walls.** Page 71
- **Detailed Requirements and Benchmarks 9. Walls, fencing, barriers & screens.** Page 92 and 93
- **Detailed Requirements and Benchmarks 9.4. Interfaces.** Page 92

(ii) **ISSUE:** Concern of overshadowing and that plants would not grow on the south side of a taller noise wall.

RESPONSE: The Urban Design Strategy calls for overshadowing by noise walls to be minimised. Transparent material could be used on the upper portions of new noise walls, to minimise overshadowing of the road and front yards in Mountain View Road.

Plant selection would be considered, to install plant species that are viable in lower light conditions on the southern side of noise walls.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 9. Walls, fencing, barriers & screens.** Page 92 and 93
- **Detailed Requirements and Benchmarks 9.6. Visual connectivity and solar access.** Page 92
(iii) **ISSUE:** Concern about the removal of the shared use path.

RESPONSE: The Urban Design Strategy calls for the retention of existing walking and cycling paths. If any path is impacted by the construction of new infrastructure then a new path must be provided, to maintain connectivity through the area.

Relevant UDS clauses:

- *Detailed Requirements and Benchmarks 13. Walking & cycling infrastructure.* Page 96
- *Detailed Requirements & Benchmarks 13.3 Pathways and connection.* Page 96

(iv) **ISSUE:** Concern about removal of vegetation and areas for planting between the noise wall and residences, with limited opportunity for any landscape buffer.

RESPONSE: The Urban Design Strategy calls for the use of planting to enhance and soften the appearance of walls and barriers, reduce height and bulk, and better integrate the structures into the surrounding area. The design should maintain sufficient space for buffer planting adjacent new noise walls, with footing designs to accommodate planting beds.

Relevant UDS clauses:

- *Place Specific Requirement 5F: Buffer landscape.* Page 71
- *Detailed Requirements and Benchmarks 9.1 Noise and visual mitigation.* Page 92
- *Detailed Requirements and Benchmarks 17. Landscape.* Page 101 and 102
- *Detailed Requirements & Benchmarks 17.4: Minimising loss.* Page 101

(v) **ISSUE:** Concern about the maintenance of the new noise wall and any new vegetation and trees.

RESPONSE: All areas of the project would be allocated to particular organisations to maintain.

Relevant UDS clauses:

- *Objective 4.4 Whole of life.* Page 12
- *Detailed Requirements & Benchmarks 9.10 Maintenance.* Page 93

(o) **Koonung Creek Reserve and Koonung Creek trail**

(i) **ISSUE:** Concern that the proposed roads are clearly and unambiguously overdesigned for their stated purpose and should be minimised.
Corridor-wide objectives in the Urban Design Strategy call for the design footprint to be minimised. This includes the widening of the Eastern Freeway where the engineering and urban design must be developed in an integrated way to provide a balanced solution that functions well for road vehicles and minimises impact on the surrounding area including Koonung Creek Reserve, Koonung Park and Koonung Creek Linear Park.

Relevant UDS clauses:

- Maps K1-K6 Koonung Creek Valley Area. Pages 70-81
- **Objective 3.4**: Minimise footprint. Page 13
- **Key Direction 1**: Develop an integrated design response. Page 15
- **Detailed Requirements and Benchmarks 7.1**: Integration with surroundings. Page 90

(ii) **ISSUE**: Strong preference to minimise any loss of open space from Koonung Creek Reserve and reduce the acquisition of public open space.

RESPONSE: Environmental Performance Requirement LP1 calls for the design footprint to be minimised, to avoid, to the extent practicable, the temporary and permanent impact on parkland and open space. This is supported by the Urban Design Strategy, which calls for the design footprint to be minimised and for the open space functions within and along the project to be maintained.

Relevant UDS clauses:

- **Objective 3.4**: Minimise footprint. Page 12
- **Key Direction 2**: Support a natural & connected corridor. Page 16
- **Key Direction 5**: Requirement 1.K: Open space functions. Page 26
- **Detailed Requirements and Benchmarks 7.1**: Integration with surroundings. Page 90

(iii) **ISSUE**: Preference to naturalise Koonung Creek, where possible. Concern about diverting any more of the creek into underground pipes. Alternatives to the undergrounding of Koonung Creek should be explored to restore the creek consistent with Melbourne Water’s approach to managing waterways.

RESPONSE: The Urban Design Strategy calls for the project to minimise any undergrounding of Koonung Creek. Any naturalisation of Koonung Creek needs to be balanced with potential loss of useable open space to accommodate new embankments down to the creek level.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 18. Water. Page 103**
- **Detailed Requirements and Benchmarks 18.3**: Daylight waterways. Page 103
(iv) ISSUE: Concern about the visual impact and loss of amenity with the removal of trees from the reserve. Removal of native vegetation and large trees along the Koonung Creek corridor should be avoided to the greatest extent possible.

The Urban Design Strategy calls for the removal of mature trees, planted and remnant native trees and remnant vegetation, to be minimised. Trees would be planted in appropriate areas along the project, to replace any trees removed, at a ratio of two new for every one removed. These trees would be planted as close as possible to the areas from where other trees were removed, to mitigate the visual impact.

Relevant UDS clauses:

- **Key Direction 5**: Requirement 8.K: Natural vegetation, wetlands and open waterways. Page 26
- **Values & priorities 6.2**: Revegetation. Page 67
- **Detailed Requirements and Benchmarks 17. Landscape.** Page 101 and 102
- **Detailed Requirements & Benchmarks 17.1**: Green corridors. Page 101
- **Detailed Requirements & Benchmarks 17.4**: Minimising loss. Page 101

(v) ISSUE: Concern that new noise walls and elevated structure would overshadow Koonung Creek Reserve and degrade the existing open space.

RESPONSE: New noise walls would be constructed in this area, to replace the existing noise walls or earth mounds and accommodate more road lanes. The Urban Design Strategy calls for new noise walls to be high quality and context sensitive, minimising visual impact and overshadowing and maintenance.

Transparent material could be used, to take advantage of scenic and adjacent views of surrounding landscape, reduce the perceived height of the structures, and minimise overshadowing. Noise walls and associated landscape could be designed to locate any acrylic component at a height that would discourage vandalism.

Landscaping could be used to soften the appearance of the noise walls, reduce the perceived height and bulk, and better integrate the structures into the surrounding area.

Relevant UDS clauses:

- **Place Specific Requirement 5F**: Buffer landscape. Page 71
- **Place Specific Requirement 5J**: Noise walls. Page 71
- **Detailed Requirements & Benchmarks 1.3 Minimising impacts.** Page 84
- **Detailed Requirements and Benchmarks 9. Walls, fencing, barriers & screens.** Page 92 and 93
(vi) **ISSUE:** Request for better protection of the Valda Avenue Wetlands. The current plan to build a wall abutting the wetlands is not sufficient. The freeway should encroach no further than the current fence line.

RESPONSE: The Urban Design Strategy calls for the retention of wetlands to be maximised. This would include the wetland areas near Carron Street in Balwyn North and Valda Avenue in Mont Albert North. Any redesign of wetlands, due to the impact of new infrastructure, should be naturalistic in form and aesthetics with shapes responding to the contours of the land.

**Relevant UDS clauses:**

- **Key Direction 5:** Requirement 8.K: Natural vegetation, wetlands and open waterways. Page 26

- **Place Specific Requirement 3A:** Biodiversity corridor. Page 71

- **Place Specific Requirement 1C:** Wetlands. Page 73

- **Detailed Requirements and Benchmarks 18. Water.** Page 103

- **Detailed Requirements and Benchmarks 18.7. Raingarden and wetland design.** Page 104

(vii) **ISSUE:** Request that maintenance of Koonung Creek Reserve fall to any organisation contracted to run NEL.

RESPONSE: All areas of the project would be allocated to particular organisations to maintain.

**Relevant UDS clauses:**

- **Objective 4.4 Whole of life.** Page 12

(viii) **ISSUE:** Request to maintain or reinstate the Masa Vukotic memorial seat.

RESPONSE: The Urban Design Strategy requires that the memorial be retained or reinstated.

**Relevant UDS clauses:**

- **Place Specific Requirement 1H:** Memorial. Page 73

(ix) **ISSUE:** Request for WSUD improvements to be made to the reserve.

RESPONSE: The Urban Design Strategy encourages the use of Water Sensitive Urban Design through the precinct, in Place Specific Requirements. More generally, the Urban Design Strategy calls for Water Sensitive Urban Design to be used to integrate water management objectives into the project’s urban design and achieve a broad range of community and environmental benefits. This includes the use of passive irrigation techniques, and the incorporation of Water Sensitive Urban Design infrastructure such as swales, bio-filtration systems (rain gardens) and wetlands.

**Relevant UDS clauses:**

- **Key Direction 5** design requirement 8.K: Natural vegetation, wetlands and open waterways. Page 26
**Place Specific Requirement 1G:** Opportunity: *Water Sensitive Urban Design. Page 73*

**Detailed Requirements and Benchmarks 18.1.** Water sensitive design. Page 103

**Detailed Requirements and Benchmarks 18.6:** Maximise community and environmental benefits. Page 104

(x) **ISSUE:** Request for a full upgrade of the Koonung Creek Trail and adjacent walking and cycling infrastructure.

RESPONSE: The Urban Design Strategy calls for the retention of existing walking and cycling paths. If any path is impacted by the construction of new infrastructure then a new path must be provided, to maintain connectivity through the area.

Relevant UDS clauses:

- **Place Specific Requirement 5B:** Lighting and open sightlines. Page 71
- **Detailed Requirements and Benchmarks 13.** Walking & cycling infrastructure. Page 96
- **Detailed Requirements & Benchmarks 13.3 Pathways and connection.** Page 96

(p) **Outhwaite Avenue precinct**

(i) **ISSUE:** Concern about loss of parkland in the immediate area.

RESPONSE: Environmental Performance Requirement LP1 calls for the design footprint to be minimised, to avoid, to the extent practicable, the temporary and permanent impact on parkland and open space. This is supported by the Urban Design Strategy, which calls for the design footprint to be minimised and for the open space functions within and along the project to be maintained.

Relevant UDS clauses:

- **Objective 3.4:** Minimise footprint. Page 12
- **Map K1 Bulleen Road to Doncaster Road.** Page 70-71
- **Key Direction 2:** Support a natural & connected corridor. Page 16
- **Key Direction 5:** Requirement 1.K: Open space functions. Page 26
- **Detailed Requirements and Benchmarks 7.1:** Integration with surroundings. Page 90

(ii) **ISSUE:** Concern about the visual impact of taller noise walls, potential overshadowing and loss of vegetation.

RESPONSE: New noise walls would be constructed in this area, to replace the existing noise walls or embankments and accommodate more road lanes. The Urban Design Strategy calls for new noise walls to
be high quality and context sensitive, minimising visual impact and overshadowing and maintenance.

Transparent material could be used, to take advantage of scenic and adjacent views of surrounding landscape, reduce the perceived height of the structures, and minimise overshadowing. Noise walls and associated landscape could be designed to locate any acrylic component at a height that would discourage vandalism.

Relevant UDS clauses:

- **Place Specific Requirement 5F**: Buffer landscape. Page 71
- **Detailed Requirements and Benchmarks 9. Walls, fencing, barriers & screens**: Page 92 and 93
- **Detailed Requirements & Benchmarks 9.6**: Visual connectivity and solar access. Page 92

(iii) **ISSUE**: Concern about a lack of space for buffer planting between the new noise wall and existing road.

The Urban Design Strategy calls for the use of planting to enhance and soften the appearance of walls and barriers, reduce height and bulk, and better integrate the structures into the surrounding area. The design should maintain sufficient space for buffer planting adjacent new noise walls, with footing designs to accommodate planting beds.

Relevant UDS clauses:

- **Place Specific Requirement 5F**: Buffer landscape treatments. Page 71
- **Detailed Requirements and Benchmarks 9.1**: Noise and visual mitigation. Page 92
- **Detailed Requirements and Benchmarks 17**: Landscape. Page 101 and 102
- **Detailed Requirements & Benchmarks 17.4**: Minimising loss. Page 101

(iv) **ISSUE**: Concern about the realignment of the existing Koonung Creek trail and potential loss of continuity.

RESPONSE: The Urban Design Strategy calls for the retention of existing walking and cycling paths. If any path is impacted by the construction of new infrastructure then a new path must be provided, to maintain connectivity through the area.

Relevant UDS clauses:

- **Place Specific Requirement 2A**: Koonung Creek Trail. Page 71
- **Place Specific Requirement 5B**: Lighting and open sightlines. Page 71
- **Detailed Requirements and Benchmarks 13**: Walking & cycling infrastructure. Page 96
Eram Road precinct

(i) ISSUE: Concern about the visual impact of a new, taller noise wall located closer to houses than the existing noise wall.

The Urban Design Strategy requires that any new noise walls in the area would be high quality and context sensitive, minimising visual impact and overshadowing and maintenance.

Transparent material could be used, to take advantage of scenic and adjacent views of surrounding landscape, reduce the perceived height of the structures. Noise walls and associated landscape could be designed to locate any acrylic component at a height that would discourage vandalism.

Landscaping would be used to soften the appearance of the noise walls, reduce the perceived height and bulk, and better integrate the structures into the surrounding area.

Relevant UDS clauses:
- Map K4 Elgar Road to Middleborough Road. Page 76-77
- Place Specific Requirement 2B: Alignment of noise walls. Page 77
- Detailed Requirements and Benchmarks 9. Walls, fencing, barriers & screens. Page 92 and 93
- Detailed Requirements and Benchmarks 9.4. Interfaces. Page 92

(ii) ISSUE: Concern about the aesthetics of the new noise wall.

RESPONSE: The Urban Design Strategy requires that any new noise walls in the area would be high quality and context sensitive, with both sides designed to the same high standard of quality. Careful consideration would be given to form, texture and colour of the walls.

Relevant UDS clauses:
- Detailed Requirements and Benchmarks 9. Walls, fencing, barriers & screens. Page 92 and 93

(iii) ISSUE: Concern about overshadowing of back yards. Request for the top of the wall to be made of acrylic, to minimise overshadowing.

RESPONSE: The Urban Design Strategy calls for overshadowing by noise walls to be minimised. Transparent material could be used on the upper portions of new noise walls, to minimise overshadowing of the road and front yards in Mountain View Road.

Plant selection would be considered, to install plant species that are viable in lower light conditions on the southern side of noise walls.

Relevant UDS clauses:
- Place Specific Requirement 2B: Alignment of noise walls. Page 77
Detailed Requirements and Benchmarks 9. Walls, fencing, barriers & screens. Page 92 and 93


Detailed Requirements and Benchmarks 17.9: Plant health. Page 101

Detailed Requirements and Benchmarks 17.10 Plant selection. Page 102

(iii) ISSUE: Concern about visual impact due to loss of trees and vegetation.

The Urban Design Strategy calls for the removal of mature trees, planted and remnant native trees and remnant vegetation, to be minimised. Trees would be planted in appropriate areas along the project, to replace any trees removed, at a ratio of two new amenity trees for every one removed, while achieving an overall net gain in tree canopy cover by 2045. These trees would be planted as close as possible to the areas from where other trees were removed, to mitigate the visual impact.

Relevant UDS clauses:
- **Objective 1.3:** Landscape and visual amenity. Page 12
- **Key Direction 5:** Requirement 7.K: Buffer vegetation. Page 26
- **Place Specific Requirement 2C:** Buffer landscape treatments. Page 77
- **Detailed Requirements and Benchmarks 17.** Landscape. Page 101 and 102
- **Detailed Requirements & Benchmarks 17.1:** Green corridors. Page 101
- **Detailed Requirements & Benchmarks 17.4:** Minimising loss. Page 101

(iv) ISSUE: Concern about the maintenance of the new noise wall – particularly any acrylic component.

RESPONSE: All areas of the project would be allocated to particular organisations to maintain.

Noise walls would be designed to discourage graffiti and minimise required maintenance.

Relevant UDS clauses:
- **Objective 4.4** Whole of life. Page 12
- **Detailed Requirements and Benchmarks 9.9** Deterring graffiti. Page 92
- **Detailed Requirements & Benchmarks 9.10** Maintenance. Page 93

(r) Eram Park
(i) **ISSUE:** Concern about the loss of parkland.

**RESPONSE:** Environmental Performance Requirement LP1 calls for the design footprint to be minimised, to avoid, to the extent practicable, the temporary and permanent impact on parkland and open space. This is supported by the Urban Design Strategy, which calls for the design footprint to be minimised and for the open space functions within and along the project to be maintained.

**Relevant UDS clauses:**
- **Objective 3.4:** Minimise footprint. Page 12
- **Map K4** Elgar Road to Middleborough Road. Page 76-77
- **Key Direction 2:** Support a natural & connected corridor. Page 16
- **Key Direction 5** design requirement 1.K: Open space functions. Page 26
- **Detailed Requirements and Benchmarks 7.1:** Integration with surroundings. Page 90

(ii) **ISSUE:** Concern about the relocation of the footbridge which gives residents access to the park.

**RESPONSE:** The Urban Design Strategy calls for a pedestrian and cyclist link from Eram Park to the south side of the freeway to be maintained during and after construction. To maintain access across the freeway at all times, a new bridge would have to be built to the side of the existing one, before the existing one is removed. The new bridge would be reasonably close to the location of the existing bridge.

**Relevant UDS clauses:**
- **Place Specific Requirement 1A:** Bridge near Eram Road. Page 77
- **Section 7.2:** Maintaining access and connections. Page 107

(iii) **ISSUE:** Request to leave the park as open space, without adding playgrounds or walking tracks.

**RESPONSE:** The Urban Design Strategy calls for the functionality of local open space to be maintained. It also notes opportunities identified by Manningham City Council including new walking and cycling paths and enhancements to support dog recreation activities.

**Relevant UDS clauses:**
- **Key Direction 2:** Support a natural & connected corridor. Page 16
- **Place Specific Requirements:**
  - 1C: New Koonung Creek crossing
  - 1D: New link to Colston Close and Hampshire Road playspace
- **Detailed Requirements and Benchmarks 7.1**: Integration with surroundings. Page 90

### (s) Eastern Freeway

#### (i) ISSUE: Concern that the expansion of the Eastern Freeway will lead to the loss of the significant architectural and landscape features.

RESPONSE: The Urban Design Strategy recognises the importance of the design qualities of the Eastern Freeway - Stage 1 (1977) and calls for the retention of important features including the original concrete bridges, the rock escarpments and views to the borrowed landscapes along the Yarra River Valley.

Elements along the Eastern Freeway – Stage 2 (1982) and Eastern Freeway - Stage 3 (1997) are likely to be incorporated into a new corridor design. The new design should respect and take design inspiration from key elements from the Stage 2 and 3 design.

**Relevant UDS clauses:**

- **Maps Y3-Y6** Yarra River Valley Area. Pages 56-63
- **Maps K1-K6** Koonung Creek Valley Area. Pages 70-81
- **Key Direction 5** design requirement 2.Y: Design qualities. Page 25
- **Values and priorities 5.2**: Fabric and aesthetic qualities of the Eastern Freeway. Page 49
- **Place Specific Requirements**:
  - Page 57: 1B existing mast lights
  - Page 59: 2F borrowed landscapes, 4A existing light masts, 4B scenic views, 4C rock escarpment, 4D Belford Road and Burke Road bridges (see below as example)
  - Page 61: 2E borrowed landscapes, 4A existing light masts, 4B existing light masts, 4C rock escarpments, 4D Yarra Boulevard and Chandler Highway Bridges
  - Page 63: 1A existing light masts, 1B prominent views, 1C rock escarpment, 1D rock escarpment, 1E Yarra Bend and Merri Creek bridges, 3A borrowed landscapes

- **Place Specific Requirement 4D**: Road and Burke Road bridges. Page 59
• **Place Specific Requirement 4D**: Yarra Boulevard and Chandler Highway bridges. Page 61

• **Place Specific Requirement 1E**: Yarra Bend Road and Merri Creek bridges. Page 63

(ii) **ISSUE**: Concern about the loss of landscape character and visual amenity with the loss of green space in the remaining Koonung Creek Valley and also the removal of the median strip, due to the doubling of the number of lanes.

RESPONSE: The widening of the road corridor between Bulleen Road and Springvale Road would likely alter the landscape character of the freeway corridor. The Urban Design Strategy calls for the establishment of buffer vegetation and use of transparent noise walls to maintain the well vegetated character.

Relevant UDS clauses:

- **Key Direction 5** design requirements 7.K: Buffer vegetation. Page 24
- **Values and priorities 6.2**: Revegetation. Page 67
- **Detailed Requirements and Benchmarks 9.6**: Visual connectivity and solar access. Page 92

(iii) **ISSUE**: Request to maintain vegetation screening along the Eastern Freeway to mitigate impact on the adjacent Yarra River and parkland.

The Urban Design Strategy calls for the removal of mature trees, planted and remnant native trees and remnant vegetation, to be minimised. Trees would be planted in appropriate areas along the project, to replace any trees removed, at a ratio of two new amenity trees for every one removed, whilst achieving an overall net gain in tree canopy cover by 2045. These trees would be planted as close as possible to the areas from where other trees were removed, to mitigate the visual impact.

Relevant UDS clauses:

- **Key Direction 5** design requirement 5.Y: Landscape setting. Page 25
- **Key Direction 5** design requirement 7.K: Buffer vegetation. Page 26
- **Place Specific Requirement 5F**: Buffer landscape treatments. Page 71
- **Detailed Requirements and Benchmarks 17**: Landscape. Page 101 and 102
- **Detailed Requirements & Benchmarks 17.1**: Green corridors. Page 101
- **Detailed Requirements & Benchmarks 17.4**: Minimising loss. Page 101

(t) Open space
(i) **ISSUE:** Strong preference to retain the maximum extent of existing open space in the project area.

RESPONSE: Environmental Performance Requirement LP1 calls for the design footprint to be minimised, to avoid, to the extent practicable, the temporary and permanent impact on parkland and open space. This is supported by the Urban Design Strategy, which calls for the design footprint to be minimised and for the open space functions within and along the project to be maintained.

Relevant UDS clauses:

- **Objective 3.4:** Minimise footprint. Page 12
- **Key Direction 2:** Support a natural & connected corridor. Page 16
- **Detailed Requirements and Benchmarks 7.1:** Integration with surroundings. Page 90
- **Detailed Requirements and Benchmarks 7.2:** Open space infrastructure. Page 90

(ii) **ISSUE:** Request to adopt and support the approach of the Wurundjeri Woiwurrung people where there is no distinction between “cultural values” and “natural values’; both are seen to be one and the same.

RESPONSE: The Urban Design Strategy calls for the project to recognise, protect and promote Indigenous cultural heritage values. This could include the approach where there is no distinction between ‘cultural values” and “natural values’, if deemed appropriate by Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation (WWCHAC).

Relevant UDS clauses:

- **Key direction 3:** Recognise past, contemporary & shared indigenous & historical cultural values. Page 17

(iii) **ISSUE:** Request to demonstrate Water Sensitive Urban Design (WSUD) for the entirety of the project. The strategy is to delegate the development of an Integrated Water Management Strategy to the detailed design process. As a minimum, the EES should include the bones of such a strategy and identify the key parameters for such a strategy, such as the land required for storage and treatment; the treatment methods and the water quality parameters to be met.

The Urban Design Strategy encourages the use of Water Sensitive Urban Design in precincts along the project corridor including Borlase Reserve, Koonung Creek Reserve and the Koonung Creek linear park. More generally, the Urban Design Strategy calls for Water Sensitive Urban Design to be used to integrate water management objectives into the project’s urban design and achieve a broad range of community and environmental benefits. This includes the use of passive irrigation techniques, and the incorporation of Water Sensitive Urban Design infrastructure such as swales, bio-filtration systems (rain gardens) and wetlands.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 18.1. Water sensitive design.** Page 103
(iv) ISSUE: Request that a green infrastructure plan be developed in conjunction with an active transport plan that reallocates road space to tree planting, landscape and open space uses over the entire area of the active transport precinct. Acquisition of land to deliver this plan if required should be enabled.

RESPONSE: The Urban Design Strategy calls for the strengthening of existing green corridors and for the design footprint to be minimised. Engineering and urban design must be developed in an integrated way to provide a balanced solution that functions well for road vehicles and minimises impact on adjacent landscape and open space.

Relevant UDS clauses:

- **Objective 3.4: Minimise footprint.** Page 13
- **Key Direction 1: Develop an integrated design response.** Page 15
- **Key Direction 2: Support a natural & connected corridor.** Page 16
- **Detailed Requirements and Benchmarks 7.1: Integration with surroundings.** Page 90
- **Detailed Requirements and Benchmarks 17. Landscape.** Page 101 and 102
- **Detailed Requirements & Benchmarks 17.1: Green corridors.** Page 101

(u) Trees

(i) ISSUE: Strong preference to maximise the number of existing trees retained – particularly mature trees (800). Request that tree removal would be minimised and mitigated through sensitive detailed design and construction methodology. Every tree that can be saved, should be saved. Should tree removal be documented to be completely unavoidable, detailed plans for landscape reinstatement works should be undertaken in consultation with the relevant local councils. This should include the use of advanced trees as part of such works, timely reinstatement of trees during phased works rather than at the completion of the project and strategies for subsequent management.

RESPONSE: The Urban Design Strategy calls for the removal of mature trees, planted and remnant native trees and remnant vegetation, (particularly large amenity trees, heritage vegetation and vegetation within or connected to open space) to be minimised.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 17. Landscape.** Page 101 and 102
- **Detailed Requirements & Benchmarks 17.4: Minimising loss.** Page 101
- **Detailed Requirements and Benchmarks 17.6 Visual mitigation.** Page 101
(ii) ISSUE: Preference to locate any replacement trees as close to their original location as possible and within the project boundary where possible.

RESPONSE: New tree planting and vegetation is to be prioritised within the project corridor, including adjoining streets, medians, buffers and in car parks, to support the urban forest. Trees would be planted in appropriate areas along the project, to replace any trees removed, at a ratio of two new amenity trees for every one removed, whilst achieving an overall net gain in tree canopy cover by 2045. These trees and lower vegetation would be planted as close as possible to the areas from where other trees were removed, to mitigate the visual impact.

Relevant UDS clauses:

- Detailed Requirements and Benchmarks 17.8: Urban forest. Page 101

(iii) ISSUE: Preference to not only replace the lost tree canopy across the project area but improve the canopy into the future

RESPONSE: Any tree removed will be replaced ratio of two new amenity trees for every one removed, while achieving an overall net gain in tree canopy cover by 2045. To support this, the Urban Design Strategy has a number of requirements to maximise tree canopy across the project area. Tree selection is also to take into account predicted future changes in climate.

Relevant UDS clauses:

- Detailed Requirements and Benchmarks 8.2 Boulevards and streetscapes. Page 91
- Detailed Requirements and Benchmarks 11.1 Carpark design. Page 95
- Detailed Requirements and Benchmarks 13.7 Shade. Page 96
- Detailed Requirements and Benchmarks 17.6 Visual mitigation. Page 101
- Detailed Requirements and Benchmarks 17.10 Plant selection. Page 102
- Place Specific Requirements relating to providing canopy trees such as:
  - Place Specific Requirement 3B: Roadside planting. Page 53
  - Place Specific Requirement 5D: Canopy tree planting. Page 71

(iv) ISSUE: Preference to replace trees with advanced planting, as early as possible, to mitigate impact on habitat.

RESPONSE: The Urban Design Strategy calls for early tree planting, where possible, to optimise growth and ability to enhance amenity and provide visual screening as quickly as possible.

Relevant UDS clauses:
Section 7.2 Using design to help manage construction impacts: Landscaping. Page 107

(v) ISSUE: Concern about maintenance of new trees, to ensure they survive.

RESPONSE: The Urban Design Strategy calls for considered plant selection, siting and soil preparation, to maximise the opportunity for tree health and survival.

All areas of the project would be allocated to particular organisations to maintain.

Relevant UDS clauses:

- **Objective 4.4 Whole of life. Page 12**
- **Detailed Requirements and Benchmarks 17.9 Plant health. Page 101**
- **Detailed Requirements and Benchmarks 17.10 Plant selection. Page 102**

(v) Walking and cycling

(i) ISSUE: Strong preference to maximise the extent of walking and cycling paths.

RESPONSE: The Urban Design Strategy calls for the project to maintain or enhance the walking and cycling network.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 13.1 Pedestrian and cycling network. Page 86**

(ii) ISSUE: Preference to grade separate cycle paths from roads.

RESPONSE: The Urban Design Strategy calls for opportunities for grade separated walking and cycling paths to be maximised. This could include pedestrian and cycling bridges or underpasses.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 13.3 Pathways and connections. Page 96**
- **Detailed Requirements and Benchmarks 14: Walking and cycling bridges. Page 97**
- **Detailed Requirements and Benchmarks 15. Walking and cycling underpasses. Page 99**

(iii) ISSUE: Preference to separate cycle paths from walking paths and support the development of Strategic Cycling Corridors with separated cycle paths.

RESPONSE: The Urban Design Strategy calls for separated walking and cycling paths where required by an appropriately high number of current or projected users.
Relevant UDS clauses:

- Detailed Requirements and Benchmarks 13.3 Pathways and connections. Page 96
- Detailed Requirements and Benchmarks 13.4 Path separation. Page 96

**ISSUE:** Concern about the like-for-like replacement of existing Eastern Freeway pedestrian and cycling crossings, which does not improve current connections between communities across the freeway.

RESPONSE: The Urban Design Strategy calls for the replacement of six pedestrian / cycling crossings across the freeway in the Koonung Creek Valley, including:

- Bullen Road bridge
- Estelle Street bridge
- Heyington Avenue bridge
- Eram Road bridge
- Koonung Road bridge
- Kett Street bridge

This would maintain local connectivity and improve access with new structures.

Other relevant UDS clauses:

- Detailed Requirements and Benchmarks 13. Walking & cycling infrastructure. Page 96
- Detailed Requirements and Benchmarks 14: Walking and cycling bridges. Page 97
- Detailed Requirements and Benchmarks 15. Walking and cycling underpasses. Page 99

**Noise walls**

**ISSUE:** Concern about the visual impact of large noise walls.

RESPONSE: The Urban Design Strategy requires that any new noise walls would be high quality and context sensitive, minimising visual impact and overshadowing and maintenance.

Relevant UDS clauses:

- Detailed Requirements & Benchmarks 9.3 Local context scale. Page 92

**ISSUE:** Request that the visual impact of noise walls is reduced through the use of vegetation.

RESPONSE: The Urban Design Strategy calls for buffer landscaping to be used to soften the appearance of noise walls, reduce their perceived
height and bulk, and better integrate the structures into the surrounding area.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 9.1 Noise and visual mitigation. Page 92**

(iii) **ISSUE:** Request to use clear acrylic to minimise overshadowing and maintain views.

RESPONSE: The Urban Design Strategy calls for transparent material to be used, to take advantage of scenic and adjacent views of surrounding landscape, reduce the perceived height of the structures, and minimise overshadowing. Noise walls and associated landscape could be designed to locate any acrylic component at a height that would discourage vandalism.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 9.6. Visual connectivity and solar access. Page 92**

(iv) **ISSUE:** Concern about the visual impact of any graffiti.

RESPONSE: The Urban Design Strategy calls for the use of high quality materials and textured surfaces on noise walls and the use of landscape buffers, to discourage graffiti.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 9.9 Deterring graffiti. Page 92**

(v) **ISSUE:** Request best practice with the state-of-the-art noise walls that potentially include sound deadening absorptive materials.

RESPONSE: The Urban Design Strategy calls for innovative approaches and ideas to maximise the noise mitigation qualities of the noise walls and address challenging design problems such as limited space, overshadowing and visual bulk.

Relevant UDS clauses:

- **Detailed Requirements and Benchmarks 9. Walls, fencing, barriers & screens. Page 92 and 93**
- **Detailed Requirements and Benchmarks 9.1 Noise and visual mitigation. Page 92**

(x) **Public art**

(i) **ISSUE:** The National Trust strongly supports the integration of interpretation of Aboriginal and non-Aboriginal cultural heritage across the project. The interpretation strategy should be informed by consultation with relevant councils and communities, and provide for ongoing maintenance and review.

RESPONSE: Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation (WWCHAC) would provide guidance on the interpretation of cultural values.
Relevant UDS clauses:

- **Key direction 3:** Recognise past, contemporary & shared indigenous & historical cultural values. Page 17

(ii) **ISSUE:** Request that Heide and the artistic community be involved in the planning of public sculpture and art installations along NEL.

RESPONSE: The development of any public art initiative would be undertaken by contractors. The Urban Design Strategy does not direct Heide or the artistic community to be involved in any particular manner, but it does note that the proximity of Heide to the project presents an exciting opportunity for potential collaboration, inspiration, innovation and creative thinking in the design of North East Link.

Relevant UDS clauses:

- **Key direction 3:** Recognise past, contemporary & shared indigenous & historical cultural values. Page 17

(iii) **ISSUE:** Request to establish an art facility in the Birrarung Cultural Precinct.

RESPONSE: The Urban Design Strategy calls for the project design to have regard to relevant State and local government strategic land use plans. This would include the DELWP ‘Yarra River – Bullen Precinct – Land Use Framework Plan’. The project should not preclude the broader strategic plan for the area, and complement or positively contribute to it where possible.

The Urban Design Strategy does not direct any future land use for the precinct, including the development of a cultural precinct. This strategic planning would be undertaken by DELWP and other relevant parties.

The Urban Design Strategy does not provide guidance on cultural offset projects such as an art facility.

Relevant UDS clauses:

- **Objective 3.3** Strategic alignment. Page 12
- **Key Direction 4:** Manningham Road interchange. Page 20
- **Place Specific Requirement 1A:** High quality navigational feature. Page 53

(iv) **ISSUE:** Request that the Urban Design Strategy should ensure the appropriate relocation of affected public artworks and the incorporation of new public art.

RESPONSE: Relocation of any art work impacted by new infrastructure would be undertaken in close consultation with relevant stakeholders. This would include the Helmet sculpture in Banksia Park and the Sentinel sculpture at Doncaster Road, if they are required to be relocated.

(v) **ISSUE:** Request that should removal of Inge King’s sculpture Sentinel be required to facilitate construction, a management, storage, and reinstatement plan should be prepared by an appropriate qualified conservator, and the work should be reinstated as close as practicable to its current location, and its prominence as a landmark maintained.
RESPONSE: The Urban Design Strategy calls for any relocation of the Inge King sculpture to be undertaken in close consultation with relevant stakeholders. This may entail a management, storage, and reinstatement plan prepared by an appropriate qualified conservator, and reinstatement of the work as close as practicable to its current location, and maintenance of its prominence as a landmark.

Relevant UDS clauses:

- **Key Direction 4**: Provide a great experience for road users. Page 20
- **Place Requirement 1A**: ‘Sentinel’ sculpture. Page 75

*(vi)* ISSUE: Request that the Urban Design Strategy and the Manningham interchange precinct (including Heide) have a stronger arts focus.

RESPONSE: The Urban Design Strategy calls for the project to celebrate and interpret places and objects of historical heritage importance including Heide Museum of Modern Art.

Relevant UDS clauses:

- **Key direction 3**: Recognise past, contemporary & shared indigenous & historical cultural values. Page 17
- **Key Direction 4**: Provide a great experience for road users. Page 20
- **Place Specific Requirement 1A**: ‘Helmet’ sculpture. Page 53

*(vi)* ISSUE: Request for engagement with Traditional Owners and development of indigenous art on the southern side of any new noise wall adjacent Belle Vue Primary School.

RESPONSE: An initiative from the contractors to represent Wurundjeri Woi-wurrung culture and values in elements such as the noise wall at Belle Vue Primary School could be aligned with Key Direction 3 in the Urban Design Strategy.

Relevant UDS clauses:

- **Key direction 3**: Recognise past, contemporary & shared indigenous & historical cultural values. Page 17

*(vii)* ISSUE: Recommendation to

- Enhance the experience of commuters and locals alike by establishing an evolving program of public art that spans a duration of at least 15 years and encompasses significant sculptural works; small-scale artworks in overpasses, walkways and neighbouring bushland; artforms that are immediate, impactful and cost-effective — such as projection art and street art; and ephemeral or evolving environmental artworks that respond to the landscape.
- Establish a committee of stakeholders - including local artists, art workers and community groups – to oversee this program.
- Establish a part-time curatorial position to ensure the effective delivery of this program.
RESPONSE: The development of any public art initiative would be undertaken by contractors. The Urban Design Strategy does not provide direction on possible approaches such as a public art program, committee of stakeholders or curator.

Relevant UDS clauses:

- **Key direction 3**: Recognise past, contemporary & shared indigenous & historical cultural values. Page 17

7. **The Urban Design Strategy**

7.1 I have further considered the Urban Design Strategy in light of public submissions, and recommend the following changes to the Urban Design Strategy:

(a) The following text from requirement 4A on page 53 should be reformatted from italic to standard text, to identify it as a core requirement - "New built form must provide sensitive interfaces with the adjoining Yarra Valley Parklands. Built form should be integrated into the landscape to minimise visual impact of flood mitigation and other structures".

7.2 Subject to these changes, it is my view that the Urban Design Strategy is suitable for the Project.

8. **Environmental Performance Requirements**

8.1 It is my view that the environmental performance requirements relevant to the Urban Design Strategy and my area of expertise, being LP1, LP3, LP4, LV1, LV2 and SW11 are appropriate and would ensure that the environmental effects of the Project relevant to my area of expertise would be suitably managed to achieve acceptable outcomes.

8.2 As such, I do not recommend any changes to the environmental performance requirements for the Project.

9. **Declaration**

9.1 I have made all the inquiries that I believe are desirable and appropriate and no matters of significance which I regard as relevant have to my knowledge been withheld from the North East Link Inquiry and Advisory Committee.

Signed

Date: 15 July 2019
Annexure A - Matters Raised by PPV Guide to Expert Evidence

(a) The name and address of the expert

Kevin Begg
GHD, 180 Lonsdale Street, Melbourne VIC 3000

(b) The expert's qualifications, experience and area of expertise

Bachelor of Planning and Design, University of Melbourne, 1990
Bachelor of Architecture, University of Melbourne, 1993

Kevin has 25 years of experience in urban design and architecture including four years as Urban Design Lead and Subject Matter Expert for the Level Crossing Removal Authority and two years as Urban Design Lead and Subject Matter Expert for the North East Link Authority. He is a member of the Urban Design Advisory Panel for LXRA Caulfield to Dandenong, LXRA Western Program Alliance, LXRA North East Program Alliance, LXRA Southern Program Alliance, LXRA Mernda Rail Extension Project, North East Link and Westgate Gate Tunnel Project, as well as Technical Advisor to the State Government for the Public Housing Renewal Program.

Kevin is co-author of the North East Link Project Urban Design Strategy
Refer to CV in Annexure B for more information.

(c) Details of any other significant contributors to this statement (if any) and their expertise

No other significant contributors to this statement

(d) All instructions that define the scope of this statement (original and supplementary and whether in writing or verbal)

Written instruction that define the scope of this statement were received from Sallyanne Everett of Clayton Utz in a letter dated 5 June 2019.

(e) Details and qualifications of any person who carried out any tests or experiments upon which the expert relied in preparing this statement

There are no other people who carried out any tests or experiments upon which I relied in preparing this statement.

(f) Any questions falling outside the expert's expertise

There are no questions that I have been asked that fall outside of my expertise.

(g) Key assumptions made in preparing the Urban Design Strategy

There are no key assumptions that have been made in preparing the Urban Design Strategy.

(h) Any departures from the findings or opinions expressed in the Urban Design Strategy and, if so, why

There are no departures from the findings or opinions expressed in the Urban Design Strategy.

(i) Whether the Urban Design Strategy is incomplete or inaccurate in any respect

I am not aware that the UDS is incomplete or inaccurate at the time of preparing this expert witness statement.

(j) Details of any changed circumstances or assumptions since the Urban Design Strategy was prepared and whether these affect the opinions expressed in the Urban Design Strategy

The Urban Design Strategy is a set of project requirements so this question is not applicable.
Annexure B – CV
Kevin Begg  
Technical Director - Urban Design

**Qualified.** Melbourne University Bachelor of Architecture (1st class hons) 1993. Melbourne University Bachelor of Planning and Design 1990.  
**Connected.** Smart Seeds Innovation Program Organiser, Committee for Melbourne Future Focus Group participant, Victorian Government Projects - Urban Design Advisory Panel member

**Relevance to project.** With more than 25 years of experience in urban design and architecture throughout Australia, England, Asia and the Middle East, Kevin has led many multidisciplinary teams designing complex, large-scale urban renewal and transit oriented developments in diverse locations. With a firm belief in collaborative processes, he participates in the development of new town centres, integrated mixed use transport developments and public precinct design.

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**Level Crossing Removal Program**  
LXRA | Melbourne, VIC, Australia

Principal Urban Designer and Subject Matter Expert advising the State Government on the removal of rail level crossings and urban renewal opportunities in 50 activity centres across the city. Tasks undertaken in the program include representation on the Urban Design Advisory Panel, development of the network-wide Urban Design Framework, options investigation and assessment, identification of value capture opportunities, extensive community engagement, participation in the interactive proponent design workshops, tender evaluation and close collaboration with OVGA, PTV, MTM, Councils and other stakeholders.

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**Bendigo Integrated Transport Land Use Strategy**  
City of Greater Bendigo | Bendigo, VIC, Australia

Principal Urban Designer creating an urban planning framework for the development of Bendigo for the next fifty years when the local population will double from 100,000 to 200,000 people. Key aspects of the ITLUS include supporting ten minute neighbourhoods and maintaining the city’s natural growth boundary of regional parks. Issues addressed by the strategy include employment nodes, new residential models, cycling, walking and improved public transport. The project featured extensive engagement with stakeholders, government agencies and the community.

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**North East Link**  
NELA | Melbourne, VIC, Australia

Principal Urban Designer and Subject Matter Expert advising the State Government on the development of the North East Link freeway project. Tasks undertaken in the program include representation on the Urban Design Advisory Panel, development of the corridor-wide Urban Design Strategy, options investigation and assessment, extensive community engagement, and close collaboration with OVGA, VicRoads, Wurudjeri, Councils and other stakeholders.

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**City Place Urban Renewal**  
City of Moonee Valley | Moonee Ponds, VIC, Australia

Principal Urban Designer for a new civic precinct in Moonee Valley incorporating a bus-tram modal interchange. Moonee Valley City Council engaged GHD to study the feasibility of creating a new plaza and public transport interchange at the centre of Moonee Ponds. The project includes a new civic space for activities, on grade parking and a public transport interchange accommodating two trams and twelve buses. Kevin led a multi-discipline team from GHD that included urban design, traffic and transport, traffic modelling, planning, landscape design, behaviour change, civil engineering and development strategy.
Reservoir Junction Urban Renewal  
City of Darebin | Reservoir, VIC, Australia
Principal Urban Designer for the redevelopment of four hectares at the centre of Reservoir Junction. Aspects of the urban design framework include lowering the rail line below grade, simplifying and improving the surrounding road network and establishing a new town centre and retail district. The primary focus of the project is economic development for the Major Activities Centre. The resulting master plan is accompanied by a clear implementation strategy and action plan for coordinating efforts to secure funding. A strong focus of the project was transport interchange between train, tram and bus stations.

Essendon Transport Interchange  
City of Moonee Valley | Essendon, VIC, Australia
Principal urban designer investigating the feasibility and preferred design outcome for the grade separation of the Craigieburn rail line where it runs through the major transport interchange at Essendon Junction. The reconfiguration of rail below road will provide significant positive impacts on the Essendon activity centre and enhance development opportunities beyond the immediate site. It will also deliver a superior outcome in terms of integrated train, bus and tram interchange functionality. In this scenario, Mount Alexander Road will be raised to the natural ground line, providing a better local street structure, connectivity and active frontages to the new development envelopes.

Surf City Retail Precinct  
Surf Coast Shire | Torquay, VIC, Australia
Principal Urban Designer leading a multi-discipline team to rejuvenate the Surf City retail precinct in Torquay. This feasibility study for the Surf Coast Shire includes extensive community and stakeholder consultation, tourism analysis, brand development, development feasibility and advocacy strategy for funding. It addresses the broader strategic and economic planning of Torquay and the region, as well as the social, cultural and environmental concerns of the local community. Facilities on the site include as an iconic surf retail precinct, surfing museum, visitor information centre and local library.

Lagoons District Master Plan  
TDIC | Abu Dhabi, United Arab Emirates
Principal Urban Designer for the development of a new mixed-use suburb for 30,000 people on Saadiyat Island. Key issues include walkability and permeability of the gated communities, sustainability in a coastal desert environment, use of water across the district, integration of civil infrastructure and the development of the interface with neighbouring, environmentally sensitive mangrove areas.

Energy Park Master Plan  
City of Brimbank | Sunshine, Australia
Principal Urban Designer assisting Brimbank Council in assessing potential master plan options for a 54 hectare site in Sunshine. Development scenarios considered for the land fill site included a regional sporting facility, residential, logistics, a golf course and passive recreational space. Opportunities to provide the adjacent Albion Station with additional park’n’ride facilities were also explored.

Union Station Precinct Design  
RTA | Dubai, UAE
Design Director and Project Director for the competition winning design of a 19,000m2 transit-oriented mixed-use precinct adjacent and above the new Union Station in Dubai. The architectural design and corresponding business model includes retail, cultural facilities, heritage building and transport interchange – all under a climate moderating canopy.

Ningbo New Urban District  
City of Ningbo | Ningbo, PR China
Principal Urban Designer for the development of three satellite cities accommodating 1.2 million people around the historic urban core of Ningbo. Key issues include the rehabilitation and reuse of the existing canal network, identity and character of the cities and provision of staged civil, community and transport infrastructure.
Annexure C – IAC Further Information Request

Set out below are my comments and response to the issues raised in the IAC Additional Queries from North East Link Project IAC Technical Advice – Urban Design, SA1 dated 17 June 2019.

5.1.1 Reference documents and policies

5.1.1 a. Provide electronic links to all listed guidelines and other documents at National and State level, and an indication as to whether any of these documents have been subsequently updated or superseded.

RESPONSE: An electronic copy of listed guidelines and documents will be made available. A table with links to all documents that are online is below. Note that not all of the listed documents have been issued online.

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<td><a href="https://www.vicpd.ca/CPTED">https://www.vicpd.ca/CPTED</a></td>
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<td>M80 Ring Road Upgrade Urban Design Strategy, VicRoads, 2010</td>
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**REGIONAL**


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<td>Greensborough Activity Centre Transport Masterplan, 2017</td>
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<td>Picture Watsonia: A Vision for Watsonia Village, 2014</td>
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<td>Warringal Parklands and Banyule Flats: Cultural Heritage Assessment, 2014</td>
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<td>Boroondara City Council</td>
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**Nillumbik Shire Council**

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B.1 Indigenous and historic cultural values

B.1.a What technical support will be available to the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation (WWCHAC)?

RESPONSE: NELP has entered into an agreement with WWCHAC that includes technical support for technical advisors and elder involvement in the project to date. Activities that have been addressed under this agreement include the EES review through the Technical Reference Group, development of the UDS, Cultural Values Mapping and development of a Cultural Heritage Management Plan. NELP is working with WWCHAC on establishing WWCHAC’s role through the procurement process.

B.1.b What will be the involvement of the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation with the Urban Design Advisory Panel?

RESPONSE: It is expected that WWCHAC would participate in UDAP workshops, where issues relating to Wurundjeri cultural values and representation are addressed. NELP is working with WWCHAC on establishing WWCHAC’s role through the procurement process.

B.1.c Have any specific opportunities or locations for expressing indigenous culture been identified?

RESPONSE: No specific opportunities or locations for expressing indigenous culture have been identified. Traditional Owner values and culture should be considered across the entire extent of the project, in accordance with Key Direction 3 on pages 17 and 18 of the Urban Design Strategy. This would include opportunities and initiatives beyond decorative art.

B.1.d What are the details of the curatorial process described in Key Direction 3?

RESPONSE: WWCHAC and NELP are developing a process where WWCHAC is involved throughout the project to guide the development of design initiatives and ensure they best represent and celebrate the culture and values of the Wurundjeri Woi-wurrung people. It is expected that this process would involve UDAP workshops.

B.1.e Are there national or international examples that could assist in identifying opportunities for expressing indigenous and local community sense of place?

RESPONSE: Contractors would be provided with possible themes and precedent examples identified by WWCHAC. Design initiatives and opportunities would be identified and developed by contractors, with positive guidance provided by WWCHAC and UDAP.

B.2 Detailed opportunities by location

B.2.a Are the locations visualised within Appendix H considered sufficiently extensive by the Urban Design Advisory Panel?

RESPONSE: The NELP LVIA team has used a recognised methodology to identify sensitive receptors and appropriate locations for visualisations. UDAP is not part of the review process of the LVIA methodology.
B.2.c Should the Urban Design Strategy provide guidance to bidders about the extent of visual communication that will be required in order to communicate project proposals to the stakeholders and the broader community?

RESPONSE: The Urban Design Strategy describes project requirements for design content and not design deliverables. Technical documents for the Request for Proposal process will set out the format of key documents and deliverables. These design deliverables would be developed to ensure that the community receives sufficient information about the final design. A public display of the Urban Design Landscape Plans is a requirement of the Secondary Consent process.

B.3 Urban design vision

B.3.a Would it assist readers if the physical vision described in Section 3.2 was summarised within a paragraph or two within the summary at Page 4?

RESPONSE: The physical vision of the project would be generated by the contractors and not prescribed in the Urban Design Strategy. Section 1.4 on page 4 provides a high level vision in “A legacy for Melbourne” and defines the role of urban design. Section 3.2 on pages 14 to 26 outlines key design directions and does not describe an overall vision.

B.4 Role of visualisation

B.4.a Has the Urban Design Advisory Panel considered how design proposals can effectively be communicated especially to non-technical stakeholders? Should the Urban Design Strategy address how proposals should be communicated, such as the use of 3D modelling, photomontages, animations, real-time modelling, and guidance as to where different techniques may be appropriate?

RESPONSE: The communication of design proposals does not fall within the responsibility of UDAP. The Urban Design Strategy describes project requirements for design content and not design deliverables. Technical documents for the Request for Proposal process will set out requirements for the format of key documents and deliverables including the urban design report, drawings and digital engineering (federated 3d model). These design deliverables would be developed to ensure that the community receives sufficient information about the final design. In addition, contractors are free to provide additional information to better communicate their concept.

B.5 Opportunities to apply detailed requirements and benchmarks

B.5.a Can further analysis of the detailed requirements and benchmarks be provided to assist understanding the aspects that are most relevant and where they might apply?

RESPONSE: Section 7 of the Urban Design Strategy describes key elements that are likely to be used in the project, such as road bridges, land bridges, cuttings, tunnels, open space, noise walls, lighting, cycle paths and pedestrian bridges. These particular urban design requirements are communicated using both text and benchmark images. This section of the Urban Design Strategy will be used to guide the development of elements as they are employed across the project.

B.6 Public art

B.6.a Could the examples that show integrated art be identified and discussed (for example, Figure 83 page 105, Urban Design Strategy)?
RESPONSE: Integrated art would be proposed by contractors.

B.6.b Could examples of individual artwork as placemaking at various scales be provided?

RESPONSE: Scale and extent of integrated art would be proposed by contractors.

B.6.c Could a commentary on public art be included in the Urban Design Strategy to address items such as appropriate collaborative processes, selection of artists, artists rights, etc?

RESPONSE: Nature and procurement of integrated art would be proposed by contractors.

B.7 Portal designs (assume this includes ventilation building and ventilation structure)

B.7.b Could the overall footprints of the proposed portals in the reference design be included in the Urban Design Strategy?

RESPONSE: The reference design has not been included in the Urban Design Strategy, as the reference design is a functional design that illustrates certain technical requirements. Any inclusion of the reference design in the Urban Design Strategy, including the footprints of the portals, would be too prescriptive, inferring a pre-determined outcome and restricting innovation and flexibility of design options.