



Expert Witness Report

DR-04 – Civil Engineering and Costing

Amendment C387ggee to the Greater Geelong Planning Scheme

Jetty Road Urban Growth Area – Stage 2

Prepared for the Developer Group (c/o Norton Rose Fulbright Australia)

8 April 2024

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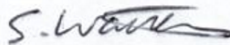
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1 Executive Summary

1. In response to specific instructions, I have completed an independent review of the civil engineering and cost estimates in respect of the drainage infrastructure "DR-04" in the DCP under the proposed Amendment.
2. The DCP costings for DR-04 are well considered and consistent with what would be reasonably expected for a wetland project of this scale – however post the exhibition of the DCP, it has become apparent that additional allowances need to be made for additional sieving costs and an increased allowance for landscape costs.
3. My recommendation would be to adopt the SMEC cost estimate Revision 8 which was recently circulated, showing a revised project cost for DR-04 of \$15,621,027.39, excluding GST.
4. The additional costing to account for the waterway costs through Parcel 23 (DR-05) should be included in the DCP.
5. The determination of costs and volumes associated with sieving of in-situ material prior to disposal off-site in accordance with CHMP 18446 are justified.
6. Additional geotechnical test pitting could be undertaken within DR-04 and DR-05 to provide a greater level of accuracy related to CHMP implementation volumes and costs. However, I consider the current level of data and the methodology of determination for the "Top of Clay" as reasonable, subject to review by the Registered Aboriginal Party.
7. The Concept design associated with DR-04 is an appropriate design solution for the subject site based on civil engineering judgement.

2 Expert Witness Statement

Name and Address

Stephen Watters, Civil Engineer

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

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 A.

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 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

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 in relation to the delivery of such projects, 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.

Instructions

I have been instructed by Linda Choi of Norton Rose Fulbright Australia in relation to Jetty Road Urban Growth Area – Stage 2 (subject site).

I was instructed to provide expert opinions concerning the civil engineering and costing related to Development Contribution Plan (DCP) drainage Item DR04 known as the “Southern Waterway”.

Report Preparation

In the preparation of this report I have reviewed the following documents:

Background Reports

- SMEC letter to Council (DR-04), 12 September 2023.
- SMEC letter to Council (DR-04), 14 December 2023.
- DCP Estimate (DR-05) – Property 23 Drainage – Rev 1, 8 February 2024.
- Southern Waterway Soil Sieving Costs, 20 March 2024.
- Jetty Road South of Rail Trail, Stormwater Management Strategy, 14 December 2022.
- Jetty Road South of Rail Trail, Stormwater Management Strategy, 15 June 2022.
- DCP Estimate (DR-05) – Property 23 Drainage – Rev 2, 25 March 2024.
- DCP Estimate (DR-04) – Properties 16 and 18 – Rev 7, 25 March 2024.

Amendment C387ggee Exhibition documents

- Explanatory Report, Undated.
- Instruction Sheet, Undated.

- Schedule 9 to Clause 45.06 (Development Contributions Plan Overlay), Undated.
- Schedule 46 to Clause 43.04 (Development Plan Overlay), Undated.
- Schedule to Clause 72.03 (What Does This Planning Scheme Consist Of), Undated.
- Schedule to Clause 72.04 (Documents Incorporated in This Planning Scheme), Undated.
- Jetty Road Urban Growth Area Stage 2 – Development Contributions Plan, October 2023.
- Development Plan Overlay – Schedule 46, 17 March 2023.
- Development Contributions Plan Overlay – Schedule 9, 21 September 2022.
- General Residential Zone 1, 21 September 2022.
- Environmental Audit Overlay, 28 August 2023.

Supporting documents

- C387ggee Rail Trail South – Ecological Assessment for Phase, 2 March 2022.
- C387ggee Rail Trail South – Addendum to Arboricultural Assessment and Report, July 2022.
- C387ggee Rail Trail South – SWMS – Water Technology, 6 September 2023.
- C387ggee Rail Trail South – Bushfire Risk Assessment, 2 July 2020.
- C387ggee Rail Trail South – Existing Conditions Flood Study, June 2020.
- C387ggee Rail Trail South – Infrastructure Servicing Report, 20 July 2022.
- C387ggee Overall - Jetty Road Rezoning – Stage 2 Stormwater Management Strategy, 15 February 2023.
- LIDAR and SMEC survey data, Undated.

Additional Documentation received 04/04/2024

- 3260E-CL-SK26-Wetland BEW Volumes_[A], SMEC
- 3260E-CL-SK29-Depth to Top of Clay Layer - Wetlands_[A], SMEC
- 3260E-CL-SK31-Wetland Sieve Volume (660mm Depth to Clay) [A], SMEC
- Costing CHMP 18446 Curlewis sieving compliance creekbank and wetlands revised 2 teams, Dugay & Co
- G3275.175 (GSSW1960) AA_Geotechnical Investigation_1421 Portarlington Road, Ground Science
- Extracts from CHMP 18446

Identity of Other Persons Relied upon in this Report

I was assisted in the preparation of this report by additional members of staff acting under my express instructions as follows:

- Compilation of Background Documents and review of final Expert Witness report – Shane McGlynn and Tom Moorfoot.

Whilst the above staff members assisted with the compilation of background documents and review of the expert report, this report was prepared by me as an independent review of the engineering matters and costing of DR-04, and the opinions in this report remain my own.

Summary of Opinions

My opinions in relation to this matter are provided in the below sections of this report.

Provisional Opinions Not Fully Researched

To the best of my knowledge all matters on which I have made comment in this statement have been appropriately researched or are based on my knowledge and experience. The statement does not contain any provisional opinions that have not been fully researched.

Matters Outside of My Expertise

To the best of my knowledge, none of the matters on which I have made comment in this statement are outside my area of expertise. To the best of my knowledge the report is complete and does not contain matters which are inaccurate.

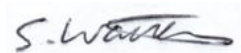
Project History

I have not previously undertaken any work associated with the Subject Land.

Practice Note Declaration

I have made all the enquiries 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 Panel.

I have read the Guide to Expert Evidence and agree to be bound by it.



Stephen Watters

Date: 8th April 2024

3 Subject Site

8. Amendment C387GGEE seeks to facilitate the planned residential development of land on the western edge of Drysdale–Clifton Springs–Curlewis. The land is referred to as the Jetty Road Urban Growth Area (Stage 2) in the Greater Geelong Planning Scheme and follows the recent completion of Stage 1 which delivered over 1700 lots. The amendment does this by rezoning 150 hectares of Farming and Rural Living zoned land to the General Residential Zone; and applying the Development Contributions Plan Overlay and Development Plan Overlay.
9. Amendment C387GGEE has been prepared by the City of Greater Geelong, which is the planning authority for this amendment. The amendment has been made at the request of SOHO Living, Stockland and APD Projects.
10. The amendment applies to all land within the shaded red area as shown in **Figure 1**. This land makes up 50 per cent of the total area known as the Jetty Road Urban Growth Area (UGA) in the Greater Geelong Planning Scheme.



Figure 1: Land affected by amendment C387GGEE (Source: Amendment C387GGEE Explanatory Report)

11. The Development Contributions Plan (DCP) which applies to Stage 2 of the Jetty Road UGA, associated property numbers and charge areas are shown in **Figure 2** below.
12. The context of this report relates to the DCP drainage asset (DR-04) located within Charge Area 3 of the DCP overlay for Stage 2 of the Jetty Road UGA.



Figure 2: Development Contributions Overlay Charge Areas (Source: Schedule 9 to Clause 45.06 Development Contributions Plan Overlay)

4 Exhibited DCP Drainage Asset (DR-04)

4.1 Background

13. The exhibited framework plan for Stage 2 of the Jetty Road UGA is presented in Figure 3 below. The exhibited drainage asset (DR-04) is located within the subject site which is bound by red linework in the figure below. The drainage asset spans between Hackwill Place (east) and Tivoli Drive (west), through property 23 and property 16 (as presented in **Figure 3**).
14. The asset (DR-04) runs diagonally through the subject site over a distance of approximately 900 m following the path of an existing “Designated Waterway” as presented on Corangamite Catchment Management Authority (CCMA) mapping. The CCMA define a “Designated waterway” as any waterway or any part of any waterway which the Authority has declared to be a designated waterway under section 188 of the Water Act 1989.

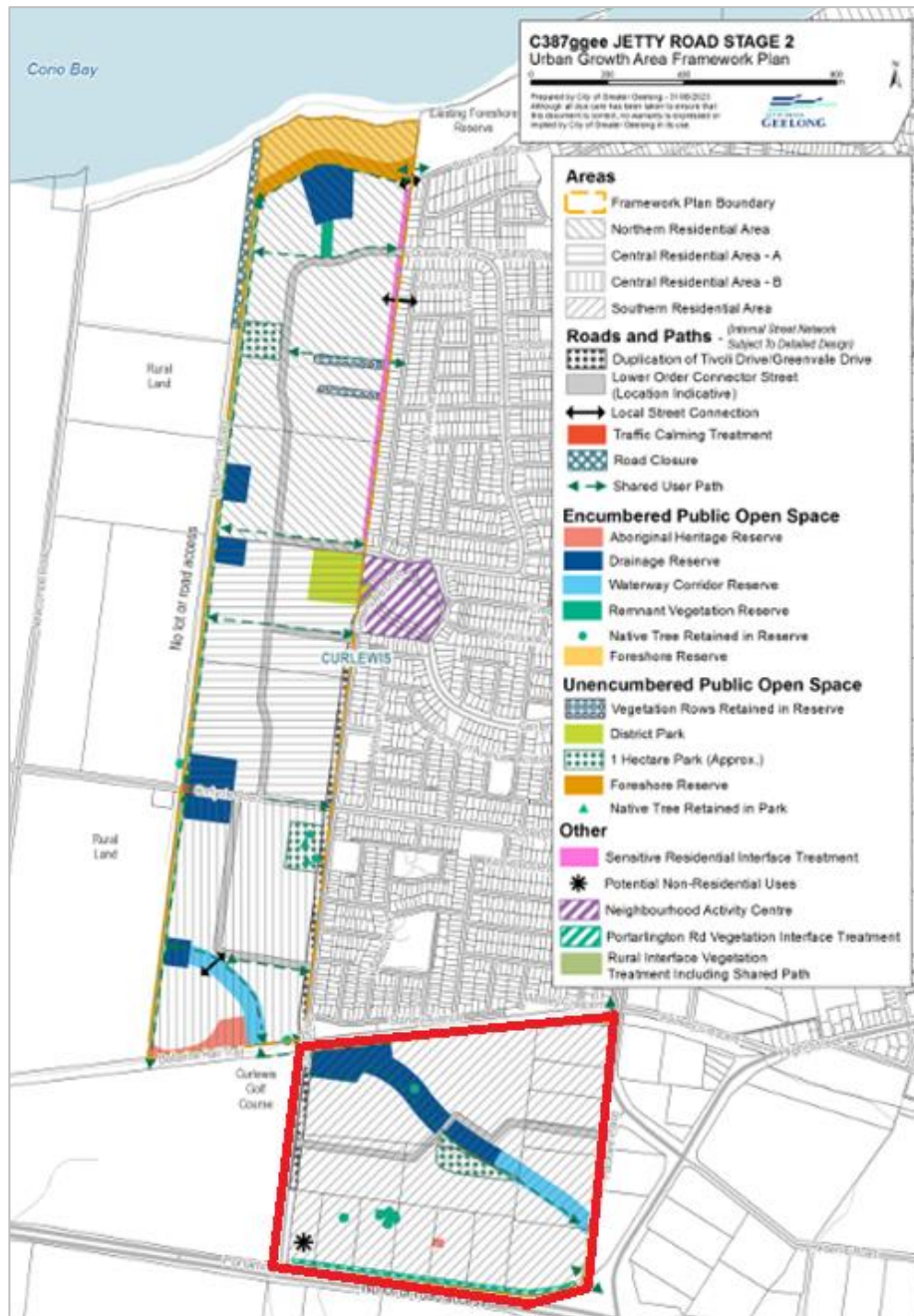


Figure 3: Stage 2 of Jetty Road UGA Framework Plan (Source: Schedule 46 to Clause 43.04 Development Plan Overlay)

15. The asset (DR-04) follows the natural low point of the existing “Designated Waterway”, which includes an existing large farm dam & small farm dam. The site falls approximately 15 m in elevation from the south-east towards the north-west.
16. Within Property 16, the site falls from 62m AHD (south-east corner) to 51m AHD (Tivoli Drive) as presented in SMEC’s survey data located in **Appendix C**.
17. The Development Contributions Plan (DCP), prepared by Urban Enterprise describes DR-04 as *Detention and WSUD Basin (Property 16)- Construction of a drainage detention and WSUD basin including earthworks, sediment ponds, access tracks, rock batters and drainage works*.



Figure 4: Map of DCP Projects within Stage 2 of Jetty Road UGA (Source: Development Contributions Plan, Urban Enterprise, October 2023)

4.2 Overall Stage 2 Stormwater Management Strategy (SWMS)

18. DR-04 is the upstream drainage retardation and treatment asset described as “Outfall 1” in the overall Jetty Road Stage 2 UGA Stormwater Drainage Strategy prepared by Water Technology (bound by red linework in the **Figure 5** below). The overall post development contributing catchment to DR-04, as described in the overall SWMS, comprising development area and external catchments (to the south-east) is 142.5 hectares.
19. The pre-developed existing 1% AEP median flow contributing to Outfall 1 has been calculated by Water Technology as 1.83 m³/s and the calculated post-development unmitigated 1% AEP median flow is 8.67 m³/s. The resultant 1% AEP post-development retardation storage calculated by Water Technology is 12,800 m³. The overall SWMS proposes a Wetland Retarding Basin to retard and treat development flows, along with an upstream constructed waterway to convey external catchment 1% AEP flows.
20. As presented in the Water Technology SWMS, the minimum corridor width proposed for the constructed waterway is 40 m in accordance with Melbourne Water - Waterway Corridors: guidelines for greenfield development areas within the Port Phillip and Westernport region, 2013, assuming roads are abutting each side of the waterway corridor.
21. The Water Technology SWMS proposes a minimum Wetland Surface area at Normal Top Water Level (NTWL) of 12,000 m² (excl. Sediment Pond area) in order to achieve best practice water quality objectives.

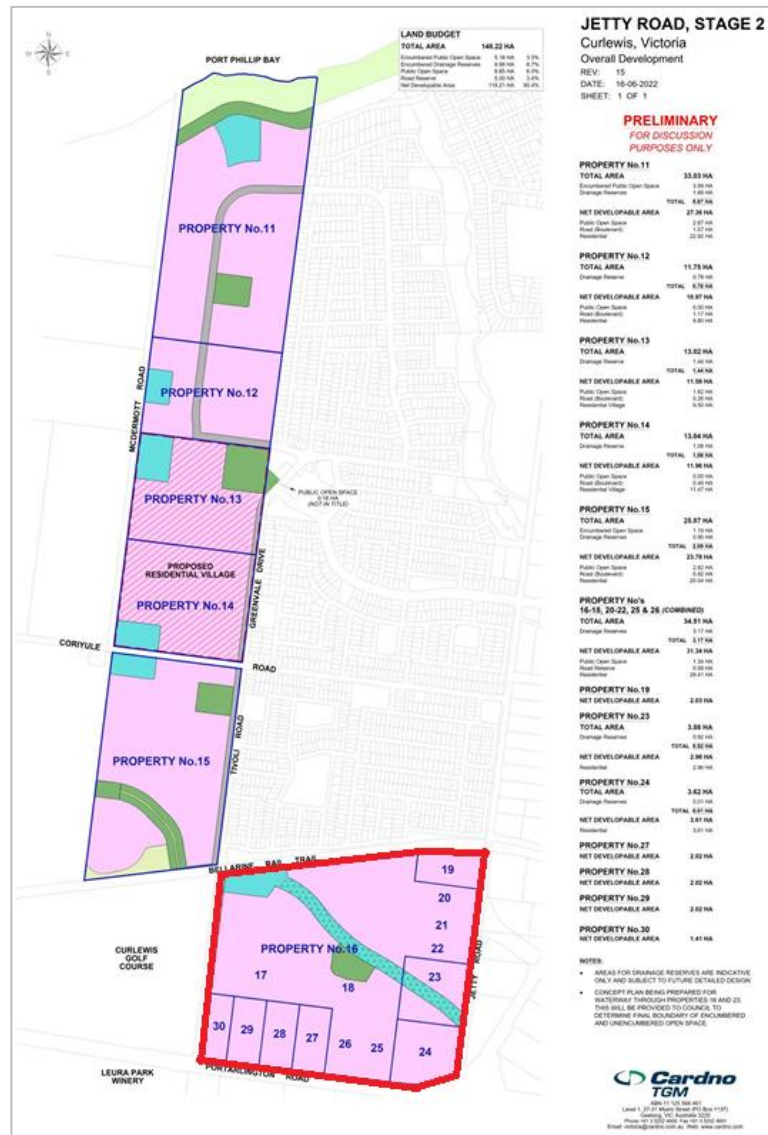


Figure 5: Development Drainage Concept Plan (Source: Water Technology Stage 2 SWMS, 15 February 2023)

4.3 Stormwater Management Strategy (SWMS) – Southern Waterway

- 22. A site specific SWMS has been prepared by Water Technology (dated 6 September 2023) for the Southern Waterway, located primarily in Property 16 and 23 of the Jetty Road Stage 2 UGA.
- 23. The SWMS suggests that a revision of the upstream catchment delineation based on detailed LIDAR data suggests the entire catchment is around 82ha. The Portarlington Road acts as a hydraulic control upstream of the site and significant works associated with the Drysdale Bypass have altered the hydrology of the catchment. Upstream storage constructed as part of the Drysdale Bypass Project by the Department of Transport includes multiple retarding basin assets as presented in **Figure 6**.

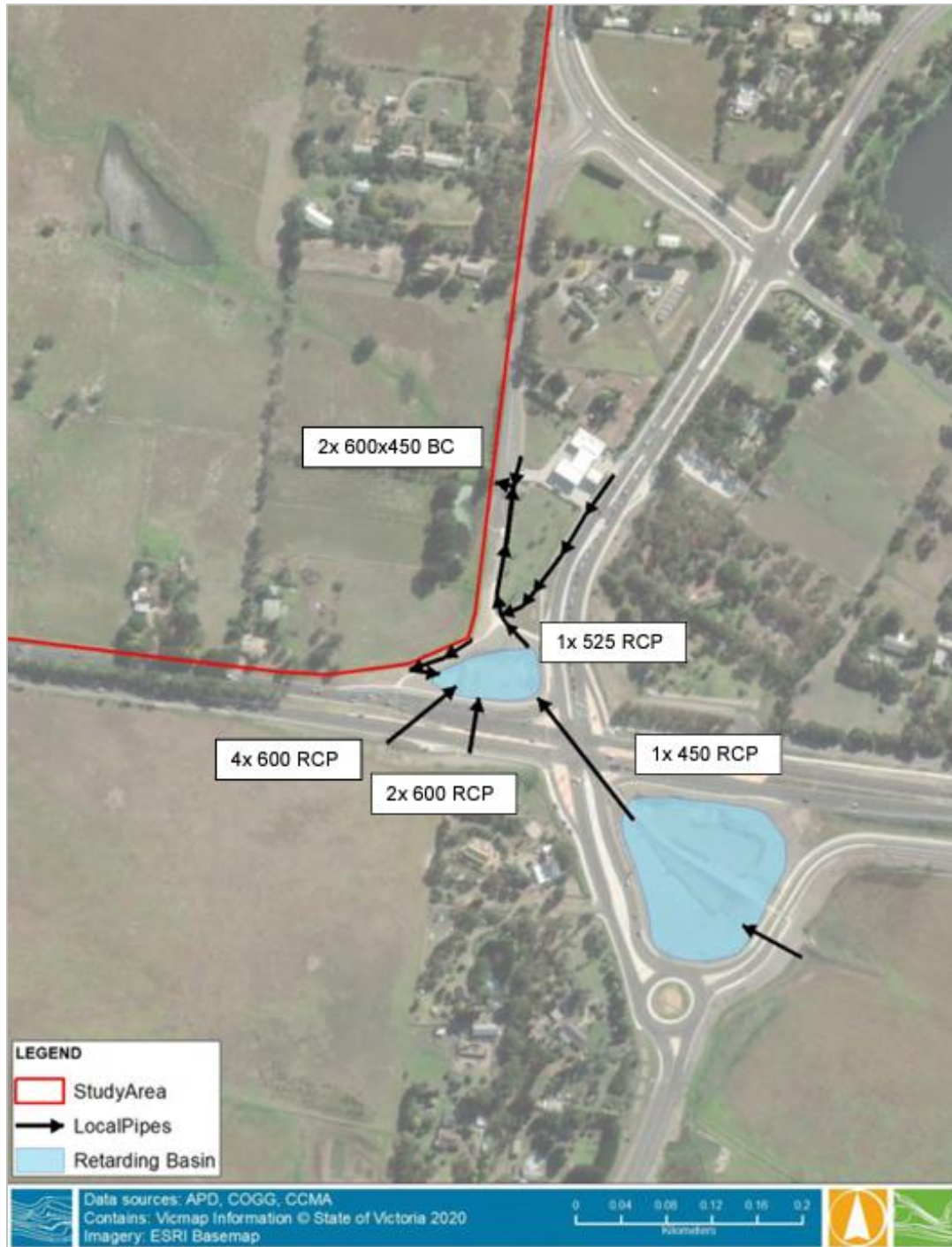


Figure 6: Upstream Drysdale Bypass existing detention assets (Source: Water Technology Southern Waterway SWMS, 6 September 2023)

24. The SWMS notes that the hydraulic model was simulated for the 10% and 1% AEP event for a range of durations from 15-minute to 6-hour. The results were then spliced to produce the maximum depth for existing conditions. The maximum depth results (as presented in **Figure 7**) show the 1% AEP depths generally less than 300mm through the site, with the exception of the location of the two existing dams. The flow path along the waterway is relatively confined due to the topography of the site.



Figure 7: 1% AEP Flood Depth – Existing Conditions (Source: Water Technology Southern Waterway SWMS, 6 September 2023)

25. The SWMS proposes a layout which incorporates a constructed waterway within the upper section of the site before transitioning to a linear constructed wetland (as presented in **Figure 8**). This is supplemented by three sediment ponds along the waterway corridor to provide pre-treatment of stormwater at network outfalls (piped) before entering the wetland system.
26. Water Technology states in the SWMS that the design for this reach of the waterway has been undertaken in line with Melbourne Water's Constructed Waterway Design Manual (2019), Wetland Design Manual and in response to site constraints.
27. Water Technology also states in the SMWS that that in accordance with discussions with the City of Great Geelong and the CCMA, it is proposed to incorporate a linear wetland and three sedimentation ponds within the waterway corridor. A linear wetland concept has been developed incorporating the following additional operational and maintenance considerations:
- Ability to isolate sediment ponds from the main wetland cells to draw-down for maintenance without having to empty the macrophyte zone.
 - Ability to drain each macrophyte zone without having to empty the other macrophyte zones and sediment ponds.
 - Maintain maximum velocity below 0.5m/s within the macrophyte zone and sediment ponds during the 1% AEP storm event.
 - The Extended detention depth of sediment ponds and macrophyte zone were set to 350 mm. The concept design plans, and velocity checks calculations have been supplied.

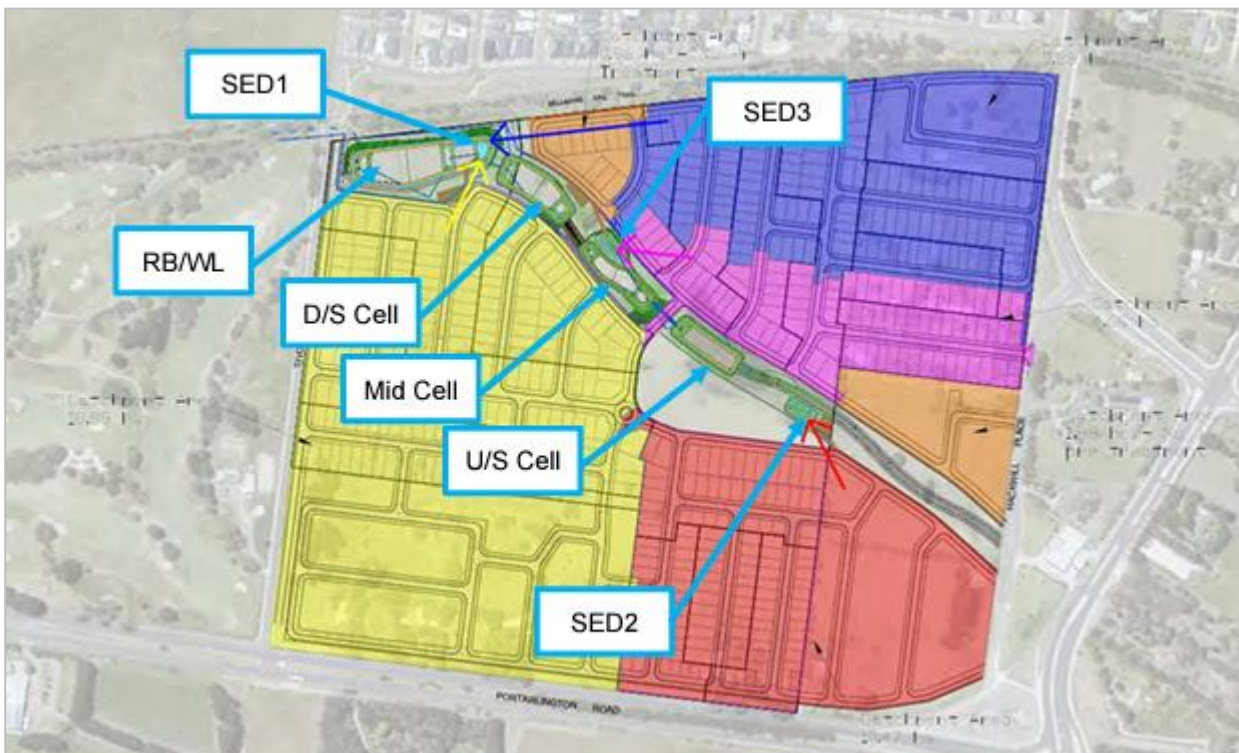


Figure 8: Asset and Catchment Strategy (Source: Water Technology Southern Waterway SWMS, 6 September 2023)

4.4 Concept Design and DCP Costing

28. Within Appendix C of the Southern Waterway SWMS is a concept design for DR-04 prepared by SMEC and reviewed by Water Technology. The concept design exhibited is Revision F (5 sheets) which contains layout plans and cross-sections with design level information.
29. It is understood that the concept design has undergone extensive review and consultation with Council and the CCMA. Based on the summary of consultation provided in expert witness instructions located in **Appendix B**, the understanding of consultation with Council regarding the Concept Design and associated hydraulic modelling is as follows:
- (a) Council had provided in-principle agreement regarding the design for the southern waterway and wetlands and the overall Stormwater Management Strategy (SWMS), including provision of an online system.
 - (b) On 5 April 2023, Council rejected the concept and design on the basis that it did not demonstrate compliance with its standards, including IDM, Council Design Note 2 & 3, Council Landscape Standards Manual and Melbourne Water Constructed Wetland/Waterway Design Manuals.
 - (c) Council also stated that the slope and construction of the batters should be adjusted to avoid any need for safety fencing, and that wetlands should be located offline to waterways.
 - (d) On 26 April 2023 the Developer Group and Council met to discuss Council's concerns and prompted updated modelling, which was provided to Council on 11 May 2023.
 - (e) On 31 May 2023, Council advised that the updated modelling provided on 11 May 2023 remained non-compliant with its standards.
 - (f) On 2 August 2023, the Developer Group's technical consultants (SMEC and Water Technology) submitted a revised waterway design to Council that met Council's requirements, with minor dispensations which Council were satisfied to accept.
 - (g) The exhibited version of the SWMS is dated 6 September 2023.
30. Council has advised the Developer Group that the construction costs associated with DR-04 shown in the exhibited DCP had been based on Stantec's estimate dated 31 August 2023, which were contained in REV06 Pricing Schedule for DCP DR-04.
31. Council has subsequently sought clarification from the Developer Group on:
- (a) Whether the costings include all work from Tivoli Drive to Hackwill Place and Portarlington Road; and
 - (b) Whether the additional SMEC landscaping costs are included.
32. In January 2024, Bursill Consulting (on behalf of APD Projects) responded to Council's queries as follows:
- (a) The civil costs included works on APD Project's properties 16 and 18, through which the proposed waterway passes, and excluded property 23 which contains a section of constructed waterway.
 - (b) Costs will likely be adjusted upwards to include works to construct a waterway channel on the land of property 23, connecting the waterway along properties 16 and 18 and the existing outfall drain on Jetty Road.
 - (c) SMEC provided an Opinion of Probable Cost for this previously uncosted section of the open constructed waterway dated 8 February 2024, which is proposed to be a new infrastructure item named DR-05.
 - (d) SMEC and APD Projects are confirming the costs for CHMP implementation, which involves a resource-intensive sieving process. SMEC is reviewing the extent of material to be excavated from the wetlands above and below the clay layer, and currently estimate that this amounts to 54,000m³.

33. On 4 April 2024 additional documentation was provided in respect of the DR-04 DCP construction cost estimate and determination of associated CHMP Sieving Costs. Documentation supplied included:
- (a) 3260E-CL-SK26-Wetland BEW Volumes_[A]
 - (b) 3260E-CL-SK29-Depth to Top of Clay Layer - Wetlands_[A]
 - (c) 3260E-CL-SK31-Wetland Sieve Volume (660mm Depth to Clay) [A]
 - (d) Costing CHMP 18446 Curlewis sieving compliance creekbank and wetlands revised 2 teams
 - (e) G3275.175 (GSSW1960) AA_Geotechnical Investigation_1421 Portarlington Road

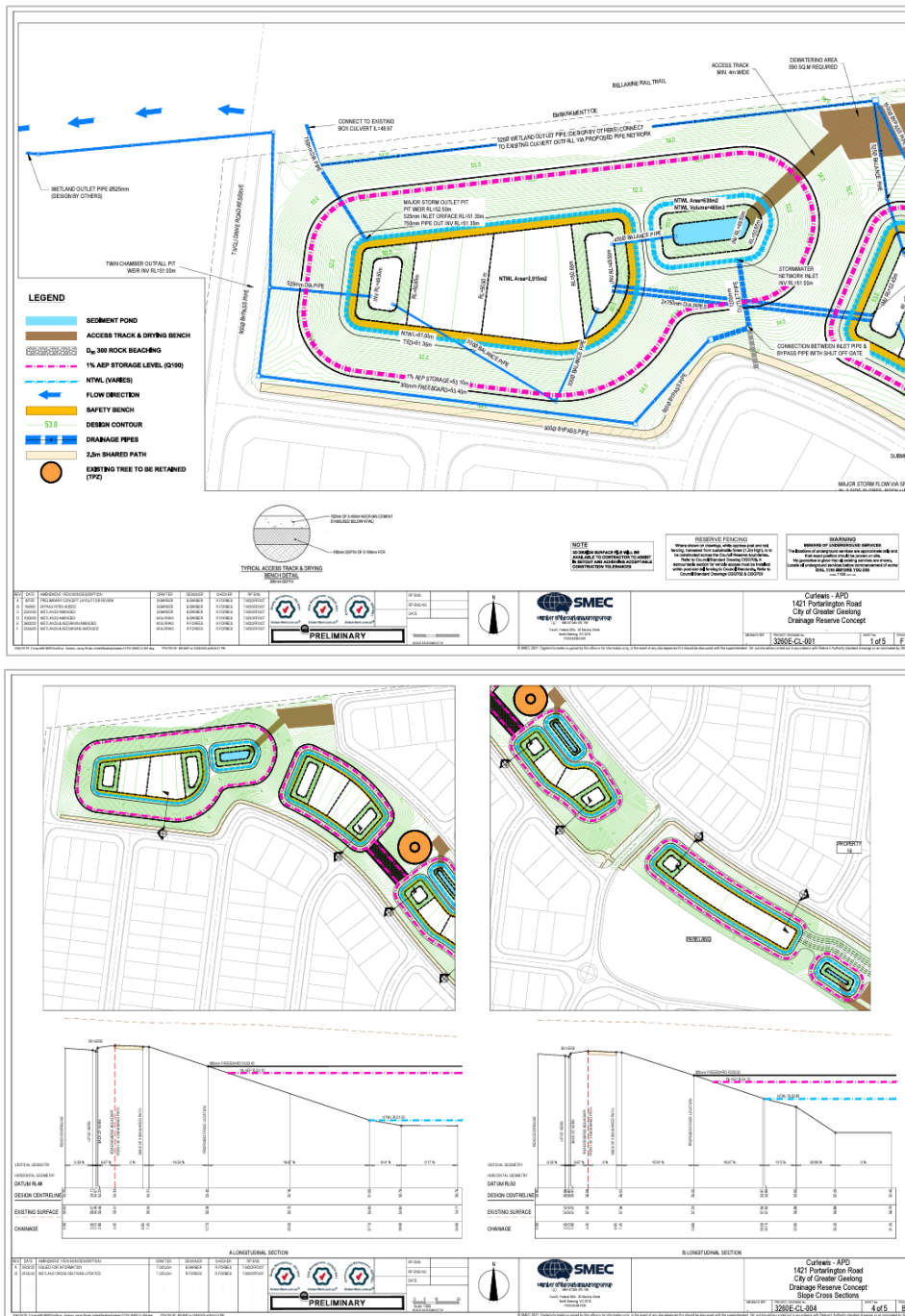


Figure 9: SMEC Concept Design (Source: Water Technology Southern Waterway SWMS, 6 September 2023)

5 Review of DR04 Costing

5.1 Exhibited DCP

34. The development contribution plan prepared by Urban Enterprise in October 2023, lists the construction cost for DR-04 as \$11,332,650.71. Within Section 5.9 of the DCP, a summary of the Development and Community Infrastructure levies allocated all of the cost for DR-04 to be borne by Charge Area 3 (as presented in **Figure 2** of this report).

DCP ID	DCP Type	Item Name	Land Area (ha)	Land Cost	Construction Cost	Total Cost	Internal Apportionment	Cost to MCA	Charge Areas	Demand Units	Levy per ha
Drainage											
DR-01	Development	Drainage Works - Pipeline (Property 11)		\$0	\$386,447	\$386,447	100.00%	\$386,447	CA 1	34.438	\$11,221.52
DR-02	Development	Coriyule Road Drainage Item		\$0	\$3,941,708	\$3,941,708	62.67%	\$2,470,137	CA 2 & 3	85.770	\$28,799.55
DR-03	Development	Drainage Works - Pipeline (Property 15)		\$0	\$323,364	\$323,364	62.67%	\$202,642	CA 2 & 3	85.770	\$2,362.62
DR-04	Development	Detention and WSUD Basin (Property 16) (construction)		\$0	\$11,332,651	\$11,332,651	100.00%	\$11,332,651	CA 3	44.249	\$256,110.89
DR-04-L	Development	Detention and WSUD Basin (Property 16) (land)	3.193	\$5,747,400	\$0	\$5,747,400	100.00%	\$5,747,400	CA 3	44.249	\$129,887.68
Sub-total Drainage					\$5,747,400	\$15,984,170		\$21,731,570			
Community Facilities											
CF-01	Development	Childrens and Community Hub (construction)		\$0	\$9,990,759	\$9,990,759	50.06%	\$5,001,040	All	120.208	\$41,603.22
CF-01-L	Development	Childrens and Community Hub (land)	0.400	\$191,755	\$0	\$191,755	50.06%	\$95,986	All	120.208	\$798.50
CF-02	Community	Regional Community and Learning Hub		\$0	\$11,210,739	\$11,210,739	40.00%	\$4,484,295	All	3717*	\$1,206.43 per dw
Sub-total Community Facilities					\$191,755	\$21,201,497		\$21,393,253			
Planning											
PL-01	Development	Planning Costs		\$0	\$1,057,674	\$1,057,674	100%	\$1,057,674	All	120.208	\$8,798.70
Sub-total Planning					\$0	\$1,057,674		\$1,057,674			
Total - DIL					\$10,668,255	\$63,505,927		\$64,174,082			
Total - CIL					\$0	\$11,210,739		\$4,484,295			
Total					\$10,668,255	\$64,716,565		\$75,384,821			

Source: Urban Enterprise

Figure 10: Infrastructure Levy Summary (Source: Development Contributions Plan, Urban Enterprise, October 2023)

35. The breakdown of the DR-04 Project Costs prepared by Stantec dated 31 August 2023 (Revision 6) are contained within the Urban Enterprise DCP.
36. It is noted that within the footer of Sheet 3 of Stantec's estimate for DCP item DR-04 (total cost \$11,332,650.71) includes an additional \$813,750 for CHMP related soil screening works. Soil Screening – 54,250 m³ @ \$15/cu.m = \$813,750. This is therefore added to the sub-total (exc. GST) in Stantec's estimate to get the resultant total cost of \$11,332,650.71 for DR-04.
37. On 4 April 2024 DCP Cost Sheet, Revision 8 was circulated, showing a revised project cost for DR-04 of \$15,621,027.39, excluding GST. This DCP Cost Sheet update is understood to contain updates to exhibited Stantec DCP Construction Cost (Rev 6) as follows:
- Revised landscape costs based on SMEC Landscape Architecture Opinion of Cost.
 - Updated CHMP sieving costs based on the costs provided by Dugay and Co.
 - Removal of Item 46 (detailed civil design). This is a double-up with consultant fees allocated to Item 48 (civil design and documentation).
 - Updated % fees and contingency based on new construction value.

JETTY ROAD - STAGE 2 DCP					
DR-04 - 13 (D-01) Detention and WSUD Basin and Constructed Waterway					
ESTIMATE: 03/04/24 - REV 08					
These works involve construction of the existing waterway between Portarlington/Jetty Rd and the Rail Trail/ Tirol Dr. The works include detention basins, channel construction, wetlands, sediment ponds, drainage, bypass drainage, dewatering areas, access tracks, headwalls, rock beaching, creek lining, etc.					
<u>These works are within Properties 16 & 18 only.</u>					
ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
PRELIMINARIES					
1	Site Establishment	1	Item	\$ 50,000.00	\$ 50,000.00
2	Provision of temporary fencing	1	Item	\$ 20,000.00	\$ 20,000.00
3	Provision of Construction Management Plan	1	Item	\$ 2,500.00	\$ 2,500.00
4	Implementation of the Environmental Management Plan	1	Item	\$ 8,000.00	\$ 8,000.00
5	Contractor to allocate a water cart to be available onsite at all times during construction works, in accordance with Council requirements.	1	Item	\$ 40,000.00	\$ 40,000.00
6	Site preparation including disposal of all surface rock, dead trees, timber, fences, wire, rubbish, disposed offsite to a tip to be arranged by the contractor.	1	Item	\$ 5,000.00	\$ 5,000.00
7	Allowance for Dewatering, treatment and bypass pumping of external catchment during construction (including water treatment prior to discharge)	1	Item	\$ 90,000.00	\$ 90,000.00
EARTHWORKS					
8	Formation to 98% level 1 compaction inclusive of stripping and stockpiling of topsoil; excavation, placing, watering and compacting approved clay filling in embankment, removal and disposal of all other surplus spoil off site, construction waste and rubbish offsite, all as specified.				
	(i) Strip existing topsoil & stockpile for future use	46800	m3	\$ 10.00	\$ 468,000.00
	(ii) Estimated Excavation	57300	m3	\$ 20.00	\$ 1,146,000.00
	(iii) Estimated Fill	3050	m3	\$ 15.00	\$ 45,750.00
9	PROVISIONAL ITEM Excess Material to be transported off site	54250	m3	\$ 30.00	\$ 1,627,500.00
	PROVISIONAL ITEM Backfilling of Existing Dam	1300	m3	\$ 15.00	\$ 19,500.00
10	Topsoiling				
	(i) 200mm depth topsoil beneath EDD (No hydroseeding)	14760	m2	\$ 2.50	\$ 36,900.00
	(ii) 200mm depth topsoil on permanent batters (above EDD)	30120	m2	\$ 2.50	\$ 75,300.00
	(iii) Hydromulch all areas above EDD with sterile Ryegrass	30120	m2	\$ 1.30	\$ 39,156.00
	(iv) Topsoil amelioration with gypsum (5T/ha) - all topsoil	33140	m2	\$ 2.50	\$ 82,850.00
11	PROVISIONAL ITEM Clay lining				
	(i) Additional 300mm Depth Cut to perform clay lining works	4428	m3	\$ 20.00	\$ 88,560.00
	(ii) Install and compact 300mm depth clay liner to EDD	4428	m3	\$ 20.00	\$ 88,560.00
	(iii) Import suitable Clay Liner Material	4428	m3	\$ 30.00	\$ 132,840.00
	(iv) Dispose of excess unsuitable clay material off-site	4428	m3	\$ 30.00	\$ 132,840.00
ACCESS TRACKS AND SEDIMENT PONDS					
12	Sediment Pond Hardstand - 400mm depth compacted rock, D50>50mm	400	m2	\$ 90.00	\$ 36,000.00
13	Access Track - 200mm thick Class 3 FCR access track with 6% CTCR	470	m2	\$ 45.00	\$ 21,150.00
14	Dewatering Area - 200mm thick Class 3 FCR	900	m2	\$ 25.00	\$ 22,500.00
15	Clean (remove & dispose) debris from sediment basins at end of maintenance period	1	Item	\$ 20,000.00	\$ 20,000.00
CONSTRUCTED WATERWAY					
16	D50 = 300mm Rock Beaching to Base Of Channel - 75 lin.m in Property 16				
	(i) Detailed cut prior to installing beaching	4850	m2	\$ 15.00	\$ 72,750.00
	(ii) Rock placement base of constructed waterway	7865	m2	\$ 25.00	\$ 196,625.00
17	Import of Rock material (1m dia fieldstone)	2360	m3	\$ 105.00	\$ 247,800.00

DRAINAGE WORKS					
18	Excavation and refilling trenches, supply, laying and jointing ordinary backfill.				
	(i) 300 dia Balance Pipes	200	m	\$ 160.00	\$ 32,000.00
	(ii) 450 dia Balance Pipe and Outlet Pipe	70	m	\$ 220.00	\$ 15,400.00
	(iii) 525 dia Outlet Pipe	230	m	\$ 300.00	\$ 69,000.00
	(iv) 750 dia Outlet Pipe	40	m	\$ 480.00	\$ 19,200.00
	(v) Q100 Pipes between wetland segments (2 x 750 dia RCP's) = 2 x 28m	156	m	\$ 480.00	\$ 74,880.00
	(vi) Culverts at road crossing (3 x 1200 x 900 RCBC's) = 3 x 36m	165	m	\$ 1,200.00	\$ 198,000.00
19	CCTV of all proposed and existing drainage pipes as instructed by Council	1286	m	\$ 18.00	\$ 23,148.00
20	Submerged Offtake Pit cast-in-situ including excavation, covers and step irons and disposal of excess material. Refer to MW STD DRG 7251/12/008				
	(i) 600mm x 600mm	14	No.	\$ 3,200.00	\$ 44,800.00
21	Junction Pits cast-in-situ including excavation, covers and step irons and disposal of excess material. All as specified. Refer to MW STD DRG 7251/08/408				
	(i) 900mm x 900mm (Wetland edge pits)	10	No.	\$ 3,600.00	\$ 36,000.00
22	Single pipe outlet to Pond 1, 2, 3 - DN1200 pipe with post & rail barrier to be installed around outlet structure	3	No.	\$ 7,500.00	\$ 22,500.00
23	Supply & install Timber Bollard SD714 (includes 1 removable at each access track)	9	No.	\$ 150.00	\$ 1,350.00
24	Bypass pipe requested by Council for 20% AEP Diversion for Maintenance				
	(i) Pond 1 bypass - DN900	190	m	\$ 400.00	\$ 76,000.00
	(ii) Pond 1 bypass - DN1500	140	m	\$ 1,000.00	\$ 140,000.00
	(iii) Pond 1 bypass - DN900	260	m	\$ 400.00	\$ 104,000.00
	(iv) Allowance for shut-off gates/ modified pits	3	Item	\$ 15,000.00	\$ 45,000.00
25	Modifications to existing channel on west side of Tivoli Drive to achieve 300mm freeboard to Golf Course and Rail Trail inclusive of Earthworks and Geofabric (as required)	250	m3	\$ 80.00	\$ 20,000.00
26	Sediment Pond Drawdown (dewatering) prior to handover for clean out purposes.	1	Item	\$ 15,000.00	\$ 15,000.00
27	Sediment excavation & removal prior to CoGG handover (based on 5yr sed load calcs)	448	m3	\$ 125.00	\$ 56,000.00
LANDSCAPE WORKS					
28	Preliminaries & General Requirements				
	Site establishment including provisions of access, survey setout, provision of site and office compounds, insurance, OH&S, traffic control, traffic management plan for Council, environmental protection and other works as specified. (3.5% of Project Value)	1	Item	\$ -	\$ 68,652.83
29	Groundworks				
	Earthworks to achieve levels as indicated on landscape plans or as required to complete the works - family nodes, fitness station, seating areas	1	Item	\$ 8,000.00	\$ 8,000.00
30	Paving				
	Geotechnical Certification	1	Item	\$ 1,900.00	\$ 1,900.00
	2.5m Wide Concrete Shared Paths - Supply & install plain concrete pavement - 774 Lin.m	1935	m2	\$ 91.00	\$ 176,085.00
	1.5m Wide Concrete Secondary Pedestrian Paths - Supply & install plain concrete pavement - 67 Lin.m	101	m2	\$ 91.00	\$ 9,145.50
	200mm wide Concrete Edge between waterway planting and grass area	1383	m	\$ 110.00	\$ 152,130.00
31	Quarry Work				
	Supply & install natural boulders (700-1200mm dia.) for seating and stepping stones as specified (provisional sum)	150	Ea.	\$ 180.00	\$ 27,000.00
32	Fixtures & Furniture				
	S1 - Supply & install timber seat with backrest as specified	7	Ea.	\$ 2,600.00	\$ 18,200.00
	S4 - Supply & install informal log seating as specified	4	Ea.	\$ 2,400.00	\$ 9,600.00
	Structural Certification, as required	1	Item	\$ 3,500.00	\$ 3,500.00
	Pedestrian Bridge - Supply and Installation all inclusive	1	Item	\$ 350,000.00	\$ 350,000.00

33	Wetland Works (Below Q100)				
	Weed control to all waterway planting areas	13960	m2	\$ 0.50	\$ 6,980.00
	Fine Trimming & grading for all waterway planting areas	13960	m2	\$ 0.50	\$ 6,980.00
	Cultivation 150mm depth to all waterway planting areas	13960	m2	\$ 1.20	\$ 16,752.00
	Supply & install jute matting to all planting areas	13960	m2	\$ 7.00	\$ 97,720.00
	Supply & install 200mm imported topsoil to all waterway planting areas	13960	m2	\$ 18.00	\$ 251,280.00
	Maintenance paths into wetlands - Supply & install plain concrete pavement	402	m2	\$ 120.00	\$ 48,240.00
34	Soil & Preparation				
	Weed control to all grassed areas (above Q100)	18711	m2	\$ 0.50	\$ 9,355.50
	Fine Trimming & grading for grassed area (above Q100), as specified	18711	m2	\$ 0.50	\$ 9,355.50
	Cultivation 150mm depth to all grassed areas (above Q100) as specified	18711	m2	\$ 1.20	\$ 22,453.20
	Supply & install 200mm imported topsoil to all grassed areas (above Q100), as specified	18711	m2	\$ 18.00	\$ 336,798.00
	Supply & install 75mm depth approved organic mulch to all garden beds (above Q100) as specified	4101	m2	\$ 8.00	\$ 32,808.00
35	Trees & Planting				
	Supply & install trees	288	Ea.	\$ 240.00	\$ 69,120.00
	Supply & install shrubs & groundcovers to Garden Bed Areas (above Q100) - V93 Hiko cell - 4 plants/m2	16404	Ea.	\$ 3.50	\$ 57,414.00
	Supply & install plants to Wetland Planting (Below Q100, Ephemeral Planting and Aquatic) - 600cc tube stock	55840	Ea.	\$ 5.50	\$ 307,120.00
36	Turf & Grassing				
	G1 - Supply & install instant turf (100% Kikuyu) in all areas including drying benches	14610	m2	\$ 11.00	\$ 160,710.00
37	Establishment (Landscaping)				
	Establish the landscape to the standards indicated in the specification. This may include, but not limited to, mowing, watering, weed removal and any miscellaneous items required to maintain the landscape	13	Weeks	\$ 1,100.00	\$ 14,300.00
	Establish the landscape to the standards indicated in the specification for MW Reimbursables items - LB1, LB2, CI, SM, DM planting areas	13	Weeks	\$ 1,800.00	\$ 4,765.00
CULTURAL HERITAGE					
38	CHMP Soil Screening Works (based on SMEC Sketch SK31 - volume of 20,680 m3 & Dugay and Co. Archaeology and Cultural Heritage Management Cost Estimate - Table 4)	1	Item	\$ 3,180,103.20	\$ 3,180,103.20
				SUB TOTAL - CONSTRUCTION COSTS	\$ 11,264,826.73
39	2-Year Maintenance Period	208	Wk.	\$ 1,000.00	\$ 208,000.00
COUNCIL AND AUTHORITY FEES AND CHARGES					
40	Council Plan Checking and Supervision Fee (3.25%)	3.25%	Item	\$ 366,106.87	\$ 366,106.87
CONSULTANCY FEES					
41	Project and Program Management	3%	Item	\$ 337,944.80	\$ 337,944.80
42	Feature Survey	1	Item	\$ 5,000.00	\$ 5,000.00
43	Geotechnical Testing	1	Item	\$ 50,000.00	\$ 50,000.00
44	integrated Stormwater Management Plan including Functional Designs and Reporting	1	Item	\$ 120,000.00	\$ 120,000.00
45	Title Survey and Plan of Subdivision	1	Item	\$ 10,000.00	\$ 10,000.00
46	Detailed Civil Design	1	Item	\$	\$
47	Engineering Concept Costs	1	Item	\$ 99,997.50	\$ 99,997.50
48	Civil Design and Documentation	8%	Item	\$ 901,186.14	\$ 901,186.14
49	As Constructed Information	1	Item	\$ 5,000.00	\$ 5,000.00
				SUBTOTAL CONSULTANCY AND AUTHORITY FEES	\$ 2,103,235.31
CONTINGENCY					
50	Contingency (20% of Construction Costs)	20%	Item	\$ 2,252,965.35	\$ 2,252,965.35
				TOTAL (EXCL. GST)	\$ 15,621,027.39
				GST	\$ 1,562,102.74
				TOTAL AMOUNT (INCL. GST)	\$ 17,183,130.12
Notes:					
- Cultural Heritage Screening costs are based on the following documents:					
1. Dugay & Co Archaeology and Cultural Heritage Management Cost Estimate (03/04/2024)					
2. SMEC Sketch 3260E-CL-SK26-Depth to Top of Clay Layer - Wetlands (Rev A)					
3. SMEC Sketch 3260E-CL-SK31-Wetland Sieve Volume (600 mm depth to Clay) - Rev A					
4. Cultural Heritage Management Plan 18448					
5. Geotechnical Site Investigation Report G3275.175 (GSSW1960) AA					

Figure 11: DR-04 Detailed Costs (Source: DR-04 - DCP Property 16 & 18 (APD) - REV08, SMEC, 3 April 2024)

5.2 Overall comments on DR-04 COSTING

38. I have reviewed the DR-04 project cost estimate prepared by Stantec and included in the Urban Enterprise DCP and believe that the quantities and costs are commensurate with the scope of works which can be ascertained from the concept design plans.
39. My observations on the quantities and costs included within the DR-04 exhibited DCP are as follows:
- (a) **Preliminaries (Items 1 to 7)** are consistent with what would be reasonably expected for a wetland project of this scale. I note that the \$90,000 allowance for Item 7 (Allowance for dewatering and treatment prior to discharge) will be susceptible to the prevailing weather conditions during construction and may be insufficient should there be a wet period which results in flooding and associated extensions to construction program. Costs for this exercise would include supervision, overheads, fuel, pumps, suction & discharge hose, clarifier/treatment unit, pad preparation for pump and any associated civil works.
 - (b) **Earthworks (Items 8 to 11)** are consistent with what would be reasonably expected for a wetland project of this scale. Clay lining is a requirement for Wetland retarding basin in accordance with Melbourne Water guidelines. It is noted that the estimate allows for Clay Lining up to Extended Detention Depth (EDD) level.
 - (c) **Access Track and Sediment Ponds (Items 12 to 15)** are consistent with what would be reasonably expected for a wetland project of this scale.
 - (d) **Constructed Waterway (Items 16 to 17)** are consistent with what would be reasonably expected for a project of this scale. It is noted that import of rock would be required as rock is not thought to be readily available at this site location based on knowledge of the local geology, and confirmed by geotechnical investigations.
 - (e) **Drainage Works (Items 18 to 27)** are generally consistent with what would be reasonably expected for a wetland project of this scale. However, it is noted that a Bypass Pipe is included within the concept design, which is a requirement of the SWMS and is included for volume control. This results in higher than typically expected costs for drainage (totalling \$365,000 in works associated with the bypass pipe).
 - (f) **Landscape Works (Items 28 to 37)**. The landscape costs were queried by Council to the Developer Group post submission per **Paragraph 31(b)** of this report. It is understood that these costs have been updated in the latest version of DCP (Rev 8) using estimates prepared by SMEC's Landscape Architecture team, which were incorrectly left out of the original DCP. I further note in Council's Part A submission that Council have accepted the higher Landscape costs based on the SMEC estimate. I make no comment in relation to the Landscape Cost Estimate, as this is outside my area of expertise.
 - (g) **Authority Charges and Consulting Fees (Items 40 to 49)** are consistent with what would be reasonably expected for a project of this scale. It is noted that Item 46 (Detailed civil design) has been removed from the previous version of DCP (Rev 6) due to this being a duplication with item 48. These costs are understood to be covered under the consultants 8% fee allowance in Item 48 (Civil Design and Documentation).

5.3 High Cost Items

40. My observations related to the high cost items included within the DR-04 exhibited DCP are as presented in **Table 3** below.

Table 3: Observations related to DR-04 High Cost Items

Item No.	Description	Qty	Unit	Rate	Amount	Comments
Item 8 (ii)	Estimated Excavation	57,300	m ³	\$20	\$1,146,000	Rate is considered reasonable and in line with current industry standard.
Item 9 (i) Provisional	Excess material to be transported off-site	54,250	m ³	\$30	\$1,627,500	<p>The rate is considered reasonable and in line with current industry standard.</p> <p>Depending on disposal location & associated cartage (including diesel) costs, the rate is likely to be higher than typical rates given the site is located in Curlewis (not a major metro area).</p> <p>The allowance for full off-site disposal is considered reasonable based on likely saturated conditions within existing waterway, and the likelihood that this material would not be suitable to be used for structural fill within the development.</p>

5.4 Sieve Costs

41. The DR-04 project cost estimate breakdown (Rev 6) included with the Urban Enterprise DCP included an allowance for an additional \$813,750 for CHMP related soil screening works based on the following:

- (a) Volume – 54,250 m³
- (b) Rate - \$15/m³
- (c) Total Cost = \$813,750

42. I understand the Developer Group noted to Council in January 2024 that the CHMP implementation costs for DR-04 were to be reviewed as per **Paragraph 31(b)** of this report.

43. The additional documentation provided on 4th April 2024 (as per **Paragraph 33** of this report) included a quotation from Dugay & Co (Archaeology and Cultural Heritage Management) to undertake CHMP Compliance (including soil sieving), which totals \$3,180,103.20 exc. GST, as included in **Figure 11**.

44. I have been provided with extracts from CHMP 18446, and the relevant conditions under section 1.1.7 (Condition 7: Management of Soils) are as follows:

- (a) Any soils above the sterile layer (i.e. the artifact bearing sediments) to be removed from the activity area must be stripped and stockpiled.
- (b) Excess soils from Wetlands 1 – 3 will likely require sieving.
- (c) The excess soils must be stockpiled in the wetland areas 1 to 3 prior to sieving.
- (d) Soils below the sterile base layer do not require sieving.

- (e) All stockpiled soil must be sieved through mesh not exceeding 5mm apertures.
 - (f) Once sieved, the soils can be removed from the activity area.
 - (g) Where sieved soils are to remain within the activity area they must be relocated to open space, and not to private allotments.
45. I have reviewed the information supplied related to sieving costs, and make the following observations:
- (a) The Sketch Plan (3260E-CL-SK26-Wetland BEW Volumes_[A]) prepared by SMEC shows a total excess cut volume of 55,423 m³ based on 3D modelling of the proposed design surface vs. existing surface conditions (survey data)
 - (b) The Sketch Plan (3260E-CL-SK29-Depth to Top of Clay Layer - Wetlands_[A]) prepared by SMEC includes test pit information from Geotechnical and Cultural Heritage investigations within the DR-04 project extents. The sketch notes that an average depth to the "Top of clay layer" is 0.66 m based on available test pit stratigraphy data.
 - (c) The Sketch Plan (3260E-CL-SK31-Wetland Sieve Volume (660mm Depth to Clay) [A]) prepared by SMEC includes a coloured representation of the proposed volume of in-situ material which will be required to be sieved under the conditions of CHMP18446, totalling 20,680 m³. This is understood to be based on SMEC's 3D model utilising a comparison between wetland design surface and the average top of clay "top of sterile layer" of 660 mm below existing surface (as presented in SK29)
 - (d) The letter prepared by Dugay & Co "*Costing CHMP 18446 Curlewis sieving compliance creekbank and wetlands revised 2 teams*" presented estimated costs for sieving works based on a volume of 20,680 m³ being required to be sieved prior to disposal off-site. The estimate comprises fees for:
 - (i) Registered Aboriginal Party (RAP) fees
 - (ii) Cultural Heritage Supervision/Consultant fees
 - (iii) Sieving and Plant fees
 - (e) The geotechnical report (G3275.175 (GSSW1960) AA_Geotechnical Investigation_1421 Portarlington Road) provides the test pit data utilised for preparation of SMEC sketch plan SK29. It is noted that SMEC also used test pit data from site investigations related to CHMP18446.
46. Based on the above observations made in **Paragraph 45** I am of the opinion that the methodology of determination and costs associated with the CHMP implementation for DR-04 (sieving costs) are reasonable based on the following:
- (a) An excess cut volume of 55,423 m³ is being generated from the DR-04 wetland excavation which will likely require disposal off-site.
 - (b) Determination of the "Top of Clay" or "Top of sterile layer" has been made based on a reasonable level of stratigraphy data obtained through geotechnical and cultural heritage test pit investigations.
 - (c) The method of determination of the required volume of material to be sieved prior to off-site disposal in SK31 appears to be reasonable based on the reported volumes from the 3D modelling. The material being excavated and disposed off-site (upper 0.66 m) appears to comprise topsoil and silty sand material which will not be suitable for use as FILL material within the development.
 - (d) Expert cost estimation has been supplied by a cultural heritage consultant which considers all RAP and consulting fees, along with associated plant fees to undertake sieving works.

6 Review of DR04 Civil Engineering

6.1 Overall comments on Concept Design and DR-04 Strategy

47. I have reviewed the SWMS and Concept designs associated with DR-04. I am of the opinion that the design solution is appropriate for the subject site.
- (a) The topography of the site grades downhill from the South-East to the North-West between approximately 78 m AHD (Portarlington Road) and 51 m AHD (Tivoli Drive) and can therefore be considered a moderately steep site.
 - (b) The low point of the site is located diagonally along the existing designated waterway and location of existing farm dams and this is where the proposed wetland asset has been sited.
 - (c) An alternative conventional offline wetland system with a dedicated constructed waterway (40 m corridor) would entail multiple wetland retarding basins on either side of the constructed waterway corridor to service the development. It is thought that this may occupy a very large footprint in NW Corner of the site (outfall location).
 - (d) A linear wetland system allows for the opportunity to split development catchments efficiently and treat/retard water prior to entering the Tivoli Drive culverts (outlet).
 - (e) The NW corner of the site is limited by moderately steep contours. Making the wetland larger at this location would likely result in a "turkey nest" wetland being required to allow for the flat bottom wetland to tie-in its batters to development (south) & Bellarine Rail Trail (north). Therefore, a linear wetland solution is considered reasonable to allow for upstream storage and in turn reduce the size of the asset in the NW corner of the site.
 - (f) The Water Technology SWMS for the Southern Waterway and memorandum (Appendix E of SWMS) reinforces the design solution is fit-for purpose for the subject site by meeting the requirement for peak flow attenuation, exceedance of pollutant load reduction performance, and taking into account Council's maintenance requirements, CCMA's requirements and considering the impacts of residence times and effective water levels.

7 Recommendations and Conclusion

48. The DCP costings for DR-04 are well considered and consistent with what would be reasonably expected for a wetland project of this scale – however post the exhibition of the DCP, it has become apparent that additional allowances need to be made for additional sieving costs and an increased allowance for landscape costs.
49. My recommendation would be to adopt the SMEC cost estimate Revision 8 which was recently circulated, showing a revised project cost for DR-04 of \$15,621,027.39, excluding GST.
50. The additional costing to account for the waterway costs through Parcel 23 (DR-05) should be included in the DCP.
51. The determination of costs and volumes associated with sieving of in-situ material prior to disposal off-site in accordance with CHMP 18446 are justified as per the above sections of this report.
52. Additional geotechnical test pitting could be undertaken within DR-04 and DR-05 to provide a greater level of accuracy related to CHMP implementation volumes and costs. However, I consider the current level of data and the methodology of determination for the “Top of Clay” as reasonable, subject to review by the Registered Aboriginal Party.
53. The Concept design associated with DR-04 is a logical design solution for the subject site based on civil engineering judgement.

Appendix A **Stephen Watters - Curriculum Vitae**



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

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
- Kilorra, 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 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 the table below, which also details the nature of my 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

I have specific experience in relation to the practical implementation of drainage schemes, and the delivery of essential services to developments including sewer, water, gas, and electrical infrastructure.

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

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 in relation to the delivery of such projects, 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

I have 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 I am 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.

I have 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

- In December 2021 I was presented with the Bill Foley Award by ALDE, which recognises people who have contributed at a high level in the industry.
- I received a high commendation in the SJ awards in 2021.
- I was the recipient of the Local Government Overseas Study tour award in 1999. This involved travelling to the UK and the US to attend the Local Government Professionals conference in Denver, and delivering a paper at the conference. The Study tour included writing a report on Best Value in the delivery of Local Government services in the US and UK.
- I was awarded an innovation award by Earth Tech in 2003.

Career History

1991-1994

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

I was employed as a graduate civil engineer, and formed part of the first cohort of design engineers employed Computer Aided design in the design office. As well as being an excellent grounding in civil design, we rotated into other departments and I spent a year working as a traffic engineer. We were also responsible for undertaking our own feature surveys, and I became proficient in the use of a total station to pick up field data.

1994-1996

Design Engineer at Fisher Stewart

My role at Fisher Stewart was a design engineer in the Roads and Local Government group, which was a small group within the Land Development team. This gave me the opportunity to be involved in residential subdivisional design, as well as to work on some major highway projects such as the duplication of the Western Port Highway.

1996-1997

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

The Wangaratta office was established to deliver the outsourcing of the design function for the City of Wangaratta. I was responsible for establishing the office, and I led a small team of design engineers and we were responsible for delivering the Council's capital works program, as well as undertaking work for other clients such as VicRoads.

1997-1999

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

The Echuca office was established to deliver the outsourcing of the design function for the Shire of Campaspe. I was responsible for establishing the office, and I led a small team of design engineers and we were responsible for delivering the Council's capital works program, as well as undertaking work for other local clients.

1999-2007

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

I returned to Melbourne in 2009 and was a Project Manager in the Urban Development group in the Melbourne office of Fisher Stewart (later Earth Tech after Fisher Stewart was acquired).

I project managed a number of residential and industrial Urban development projects including:

- Caroline Springs including Urban Wetland and Cascades
- Laurimar Estate, Doreen
- Mount Derrimut Industrial Estate

Other general civil projects that I project managed in this time include:

- 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.

I was also responsible for the coordination and delivery of the 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.

2007-2011

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

During this period I managed the Urban Engineering design team, which was included in the order of 45 design engineers, designers and draftspeople.

The Urban Engineering projects that I project managed in this time included:

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

2011 – 2016

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

The Urban Engineering projects that I project managed in this time included:

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

2017 – 2019

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

As RFM I was responsible for overseeing the Urban development business in the southern region of SMEC, and acted as a Senior Project Manager or Project Director on a number of projects.

2019 – 2022

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

In addition to the above management role, I am currently the Project Director on several of our most significant Urban development projects, including:

- Kingsfield, Sunbury
- Olivine, Donnybrook
- Kinbrook, English St, Donnybrook
- Deanside Village, Rockbank
- Harpley

Appendix B **Norton Rose Fulbright Australia** **Instructions**

submissions, and a petition containing 36 signatures, objecting to the timing for delivery of the Development Contributions Plan (**DCP**) and the Curlewis Children's and Community Hub.

- 1.9 The Council has considered the submissions and its responses and a summary of the issues raised in the submissions are provided at Tab C.
- 1.10 The Panel Hearing will be conducted at Planning Panels Victoria (Hearing Room 2, Ground Floor, 1 Spring Street, Melbourne) on the following dates (see hearing timetable are provided at Tab D):
- (1) Monday 22 April to Wednesday 24 April 2024;
 - (2) Monday 29 April to Friday 3 May 2024; and
 - (3) Monday 6 May 2024.

2 Your instructions

2.1 Our client wishes to engage you to:

- (1) review the draft Amendment documents and background materials in your brief;
- (2) prepare an expert witness statement providing civil engineering and cost evidence in respect of the drainage infrastructure "DR-04" in the DCP under the proposed Amendment; and
- (3) if instructed, appear at the Panel hearing in the week commencing 22 April 2024 to present your expert evidence.

3 The Land

3.1 The Land consists of 20 individual titles. As shown by the blue lines in Figure 1, the Land is:

- (1) partially in a Farming Zone (**FZ**). As shown in green, this area of 96.7 hectares is bound by Port Phillip Bay to the north, McDermott Road to the west, Tivoli Drive / Greenvale Drive to the east and the Bellarine Rail Trail to the south;
- (2) partially in a Rural Living Zone (**RLZ**). As shown in orange, this area of 51.5 hectares is bound by the Bellarine Rail Trail to the north, Curlewis Golf Course and Tivoli Drive to the west, Hackwill Place to the east and Portarlington Road south of the Bellarine Rail Trail;
- (3) not subject to any Overlays; and
- (4) 150 hectares in total area.

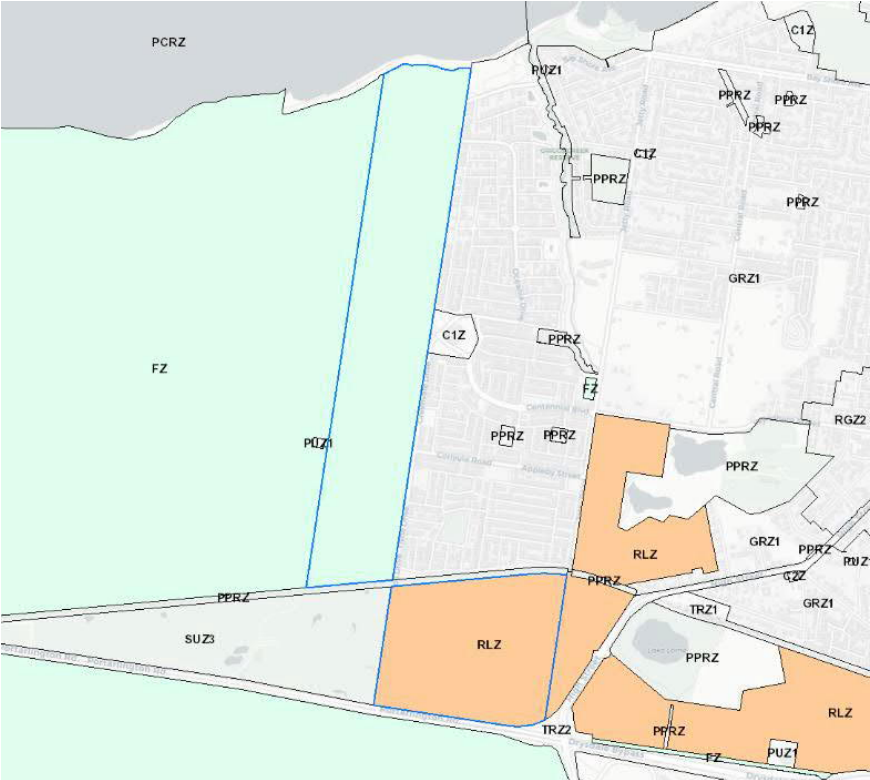


Figure 1: Map of Land



Figure 2: Aerial map of the Land

3.2 The Land has the following adjacencies as shown in Figures 2 and 3:

- (1) To the south, the Land has frontage to the Bellarine Rail Trail and Portarlington Road. South of the Bellarine Rail Trail is a Special Use Zone – Schedule 3 (**SUZ3**) containing the Curlewis Golf Club, while south of Portarlington Road is zoned as further FZ land.
- (2) To the west, the Land has frontage to McDermott Road. West of McDermott Road is additional FZ land.
- (3) To the east, the Land has frontage to Tivoli Drive, Greenvale Drive and Jetty Road. East of Tivoli Drive and Greenvale Drive is predominantly residential properties in the General Residential Zone – Schedule 1 (**GRZ1**) and a commercial area in the Commercial 1 Zone (**C1Z**) anchored by a Woolworths supermarket. East of Jetty Road is further RLZ land and Lake Lorne in a Public Park and Recreation Zone (**PPRZ**).
- (4) To the north, the Land has frontage to the Public Conservation and Resource Zone (**PCRZ**) along Port Phillip Bay.

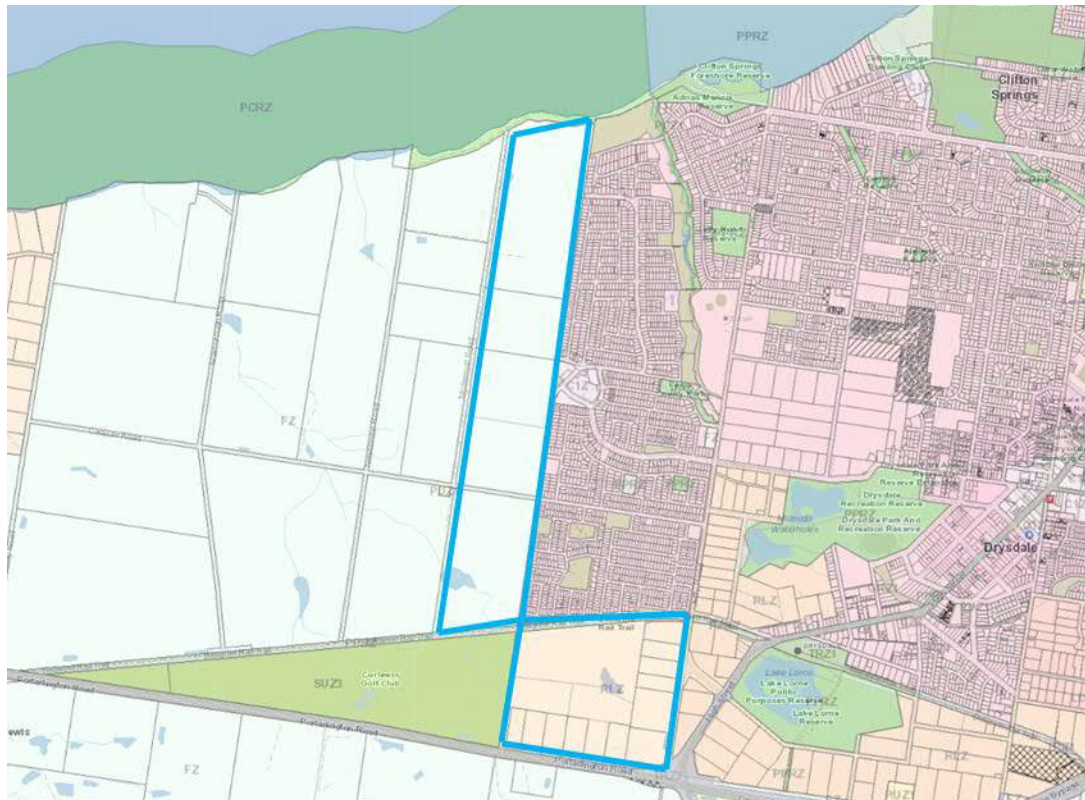


Figure 3: Map of surrounding area

3.3 The Developer Group controls a significant portion of the Land. The Developer Group's landholdings are shown in the map below. Stockland, SOHO Living and APD Projects' landholdings are represented within the purple, blue and black boundaries respectively.

- (1) Stockland:
 - (a) 32-70 McDermott Road, Curlewis VIC 3222;

- (2) SOHO Living:
 - (a) 91-125 Coriyule Road, Curlewis VIC 3222;
- (3) APD Projects:
 - (a) 1421-1423 Portarlinton Road, Curlewis VIC 3222;
 - (b) 1471-1479 Portarlinton Road, Curlewis VIC 3222;
 - (c) 292-300 Jetty Road, Curlewis VIC 3222; and
 - (d) 12-18 Hackwill Place, Curlewis VIC 3222.

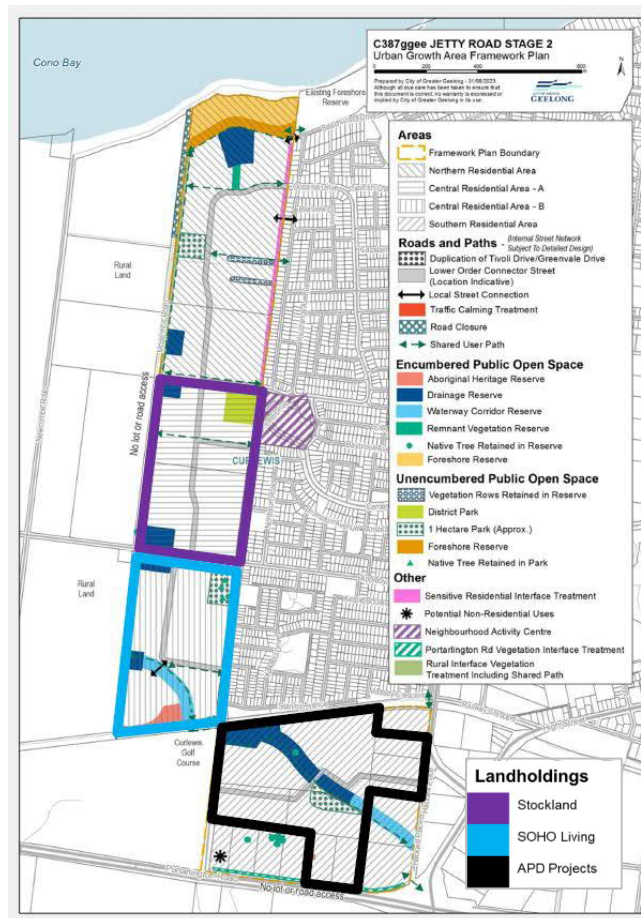


Figure 4: Map of Developer Group landholdings

4 The Amendment

4.1 In summary, the Amendment proposes the following changes to the Scheme:

Zoning maps

- (1) Amend *Planning Scheme Map 59* to rezone the Land from FZ and RLZ to GRZ1.

Overlay maps

- (2) Amend *Planning Scheme Map 59DPO* to apply the Development Plan Overlay (DPO) Schedule 46 to the Land.

- (3) Amend *Planning Scheme Map 59DCPO* to apply the Development Contributions Plan Overlay (**DCPO**) Schedule 9 to the Land.
- (4) Insert *Planning Scheme Map 59EAO* to apply the Environmental Audit Overlay (**EAO**) to the Land.

Planning scheme ordinance

- (5) Insert a new Schedule 46 to Clause 43.04 DPO that will apply to the Land.
- (6) Insert a new Schedule 9 to Clause 45.06 of the DCPO Schedule that will apply to the Land.
- (7) Amend the Schedule to Clause 72.03 (*What does this planning scheme consist of?*) to include a new map 59EAO.
- (8) Amend the Schedule to Clause 72.04 (*Documents Incorporated in this Planning Scheme*) to include the Jetty Road Urban Growth Area Stage 2 Development Contributions Plan.

4.2 Council's Explanatory Report outlines why the Amendment is required and how the Amendment implements the objectives of planning in Victoria pursuant to sections 4(1) and 12(1)(a) of the Act. The report also details how the Amendment:

- (1) addresses environmental, social and economic effects, including by retaining native vegetation in open space and reserves, constructing a waterway corridor reserve consistent with the Melbourne Waterway Guidelines, generating contributions towards identified social and community infrastructure and including new places on the Aboriginal Heritage Register;
- (2) addresses bushfire risk, including by obtaining risk assessments from South Coast Bushfire Consultants and mandating adequate setbacks to buildings to meet bushfire risk management objectives;
- (3) complies with the requirements of Ministerial Directions;
- (4) supports or implements the Planning Policy Framework, a significant pillar of which is the *Bellarine Peninsula Statement of Planning Policy (Bellarine Peninsula SPP)* released in July 2023. For example, Objective 8 of the Bellarine Peninsula SPP relates to the sustainable management and development of settlements consistent with protecting landscape significance, environment and biodiversity values, Wadawurrung living cultural heritage and historic heritage values. In the context, Council outlines how the Amendment will approach elements including conservation of native coastal and indigenous vegetation, best practice environmentally sustainable design and affordable housing;
- (5) supports or implements the Municipal Planning Strategy, including by directing and containing growth in appropriate locations;
- (6) makes proper use of the Victoria Planning Provisions, including by:
 - (a) using the GRZ to encourage a diversity of housing types and growth, as well as ensure consistency with Jetty Road Urban Growth Area Stage 1, which neighbours the Affected Land to the east;
 - (b) using the DPO to ensure development occurs in a planned and coordinated manner;
 - (c) using the DCPO to list infrastructure required to service future residents, state timing of delivery and calculate a development contribution rate; and
 - (d) using the EAO to mitigate potential risks of pesticide contamination from previous farming and agricultural land uses;

- (7) consulted with and addressed the views of relevant agencies, such as the Corangamite Catchment Management Authority (regarding stormwater management planning), the Environment Protection Authority and Department of Transport and Planning (regarding potentially contaminated land) and the Country Fire Authority.
- 4.3 The infrastructure items included in the Stage 1 DCP have been delivered, but some of the Stage 1 DCP items are intended to be funded by Stage 2 landowners as per Schedule 2 to Clause 45.06 (DCPO).
- 4.4 Council has also noted that key risks, should the Amendment not proceed, are namely:
- (1) confusion and uncertainty for directly affected landowners, developers and the local community;
 - (2) Council exposure to legal and financial repercussions associated with its DCP obligations; and
 - (3) delays to local road duplication that will benefit nearby residents.

5 The Developer Group's Submission

5.1 The Developer Group believes the Amendment is strategically justified and should be approved as soon as possible to enable development to commence, subject to changes.

5.2 The Developer Group's Submission, dated 18 December 2023, is summarised below, along with relevant Council responses in its Response to Submissions. We note that unless noted otherwise, the submissions have been made collectively by the Developer Group:

A. Support for overall Amendment

- (1) The Developer Group supports the delivery of Tivoli Drive and Greenvale Drive per the exhibited draft agreements under section 173 of the Act.

B. DPO Schedule

- (1) The DPO Schedule should be amended to clarify the affordable housing contribution is voluntary and to remove the detailed requirements currently included in the Draft DPO Schedule;
- (2) The DPO Schedule should be amended to include wetland and waterway landscape design principles to guide the approval of future assets and to facilitate increased development area yield;
- (3) Other specific changes to the DPO Schedule drafting are required, including introducing flexibility as to how the responsible authority can consider permit conditions;
- (4) Changes to the Environmentally Sustainable Design provisions are required to ensure relevance and appropriateness;
- (5) References to residential and retirement villages in the DPO Schedule should be amended, including the current wording that requires any Development Plan to provide for both a residential and retirement village.¹

C. DCP

- (1) The Coriyule Road Drain (DR-02) should be excluded from the DCP, for reasons including that it has already been funded by the Council and that the Affected Land only represents 16% of its catchment area;

¹ Stockland only.

- (2) The assigned land area for the Southern Waterway (DR-04) should be reduced;²
- (3) The Southern Waterway (DR-04) costs should be amended to include the correct land area and correct landscape costs;³
- (4) The land valuation methodology for the Southern Wetland should be site-specific;⁴
- (5) DCP projects should reference the financing costs associated with the early delivery of enabling infrastructure, particularly as these are expected to be significant;⁵
- (6) DCP costs for DR-01 and DR-03 should be corrected as they have been mis-numbered;
- (7) Construction and traffic calming treatment costs associated with Coriyule Road should be included in the DCP, given the road's significance as a key thoroughfare and the need to construct it in a single stage early in the development;⁶
- (8) The cost of foreshore works should be amended and/or that the Council should clarify the scope of required works, given a discrepancy between amounts in the DCP report and existing Stantec cost submission; and
- (9) The DCP Overlay Schedule drafting should be amended to ensure that the cost of projects completed prior to introduction of the DCP are indexed with the CPI.

D. Specific Control Overlay (SCO)

- (1) An SCO should be introduced to facilitate use of the Small Lot Housing Code (**SLHC**), which will enable construction of single dwellings on lots smaller than 300 square metres without the need for a planning permit and hence enable diversity, affordability, efficiency and increased access to housing.⁷

6 Drainage concerns

- 6.1 Council had provided in-principle agreement regarding the design for the southern waterway and wetlands and the overall Stormwater Management Strategy (**SWMS**), including provision of an online system.
- 6.2 On 5 April 2023, however, Council rejected the concept and design on the basis that it did not demonstrate compliance with its standards. Council provided further comments on this position on 13 April 2023, setting out the following standards to be met:
 - (1) Infrastructure Design Manual (Local Government Infrastructure Design Association);
 - (2) Design Note 2: Stormwater Detention Storage Design (City of Greater Geelong);
 - (3) Design Note 3: MUSIC - Modelling Approach and Parameters for use within the City of Greater Geelong (City of Greater Geelong);
 - (4) Design Note 3: Wetlands and Ponds (City of Greater Geelong);
 - (5) Landscape Standards Manual (City of Greater Geelong);
 - (6) Constructed Wetland Design Manual (Melbourne Water);

² APD Projects only.

³ APD Projects only.

⁴ APD Projects only.

⁵ APD Projects only.

⁶ Stockland and SOHO Living only.

⁷ APD Projects and SOHO Living only.

- (7) Constructed Waterway Design Manual (Melbourne Water); and
 - (8) Construction and establishment guidelines: swales, bioretention systems and wetlands guideline (Water by Design).
- 6.3 Council also stated that the slope and construction of the batters should be adjusted to avoid any need for safety fencing, and that wetlands should be located offline to waterways.
- 6.4 On 26 April 2023 the Developer Group and Council met to discuss Council's concerns and prompted updated modelling, which were provided to Council on 11 May 2023.
- 6.5 On 31 May 2023, Council advised that the updated modelling provided on 11 May 2023 remained non-compliant with its standards.
- 6.6 On 2 August 2023, the Developer Group's technical consultants (SMC and Water Technology) submitted a revised waterway design to Council that met Council's requirements.
- 6.7 The exhibited version of the SWMS is dated 6 September 2023.

7 DR-04

- 7.1 Property 16 is owned by APD Projects and is described as Lot 1 on Plan of Subdivision 616244 in Certificate of Title Volume 08501 Folio 901. It is encumbered by a declared 40-metre waterway (see Figure 5 below).
- 7.2 Under the proposed Amendment and the DCP, the waterway will be developed to create a drainage reserve (identified as "DR-04" in the DCP) which will service the future residential development and adjoin the constructed waterway on property 23.

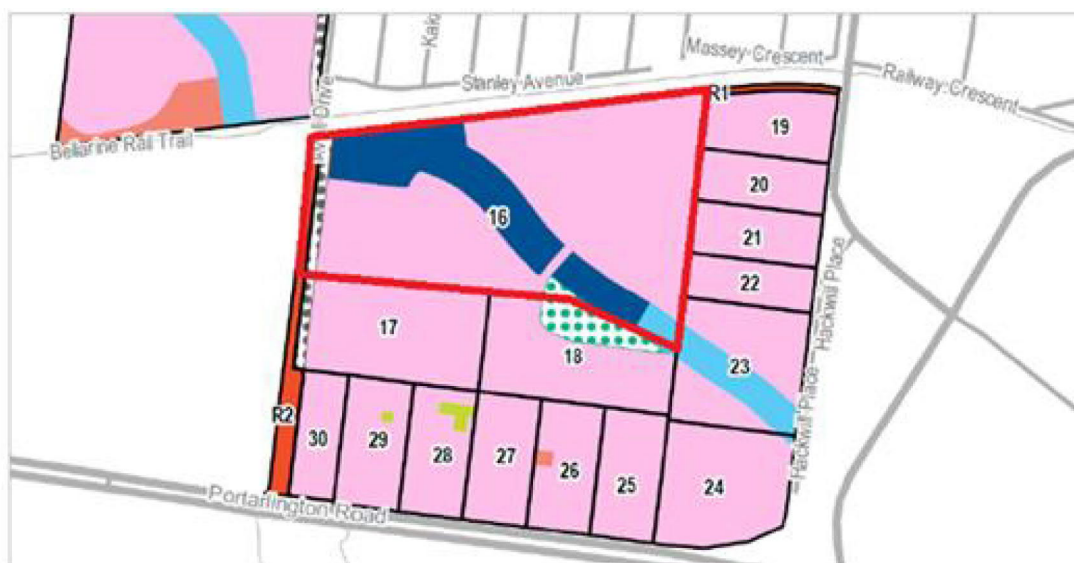


Figure 5: Map of Property 16

- 7.3 APD Projects submitted that the DR-04 costs for construction (comprising landscape and civil costs) in the DCP are incorrect for the landscape component.
- 7.4 Council has advised the Developer Group that the construction costs associated with DR-04 had been based on Stantec's results dated 31 August 2023, which were contained in REV06 Pricing Schedule for DCP DR-04.

- 7.5 Council has subsequently sought clarification from the Developer Group on:
- (1) whether the costings include all work from Tivoli Drive to Hackwill Place and Portarlington Road; and
 - (2) whether the additional SMEC landscaping costs are included.
- 7.6 In January 2024, Bursill Consulting (on behalf of APD Projects) responded to Council's queries as follows:
- (1) The civil costs included works on APD Project's properties 16 and 18, through which the proposed waterway passes, and included property 23 which contains a section of constructed waterway;
 - (2) Costs will likely be adjusted upwards to include works to construct a waterway channel on the land of property 23, connecting the waterway along properties 16 and 18 and the existing outfall drain on Jetty Road.
 - (3) SMEC provided an Opinion of Probable Cost for this previously uncosted section of the open constructed waterway dated 8 February 2024, which is proposed to be a new infrastructure item named DR-05.
 - (4) SMEC and APD Projects are confirming the costs for CHMP implementation, which involves a resource-intensive sieving process. SMEC is reviewing the extent of material to be excavated from the wetlands above and below the clay layer, and currently estimates this amounts to 54,000m³.

8 Panel Hearing

- 8.1 On 13 February 2024, Council resolved to:
- (1) Request the Minister for Planning to appoint an Independent Panel (**Panel**) under Part 8 of the Act;
 - (2) Refer all submissions to the Panel; and
 - (3) Submit to the Panel its response to the submissions as outlined in its report (**Response to Submissions**).
- 8.2 On 14 February 2024, Council published the Response to Submissions (provided in full and separately summarised at Tab C). The Developer Group's submission is referred to as Submission 7.
- 8.3 Council received 58 submissions following exhibition, with 56 of these requesting changes to the Amendment.
- 8.4 The main issues raised by the submitters included the following:
- (1) the Children's and Community Hub, with several submissions raising concerns about the postponed delivery date under the DCP for Stage 2 compared to what had been targeted in the DCP for Stage 1;
 - (2) the need for various changes to Coriyule Road, Tivoli Drive and Greenvale Drive, including escalating the role of Coriyule Road to a higher-order road, sealing Coriyule Road west of the Land and adding service lanes to Tivoli Drive;
 - (3) requested changes to DPO46, including those of the Developer Group detailed above; and
 - (4) requested changes to the DCP, including those of the Developer Group detailed above.

8.5 Council provided the following responses to the Developer Group's submission:

- (1) In relation to the Developer Group's Submissions concerning the DPO Schedule:
 - (a) Council does not accept the alternative affordable housing provisions in the Developer Group's submission and has clarified that affordable housing contributions are discretionary;
 - (b) Council's view is that the proposed changes in respect of wetland and waterway landscape design principles are "overly prescriptive and may in fact limit flexibility in design";
 - (c) Council's view regarding concerns about introducing more flexibility in how the responsible authority can consider permit conditions is that "it is considered appropriate that the specific actions are identified as part of the development plan preparation which should then inform relevant permit conditions";
 - (d) Council agrees that the ESD provisions at clause 4.0 require review, although it does not agree with the Developer Group's proposed approach. Council has undertaken to prepare redrafted ESD provisions for the panel hearing; and
 - (e) While Council supports the removal of a north-south road as proposed by the Developer Group, it does not support Stockland's requested changes to the requirement for both residential and retirement villages as the existing wording promotes a diversity of land uses.
- (2) In relation to the Developer Group's submissions concerning the DCP:
 - (a) Council's position is that the Coriyule Road Drain should remain in the DCP given the direct nexus between it and development as part of Jetty Road Stage 2. Council also clarified the indexation methodology adopted;
 - (b) Regarding the assigned area for DR-04, Council clarified that the DCP was prepared on land budget information that has since been revised, and will be amended accordingly;
 - (c) Regarding the costs for DR-04, Council clarified that the DCP was prepared on land budget information that has since been revised, and that the DCP will be amended accordingly;
 - (d) Regarding the land valuation methodology for the Southern Wetland, Council maintained and clarified its position, including with reference to the Ministerial Direction on the Preparation and Content of Infrastructure Contributions Plans;
 - (e) Council is open to including financing costs attributable to early infrastructure delivery with clear justification, noting that "financing costs are not normally included where the works are 'typical' in terms of scope, timing and triggers";
 - (f) Council is confirming DCP costs for DR-01 and DR-03 with Stantec;
 - (g) Cost sharing is typically not required for local roads, unless there is a clear justification for inclusion which also considers equity impacts on affected landowners;
 - (h) Council maintained and clarified its approach to costing the foreshore works; and
 - (i) Regarding the timing of the costing of projects, Council maintained its position on this item.

- (3) In relation to the Developer Group's submissions concerning the SCO:
 - (a) Council supports the use of the SLHC but specifies that it can only be activated in special purpose zones and therefore this point is beyond the scope of the Amendment.
- 8.6 The Panel Hearing will be conducted at Planning Panels Victoria (Hearing Room 2, Ground Floor, 1 Spring Street, Melbourne) on the following dates:
 - (1) Monday 22 April to Wednesday 24 April 2024;
 - (2) Monday 29 April to Friday 3 May 2024; and
 - (3) Monday 6 May 2024.
- 8.7 In accordance with the Panel's Directions, the Proponent's expert evidence is due for filing and service by no later than 12 noon on 8 April 2024. We therefore request your draft report by no later than 4 April 2024, if possible.
- 8.8 Sarah Raso has been appointed as Chair of the Panel.

9 Enclosed documents

- 9.1 Enclosed is a folder of background documents via a Dropbox link for your consideration.
- 9.2 Please ensure that you have regard to the *Planning Panel Victoria Practice Note 1 regarding Expert Evidence (PPV Practice Note 1 – Expert Evidence)* when preparing your evidence.

10 Client details, further information and site inspection

- 10.1 Please direct any updates to fee estimates (if required) and invoices in this matter the Developer Group at the following address, care of Norton Rose Fulbright:

Elizabeth Guylar
Development Manager
APD Projects
Elizabeth.Guylar@apdprojects.com.au

Tina Puopolo
Development Manager
SOHO Living
TinaP@soholiving.com.au

Lachlan Atkins
Project Director
Stockland
Lachlan.Atkins@stockland.com.au

11 Confidentiality

- 11.1 This letter, any enclosed documents and all other communications between us and between you are confidential (**Confidential Information**) and are subject to a claim for privilege and must not be disclosed without our consent or the consent of our client.
- 11.2 The duty of confidentiality will continue beyond the conclusion of your instructions.
- 11.3 If you are obliged by law to disclose Confidential Information, it is not a breach of this engagement if you first give written notice to us of that obligation, if you can do so without breach of any law.

26 March 2024

- 11.4 You must return all documents and other media, including copies, which contain Confidential Information to us. You must delete all electronically stored material immediately when requested to do so by us.
- 11.5 You must take all steps necessary to maintain Confidential Information and notes in strictest confidence.

12 Change of opinion

- 12.1 If for some reason, you change your opinion after delivering your report, please advise us as soon as possible. If that change is material, a supplementary report will need to be prepared, which explains the reasons for the change in your opinion.

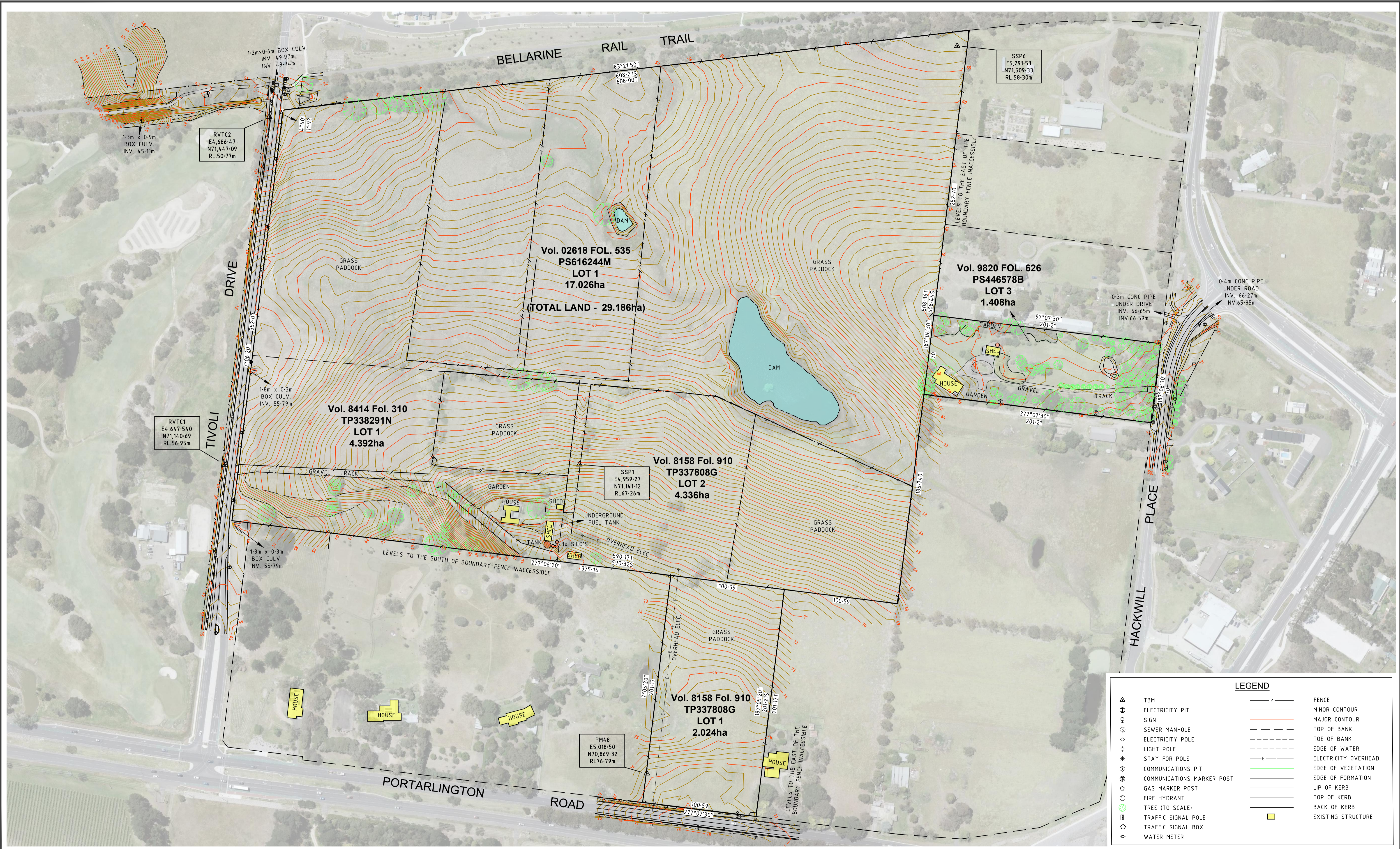
Should you require any further information, please call Linda Choi on 8686 6367 or Tamara Brezzi on 8686 6226.

Yours faithfully



Linda Choi
Senior Associate
Norton Rose Fulbright Australia
Partner: Tamara Brezzi

Appendix C **SMEC Survey Data**



LEGEND			
▲	TBM	— / —	FENCE
⊕	ELECTRICITY PIT	—	MINOR CONTOUR
⊙	SIGN	—	MAJOR CONTOUR
⊕	SEWER MANHOLE	—	TOP OF BANK
⊕	ELECTRICITY POLE	—	TOE OF BANK
⊕	LIGHT POLE	—	EDGE OF WATER
*	STAY FOR POLE	—	ELECTRICITY OVERHEAD
⊕	COMMUNICATIONS PIT	—	EDGE OF VEGETATION
⊕	COMMUNICATIONS MARKER POST	—	EDGE OF FORMATION
⊕	GAS MARKER POST	—	LIP OF KERB
⊕	FIRE HYDRANT	—	TOP OF KERB
⊕	TREE (TO SCALE)	—	BACK OF KERB
⊕	TRAFFIC SIGNAL POLE	—	EXISTING STRUCTURE
⊕	TRAFFIC SIGNAL BOX	—	
⊕	WATER METER	—	

CURLEWIS - APD
 1421 Portarlington Rd
 Curlewis
 Existing Conditions & Title Re-establishment
 Drawing No. Curlewis APD.00 Ver. A
 Sheet No. 1 of 1
 Copyright SMEC© 2022.

Surveyed	R.Alexander	March 2022
Drawn	R.Alexander	18/03/2022
Checked	S.Lovelock	21/03/2022
Approved	S. Lovelock	21/03/2022

VERSION	DESCRIPTION	DATE	APPD
A	Initial Release	21-03-2022	SL

Bearing Datum:
 MGA 2020 Zone 55 Vide GPSNET.
 Local Coordinate datum via Curlewis APD Shift & Scale (Supplied).

Level Datum:
 AHD Vide GPSNET confirmed by
 BELLARINE PM 48 76-871m
 BELLARINE PM 225 55-995m
 BELLARINE PM 138 62-457m
 BELLARINE PM 49 65-945m (SMES 07/10/2021)

Contour Interval: 0.25m

NOTES

- HEIGHTS BASED UPON TRIGONOMETRIC LEVELLING. PRIOR TO CONSTRUCTION THE HEIGHT DATUM NEEDS TO BE CONFIRMED AND HARD LEVELLED.
- ALL INTERNAL FENCES ARE POST AND WIRE UNLESS DESCRIBED OTHERWISE.
- ONLY VISIBLE SERVICES AT SURFACE LEVEL HAVE BEEN LOCATED. BEWARE OF UNDERGROUND SERVICES.
- SMALL TREES WITH <0.3m TRUNK HAVE NOT BEEN INDIVIDUALLY LOCATED AS PART OF THIS SURVEY.
- DISTANCES ARE IN METRES.

Surveying Engineering
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