



Amendment C232melt

Toolern PSP refresh -Engineering Expert Evidence

Prepared for: Lendlease

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Executive Summary

- 1. On behalf of Lendlease I have been engaged by Minter Ellison Lawyers to assist Planning Panels Victoria with respect to a range of proposed amendments to the Toolern PSP and corresponding update to Toolern DCP, including:
 - a) the way in which the drainage infrastructure within Property 29 is depicted within the amendment documents having regard to the required size, shape and location of this infrastructure and the implications of its depiction for the development of Property 29;
 - b) the design of infrastructure item IT23 (intersection) and whether it should have a fourth (southern) leg having regard to the intended development of land to the south of that intersection and the way similar infrastructure has been designed and is intended to be funded in the DCP; and
 - c) infrastructure item BD04 (pedestrian/cycle bridge), having regard to its feasibility and whether it has been suitably costed.

Drainage Scheme works within Property 29

- 2. Within Property 29, the Toolern PSP amendment documents are consistent with the current Melbourne Water Melton South drainage scheme. It should be noted however that SMEC/Lendlease have recently negotiated changes to both the size and location of the retarding basin/ wetland (shown as asset 11 in the PSP), as well as the alignment of the waterway, which is now proposed to follow the alignment of Ferris Road.
- 3. Given that Council and Melbourne Water have recently agreed to these changes, and the Toolern PSP is currently being revised, it would be prudent to revise the Toolern PSP to reflect the negotiated outcomes.

Intersection IT23

4. IT23 is located at the intersection of Atherstone Boulevard (collector road) and the East-West secondary arterial road, and it is logical to include a southern leg of this intersection to provide access to residential precinct south of the East-West arterial. Other similar intersections within the Toolern DCP (notably IT21 and IT22) are designed as 4 legged intersections, and to be consistent with the treatment of those intersections, it would appear to be reasonable to include the southern leg of IT23 in the DCP.

Ferris Road South of IT05

5. Lendlease has proposed that Ferris Road South of IT05 be funded by the DCP, and the proposal has been supported by Council's expert traffic engineer Marco Lucioni. This proposal needs careful consideration, due to potential impacts on adjoining developments that have planning permits underway, particularly if this change results in a wider road reserve for Ferris Road south of IT05.

Pedestrian/Cycle bridge BD04

6. I have reviewed the existing terrain in the proposed location of BD04, and have found it to be unsuitable to construct a 30m long pedestrian/cycle bridge at this location. Toolern Creek in this location is very incised, and hence it is likely that it would not be economically feasible to construct such a bridge in this area.

1. Statement of Witness

1.1 Name and address of the expert

Stephen Watters, Civil Engineer

SMEC Australia, Tower 4, 727 Collins Street, Melbourne, 3008

1.2 Acknowledgment

I acknowledge that I have read the Expert Witness Code of Conduct as it applies to persons retained as an Expert Witness

- to assist the Court impartially on matters relevant to my area of expertise,
- to provide an expert's report for use as evidence in the proceedings, or
- to give opinion evidence in the proceedings,

and agree to be bound by the Code of Conduct in relation to the report hereafter provided.

1.3 Qualifications and Experience

I hold a Bachelor of Engineering (Civil), 1990, University of Melbourne and have over 34 years experience as a civil engineer. My curriculum Vitae is included in Appendix D.

1.4 Area of Expertise to Make the Report

The majority of my civil engineering career has been associated with the delivery of land development projects including associated infrastructure works throughout metropolitan Melbourne and regional Victoria. I have particular experience in relation to the design and delivery of projects, which includes leading teams of design engineers and construction engineers, and this includes review of Precinct Structure Plans (PSPs) and Infrastructure Contribution Plans (ICPs).

I have prepared Expert Witness reports related to panel hearings for a number of Precinct Structure Plans, which are summarised in Table 1 below, which also details the nature of my involvement in each instance:

Table 1: Previous projects involving Expert Evidence involvement

PSP	My role	Panel representation
Sunbury South and Lancefield Road ICP	Prepared an Expert Evidence report related to the ICP	Participated in the ICP conclave in relation to the estimated cost of projects
Clyde North PSP	Prepared an Expert Evidence report related to Drainage	Appeared before the PSP panel in relation to drainage issues
English Street PSP	Reviewed the PSP and provided feedback to the VPA	Participated in the conclave related to the Bridge over Merri Creek
Officer South Employment PSP	Prepared an Expert Evidence reports related to Drainage and the ICP.	Participated in the Drainage conclave and was involved in round table discussions at the panel in relation to ICP and Drainage issues

PSP	My role	Panel representation
Jetty Road Stage 2	Expert Evidence at appearance at panel related to drainage and costing matters	Participated in the Drainage conclave and appeared at the planning panel in relation to ICP and Drainage issues

I have experience in relation to the practical implementation of projects identified in DCPs and ICPs, which includes detailed negotiations with Councils and Road authorities, including the following projects shown in Table 2 below:

Table 2: Examples of the practical delivery of DCP and ICP projects

Project	PSP	My role
Deanside	Kororoit	Project Manager for the Deanside project. Negotiated with Council and oversaw the delivery of a number of ICP projects.
Kinbrook	English Street	Project Manager for the Kinbrook Estate. Negotiated with Council and oversaw the delivery of a number of ICP projects.
The Boulevard	Clyde North	Oversaw the design and delivery of the first phase of the Grices Road project.
Kilora	Clyde North	Project Manager for the Kilora project. Negotiated with Council and oversaw the delivery of a number of ICP projects.
Atherstone	Toolern	Oversaw the design and delivery of a number of DCP projects. Negotiated with Council in relation to WIK and reimbursements for works completed.
Kingsfield	Lancefield Road	Oversaw the design and delivery of the Lancefield Road and Rolling Meadows Drive signalised intersection.

1.5 Disclosure of Interests

SMEC Australia is currently engaged to provide Engineering and other consulting services in relation to the development of Atherstone located in Melton South. I am not aware of any conflicts of interest that need to be declared.

1.6 Other persons assisting with the preparation of this Statement

Nick Elliott - Principal Project Manager, SMEC

Derrick Hitchins - Chief Technical Principal, Transport Planning, SMEC

2. Introduction

2.1 Overview

- 6. Amendment C232melt to the Melton Planning Scheme seeks to amend the Toolern PSP and associated Toolern DCP.
- 7. Lendlease is responsible for the development of Atherstone, a master planned community located in Strathtulloh, which forms a significant proportion of the Toolern PSP. Atherstone incorporates Properties 15 & 16, 18 to 20 and 22 to 29 in the Toolern PSP, as shown in highlighted in orange in Figure 1 below.



Figure 1: Property numbers related to the Atherstone Estate

8. Figure 2 below shows the overall Atherstone masterplan. A significant proportion of the development has been completed, with undeveloped areas still to be developed in the north east and southern areas of Atherstone. The main focus of this report relates to the undeveloped Billeroy and Merevale precincts of Atherstone, which are in the southern and south east area of the development.

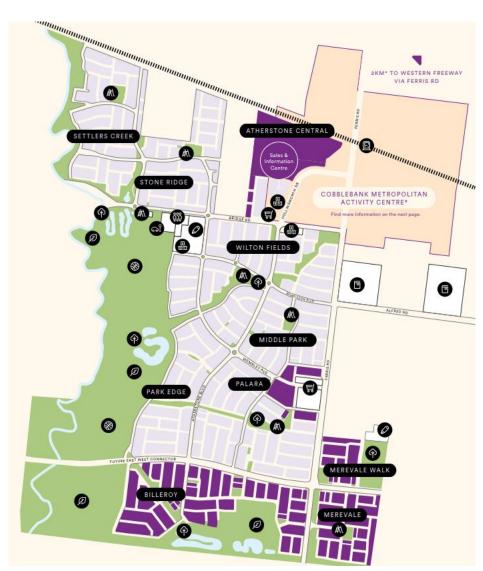


Figure 2: Atherstone Masterplan

2.2 Instructions

- 9. On behalf of Lendlease I have been engaged by Minter Ellison Lawyers to assist Planning Panels Victoria ("the Panel") with respect to a range of proposed amendments to the Toolern PSP and corresponding update to Toolern DCP, as per instructions dated 13th August 2004 (refer to Instructions included as Appendix A).
- 10. The instructions include responding to the following matters:
 - a) Review the Amendment documents relevant to your expertise.
 - b) Consider the appropriateness of:
 - the way in which the drainage infrastructure within Property 29 is depicted within the amendment documents having regard to what you anticipate to be the required size, shape and location of this infrastructure and the implications of its depiction for the development of Property 29;
 - ii) the design of infrastructure item IT23 (intersection) and whether it should have a fourth (southern) leg having regard to the intended development of land to the south of that intersection and the way similar infrastructure has been designed and is intended to be funded in the DCP; and
 - iii) infrastructure item BD04 (pedestrian bridge), having regard to its feasibility and whether it has been suitably costed.
 - Prepare an expert evidence statement in the format required by the Panel's directions and Practice Note1.

2.3 Responding to additional matters

11. Post the receipt of the above mentioned instructions, I have been provided with copies of the Witness Statements of Marco Lucioni, Chris De Silva and Matt Ainsaar (all acting for Council), and where these have raised issues pertinent to the Lendlease submission, I have made comments on these in this report.

2.4 Reference Documents

- Toolern Precinct Structure Plan (October 2010), Growth Areas Authority
- Toolern Park Precinct Structure Plan (August 2014), Metropolitan Planning Authority
- Toolern Park Precinct Development Contributions Plan (August 2014)
- Toolern Precinct Structure Plan (July 2011 with December 2015 amendments)
- Toolern Precinct Development Contributions Plan (July 2011 with December 2015 amendments)
- Toolern Precinct Structure Plan (July 2011 with February 2019 amendments).
- Toolern Precinct Structure Plan (July 2011 with June 2022 amendments)
- Toolern Precinct Development Contributions Plan (July 2011 with June 2022 amendments)
- Melbourne Water Melton South Drainage Scheme
- Cardno background report "Recommended Changes Toolern PSP and DCP Documents" (March 2022)

3. Melton South Drainage Scheme

3.1 Background

12. The Melbourne Water (MW) Melton South Development Service Scheme ("the drainage scheme") covers the southern portion of the Atherstone Estate, as shown in Figure 3 below.

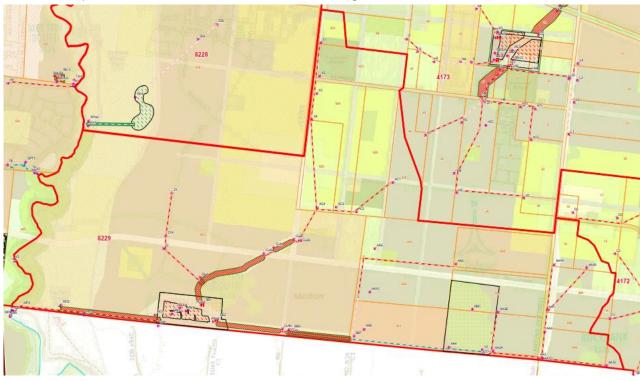


Figure 3: Melton South Developer Services Scheme

13. The key feature of the drainage scheme is the Retarding basin/ wetland (RB3/WL1) located on the southern boundary of Toolern PSP, shown on the zoomed in extract of the drainage scheme shown in Figure 4 below.

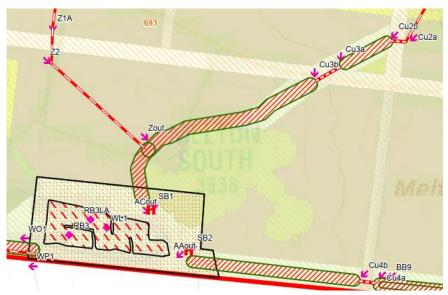


Figure 4: RB3/WL1 shown in the MW Melton South drainage scheme

14. RB3/WL1 is referred to as Stormwater Asset ID 11 in the Toolern PSP. There is also a drainage reserve shown in the PSP and the drainage scheme (Waterway Asset IDs 12 & 13), which crosses both Ferris Road and the East-West arterial Road, and discharges to RB3/WL1, as shown in Figure 5 below.



Figure 5: Extract from the IWMP (Plan 14) of the Toolern PSP (Amended June 2022)

15. An extract from Table 9 of the Toolern PSP (Amended June 2022) showing the proposed drainage assets within Property 29 is shown in Figure 6 below.

STORMWATER ASSET ID	ТҮРЕ	WATERWAY CORRIDOR WIDTH (M)	REQUIRED LAND AREA (HA)
11	Retarding basin, wetland	N/A	8.00
12	Waterway	60	3.00
13	Waterway	60	0.90
14	Sediment pond	N/A	0.80
15	Waterway	60	2.28
16	Waterway	60	2.33

Figure 6: Drainage assets with Property 29 shown in Table 9 of the Toolern PSP (Amended June 2022)

3.2 Proposed changes to drainage scheme

16. SMEC and Lendlease have been in discussions with both the City of Melton and Melbourne Water in relation to how the drainage scheme can be implemented, with changes agreed as follows.

3.2.1 Two water bodies at RB3/WL1

17. Due to the location of the Melton Outfall sewer (shown in the Figure 7 below), it is not possible to construct RB3/WL1 at the size and location shown in the Melbourne Water (MW) drainage scheme (and shown in the Toolern PSP). This is due to the fact that the Melton Outfall sewer crosses the drainage reserve, and this significant piece of infrastructure (1350mm diameter sewer) would be too expensive to relocate. Greater Western Water (GWW) has also indicated that they do not support relocation the Melton Outfall sewer.

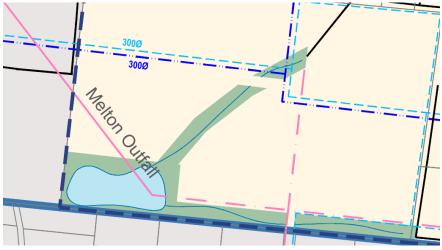


Figure 7: Location of the Melton Outfall sewer, from Plan 14 of the Toolern PSP (Amended 2014)

18. Hence SMEC/Lendlease have proposed to construct two separate water bodies (on either side of the outfall sewer), as shown in Figure 8 below. This will utilise some land between the RB3/WL1 and the conservation area, which is currently shown as being developable land, and will maximise the amount of water quality treatment and retarding volume for the benefit of the overall drainage catchment.



Figure 8: Proposed twin water bodies, and realigned waterway along Ferris Road

19. MW has indicated in meetings with SMEC and Lendlease that they will accept this alternative solution, with two separate water bodies to be reimbursed by the Melton South drainage scheme.

3.2.2 Alternative alignment of waterway along Ferris Road

- 20. An alternative alignment for the Waterway has been proposed by SMEC/Lendlease, such that the waterway would follow Ferris Road, and join the east-west section of the drainage channel at the southern end of Ferris Road (refer to Figure 7 above). This alignment is preferable because it avoids the conservation area located near RB3/WL1, and also provides for a better outcome for the residential development in the southern area of Atherstone.
- 21. Council has provided support for the change to the alignment of the waterway, and a copy of an email from Council confirming acceptance of the alternative alignment is provided in Appendix B. MW have also indicated acceptance of the alternative alignment in meetings with SMEC/Lendlease.
- 22. Given that the Council and MW support the above changes to the drainage scheme, and that the PSP is currently being updated, I consider that is would be appropriate for the revised PSP plan be updated to reflect the agreed outcomes.

3.2.3 Waterway widths

- 23. The detailed design of the drainage along Ferris Road has progressed sufficiently to confirm the required width of the drainage reserve along Ferris Road.
- 24. A comparison of the waterway widths shown in the PSP, compared to the width required based on the detailed design of the assets is shown in Table 3 below.

Table 3: Comparison of Waterway widths and areas

ASSET ID	ТҮРЕ	CURRENT WATERWAY CORRIDOR WIDTH IN DCP (m)	SMEC ACTUAL WATERWAY CORRIDOR WIDTH (m)	REQUIRED LAND IN PSP AREA (ha)	SMEC ACTUAL REQUIRED LAND (ha)
11	Retarding basin/ wetland	N/A	N/A	8.00	9.80
12	Waterway	60	northern section varies, 27 to 32 southern section varies, 52 to 60	3.00	1.69
13	Waterway	60	Not required	0.90	0.00
14	Sediment Pond	N/A	RB rather than sed pond	0.80	0.44
15	Waterway	60	44	2.28	0.35
16	Waterway	60	varies, 28 to 40	2.33	1.33
TOTAL				17.31	13.61

25. Given the above, it is recommended that the PSP and DCP be modified to reflect the agreed outcomes related to the location, size and alignment of the waterway assets in this area. Alternatively, if the Toolern PSP is not amended, then it is recommended that text be added to the PSP to the effect that the proponent has flexibility to propose alternative configuration of drainage assets, to the satisfaction of Council and Melbourne Water.

4. Intersection IT-23

- 27. My instructions are to consider whether the southern leg of IT-23 should be funded by the Toolern DCP.
- 28. In the section below, all references to IT-01 relate to the DCP project IT-01 in the **Toolern Park** DCP (not the Toolern DCP).

4.1 Relevant previous reports

29. In considering the above question, it is important to understand the context of the intersection with respect to both the Toolern and Toolern Park PSPs. Extracts below outline proposed intersections which are currently allowed for in the Toolern and Toolern Park DCPs for intersections IT01, IT23 and IT05.

Table 4 - Extract from Toolern Park DCP (2014), Table 8, Project Costs recovered by the DCP

DCP PROJECT NUMBER		DESCRIPTION	TOTAL PROJECT COST \$2014	TOTAL COST TO BE RECOVERED BY THE DCP \$2014
IT01	Development	East West Arterial and Toolern Park Road: Intersection (interim layout) Construction of a signalised 4-way intersection and slip lanes, requiring additional land purchase of 0.46 hectares. (Remaining 1.03ha is funded through the Toolern PSP).	\$ 3,692,948	\$ 3,692,948

Table 5 - Extract from Toolern DCP (2015), Table 3: Strategic Justification

PROJECT INFRASTRUCTURE CATEGORY		DESCRIPTION	ESTIMATED PROJECT COST			
			LAND	CONSTRUCTION	TOTAL	
IT05	Development	East West Arterial and Ferris Road: Intersection. "Interim layout" Construction of signalised 4-way intersection and slip lanes. Purchase of 0.304 hectares of additional required land.	\$91,110	\$1,008,000	\$1,099,110	
IT23	Development	East West Arterial and Western North-South Connector Road: Intersection. "Interim layout" Construction of signalised T-intersection and slip lanes.	\$0	\$798,000	\$798,000	

4.2 Toolern Park PSP (2014)

- 30. The extension of the Urban Growth Boundary (UGB) in 2010 created a single urban area linking Melton with metropolitan Melbourne at Caroline Springs. The Urban Growth Boundary was further amended in 2012 to include the Toolern Park Precinct Structure Plan area and as such the Toolern Park PSP continues to provide the blueprint for all future development. As there are no current revisions being proposed to the Toolern Park PSP, the Council is correct in their response when they say that access to the Atherstone Billeroy precinct can be facilitated through IT01 in the Toolern Park PSP and IT05 in the Toolern PSP.
- 31. Figure 9 below provides an extract from the Toolern Park PSP in support of the above and is further reinforced by the indicatively marked future cross connection into the Billeroy precinct to the east.



Figure 9 – Extract from Toolern Park DCP - Plan 4 Transport Projects

4.3 Toolern PSP (2015)

- 32. The Toolern PSP identified a number of additional signalised intersections along the East-West Arterial Road, the locations of which are shown in more detail in Figure 10 below.
- 33. Of particular note is the legend which indicates that IT23 is intended to be a Signalised T and IT05 a signalised 4-way intersection. The Council is therefore once again correct in their response when they say that access to the Billeroy precinct can be facilitated through IT01 in the Toolern Park PSP and IT05 in the Toolern PSP.



Figure 10 - Extract from Toolern DCP (2015), Plan 4 Roads and Intersections

4.4 Toolern PSP (2022)

- 34. In 2022, further amendments to the PSP were introduced and exhibited between 11 April and 16 May 2024. The amendments propose to implement the recommendations contained within the Toolern Development Contributions Plan Review and Precinct Structure Plan Refresh (February 2024) by updating the Toolern Precinct Structure Plan, (July 2011 with February 2019 amendments).
- 35. Whilst quite possibly of little consequence, it is interesting to note that the Road Network Plan was also updated (possibly incorrectly) to reflect the inclusion of a 4-way signalised intersection at IT23 (as shown in

Figure 11 below), if one assumes the same nomenclature as used in the 2015 revision was intended to be applied. The corresponding description in the Toolern DCP has however remained unchanged (and still refers to IT23 as a signalised T-intersection).





Figure 11 - Extract from Toolern DCP (2022), Plan 15 Road Network

4.5 Billeroy Precinct Planning (2023)

- 36. In 2023, Lendlease entered into discussions with the Council regarding a planning permit application for the Billeroy precinct located just south of the East-West Arterial within Atherstone.
- 37. The development north of the East West Arterial had by this time caused Intersection IT23 (Atherstone Boulevard) to be moved westwards and closer to IT01 which in turn had allowed for an additional collector road opposite Palara Drive to be inserted into the East-West Arterial Road corridor. Moreover, IT01 (Basildon Crescent) was no longer a 4-way intersection (as per the requirements of the Toolern PSP (2015)), but rather an intersection T. Intersection IT23 was proposed to be upgraded to a 4-way intersection in lieu of the change to IT01 and supplemented by a newly proposed left in left out opposite Palara Drive.
- 38. None of these proposed changes are precisely in accordance with either the approved Toolern Park PSP or the Toolern PSP and have yet to be approved by Council.
- 39. Figure 12 below shows the proposal to include the southern leg of IT23 in the Toolern DCP, and Figure 13 below provides a visual of what has been described above.



Figure 12: Proposed Southern extension of IT23 to be included in DCP



Figure 13: Billeroy precinct draft Concept Plan

4.6 Atherstone East-West Arterial Road

40. It is apparent that at a strategic level, the Lendlease proposal for the East-West Arterial has significant merit, albeit not precisely in accordance with both the Toolern Park PSP and the Toolern PSP.

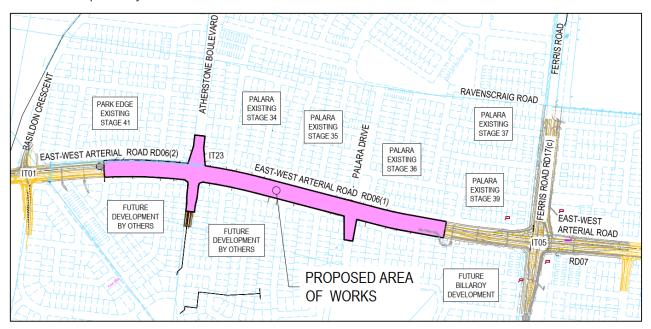


Figure 14 - Extract from Atherstone E-W Arterial Road Package 330, Functional Layout Plans

41. To better understand my reasons for saying so, the following sections will outline the process I have used to reach my conclusion.

4.6.1 IT01 (Toolern Park PSP) Basildon Crescent

- 42. Considered in isolation, IT01 is the primary access/egress point for the Toolern Park PSP (refer to Figure 15 below). As such, the future East-West Arterial will serve as the primary access road to the surrounding precincts and road network.
- 43. Basildon Crescent, extending towards the north from IT01, borders the Toolern Creek Regional Park and is intended to provide local access to the regional open space, sports facilities and community meeting space. It is proposed as a 2-lane Connector Street with the potential for parking on either side of the roadway. A 3m wide cycleway and a 2m wide pedestrian path is proposed along the regional park interface.
- 44. The Greater Western Water sewer main is an important asset servicing Melton and runs diagonally through the Precinct and indeed any future design proposed for the intersection.

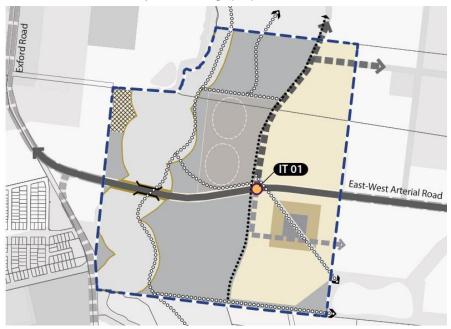


Figure 15: Extract from Toolern Park DCP, Plan 4

4.6.2 IT23 Atherstone Boulevard

- 45. My investigations have revealed that discussions most likely commenced between Lendlease and Council as far back as 2012 regarding the future alignment of Atherstone Boulevard as a 2-lane Connector Road and by extension the location of IT23, including a southern leg to service both the Toolern Park PSP and the Billeroy precinct. This is evidenced by the modified alignment which has already been constructed with the approval of the Council.
- 46. Figure 16 below clearly shows:
 - a) The alignment of Atherstone Boulevard swinging west towards the Toolern PSP boundary and in doing so creating a north-south "spine" through the middle of Atherstone.
 - b) The inclusion of Palara Drive, not previously noted in any revision of the Toolern PSP, and
 - c) The priority assigned to Basildon Crescent greatly diminished with no apparent need for 4-way intersection to be located at IT01.
- 47. However, what is clear is that the overarching sentiment at the time was leaning towards treating the Toolern Park PSP and the Toolern PSP as one, for the purposes of traffic modelling and the design of the East-West Arterial Road.



Figure 16- Proposed Master Plan - Atherstone Precinct (Source: Cardno Grogan Richards Traffic and Transport Assessment (May 2012))

- 48. As further consideration towards the inclusion of a southern leg on Intersection 23, I have reviewed the implications of adopting the design as proposed by Lendlease for Planning Application purposes and consider that for the following reasons that it would be appropriate for the Toolern PSP to be amended as such:
 - a) According to what has been noted in the Toolern Park PSP, there is a relatively small population proposed within the Toolern Park Precinct. A local town centre, primary school and dedicated community centre are not warranted within the Precinct. Constructing a major intersection (IT01) with a southern leg to service this minor precinct may therefore not be entirely warranted.
 - b) IT01 is located at the western boundary of the Atherstone Estate. This will result in a predominantly east-west movement of traffic through the precinct, with the associated increase in internal traffic volumes traversing through the local street network to access/egress the precinct. This situation would be exacerbated with the addition of any future traffic being generated within the Billeroy precinct, should the future cross connection be employed.
 - c) Conversely, IT23 is more 'centrally located' at the boundary between the Toolern Park PSP and the Toolern PSP. Traffic will therefore be distributed more evenly through the precincts and the alignment of IT23 with Atherstone Boulevard will encourage more north-south traffic to use the Atherstone spine, as opposed to Ferris Road.
 - d) It is possible that through negotiation between Council and Lendlease, some of the funds that have been allocated toward the construction of IT01 could be redirected to constructing a southern leg for IT23 of a similar size, thereby benefitting both the Toolern Park precinct and the Billeroy precinct at no additional expense to the public purse.

e) A review of the East-West Arterial Road as proposed in the Toolern DCP (2022) would suggest that a precedent has been set by the proposed design of IT22 and IT21 located further to the east of the precinct. In both cases, as illustrated in Figure 17 below, the funding of a southern leg has been included in the DCP. Similar to IT23, there is no indication that the connector roads on the southern legs of IT21 and IT22 are intended to extend beyond the southern PSP boundary, thereby negating the argument that the situation is dissimilar to the situation for IT23.



Figure 17 - Extract from Toolern DCP (2022), Plan 15 Road Network

5. Extension of Ferris Road south of IT05

5.1 Overview of issue

- 49. The Lendlease submission to the panel requested that RD17 be extended south of IT05 to the boundary of the PSP. The road is currently identified as developer works in the Toolern DCP.
- 50. Council's traffic expert Marco Lucioni agreed that RD17 should be extended to the southern boundary of the PSP.
- 51. If RD17 is continued to the south of IT05 as has been suggested, then consideration will need to be made in relation to any impact that this change will have on planning permits that are currently in progress on both sides of Ferris Road.
- 52. IT05 is currently under construction, with construction scheduled to be completed before the end of 2024, and the road reserve for IT05 has already been created. At the southern end of IT05, the road reserve width has been created based on Ferris Road being a connector road (as shown in the current PSP), with a road reserve width of 25m, as shown on Figure 18 below.

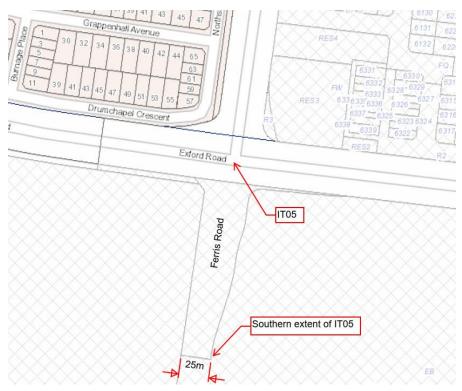


Figure 18: Current Ferris Road reserve width at southern end of IT05

53. If Ferris Road south of IT05 forms part of RD17, the PSP should also clarify whether this section of road can remain as a connector (25m road width), or would need to be reclassified as a Secondary Arterial road (34m road width). Increasing the road reserve width to 34m metres may impact the adjoining developments on both sides of Ferris Road. Reclassifying this section of Ferris Road as Secondary Arterial Road may also impact the manner in which the adjoining developments are permitted to gain access from Ferris Road.

5.2 Status of current planning permits

54. Lendlease has applied for a planning permit for the Merevale precinct, with the Merevale Permit plan shown in Figure 19 below.



Figure 19: Merevale Permit plan

55. Lendlease intends to lodge a planning application for the Billeroy precinct in the coming weeks. A draft concept plan of the Billeroy precinct is shown in Figure 20 below.



56. Any change to the road reserve width of Ferris Road would likely have an impact on the above two permit plans.

6. Pedestrian Bridge BD04

6.1 BD04 Background

57. The Toolern PSP indicates that a Pedestrian Bridge BD04 crossing Toolern Creek is to be located approximately in line with the southern border of the PSP, as shown in Figure 21 below.



The DCP provides the following information related to BD04:

BD04 Shared Use Pedestrian Bridge 1: Toolern Creek.
Construction of a shared use pedestrian bridge over the Toolern Creek.

The construction cost allowance for BD04 is \$1,389,467.

Figure 21: Extract from Plan 5 of the Toolern DCP (Amended December 2015)

58. The March 2022 Cardno (now Stantec) background report "Recommended Changes Toolern PSP and DCP Documents" provided a typical section of BD04, indicating that the bridge would be 30m in length with a 4m deck width, as shown in Fig. 22 below (and included as Appendix C).

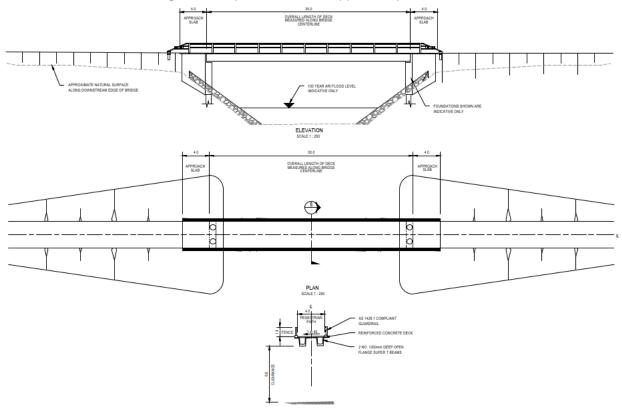


Figure 22: Bridge Type BD04 and BD05 from Cardno DCP background report

59. The above Cardno drawing is a typical "benchmark" design, and it appears that it has not considered the actual nature of the site in question, but rather adopted a typical design and costing, which I don't believe is appropriate in this instance for the reasons provided below.

6.2 Implementation issues

60. There are practical implementation reasons why BD04 should not be provided in the location shown in the PSP/DCP, primarily due to the terrain of Toolern Creek in this location not being suitable. The western side of the creek bank is substantially higher than the east bank, as can be seen from the photo below (refer Figure 23) and cross section shown below (refer Figure 24).



Figure 23: Photo of Toolern Creek, standing on the east bank, looking towards the west bank

- 61. If a bridge of 30m length was constructed (as proposed by the Cardno drawing), then there would still be a significant height difference from the western end of the bridge to the top of the bank on the western side of the creek. Refer to the long section below, where a 30m bridge has been plotted on the existing terrain, and this shows the approximate 15m vertical distance to the top of the eastern bank.
- 62. So whilst the intention of providing the bridge in this location is to allow pedestrians/cyclists to cross Toolern Creek and access the future Regional Park, in practice it won't be possible to access the bridge due to the steep terrain and height difference.
- 63. Toolern creek in this area is very incised, and hence moving the bridge further north or further south will not necessarily improve this situation.

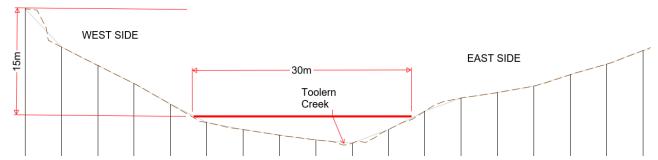


Figure 24: Cross Section of Toolern Creek

- 64. If the intention was to construct the bridge at a higher level, this would introduce significant constructability issues on the west bank side due to the steep terrain, and a longer bridge would also likely be necessary, which calls into question whether the \$1.389M allowance in the DCP for the bridge is potentially underfunded.
- 65. The quantum of the underfunding is difficult to assess at this time, as it is not clear how the bridge could be practically constructed in this location.
- 66. If there is a funding shortfall associated with the BD04, this may have a financial impact on Council as the responsible authority for delivering the DCP.

7. Recommendations

67. My recommendations in relation to the above issues are as follows:

Drainage Scheme works within Property 29

- 68. That the Toolern PSP be amended to show the negotiated changes to both the size, alignment and location of the retarding basin/ wetland (shown as asset 11 in the PSP), as well as the alignment and width of the waterway, which is now proposed to follow the alignment of Ferris Road.
- 69. Alternatively, if the Toolern PSP is not amended, then text be added to the PSP to the effect that the proponent has flexibility to propose alternative configuration of drainage assets, to the satisfaction of Council and Melbourne Water.

Intersection IT23

70. That the southern leg of IT23 be included in the DCP, to be consistent with the treatment of the other similar intersections (IT21 and IT22).

Extension of Ferris Road south of IT05

71. Whilst extending Ferris Road south of IT05 (extending RD17 to the southern boundary of the PSP) may have merit, further information is required in relation to impacts that this extension may have on surrounding development. In particular, the Ferris Road reserve south of IT05 has been created at a width of 25m (consistent with the current status of a connector road), and any additional road widening may impact on the adjoining development permits.

Pedestrian/Cycle bridge BD04

72. The terrain along this section of Toolern Creek does not appear to be suitable for a pedestrian/cycle bridge, and my recommendation would be to delete this DCP item. If BD04 is to remain in the DCP in its current position, then I recommend that a more detailed investigation be undertaken to determine a realistic cost of providing this bridge.

Appendix A
Instructions from Minter Ellison

MinterEllison.

13 August 2024

BY EMAIL

Stephen Watters SMEC Australia Tower 4/727 Collins St Docklands VIC 3008 Stephen.Watters@smec.com

Dear Stephen

Melton Planning Scheme Amendment C232melt: Toolern Development Contributions Plan Review and Precinct Structure Plan Refresh

1. Background

- 1.1 We act for Lendlease Communities (Atherstone) Pty Limited (**Lendlease**) in relation to this matter.
- 1.2 Melton Planning Scheme Amendment C232melt (**Amendment**) proposes to update the Toolern Development Contributions Plan (**DCP**) and the Toolern Precinct Structure Plan (**PSP**), and revise Schedule 3 to the Urban Growth Zone (**UGZ**), Schedule 3 to the Development Contributions Plan Overlay (**DCPO**) and other operational provisions to facilitate the delivery of infrastructure within the Toolern precinct
- 1.3 The exhibited Amendment documents are available here: https://planning-schemes.app.planning.vic.gov.au/Melton/amendments/C232melt.
- 1.4 The Melton City Council (**Council**) is the planning authority and prepared the amendment.
- 1.5 Lendlease is developing the following land within the PSP under a development agreement with its owner, the Council:

Property address	PSP property number	Future urban structure
35A Astley Drive, Strathtulloh 3338 (Lot ES PS825752)	29 (part)	Conventional residential / medium density residential
35A Astley Drive, Strathtulloh 3338 (Lot EA PS828064)	29 (part)	Conventional residential / wetland / drainage reserve / retarding basin
Southlands Loop, Strathtulloh (EZ\PS830842)	28 (part)	Neighbourhood activity centre / high density residential
122 Wembley Avenue, Strathtulloh (FC\PS847499)	28 (part)	Neighbourhood activity centre / high density residential
1 Downley Loop, Strathtulloh (EF\PS830832)	28 (part)	Neighbourhood activity centre / high density residential
334 Ferris Road, Strathtulloh (EV\PS825787)	27 (part)	Neighbourhood activity centre / high density residential

Table 1: Properties being developed by Lendlease within the PSP

- 1.6 Lendlease made a submission to the Council about the Amendment which is dated 16 May 2024.
- 1.7 On 2 July 2024 the Council resolved to refer submissions to a Panel.
- 1.8 The Panel will comprise Con Tsotsoros (Chair), Andrew Grear and Nicola Foxworthy and a hearing will start on 26 August 2024 and run until 9 September 2024.
- 1.9 You are instructed to give evidence at the hearing in relation to civil engineering.
- 1.10 Your detailed instructions are set out in this letter.

2. Lendlease submission

- 2.1 The changes proposed to the Melton Planning Scheme, including the PSP and DCP, are wide ranging.
- 2.2 Lendlease is generally supportive of the amendment.
- 2.3 Lendlease's submission identifies a number of discrete changes that are sought to the Amendment.

3. Panel directions

- 3.1 A copy of the Panel's directions are included in your brief. Please review them closely.
- 3.2 Of most relevance to you, the Panel has directed that:
 - (a) Our expert evidence must be filed by midday on 19 August 2024
 - (b) Lendlease is to present its submissions and call its evidence on 2 September 2024
- 3.3 Directions 10 13 specify requirements for expert reports.
- 3.4 Directions 26 30 specify requirements for giving evidence.

4. Instructions

- 4.1 Your instructions are to.
 - (a) Review the Amendment documents relevant to your expertise.
 - (b) Consider the appropriateness of:
 - the way in which the drainage infrastructure within Property 29 is depicted within the amendment documents having regard to what you anticipate to be the required size, shape and location of this infrastructure and the implications of its depiction for the development of Property 29;
 - (ii) the design of infrastructure item IT23 (intersection) and whether it should have a fourth (southern) leg having regard to the intended development of land to the south of that intersection and the way similar infrastructure has been designed and is intended to be funded in the DCP; and
 - (iii) infrastructure item BD04 (pedestrian bridge), having regard to its feasibility and whether it has been suitably costed.
 - (c) Prepare an expert evidence statement in the format required by the Panel's directions and Practice Note 1.
 - (d) Attend the hearing on 2 September 2024 to present your evidence and answer questions in accordance with the Panel's directions.
- 4.2 Please provide a draft of your statement by no later than 15 August 2024 for review.
- 4.3 A brief of documents is enclosed. An index is appended to this letter of instruction.

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Please contact Jarryd Gray on 8608 2582 with any queries.

Yours faithfully **MinterEllison**

Partner: Jarryd Gray T: +61 3 8608 2582 Jarryd.gray@minterellison.com OUR REF: JCG 1507411

Minter Ellison

Index to brief

Tab	Document
1.	Lendlease submission dated 16 May 2024
2.	Council response to Lendlease submission (undated)
3.	Panel directions letter dated 3 July 2024
4.	Panel directions and timetable (v1) dated 25 July 2024
5.	Panel directions and timetable (v2) dated 2 August 2024
6.	Council Part A submission

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Appendix B

Council acceptance – waterway realignment along Ferris Road

Stephen WATTERS

To: Shane Trenerry

Subject: RE: Waterway alignment - Ferris Road

From: Shane Trenerry

Sent: Monday, 9 October 2023 8:55 AM

To: Stephen WATTERS < Stephen.Watters@smec.com>

Cc: Matt Morgan (<u>Matt.Morgan@lendlease.com</u>) < <u>Matt.Morgan@lendlease.com</u>>; Greg O'Donnell < <u>Gregory.ODonnell@lendlease.com</u>>; Hamed SADRI < <u>Hamed.Sadri@smec.com</u>>; Dale YOUNG

<Dale.Young@smec.com>

Subject: RE: Waterway alignment - Ferris Road

Hi Steve,

Thank you for submitting the memo and associated documents for the proposed waterway alignment along Ferris Road.

Council in principle does not object to the proposed waterway alignment, subject to the following:

Adequate land is provided for the waterway to include shared paths on both sides.

Additionally, Council notes:

 Design plans for waterway and drainage pipelines must be submitted to the relevant authority for assessment and approval in accordance with general procedure for detail design approval.

If you have any questions please let me know.

Kind regards,

Shane Trenerry (he/him)

A/Coordinator - Major Developments | Melton City Council

P: 9747 5484

E: shanet@melton.vic.gov.au | W: melton.vic.gov.au

PO Box 21, Melton VIC 3337



Melton City Council acknowledges the Traditional Owners of this land, the people of the Kulin Nations, and pays respect to their Elders, past, present and emerging.









From: Stephen WATTERS < Stephen. Watters@smec.com>

Sent: Tuesday, 29 August 2023 9:53 AM

To: Shane Trenerry <ShaneT@melton.vic.gov.au>

Cc: Matt Morgan (<u>Matt.Morgan@lendlease.com</u>) < <u>Matt.Morgan@lendlease.com</u>>; Greg O'Donnell < <u>Gregory.ODonnell@lendlease.com</u>>; Hamed SADRI < <u>Hamed.Sadri@smec.com</u>>; Dale YOUNG

<Dale.Young@smec.com>

Subject: Waterway alignment - Ferris Road

Hi Shane.

As discussed, please find attached a memo and accompanying attachments related to the proposed waterway alignment along Ferris Road.

It would be appreciated if Council could please confirm support and acceptance of the waterway alignment along Ferris Road.

Let me know if you have any queries regarding the attached, and we would be pleased to meet with you and other Council officers if you want to discuss in more detail.

Thanks, Steve

Stephen Watters

National Manager - Urban Engineering, Urban Communities M +61 427 948 186 T +61 3 9869 0896 E Stephen.Watters@smec.com Wurundjeri Country, Collins Square, Tower 4, Level 20, 727 Collins St, Melbourne, VIC, 3008, Australia

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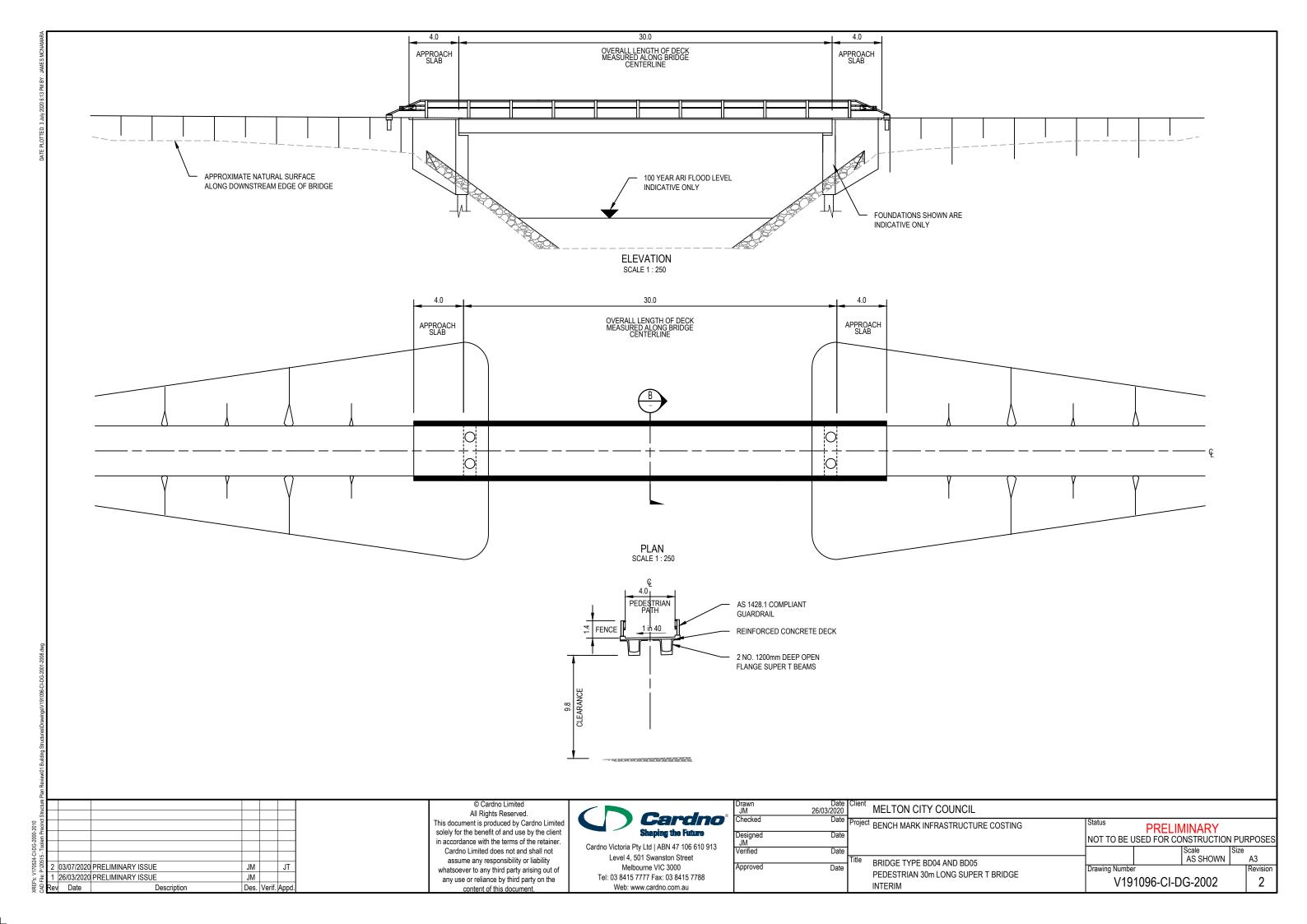
SMEC acknowledges the Traditional Custodians of Country throughout Australia and their connections to land, sea and community. We pay our respect to their elders past, present and emerging and extend that respect to all First Nations peoples today.

Disclaimer: The information contained in this e-mail and any attached file is confidential. It is intended solely for the addressee, and may not be used, reproduced, disclosed or distributed without SMEC's permission. SMEC accepts no liability for loss or damage (whether caused by negligence or not) resulting from the use of any attached files.

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Appendix C

BD04 Bridge plan and section



Appendix D

CV- Stephen Watters





Years of Industry Experience

- 34+ years

Qualifications and Memberships

- Bachelor of Engineering (Civil)
 Honours
- CPEng, NER
- Professional Registered Engineer (Victoria)
- MBA
- Graduate Diploma Computer
 Studies
- UDIA Greenfields Development Committee (VIC)
- Previous President of the Association of Land Development Engineers (ALDE

Key Skills and Competencies

- Project Management
- Land Development Process
- Service Authorities Policies & Procedures
- Cost Estimation and Budget Preparation
- Stakeholder liaison and consultation
- Precinct Structure Plan development

Professional History

- 2022 Present | SMEC,
 National Manager Urban
 Engineering
- 2008 2022 | SMEC, Manager Engineering, Melbourne
- 1994 2008 | SMEC, Engineer and Project Manager
- 1991 1994 | Wyndham City Council, Traffic & Design Engineer

Stephen Watters

National Manager - Urban Engineering

Professional Overview

Stephen is a Civil Engineer with over 34 years' experience in engineering design and project management in urban development and civil infrastructure fields. He first joined Fisher Stewart (predecessor company of SMEC) in 1994 after 3 years' experience with Wyndham City Council working as a traffic and design engineer. Stephen has worked in the Urban Development Group in Melbourne, as well as being Senior Design Engineer in the Wangaratta and Echuca offices of Earth Tech (also a predecessor company of SMEC), before returning to the Melbourne office in 1999. As well as undertaking project delivery roles such as Project Manager and Project Director, Stephen has also held management positions including Manager of Engineering Design, Manager of the Urban Engineering Group, and currently the National Manager of Urban Engineering at SMEC.

Stephen has had extensive experience in engineering design and project management, including design of major highway duplication projects. Stephen also has qualifications in management (MBA) and computer studies and his skills in this area are utilised to ensure that the design and project management teams are maximising the use of state-of-the-art technology. Stephen's experience in both local government and consulting allows him to make use of his extensive knowledge of authority requirements for the efficient delivery of civil infrastructure projects.

Stephen is actively involved in industry associations, and has previously been a board member of the Association of Land Development Engineers (ALDE), including being holding the role of President for two years. He is currently a committee member of the Urban Development Institute of Australia (UDIA) Greenfield Infrastructure Committee.

Relevant Project Experience

Stephen has fulfilled Project Manager and Project Director roles for the following projects:

- Deanside Village, Rockbank
- Caroline Springs including Urban Wetland and Cascades
- Laurimar Estate, Doreen
- The Boulevard, Grices Road, Clyde North
- Kilora, Grices Road, Clyde North
- Circa 1886, Grices Road, Clyde North
- Kinbrook, English St, Donnybrook
- Quarters Estate, Cranbourne West
- Connex Modal Interchanges
- Strzelecki Highway design
- Sunshine Golf Course



Planning Panel Experience

The majority of Stephen's civil engineering career has been associated with the delivery of land development projects including associated infrastructure works throughout metropolitan Melbourne and regional Victoria. He has particular experience in relation to the design and delivery of projects, which includes leading teams of design engineers and construction engineers, and this includes review of Precinct Structure Plans (PSPs) and Infrastructure Contribution Plans (ICPs).

Stephen has prepared Expert Witness reports related to panel hearings for a number of Precinct Structure Plans, which are summarised in the table below, which also details the nature of his involvement in each instance:

PSP	My role	Panel representation
Sunbury South and Lancefield Road ICP	Prepared an Expert Evidence report related to the ICP	Participated in the ICP conclave in relation to the estimated cost of projects
Clyde North PSP	Prepared an Expert Evidence report related to Drainage	Appeared before the PSP panel in relation to drainage issues
English Street PSP	Reviewed the PSP and provided feedback to the VPA	Participated in the conclave related to the Bridge over Merri Creek
Officer South Employment PSP	Prepared an Expert Evidence report related to the ICP and Drainage Issues	Participated in the Drainage conclave and was involved in round table discussions at the panel in relation to ICP and Drainage issues
Jetty Road Stage 2	Expert Evidence at appearance at panel related to drainage and costing matters	Participated in the Drainage conclave and appeared at the planning panel in relation to ICP and Drainage issues

Infrastructure Contribution Plans (ICPs) and Developer Contribution Plans (DCPs)

Stephen has experience in relation to the practical implementation of projects identified in DCPs and ICPs, which includes detailed negotiations with Councils and Road authorities, including the following projects shown below:

Project	PSP	My role
Deanside	Kororoit	Project Manager for the Deanside project. Negotiated with Council and oversaw the delivery of a number of ICP projects.
Kinbrook	English Street	Project Manager for the Kinbrook Estate. Negotiated with Council and oversaw the delivery of a number of ICP projects.
The Boulevard	Clyde North	Oversaw the design and delivery of the first phase of the Grices Road project.
Kilora	Clyde North	Project Manager for the Kilora project. Negotiated with Council and oversaw the delivery of a number of ICP projects.
Atherstone	Toolern	Oversaw the design and delivery of a number of DCP projects. Negotiated with Council in relation to WIK and reimbursements for works completed.
Kingsfield	Lancefield Road	Oversaw the design and delivery of the Lancefield Road and Rolling Meadows Drive signalised intersection.



Industry Involvement

Stephen has always taken an active interest in the Urban Development Industry, and was a long term executive committee member of the Association of Land Development Engineers (ALDE), and acted as President of this association during 2016 – 2017. Currently he is a member of the Urban Development Institute of Australia (UDIA) Greenfields committee, and this has provided opportunities to provide technical engineering input to the committee, and to liaise closely with authorities in relation to policies and standards.

He has participated on numerous committees including:

- The Urban Development Water Advisory Group (UDWAG) Technical Committee which enables MWC to collaborate with industry
- The Engineering Design and Construction (EDCM) Technical Committee

Professional Awards

- Bill Foley (Association of Land Development Engineers) Award, December 2021
 This award recognises people who have contributed at a high level in the industry.
- High commendation in the SJ awards in 2021.
- Recipient of the Local Government Overseas Study tour award in 1999.
- Earth Tech Innovation Award in 2003.

Career History

1991-1994

Design and Traffic Engineer - City of Werribee (now Wyndham City Council)

- Detailed design of Council capital works projects.
- Feature Survey of Council capital works projects.
- Traffic Engineering investigations and responses to residents.

1994-1996

Design Engineer at Fisher Stewart

- Detailed design of residential subdivisions,
- Detailed of highway projects such as the duplication of the Western Port Highway.
- Detailed design related to local government projects

1996-1997

Senior Design Engineer/ Manager of the Wangaratta office – Fisher Stewart

- Senior Design Engineer and Manager of the Wangaratta office
- Detailed design related to delivery of the Rural City of Wangaratta's capital works program
- Detailed design of VicRoads main road projects.

1997-1999

Senior Design Engineer/ Manager of the Echuca office - Fisher Stewart

- Senior Design Engineer and Manager of the Echuda office
- Detailed design related to delivery of the Campaspe Shire's capital works program
- Detailed design of VicRoads main road projects.



1999-2007

Project Manager - Fisher Stewart/ Earth Tech (Melbourne Office)

Project Manager in the Urban Development group in the Melbourne office of Fisher Stewart (later Earth Tech after Fisher Stewart was acquired).

Project Management of residential and industrial Urban development projects including:

- Caroline Springs including Urban Wetland and Cascades
- Laurimar Estate, Doreen
- Mount Derrimut Industrial Estate
- Bayside City Council capital works program during the period between 1999 and 2002, which involved a number of
 projects including road and drainage design, intersection treatments, the Beach Road shared path and the upgrade to
 the Middle Brighton Baths.
- Other general civil projects including:
 - the design of the re-alignment of the Strzelecki Highway at Morwell, where the highway was deviated to allow the Hazelwood coal mine to expand.
 - Six Connex Modal Interchanges for MTM on the Melbourne rail network
 - The development of the Sunshine Golf Course, which included a sewer mining project to produce Class A water for irrigation purposes
 - The duplication of Victoria Street in Richmond, as part of the Victoria Gardens commercial development. These
 works included the relocation of the tram tracks and relocation of significant telecommunications/ electrical and
 water mains.

2007-2011

Manager Engineering Design/ Project Manager - SM Urban (Melbourne office)

Project Management of a number of Urban Development projects including:

- The Boulevard, Grices Road, Clyde North
- Kilora, Grices Road, Clyde North

2011 - 2016

Manager Engineering/ Senior Project Manager – SMEC Urban (Melbourne office)

Project Management of a number of Urban Development projects including:

- Circa 1886, Grices Road, Clyde North
- Quarters Estate, Cranbourne West

2017 - 2019

Regional Functional Manager Urban, Southern (Vic/Tas/SA/WA) - SMEC Australia

Project Director for several large scale Urban development projects, including:

• Kinbrook, English St, Donnybrook

2019 - 2022

State Sector Manager Urban Communities (Vic/Tas/SA/WA) - SMEC Australia

Project Director for several large scale Urban development projects, including:

- Kingsfield, Sunbury
- Deanside Village, Rockbank
- Olivine, Donnybrook

2022 - current

National Manager Urban Engineering – SMEC Australia

Stephen is currently the Project Director on several large scale Urban development projects, including:

- Atherstone, Strathtulloh
- The Grove, Tarneit



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