JURISDICTION	:	STATE ADMINISTRATIVE TRIBUNAL
ACT	:	PLANNING AND DEVELOPMENT ACT 2005 (WA)
CITATION	:	SATTERLEY PROPERTY GROUP PTY LTD and WESTERN AUSTRALIAN PLANNING COMMISSION [2026] WASAT 110
MEMBER	:	JUDGE H JACKSON, DEPUTY PRESIDENT MR R POVEY, MEMBER
HEARD	:	12, 15 - 17 AND 22 - 26 SEPTEMBER, 6 - 9, 21 AND 24 OCTOBER 2025 AND 9 AND 11 DECEMBER 2025, 1 APRIL 2026
DELIVERED	:	23 SEPTEMBER 2026
PUBLISHED	:	23 SEPTEMBER 2026
FILE NO/S	:	DR 189 of 2020
BETWEEN	:	SATTERLEY PROPERTY GROUP PTY LTD Applicant AND WESTERN AUSTRALIAN PLANNING COMMISSION Respondent SAVE PERTH HILLS Intervenor SHIRE OF MUNDARING Interested Party

Catchwords:

Planning and development - Application for review of refusal to approve structure plan - Long history of zoning for development - Urban zoned land under MRS - Rural zoned land under MRS - Development zone under LPS - Proposed structure plan to replace lapsed structure plan - SPP 3.7 and its Guidelines - Primary issue of risk posed by bushfire - Question of transitional application of Guidelines to SPP 3.7 - Application of an outcomes based approach under cl 7.7 of SPP 3.7 and cl 1.3.1 of the Guidelines - Application of rules of evidence to expert opinion evidence - Traffic Impact Assessment unreliable - Structure plan will impose unacceptable burden on intersection - Where majority of development will be completed only after construction of major infrastructure which developer does not control - Bushfire modelling - Microsimulation traffic modelling undertaken to demonstrate ability to evacuate structure plan area - Manual adjustments made to microsimulation traffic model not identified, explained or justified - Risk assessment as means by which bushfire risk is said to be reduced to acceptable level - Limited explanation as to how and how much risk treatments reduced bushfire risk - Bushfire refuge proposal lacking policy support and necessary detail - Consideration of difficulties associated with need for maintenance of vegetation on private land to low threat state - Location, adequacy, design and ongoing management of public open space - Decision to refuse approval of structure plan

Legislation:

Aboriginal Heritage Act 1972 (WA)
Environment Protection and Biodiversity Conservation Act 1999 (Cth)
Environmental Protection Act 1986 (WA), Pt IV
Fire and Emergency Services Act 1998 (WA)
Metropolitan Region Scheme, cl 23, cl 56
Planning and Development (Local Planning Schemes) Regulations 2015 (WA), Sch 2, Pt 4, cl 14, cl 15, cl 16, cl 16(1), cl 22, cl 27, Pt 10A
Planning and Development Act 2005 (WA), s 37, s 241(1), s 241(1)(a), s 256(1), s 257B, Pt IV, Div 2, Div 3,
Residential Design Codes Volume 1
Shire of Mundaring Local Planning Scheme No 4, cl 1.6, cl 4.2.9, cl 5.16, cl 5.17, Sch 11
Shire of Mundaring Local Planning Strategy
Shire of Mundaring Town Planning Scheme No 3 (repealed)
State Administrative Tribunal Act 2004 (WA), s 27, s 27(2), s 31, s 32(1)
State Administrative Tribunal Rules 2004 (WA), r 39B(6)

Result:

The Tribunal refuses to approve the structure plan

Category: B

Representation:

Counsel:

Applicant	:	Mr P McQueen
Respondent	:	Mr IA Repper and Ms S Price
Intervenor	:	Mr Tomasi and Mr S Bourke
Interested Party	:	Mr CA Slarke

Solicitors:

Applicant	:	Lavan
Respondent	:	State Solicitor's Office
Intervenor	:	Logie Legal
Interested Party	:	McLeods

Case(s) referred to in decision(s):

Avila and Main Roads Western Australia [2023] WASAT 79.
Bridgetown/Greenbushes Friends of the Forest Inc v Department of Conservation and Land Management (1997) 18 WAR 102.
Clive Elliott Jennings & Co Pty Ltd v Western Australian Planning Commission [2002] WASCA 276; (2002) 122 LGERA 433.
Forrest & Forrest Pty Ltd v Minister for Aboriginal Affairs [2024] WASCA 96.
Frugtniet v Australian Securities and Investments Commission [2019] HCA 16; (2019) 266 CLR 250.
Hordyk and Wanslea Family Services Inc [2022] WASAT 117; (2022) 107 SR (WA) 164.
Koltasz Smith & Partners v Western Australian Planning Commission [2000] WATPAT 1.
Lang v The Queen [2023] HCA 29; (2023) 278 CLR 323.
Maio v City of Stirling [No 2] [2015] WASC 189.
Makita (Australia) Pty Ltd v Sprowles [2001] NSWCA 305; (2001) 52 NSWLR 705.
Marshall v Metropolitan Redevelopment Authority [2015] WASC 226.
Medical Board of Australia v Woollard [2012] WASAT 209

Ord Irrigation Cooperative Ltd v Department of Water [2018] WASCA 83; (2018) 232 LGERA 331.

Paspaley Pearling Company Pty Ltd and Delegate of The Chief Executive Officer of The Department of Primary Industries and Regional Development [No 2] [2024] WASAT 108; (2024) 116 SR (WA) 1.

Pollock v Wellington (1996) 15 WAR 1.

Re Drake v Minister for Immigration and Ethnic Affairs [No 2] [1979] AATA 179; (1979) 2 ALD 634.

Ridgecity Holdings Pty Ltd and City of Albany [2006] WASAT 187.

Satterley Property Group Pty Ltd and Western Australian Planning Commission [2025] WASAT 17; (2025) 117 SR (WA) 86.

Satterley Property Group Pty Ltd and Western Australian Planning Commission [2026] WASAT 39; (2026) 120 SR (WA) 114.

Two Rocks Investments Pty Ltd and Western Australian Planning Commission [2019] WASAT 59; (2019) 97 SR (WA) 270.

WA Developments Pty Ltd and Western Australian Planning Commission [2008] WASAT 260.

Wattleup Road Development Company Pty Ltd and Western Australian Planning Commission [2011] WASAT 160.

Westpoint Corporation Pty Ltd v The Registrar of Titles [2004] WASC 189.

Contents

REASONS FOR DECISION OF THE TRIBUNAL:

Introduction

1 By this proceeding the applicant (**Satterley**) seeks review of the respondent's (**WAPC's**) refusal to approve a structure plan, which proposes development of 535ha of land, being Lot 48 Stoneville Road, Stoneville (**Site**).

2 The Site has long been identified in Local and State planning frameworks as the 'North Stoneville' townsite. The structure plan proposes, among other things, the development of ~1000 lots to accommodate ~2800 people.

3 The ultimate issue we are asked to decide is whether the 'correct and preferable decision'[1] is to approve the structure plan; or require Satterley to modify it in a manner specified by us and resubmit it to the WAPC for approval; or refuse to approve it.

4 Although Satterley's initial position was that the structure plan should be approved, for much of the hearing it accepted that approval was not appropriate and that we should find that a modified version of the structure plan should be submitted to the WAPC for its approval. Its closing submissions were to that effect and included a schedule of proposed modifications.[2]

5 The WAPC, the intervenor[3] (Save Perth Hills - **SPH**) and the Shire all disagree. They submit that we should refuse to approve the structure plan.[4]

6 In each case, their ultimate submission is that we should not be satisfied that the risk posed by bushfire, should the structure plan be approved and the Site developed pursuant to it, would be acceptable.

7 We agree and for the following reasons, we find that the correct and preferable decision is to refuse to approve the structure plan.

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[1] Pursuant to s 27(2) of the *State Administrative Tribunal Act 2004* (WA) (**SAT Act**).

[2] Applicant's Outline of Closing Submissions, 20 November 2025 (**Applicant's Outline**), paras 3 & 4 and Annexure A.

[3] On 21 February 2025, Save Perth Hills Inc was granted leave to intervene on certain conditions and for the Shire to make, at that stage, opening submissions - ***Satterley Property Group Pty Ltd and Western Australian Planning Commission*** [2025] WASAT 17; (2025) 117 SR (WA) 86. Subsequently, the Shire was permitted to also make submissions.

[4] Respondent's Closing Submissions, 20 November 2025 (**Respondent's Outline**), para 1. Intervenor's Closing Submissions, 20 November 2025 (**SPH's Outline**), para 28. Closing Submissions by Shire of Mundaring, 20 November 2025 (**Shire's Outline**), para 7 and 149(a).

8 However, that decision should not be seen as a finding that the Site should be transferred to the Rural zone, that it is irredeemably unsuitable for urban development, or that no structure plan should or could ever be approved.

9 Our finding is that the structure plan put before us and relied upon by Satterley is so flawed as to warrant a refusal to approve it. What decisions others make as to the future of the Site is a matter for them, informed by the facts and circumstances and, indeed, any future proposed structure plan, of the time.

The locality

10 The Site is located within Perth's Darling Ranges, approximately 30 kms east of the Perth CBD, 15 km east of Midland and 5 km north of the Mundaring District Centre.[5]

11 The parties are agreed, and we find, that the locality[6] within which the Site is situated includes:[7]

(a) John Forrest National Park, which is located approximately 2.4 km to the west of the Site.

(b) Toodyay Road, which is a single carriageway road located just over 2 km north of the Site. It is convenient to note here that Main Roads WA (**MRWA**) proposes to build a new section of the Perth Adelaide National Highway between Roe Highway/Toodyay Road intersection and Great Eastern Highway (**GEH**) at Northam as part of the EastLink project (**EastLink**). EastLink is planned as a dual carriageway road with interchanges and overpasses to freeway standard. No business case has been developed for the majority of EastLink, including that part relevant to this matter, which therefore remains unfunded and there is no timing for its completion.[8]

(c) GEH, which is a four-lane carriageway divided road, located approximately 4 km south of the Site.

[5] Exhibit 1, Part 2, page 25.
[6] By 'locality', we mean that area of land which both impacts on the proposed development (being, in this case, the development proposed by the structure plan) and which will be impacted by it: ***Ridgecity Holdings Pty Ltd and City of Albany*** [2006] WASAT 187.
[7] Respondent's SIFC, paras 48 - 60, Applicant's SIFC para 39 and Intervenor's SIFC, para 7.
[8] Witness Statement of Lindsay Broadhurst, 13 June 2025 (Exhibit 17), paras 12, 20. Also, ts 282 - 283 and 299 - 300, 17 September 2025.

(d) several single carriageway rural roads running north-south connecting the Site to GEH and Toodyay Road, including Roland Road, Byfield Road/Seaborne Street, each of which are west of the Site and Stoneville Road, which is east of the Site.

(e) three schools near the Site on Roland Road: Mundaring Christian College; Silver Tree Steiner School; and Parkerville Steiner College, all of which are, more or less, co-located.

(f) the Parkerville townsite to the south of the Site, essentially at the southern end of Roland Road. It includes, amongst other things, a primary school, tavern, hall and church. Further south, a large place of worship is located on Seaborne Street (which is, more or less, an extension of Roland Road), approximately 300 metres north of GEH.

(g) the Stoneville townsite to the south-east of the Site on Stoneville Road. Further south, Stoneville Road meets GEH at traffic signals in the centre of the Mundaring townsite.

The Site

12 The Site, we find:[9]

(a) has an area of approximately 535ha, is currently undeveloped and is bounded by:

(i) Hawkstone Street (formerly Cameron Road) to the north, which is the boundary between the Shire and the City of Swan;

(ii) Roland Road to the west;

(iii) Rural zoned land, Woodlands Road and Stoneville Road to the east; and

(iv) Rural zoned land to the south;

(b) has a mixture of flat areas and elevated ridges, with slopes of up to 15 degrees and is traversed by small creek lines. The most prominent water course runs north to south through the centre of the Site and ultimately flows into Jane Brook;

[9] Respondent's SIFC, paras 36 - 47.

(c) is approximately 45% cleared, with remnant vegetation typically comprising Jarrah and Marri open forest with some Sheoak and Banksia woodland;

(d) is likely to be used by Carnaby's black cockatoo, Forest red-tail black cockatoo, Baudin's black cockatoo, Chuditch, Brush-tailed phascogale and Wedge-tailed eagle and provides approximately 297ha of Black cockatoo habitat;

(e) has been used for pastoral and dairying activities and, in the northern part, for quarrying of gravel;

(f) is surrounded by land predominantly used for rural-residential purposes, with minimum lot sizes of 2 ha;

(g) is zoned, under the *Metropolitan Region Scheme* (**MRS**), a mix of 'Rural' (297 ha) and 'Urban' (238 ha), with the Urban zoned area being split between three non-contiguous portions;

(h) is zoned 'Development' under the *Shire of Mundaring Local Planning Scheme No 4* (**LPS 4**), which zoning permits urban development subject to an approved structure plan; and

(i) is mostly designated as 'bushfire prone' (Area 2) by the Fire and Emergency Services Coordinator under the *Fire and Emergency Services Act 1998* (WA) (**FES Act**).[10]

Planning history of the Site

13 In 1994, the Site was first zoned Special Purpose - Comprehensive Townsite Development under *Shire of Mundaring Town Planning Scheme No 3* (**TPS 3**).[11] At that time, the whole of the Site remained zoned Rural under the MRS.

14 In 1998, a structure plan was approved by the Shire under TPS 3 (**1998 Structure Plan**). This structure plan remained in effect until it expired on 18 October 2025.[12]

15 In 2003, those parts of the Site proposed for urban development under the 1998 Structure Plan were rezoned from the Rural zone to the Urban Deferred zone in the MRS.[13]

[10] Exhibit 2, Updated BMP, page 4 - Plate 1.1: Map of Bush Fire Prone Areas.
[11] Respondent's SIFC, para 61.
[12] Respondent's SIFC, para 62. The approval of the 1998 Structure Plan expired during the final hearing.

16 The Urban Deferred zoning was applied because the issue of wastewater treatment remained unresolved. The MRS amendment was referred to the Environment Protection Authority (**EPA**) under Part IV of the *Environmental Protection Act 1986* (WA) (**EP Act**). The EPA decided not to assess the amendment but provided advice on matters such as vegetation, surface water and groundwater.[14]

17 In 2010, the Shire's draft District Zoning Scheme No 4, now known as LPS 4, was referred to the EPA under Part IV of the EP Act and the EPA decided not to assess it.[15]

18 LPS 4 was gazetted and commenced on 17 February 2014. The Site was zoned Development.[16]

19 In 2016, the Urban Deferred zoning was lifted by the WAPC following resolution of the wastewater issues and the Site was zoned Urban under the MRS on 8 November 2016.[17] It will be necessary to return to this issue but, in broad terms, the 2016 amendment was supported by a bushfire management plan (**BMP 2016**) which was prepared in accordance with the then *State Planning Policy 3.7 - Planning in Bushfire Prone Areas 2015* (**SPP 3.7 2015**).[18]

20 On 30 November 2018, Satterley submitted to the Shire proposed Amendment No 1 to the 1998 Structure Plan (**Amendment 1**).[19] It is uncontroversial that, in substance, Amendment 1 was a new standalone structure plan intended to entirely replace the 1998 Structure Plan.[20]

21 On 14 July 2020, the WAPC refused Amendment 1 and on 20 August 2020, Satterley lodged an application for review of that decision with the Tribunal.

22 Following nine mediation sessions, which resulted in amendments to Amendment 1 (**Revised Amendment 1**), the WAPC was invited, pursuant to s 31 of the *State Administrative Tribunal Act 2004* (WA) (**SAT Act**), to reconsider its decision. On 7 December 2023, it did so and refused to approve the Revised Amendment 1 for three reasons:[21]

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[13] MRS amendment 1019 - 33, noted in Exhibit 3.4, Respondent's Bundle of Documents Volume 4, page 84.
[14] Respondent's SIFC, para 64.
[15] Respondent's SIFC, para 65.
[16] Respondent's SIFC, para 65.
[17] Exhibit 3.4, Respondent's Bundle of Documents Volume 4, Documents 6 - 8.
[18] Applicant's SIFC, para 41.
[19] The 1998 Structure Plan is identified as Structure Plan No 34 in LPS 4, Exhibit 3.2, page 207.
[20] Respondent's Opening Submissions, para 6.
[21] Exhibit 3.1, Respondent's Bundle of Documents Volume 1, page 6.

1. The Amended Structure Plan does not demonstrate that the threat of bushfire risk to people, property and infrastructure can be appropriately mitigated having regard to the objectives and intent of State Planning Policy 3.7 - Planning in Bushfire Prone Areas and the Guidelines for Planning in Bushfire Prone Areas because:

    a) the technical information submitted in support of the [Structure Plan], including traffic, evacuation and bushfire analysis and modelling, does not include adequate or accurate details to demonstrate that the risk of impacts from a bushfire, including safe evacuation in a bushfire emergency, is acceptable; and

    b) insufficient information is provided to identify that the protection of environmental conservation values can be appropriately balanced with the outcomes of bushfire risk management in perpetuity, including identification of appropriate management authorities responsible for maintaining conservation and bushfire outcomes.

2. Application of the 'precautionary principle' in refusing the application is warranted, given that adequate and accurate information to demonstrate that the threat of bushfire risk is acceptable has not been provided.

3. The true impact of traffic on the road network to provide for appropriate local and regional transport network outcomes has not been demonstrated.

23 It is that decision which is now the subject of review.

24 On 14 June 2024, leave was granted by the Tribunal for the applicant to further amend Revised Amendment 1 and it is this version of the structure plan that is before us,[22] with the exception of an updated BMP which, with leave of the Tribunal, was filed on 11 April 2025.[23] Hereafter, we will refer to the draft structure plan that is before us as the Structure Plan.

25 During the course of the hearing, the approval of the 1998 Structure Plan expired. As a consequence, there is presently no extant structure plan over the Site. The WAPC submits, and we accept, that the Structure Plan before us is to be treated as an application for the approval of a new structure plan.[24]

[22] Exhibit 1.
[23] Exhibit 2.
[24] Respondent's Outline, para 38.

The Structure Plan

26 In broad terms, the Structure Plan proposes: ~1,000 lots, to accommodate ~2,800 people; lot sizes typically between 1,012 m^2 and 2,000 m^2, with some 10,000 m^2 lots; 193ha of conservation reserve and 36ha of recreation reserve; a local centre; and two schools - one government and one private.

27 It proposes three 'villages', with Village 1 in the north-east of the Site, Village 2 occupying the southern two thirds of the western boundary and much of the centre of the Site and Village 3 occupying the south-eastern 'finger' of the Site.

28 The structure plan does not identify a timeframe for implementation.[25]

29 Schedule 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015* (WA) (**Deemed Provisions**), at cl 28, provides for a structure plan, although a longer period can be approved.

30 Prior to the hearing, the parties appeared to agree that implementation of the Structure Plan is likely to occur over a period of 15 years.[26] Nothing appeared to be said to suggest otherwise during the hearing.

31 However, and inconsistent with its ultimate submission that we should direct it to make modifications and resubmit the Structure Plan to the WAPC, Satterley's closing submissions sought approval for a period of 20 years.[27]

32 The Structure Plan proposes that development would be capped at 400 lots, pending the completion of EastLink.[28] The proposed development of 400 lots prior to the completion of EastLink is sometimes referred to as Stage 1 and the proposed development of the balance after EastLink is completed is, therefore, referred to as Stage 2.

33 Save for in that regard, and the intention that Stage 1 development would commence in Village 2, the Structure Plan lacks any detail as to

[25] Exhibit 1, page 13.
[26] Respondent's SIFC, para 8(e). The Applicant's responsive SIFC accepts the 15-year implementation timeframe - see para 1. The applicant's Bushfire Management Plan also indicates a development timeframe 'over an approximately 15-year period' - see Exhibit 2, page 2.
[27] Applicant's Outline, para 478.
[28] Exhibit 1, cl 5.3.

staging. That was the subject of more than one critical comment during the hearing.

34 Late on 7 October 2025 (the 11th day of hearing), Satterley tendered a plan dated 6 October 2025 and titled Interim Development Extent Plan (**Exhibit 48**), which provides a proposed three-staged development of Village 2 as Stage 1.

35 That timing is not merely coincidental; it occurred during the evidence of the bushfire planning experts. In particular, it seeks to address the management of bushfire risk that arises as a result of the development of Village 2 (Stage 1) ahead of Villages 1 and 3 (Stage 2).

36 Exhibit 48 acknowledges that, in order to achieve protection of Stage 1 from bushfires from the north and east, it will be necessary to construct some internal connecting roads and implement vegetation management, including the provision of buffers, within the Stage 2 area.

37 It is convenient to note here also that as a result of the traffic evidence, Satterley acknowledged that it may be necessary to reduce the number of lots developed under Stage 1 to ensure that traffic volumes at the intersection of GEH and Seaborne Street are kept below certain levels prior to the completion of EastLink.

38 It will be necessary to address this issue in more detail below (under Issue A - Traffic) but, for present purposes, Satterley proposes[29] that Stage 1 will be developed such that it will not yield, prior to the completion of EastLink, more than:

(a) 125-135 lots if the intersection of GEH and Seaborne Street is upgraded in the form currently proposed by MRWA (i.e. without an acceleration lane);[30] and

(b) not exceed 350-394 lots if the intersection of GEH and Seaborne Street is upgraded with an acceleration lane.[31]

39 Finally, we note that the Structure Plan is made up of several parts and, indeed, documents as follows: Executive Summary; 'Part One - Implementation', including 'Plan 1: Structure Plan Map'; 'Part Two - Explanatory'; and the following Appendices:

[29] Applicant's Outline, paras 98 - 99 and Annexure A - Schedule of Proposed Modifications - #3 and #13.
[30] Exhibit 18.
[31] As identified in Attachment BB2B, Exhibit 24.

(a) Appendix 1 - North Stoneville Transect Design Guide;

(b) Appendix 2 - Commercial Strategy;

(c) Appendix 3 - Engineering Servicing Report;

(d) Appendix 4A - Revised Transport Impact Assessment (**TIA**);[32]

(e) Appendix 4B - Microsimulation Evacuation Modelling Report (**MEMR**);

(f) Appendix 5 - Local Water Management Strategy;

(g) Appendix 6A - Environmental Assessment Report Addendum;

(h) Appendix 6B - Environment Assessment Report (Original);

(i) Appendix 7 - Bushfire Management Plan (**BMP**);[33]

(j) Appendix 8 - Aboriginal Heritage Report; and

(k) Appendix 9 - Bushfire Simulation Modelling Report (**BSMR**).

40 As previously noted, on 11 April 2025, Satterley filed an updated BMP (Exhibit 2), replacing the version in Appendix 7 to the Structure Plan.

Bushfire history in and around the Locality during the past 20 years

41 We were referred to six bushfires in and around the locality in the past 20 years.

42 The Pickering Brook bushfire (January 2005) burned through forest in the Pickering Brook area and was started by several deliberate ignitions on the evening of 15 January 2005. On 25 January 2005, it was brought under control, by which time it had burnt through 27,000 ha.[34]

43 The Parkerville/Stoneville bushfire was ignited on 3 January 2008 just below the south-west boundary of the Site, west of Brindle Road, east of Roland Road and north of Kilburn Road in Parkerville as a result of contact between a tree branch and a conductor of a 22 kV

[32] Dated June 2024.
[33] Dated June 2024. This has been superseded by Exhibit 2, the later BMP, filed 11 April 2025.
[34] Exhibit 3.3, page 355.

Western Power line.[35] Four homes were destroyed, with several others damaged, and the fire burnt through 900 ha.[36]

44 The Perth Hills bushfires involved two major bushfires on the weekend of 5 and 6 February 2011, with one occurring in the suburbs of Roleystone and Kelmscott, and the other in Red Hill, Herne Hill, Millendon, Baskerville and Gidgegannup. Approximately 440 ha was burnt in the Roleystone locality and 1,100 ha burned in the Red Hill locality.[37] In these fires, 517 families were evacuated, 71 homes were destroyed and 39 homes were damaged.[38]

45 The Parkerville/Stoneville/Mt Helena bushfire commenced on 12 January 2014 and was ignited by a power pole on a property in Granite Road, Parkerville, which fell causing sparking and ignition of vegetation. This bushfire occurred less than 2 km from the Site[39] and burnt 386 ha. It destroyed 57 residential properties and six others were extensively damaged.[40]

46 The Sawyers Valley bushfire ignited on 14 January 2018 and burnt through approximately 3000 ha of bushland.

47 The Wooroloo bushfire, located less than 10 kms from the Site, occurred during the first week of February 2021.[41] Its ignition was alleged to have been caused by the use of an angle grinder on a day of Total Fire Ban. The resulting fire burned through approximately 10,750 ha and destroyed 86 dwellings.[42]

The Hearing and the Evidence

48 The hearing took place over 17 days: 12, 15 - 17 and 22 - 26 September 2025, 6 - 9, 21 and 24 October 2025 and 9 and 11 December 2025. In February 2026, Satterley applied to re-open its case, which application was heard on 1 April 2026. That application was dismissed on 23 April 2026.[43]

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[35] Exhibit 3.3, pages 375 - 376.
[36] Exhibit 3.3, page 385.
[37] Exhibit 3.3, page 386.
[38] Exhibit 3.3, page 402.
[39] Exhibit 1, Appendix 9, page 7.
[40] Exhibit 3.3, page 615.
[41] Exhibit 1, Appendix 9, page 6.
[42] Exhibit 3.3, page 700.
[43] ***Satterley Property Group Pty Ltd and Western Australian Planning Commission*** [2026] WASAT 39; (2026) 120 SR (WA) 114.

49 On 22 September 2025 we conducted a view of the Site and the locality with representatives of the parties and several witnesses.[44]

50 We first heard evidence from five lay witnesses, called on behalf of SPH, being residents, or former residents, of the locality and its surrounds. Each of them had first-hand experience of evacuating from one or more of the bushfires described above and we agree with SPH's description of their evidence: each of them 'presented as honest and forthright witnesses who were doing their best to recount what could fairly be described as traumatic events'.[45]

51 We accept their evidence as truthful and are grateful to each of them for their willingness to share such difficult, intimate, experiences.

52 Their evidence provided a very sharp reminder of the 'real-world' consequences of the decision that we are called upon to make in this matter. For that reason, we have decided to briefly summarise their evidence at this stage. Two of the witnesses requested that we anonymise their names in these reasons and so, given the sensitivities associated with aspects of their evidence, we have done so.

53 Each of the lay witnesses filed a witness statement, which was accepted as their evidence-in-chief, and they were cross-examined although, as might be expected, there was no challenge to the factual accuracy of their evidence as to their experiences.

54 Ms Helen Lynes is a former resident of Hovea, and her former home is approximately two to three kilometres from the Site. She gave evidence of her experience in the 2014 Parkerville/Stoneville/ Mt Helena bushfire. Her evidence recounted the death of her husband, who suffered a heart attack while on the roof of their home cleaning out and wetting down the gutters, after they first saw the smoke from the Parkerville Bushfire. She recounted the attendance of emergency services, including paramedics.

55 That day it was, thankfully, unnecessary for her to make what would have been a terrible decision to either stay with him or to evacuate and leave him.[46] When asked about how she might have proceeded had it been necessary to make that decision, she was initially unable to answer the question,[47] but she later returned to it and spoke

[44] The route for the view is Exhibit 20.
[45] SPH's Outline, para 5.
[46] ts 224, 16 September 2025.
[47] ts 224 - 225, 16 September 2025.

movingly of her experience in other bushfires with her neighbours, saying that she had seen it 'over and over again … that people do what they can for the people that they care about around them, or people who are vulnerable, or people … who otherwise would be left abandoned'.[48]

56 Ms Dorothy Gill is a former resident of Wooroloo and her evidence recounts her experience in the 2021 Wooroloo bushfire, which included evacuating her home with some of her pets (two dogs and two of her four cats) and two of her three horses and enabling her brother to remove his caravan which was stored at the shed on her property. The fire prevented her from returning to her property to rescue her remaining horse. The day after the fire, she returned to find all her outbuildings and their contents destroyed, with only her home left standing. Her remaining horse was, thankfully, still alive and in its paddock.

57 AB is a resident of Stoneville and a volunteer firefighter with 25 years' experience. In his evidence he described his experiences working as a volunteer firefighter to protect the community in four bushfire events: Parkerville/Stoneville in 2008; Parkerville/Stoneville/ Mt Helena in 2014; Wooroloo in 2021 and Parkerville in 2023. In his evidence of the 2008 Parkville/Stoneville bushfire he also recounted the actions of his wife and children to evacuate their home and the assistance he rendered to evacuate an elderly neighbour who did not drive.

58 CD is a former resident of Stoneville, where she lived from 1991 until her home was destroyed in the 2014 Parkerville/Stoneville bushfire. She now lives in Mundaring. In her evidence she recounted her experiences in three bushfires.

(a) Although she did not have to evacuate from the 2008 Parkerville bushfire, she spoke of the preparations she made to her property, including packing possessions into her car in readiness.

(b) The 2014 Parkville/Stoneville bushfire destroyed her home, and her evidence recounted the events of that day, including her and her husband's separate evacuation of their property and her later return to the property to find her home completely destroyed, save for the brick chimney and the granny flat.

[48] ts 229, 16 September 2025.

(c) At the time of the 2021 Wooroloo bushfire, she was living in Mundaring. She recounted the trauma she experienced reliving the events of 2014. Although she did not ultimately have to evacuate, she and her husband were on high alert with their car packed.

59 Ms Jessica Cochrane has been a resident of Stoneville since 1997 and grew up in various locations in the Perth Hills. Her evidence concerned the 2008 Stoneville/Parkville bushfire. At the time she was eight months pregnant. She recounted her evacuation by car along roads with burning bush, her later return home and the tragic loss of her child, who was stillborn.

60 Taken together, the evidence provides a strong basis for a finding that bushfire evacuations are, generally speaking, 'chaotic and confusing'[49] and that people, including those that have prepared well for the eventuality, make decisions that might be said to appear to be irrational.

61 SPH submitted that, on the basis of the evidence of the lay witnesses, we should accept that the process of coming to, and then implementing, a decision to evacuate 'is a complex process which is anything but linear'.[50] We agree. The evidence included examples of:

(a) people delaying the decision to leave and, having done so, of returning back towards the fire, to collect property and animals;

(b) finding expected escape routes blocked and having to alter plans as a result, with potentially catastrophic results;

(c) unexpected events that very significantly alter plans for evacuation; and

(d) neighbours and others who were less prepared, had mobility difficulties or other factors that made evacuation difficult and the consequences for the evacuation of those who, at considerable risk to themselves, provide selfless assistance.

62 The lay evidence was consistent with, and supports, the evidence of Dr Kenneth Strahan, who was called by SPH as an expert in human

[49] Shire's Outline, para 9.
[50] SPH's Outline, para 5.

behaviour in fire (**HBIF**). His evidence was uncontested and was largely accepted by other experts.[51]

63 We agree with the Shire's closing submission[52] that the evidence of human experience of bushfires, as briefly summarised above, provides a useful 'lens' through which other evidence may be viewed.

64 We also heard evidence from 15 expert witnesses across seven professional fields, with some experts giving evidence in multiple fields. Noone challenged the expertise of any of the experts and we accept that each of them is an expert in their field:

(a) Environment - Mr Dale Newsome is an environmental consultant who was called by Satterley.

(b) Road Planning - Mr Lindsay Broadhurst is the Director Road Planning with MRWA and was called by the WAPC.

(c) Traffic Impact Assessment - Mr Benham Bordbar was called by Satterley and Mr Darren Levey was called by the WAPC. Both are very experienced traffic engineers.

(d) Traffic Microsimulation Modelling - Dr Mohammad Rasouli was called by Satterley, Mr Levey was called by the WAPC and Dr Strahan was called by SPH. We have previously described the expertise of Dr Strahan and Mr Levey. Dr Rasouli is a traffic engineer and transport modeller.

(e) Bushfire Planning - Messrs Daniel Panickar and Anthony Rowe were called by Satterley, Messrs Gary McMahon, Jackson Parker and Clinton Kuchel were called by the WAPC, and Dr Strahan was called by SPH. Each of them has experience in bushfire planning but each has a different background:

(i) Mr Panickar practises as both a bushfire and environmental consultant;

(ii) Mr Rowe practices as both a bushfire consultant and as a town planner;

[51] SPH's Outline, para 12.
[52] Shire's Outline, para 11.

(iii) Mr McMahon practices as both a bushfire and environmental consultant. He also has considerable operational experience as a firefighter;

(iv) Mr Parker is the Director of Bushfire Technical Services at the Department of Fire and Emergency Services (**DFES**) and has operational experiences as a firefighter;

(v) Mr Kuchel is currently the Superintendent of Metropolitan North Coastal and North-East Regions with DFES; and

(vi) Dr Strahan is a researcher in HBIF.

(f) Bushfire Simulation - Mr Anthony Power was called by Satterley, Mr Parker was called by the WAPC and Dr Strahan was called by SPH. We have previously described the experience of Mr Parker and Dr Strahan. Mr Power is a consultant bushfire modeller. He also has experience as a volunteer firefighter.

(g) Town Planning - Mr Duane Cole was called by Satterley and Messrs Alan Stewart and Ryan Shaw were called by the WAPC. All are experienced town planners.

65 In each case, save for the field of town planning, wherever more than one expert gave evidence in a particular field, the experts conferred, after which they filed a joint witness statement. They also gave concurrent evidence at the hearing save for Mr Kuchel, whose limited availability did not allow for it. He did, however, contribute to the Joint Conferral Statement - Bushfire Planning (Exhibit 46).

Planning framework

66 The planning framework, which we have considered in determining this application, includes:

(a) *Planning and Development Act 2005* (WA) (**PD Act**);

(b) *Metropolitan Region Scheme* (**MRS**);

(c) *Planning and Development (Local Planning Schemes) Regulations 2015* (WA) Schedule 2 (**Deemed Provisions**);

(d) *Shire of Mundaring Local Planning Scheme No 4* (**LPS 4**);

(e) *Perth and Peel @ 3.5 million: North-East Metropolitan Sub-Regional Planning Framework*;

(f) *State Planning Policy 1 - State Planning Framework* (**SPP 1**);

(g) *State Planning Policy 2 - Environment and Natural Resources Policy* (**SPP 2**);

(h) *State Planning Policy 2.8 - Bushland Policy for the Perth Metropolitan Region* (**SPP 2.8**);

(i) *State Planning Policy 3.0 - Urban Growth and Settlement* (**SPP 3.0**);

(j) *State Planning Policy 3.4 - Natural Hazards and Disasters* (**SPP 3.4**);

(k) *State Planning Policy 3.7 - Bushfire* (November 2024) (**SPP 3.7**) and *Planning for Bushfire Guidelines* (November 2024) (**Guidelines**);[53]

(l) The superseded *State Planning Policy 3.7 - Planning in Bushfire Prone Areas* (December 2015) (**SPP 3.7 2015**) and superseded *Guidelines for Planning in Bushfire Prone Areas - Version 1.4* (December 2015) (**Guidelines 2015**);[54]

(m) *Residential Design Codes Volume 1* (**R-Codes**);

(n) *Liveable Neighbourhoods*;

(o) *Shire of Mundaring Local Planning Strategy* (2013); and

(p) *Shire of Mundaring Local Biodiversity Strategy 2023 - 2030*.

67 We have also made reference to the EP Act; the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth) (**EPBC Act**); and the *Aboriginal Heritage Act 1972* (WA).

68 It should be self-evident from the foregoing that many of the above statutes and policy documents have limited relevance to the issues that we must determine. Our consideration of them is, in each

[53] The respondent also published an 'Explanatory Note' to SPP 3.7. During the course of the hearing, on 25 November 2025, prior to closing submissions, the respondent published an updated Explanatory Note, which replaced the earlier version. The 25 November 2025 version is Exhibit 66.

[54] SPP 3.7 2015 and the Guidelines 2015 were in place at the time of respondent's decision, on 25 October 2016, to lift the Site's urban deferment. The Guidelines 2015 are at Exhibit 3.4, pages 3 - 52.

case, limited to the extent of their relevance.[55] Indeed, save for a few minor exceptions, our determination turns almost entirely on the application of SPP 3.7 and the Guidelines.

69 That is reflected in what follows. We first set out the legislative framework in relation to structure plans contained within the Deemed Provisions and other relevant provisions of LPS 4, after which we outline the relevant provisions of SPP 3.7 and the Guidelines.

The Deemed Provisions

70 By s 257B of the PD Act, the Deemed Provisions are to be read into all local planning schemes, including LPS 4, and are to prevail over other provisions, to the extent of any inconsistency.

71 Part 4 of the Deemed Provisions deals with structure plans and, pursuant to cl 14, the Structure Plan is, we accept, a 'standard structure plan', which is one 'for the coordination of future subdivision and zoning of an area of land'.

72 Clause 15 of the Deemed Provisions sets out when a structure plan may be prepared and cl 16(1) requires, among other things, that structure plans be in a manner and form approved by the WAPC. There is no suggestion that the requirements of cl 16 have not been met.

73 Clauses 17 - 20 of the Deemed Provisions provides for the receipt by a local government of a draft structure plan, its consideration as to whether it satisfies certain requirements and, if it does, its acceptance of the document for assessment. Once that occurs, the draft plan must be advertised and submissions invited, following which any submissions received must be considered and a report prepared by the local government, which must be provided to the WAPC.

74 Pursuant to cl 22 of the Deemed Provisions, the WAPC *must* consider both the draft structure plan and the local government's report about it and may approve it, require the local government or the person who prepared the structure plan to modify it in a manner specified and resubmit it for approval, or refuse to approve it.

75 As noted above, it is the power under cl 22 that we are re-exercising *de novo* on review in this proceeding.

[55] By s 241(1) of the *Planning and Development Act 2005* (WA), we are required to 'have due regard to' any State planning policy 'which may affect the subject matter of the application'.

76 Satterley submitted that the obligation on the WAPC to consider the structure plan and the local government's report, passed to us on review.[56] We accept that is so[57] and have done so.

77 However, neither Amendment 1, which was the subject of the WAPC's original decision, nor Revised Amendment 1, which was the subject of the reconsideration, are relied upon by Satterley and, indeed, in the hearing they were referred to only by way of historical context.

78 Equally, the report provided to the WAPC by the Shire pursuant to cl 20 of the Deemed Provisions is dated 27 August 2019 and concerned Amendment 1.[58] The Shire considered Revised Amendment 1 and provided its recommendation on it to the WAPC on 4 May 2023,[59] ahead of the latter's re-consideration decision on 7 December 2023. We have gained little from our consideration of those documents.

79 The intended purpose of cl 20 of the Deemed Provisions - consideration of the views of the relevant local government - is achieved in this case by having regard to the Shire's submissions made in this hearing as it is they which are directed to the proposal put forward by Satterley's Structure Plan.

80 By cl 27 of the Deemed Provisions, a structure plan that has been approved by the WAPC does not bind subsequent decision-makers when considering whether to grant development or subdivision approval, but they must give due regard to it.

81 Part 10A of the Deemed Provisions deals with bushfire risk management and imposes certain requirements for development in a bushfire prone area. However, it does not contain provisions concerning structure plans in bushfire prone areas.

Other Relevant Provisions of LPS 4

82 LPS 4, at cl 1.6, contains various aims, including the following which is relevant to the current task:[60]

> (a) promote and safeguard the health, safety and general welfare of the residents of the Shire;

[56] Applicant's Outline, para 23.
[57] ***Frugtniet v Australian Securities and Investments Commission*** [2019] HCA 16; (2019) 266 CLR 250, [51].
[58] Exhibit 3.1 (Part 2), page 1637.
[59] Exhibit 3.1 (Part 1), pages 1084 - 1089.
[60] Respondent's SIFC, para 94. The Applicant's SIFC, at para 48.1, observes that other aims of LPS 4 are 'potentially relevant' but does not go further to identify other specific relevant aims.

> (b) preserve and enhance the amenity of the Shire and to manage land uses so as to minimise conflicts between potentially incompatible land uses;
>
> (c) assist in achieving ecological, social and economic sustainability through a land use planning framework that balances the benefits and impacts of development on the Shire's natural, built, social and economic environment;
>
> (d) preserve the Shire's biodiversity and environmental values through appropriate protection of areas of significant native vegetation, valuable habitat areas and other areas of environmental value;
>
> …
>
> (l) recognise and protect places of cultural heritage significance[.]

83 The Site, as mentioned, is zoned 'Development' under LPS 4, the objective of which is set out at cl 4.2.9 as follows:

> To provide for the orderly planning of large areas of land for residential and other purposes through comprehensive structure planning which will provide the basis for future subdivision and development.

84 Clause 5.16 details development requirements for land within the Development zone. They include the requirement for a structure plan to be developed in accordance with cl 5.17 and must include certain matters, including density codings and 'the desired type and disposition of uses'. Such structure plans must also comply with the requirements of Schedule 12.

85 There was no suggestion that the Structure Plan was inconsistent with any of those provisions and, indeed, much of cl 5.17 is concerned with matters of procedure that are now addressed by provisions in the Deemed Provisions. As noted, pursuant to s 257B of the PD Act, the latter prevails to the extent of any inconsistency. Such matters were not addressed by any party and it does not seem necessary for us to deal with that issue here.

86 Finally, we note that Schedule 11 of LPS 4 identifies the 1998 Structure Plan, which it describes as LSIP (Local Subdivision and Infrastructure Plan) 265, as 'Structure Plan 34' ' Stoneville Townsite Development, Roland Road, Stoneville' but as mentioned, that structure plan has now expired.

SPP 3.7 and the Guidelines

87 Both SPP 3.7 and the Guidelines took effect in November 2024.

88 In each case they replaced an earlier version from 2015.[61] It will be necessary to address the transition in more detail below.

SPP 3.7

89 SPP 3.7 states that, in conjunction with the Guidelines, it provides 'the foundation for land use planning to address bushfire management in Western Australia'.[62] It states that it 'is to be used to inform and guide decision-makers, referral agencies and landowners/proponents to help achieve acceptable bushfire protection outcomes'.[63] As we have said, it is critical to our determination of this proceeding.

90 SPP 3.7's policy intent is set out in cl 2 as follows:

> To implement effective, risk-based land use planning and development which in the first instance avoids the bushfire risk, but where unavoidable, manages and/or mitigates the risk to people, property and infrastructure to an acceptable level. The preservation of life and the management of bushfire impact are paramount.

91 SPP 3.7, at cl 3, explains bushfire in Western Australia, including that:

> Under certain weather conditions, bushfire incidents can reach catastrophic magnitudes. Fire conditions may be such that even development consistent with planning policy and building controls may not be enough to ensure the bushfire threat is sufficiently reduced to avoid injury or property damage. Bushfire threat can never be completely eliminated, and landowners should recognise the need for management and evacuation measures when accepting a level of personal risk and responsibility through choosing to live in bushfire prone areas.

92 The four policy objectives of SPP 3.7 are set out in cl 5:

> 5.1 Avoid the bushfire risk in the first instance, but where unavoidable, manage and/or mitigate the risk to people, property and infrastructure, to ensure the risks are acceptable and appropriate to the land use and the location.

[61] For completeness, the Guidelines 2015 were updated at various times from February 2017 to May 2022. See Exhibit 3.2, pages 385-386, for the list of updates.
[62] SPP 3.7, cl 4 in Exhibit 3.6, page 5.
[63] SPP 3.7, cl 4 in Exhibit 3.6, page 5.

5.2 Improve the bushfire resilience of communities through the provision of appropriate community infrastructure, for use by emergency services and the community in the event of a bushfire.

5.3 Ensure development is resilient to increasingly severe and more frequent bushfires compounded by climate change.

5.4 Prioritise the retention of native vegetation for biodiversity conservation, environmental protection and landscape amenity.

93 The policy outcomes of SPP 3.7 are at cl 6. Each outcome is reflected within the four elements of the Guidelines being: (1) Location; (2) Siting and design; (3) Vehicular access; and (4) Water supply. The outcomes are to be achieved through compliance with the bushfire protection criteria, utilising either the acceptable solutions or through an outcomes-based approach. They are as follows:

6.1 Avoid broader landscapes that present an unacceptable bushfire risk to people, property and infrastructure.

6.2 Ensure siting and design solutions:

- manage or mitigate the bushfire risk to people, property and infrastructure; and
- avoid, or where unavoidable, minimise clearing of native vegetation.

6.3 Ensure the design and capacity of vehicular access and egress provide:

- for efficient and effective evacuation to a suitable destination(s); and/or
- as a contingency measure for vulnerable tourism land uses, an on-site shelter, where demonstrated appropriate, as a last resort option.

6.4 Ensure that sufficient water is available and accessible for emergency services, to enable people, property and infrastructure to be defended from bushfire.

94 Clause 7 details policy measures, which are grouped under the following headings: General measures - cl 7.1; Broader landscape -

cl 7.2; Siting in BAL[64] 40 or BAL-Flame Zone - cl 7.3; Vulnerable land uses - cl 7.4;[65] and Outcomes-based approach - cl 7.5.

95 Clause 7.1 provides that '[b]ushfire should be considered at the earliest possible stage of the planning process and all subsequent stages in accordance with the Guidelines'.

96 Clause 7.2 provides:[66]

> Proposals located within a Broader Landscape Type B in accordance with the methodology within the Guidelines, will not be supported unless the proposal has demonstrated through an outcomes-based approach that the broader landscape risk to people, property and infrastructure is acceptable.

97 Clause 7.3 provides a presumption against development in areas 'with a radiant heat impact' exceeding BAL-40 or BAL-FZ.

98 Clause 7.5 is concerned with 'outcomes-based' approaches. It proceeds on the basis that, while some planning proposals may be unable to comply with the 'acceptable solutions' to which the Guidelines refer, they may still be able to satisfy the outcomes of the policy 'through the use of innovative, alternative bushfire risk management measures'.

99 That is, similar with some other planning policies, the critical question is whether the proposal satisfies the relevant policy outcome and, while adoption of the relevant acceptable solution is deemed to satisfy the relevant outcome, satisfaction of that outcome may also be achieved by some other means.

100 Relevantly, cl 7.5 provides:

> i. …
>
> ii. Where an outcomes-based approach is used, an assessment is to be undertaken in accordance with this policy, and the following criteria:
>
> a) address the acceptable solutions to the greatest extent possible;

[64] BAL = Bushfire Attack Level.
[65] There was no suggestion that the Structure Plan gives rise to consideration of cl 7.4.
[66] Broader Landscape Types are identified in the Guidelines and are described further in these reasons at para 125 and following.

b) identify the non-compliance with the acceptable solutions and why these cannot be achieved;

c) detail how the design addresses bushfire risk and where additional bushfire risk management measures have been deemed necessary and included to minimise the risk;

d) detail if there are any community net-benefits, such as improvements to the public road network;

e) include any fire engineering solutions or written evidence such as publications and State Administrative Tribunal decisions to support the proposal (where available);

f) outline how the policy outcomes have been achieved; and

g) outline why approval is warranted by the decision-maker in this instance.

iii. Where an outcomes-based approach is unable to demonstrate that the outcomes of this policy can be achieved, to the satisfaction of the decision-maker, refusal should be contemplated.

101 SPP 3.7 defines 'strategic planning proposal' as:[67]

> any strategic-level planning document or proposal including regional and sub-regional frameworks, region schemes and amendments, sub-regional strategies, structure plans, local planning strategies and local planning scheme reviews, scheme amendments, *but does not include structure plans where the lot layout and/or the internal road layout is known* (Emphasis added)

102 As will be seen, the Guidelines apply the distinction through two different sets of bushfire protection criteria: *Bushfire Protection Criteria 5: Structure Plans and subdivision applications* and *Bushfire Protection Criteria 4: Strategic Planning*. The former applies where the lot and/or road layout is known and the latter where it is not.

103 Although in its SIFC, the WAPC identified both *Bushfire Protection Criteria 4: Strategic Planning* and *Bushfire Protection Criteria 5: Structure Plans and subdivision applications* as potentially applying,[68] by the time of the hearing, it was common ground that only

[67] Exhibit 3.6, page 10.
[68] Respondent's SIFC, para 193.

the latter applied.[69] That approach appears to rely upon the evidence of the bushfire planning experts[70] and the planners.[71]

104 We accept that the Structure Plan *does* show both perimeter and internal connector roads and so, it might reasonably be said that the 'internal road layout' is known.

105 But in any event, the key Element for our consideration in this case is Element 1: Location which is, notwithstanding some minor wording differences, essentially the same for both Bushfire Protection Criteria 4 and 5.

The Guidelines

106 The Guidelines are to be read in conjunction with SPP 3.7.[72]

107 Nonetheless, we agree with the WAPC's submissions that the primacy of SPP 3.7 should be recognised, and, to the extent of any inconsistency, it prevails over the Guidelines.[73]

108 Clause 1.3 of the Guidelines explains the application of the Guidelines and cl 1.3.1 addresses approvals granted prior to the current versions of SPP 3.7 and the Guidelines. It provides as follows:

> Where a strategic planning proposal, subdivision or development application was approved prior to 2015 and was not assessed against SPP 3.7 (2015) or the Guidelines, the subsequent stage of the planning process, or modification or addition to the development approval, should demonstrate compliance with SPP 3.7 (2024) and these Guidelines, including the new methodology for Element 1: Location (if required).
>
> Where a strategic planning proposal, subdivision or development application was assessed against SPP 3.7 (2015) and the Guidelines, the subsequent stage(s) of the planning process, or modification or addition to the development approval, should demonstrate compliance with SPP 3.7 (2024) and these Guidelines, with the exception of the new methodology for Element 1: Location (if required).
>
> In these instances, and where necessary, the design should be modified to achieve compliance with the bushfire protection criteria.

[69] Applicant's Outline, para 135 and the Respondent's Outline, para 202.
[70] Exhibit 46 'Expert Conferral Statement - Bushfire Planning' para 11 per Messrs Parker, McMahon and Panickar.
[71] Exhibit 62 'Witness Statement of Alan Stewart' para126; Exhibit 63 'Witness Statement of Ryan Shaw' para 97. Also, ts 47, 21 October 2025 (per Mr Cole).
[72] Exhibit 3.6, page 15.
[73] Respondent's Outline, para 146.

> Where re-design is not possible due to demonstrated site constraints and/or environmental values, an outcomes-based approach can be used, however it should be noted that there is no guarantee an approval will be forthcoming.
>
> Compliance with the outcomes and/or acceptable solutions will need to be demonstrated to the satisfaction of the decision-maker.

109 As should be clear, cl 1.3.1 provides something of a 'transitional' provision. As also should be clear, it identifies the key difference between the 2015 regime and the new/2024 regime as Element 1: Location. That is, the 2024 regime includes a focus on the landscape in which the development site is located. As will be described in more detail below, the purpose of this element is to avoid locating developments in areas susceptible to landscape scale fires.

110 At cl 1.4, the Guidelines set out eight guiding principles which 'provide the contextual framework for the implementation of SPP 3.7'.[74] They are identified by the following headings:[75]

1. Outcomes based decision-making.
2. Early consideration.
3. Site-responsive solutions.
4. Risk management.
5. Evidence-based decision-making.
6. Collaboration.
7. Precautionary principle.
8. Intergenerational equity.

111 In relation to the precautionary principle,[76] the Guidelines explain:

> Based on the application of the precautionary principle, a strategic planning proposal, subdivision or development application should not be supported where:
>
> - it does not satisfy the bushfire protection criteria through compliance with the acceptable solutions and/or an outcomes-based approach;

[74] Exhibit 3.6, page 17.
[75] Exhibit 3.6, page 18.
[76] The precautionary principle is identified as a consideration in Issue B6 in Respondent's SIFC at para 22 which is discussed at paras 1011 - 1027 of these reasons.

- there is inadequate known or available information; and

- an understanding of the consequences of a bushfire has not been made available by the proponent to the decision-maker.

112 Section 2 of the Guidelines is headed 'Assessing the Bushfire Context'. Clause 2.1 is headed 'Bushfire Assessment Tools' and cl 2.1.2 is headed 'Broader landscape assessment'. It states that the 'broader landscape is the area external to the strategic planning proposal, subdivision or development application, extending for a distance of approximately two kilometres beyond the subject site.'

113 That clause also states that the assessment of the broader landscape 'provides a means of considering the suitability of the location for intensification of land use and development' and that proposals shown as Area 1 (Urban) on the Map of Bush Fire Prone Areas 'will not require an assessment of the broader landscape or need to demonstrate compliance with Element 1: Location', as they are 'built-up and the risk of a landscape scale bushfire … is lower'. By contrast, proposals shown as Area 2 *do* require an assessment of the broader landscape to demonstrate compliance with Element 1: Location.

114 As noted above at para [12(i)], most of the Site is designated as Area 2.

115 Clause 2.2 relates to bushfire management plans (**BMPs**) and cl 2.2.1 explains how the bushfire protection criteria are to be addressed. It states:

> The bushfire protection criteria are an outcomes-based system of assessing bushfire risk management, divided across four Elements - location, siting and design, vehicular access and water supply.
>
> Each Element is achieved by demonstrating compliance with one of the following:
>
> a) Acceptable solution(s)
>
> b) Outcomes-based approach
>
> c) A combination of (a) and (b).

116 It further states that:

> The acceptable solutions provide a deemed-to-comply pathway for assessment and approval. Compliance with the relevant acceptable

> solutions achieves the policy outcomes and satisfy the requirements of SPP 3.7.[77]
>
> An outcomes-based approach can be used where compliance with the acceptable solutions cannot be achieved due to demonstrated site constraints or environmental values (including waterways and/or foreshores, where road(s) are already gazetted or existing native vegetation cannot be cleared), and where the bushfire planning practitioner is of the expert opinion that the SPP 3.7 outcomes can still be demonstrated.[78]

117 It further provides that, where an outcomes-based approach or a combination outcomes-based and acceptable solutions approach is being used, a BMP should:[79]

- address the acceptable solutions to the greatest extent possible;
- identify the non-compliance with the acceptable solutions and why these cannot be achieved;
- detail how the design considers bushfire risk and where additional or alternative bushfire risk management measures have been included to reduce the risk;
- detail if there are any community net-benefits, such as improvements to the public road network;
- include written evidence such as publications or State Administrative Tribunal decisions to support the strategic planning proposal, subdivision or development applications (where available);
- outline how the policy outcomes have been achieved; and
- outline why approval is warranted by the decision maker in this instance.

118 It also provides that additional or alternative bushfire risk management measures may include, but are not limited to:[80]

- improvements to the local and broader road network to facilitate improved access, to and within the site or locality;
- provision of additional emergency access ways or fire service access routes;

[77] Exhibit 3.6, page 22 - Guidelines, cl 2.2.1 a.
[78] Exhibit 3.6, page 22 - Guidelines, cl 2.2.1 b.
[79] Exhibit 3.6, page 22 - Guidelines, cl 2.2.1 b.
[80] Exhibit 3.6, page 22 - Guidelines, cl 2.2.1 b.

- provision of additional strategic or private water tanks;
- a reduction in the number of lots or maximum occupancy;
- an increased/additional area of public open space managed in perpetuity, in a 'low-threat' state, to provide increased hazard separation to any classified vegetation;
- provision of additional forms of hazard separation;
- construction of buildings to a higher bushfire construction standard than required under AS 3959.

119 Details on how the additional bushfire risk management measures will be implemented are to be included in the BMP.[81]

120 Section 3 of the Guidelines provides the Supporting Framework. It is not necessary to address it here in any detail.

121 As previously noted, the hearing proceeded on the basis that Section 5 applies to the Structure Plan. Accordingly, it is not necessary to address Section 4 - Strategic Planning.

122 Section 5 describes four Elements: Element 1: Location; Element 2: Siting and design; Element 3: Vehicular access; and Element 4: Water supply.

123 For each Element, there is an 'Outcome' and one or more 'Acceptable solutions'.

124 For Element 1: Location, the Outcome is as follows:[82]

> O1 Avoid broader landscapes that present an unacceptable bushfire risk to life, property and infrastructure.

125 As to 'Acceptable Solutions' for Element 1, as the Site is in 'Area 2' it is necessary to determine the Broader Landscape Type (**BLT**).

126 That must be done in accordance with Appendix A.1, by which the Site is identified as located within a 'Broader Landscape Type A' (**BLT A**) or a 'Broader Landscape Type B' (**BLT B**).

[81] Exhibit 3.6, page 22 - Guidelines, cl 2.2.1 b.
[82] Exhibit 3.6, page 41.

127 If the Site is within a BLT A, Acceptable Solution A1.1a (**A1.1a**) provides that 'this location satisfies the policy outcome for Element 1: Location and no additional consideration is required'.[83]

128 However, if the Site is within a BLT B, Acceptable Solution A1.1b (**A1.1b**) provides that this 'presents an unacceptable bushfire risk of a landscape scale bushfire resulting in impacts to people, property and infrastructure. This location does not satisfy the acceptable solution for Element 1: Location'.[84]

129 A1.1b then provides:[85]

> Where the practitioner considers that further analysis could demonstrate to the decision-maker that the risks can be appropriately managed, and/or mitigated, an outcomes-based approach should be prepared, in accordance with policy measure 7.5 of SPP 3.7. Further explanatory notes are provided in Appendix B.1 of the Guidelines.

130 The Guidelines also provide for Elements 2, 3 and 4. It was uncontroversial that the Structure Plan does, or with modification would, adequately address each of these Elements and it is unnecessary to describe them here, although we will return to them in a little more detail below.[86]

Nature of the Tribunal's Task

131 As previously noted, the WAPC's decision to refuse to approve the Structure Plan was made under cl 22 of the Deemed Provisions and, upon review, we 'stand in the shoes' of the WAPC and will re-exercise that power.[87]

132 In closing submissions, the WAPC made several submissions about our role in re-exercising that power. With respect, we accept each of them.[88]

133 First, the question before us is whether the correct and preferable decision is that the Structure Plan should be approved, modified, or whether approval should be refused.

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[83] Exhibit 3.6, page 41.
[84] Exhibit 3.6, page 41.
[85] Exhibit 3.6, page 41.
[86] Element 2 discussed further at paras 1002 - 1007, Element 3 at para 853 and Element 4 at para 977.
[87] SAT Act, s 27; ***Ord Irrigation Cooperative Ltd v Department of Water*** [2018] WASCA 83; (2018) 232 LGERA 331, [115]; ***Forrest & Forrest Pty Ltd v Minister for Aboriginal Affairs*** [2024] WASCA 96, [34] - [35].
[88] Respondent's Outline, paras 39 - 42 and 44.

134 Secondly, the Tribunal's role is to make a decision on the proposal that the Applicant puts forward, it is not to devise an approvable structure plan.

135 Third, in making its decision, it is not for the Tribunal to determine the capacity of the Site for urban development or whether the Site should remain zoned Urban. Those decisions have already been made and are reflected in the Urban zoning.

136 Fourth, as we have already indicated, and notwithstanding the immediately preceding paragraph, Urban zoning of land does not guarantee any particular development outcome.

137 Fifth, the Structure Plan must be assessed against the contemporary planning framework to determine whether the proposed form and intensity of development is appropriate.

138 Sixth, to refuse to approve the Structure Plan is not to determine that no urban development proposal could ever be approved. A 'refusal' is no more than a determination that this proposal is not suitable for approval.

139 Implicit in those propositions is a rejection of the submission put by Satterley in opening that the Site's lengthy planning history, including its zoning, strongly militates against refusal.[89]

140 There is neither support in principle nor authority[90] for that submission which, more or less, amounts to the proposition that, provided a site's zoning renders it suitable for urban development, a structure plan should only be refused in special or even extraordinary circumstances.

141 Satterley's submissions in this regard included a focus on the strategic nature of the Structure Plan. It encouraged us to take a 'broadbrush' approach in what we understood was intended to be a contrast to that which might be taken when assessing a subdivision or an application for development approval.[91]

[89] Applicant's Outline, para 5. See, also, ts 159 - 160, 15 September 2025.
[90] No authority was cited for the proposition, and the WAPC's submissions advise that there is no such authority. Our own research supports that conclusion.
[91] See, e.g., ts 159 - 160, 15 September 2025.

142 We agree that the nature of the decision being made - to approve, refuse to approve, or require reconsideration of a structure plan - can properly inform the approach to be taken.

143 So much appears to have been acknowledged by the Tribunal in ***Two Rocks*** when it held:[92]

> … as stated in s 27(2) of the SAT Act, the Tribunal must itself determine and produce 'the correct and preferable decision at the time of the decision upon the review'. However, as Mr S Penglis SC, who appeared with Ms R Young on behalf of the applicants, observed in a discussion with the Tribunal, the 'correct and preferable decision' in relation to an issue, or the review generally, 'isn't necessarily a binary outcome', that is to say, the correct and preferable decision in relation to an issue, or the proceeding generally, may not reflect a position contended for by either party. This is the case in relation to review proceedings generally, *but it is particularly so in a review proceeding involving strategic planning, such as a structure plan* (Emphasis Added)

144 In our view, the status of the Structure Plan as a strategic planning document, and one which future decision-makers considering an application for subdivision or development approval must have 'due regard to' but are 'not bound by',[93] are relevant factors in the approach to be taken to the task before us.

145 Indeed, we said as much in our reasons for refusing Satterley leave to reopen its case:[94]

> In our view, the proceeding requires us to consider whether or not the Site is capable of being developed in the manner anticipated, more or less, by the proposed Structure Plan.
>
> That is, it is not necessary for us to be satisfied of each and every detail. We accept the submissions made by Mr McQueen that a Structure Plan is a document to which due regard must be had by the WAPC when considering subsequent applications for subdivision and that such subsequent subdivisions need not slavishly follow it.
>
> But we must be satisfied that it is possible and feasible to develop the Site in the manner proposed by the proposed Structure Plan and in a manner that is consistent with relevant planning policies, the most relevant in this case being SPP 3.7.

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[92] ***Two Rocks Investments Pty Ltd and Western Australian Planning Commission*** [2019] WASAT 59; (2019) 97 SR (WA) 270 [55].
[93] Deemed Provisions, cl 27.
[94] ***Satterley Property Group Pty Ltd and Western Australian Planning Commission*** [2026] WASAT 39, [54] - [56].

146 However, to take such an approach does not equate to waving things through on the basis that all problems identified can be remedied at the subdivision stage. We do not accept the suggestion that we ought to, in effect, overlook inadequacies in the Structure Plan on the basis that one must not look too closely at the detail.

147 To repeat, we must be satisfied that it is possible and feasible for the Site to be developed in accordance with the Structure Plan such that it will be consistent with relevant planning policies, or, where there is a departure from policy, that there is a cogent reason for that departure.

148 In our view, that requires Satterley as the proponent - which seeks to satisfy us that the correct and preferable decision is to approve the Structure Plan - to have engaged in an iterative process with its experts such that they identify whether there are likely to be any difficulties with the development of the Site in accordance with the Structure Plan and, if so, to demonstrate that those difficulties can be overcome.

149 As will be seen, in critical areas that approach was not taken with the result that we are not satisfied that it is possible and feasible for the Site to be developed in accordance with the Structure Plan so as to be in accordance with SPP 3.7 and the Guidelines, and in circumstances where we are not satisfied that there is any cogent reason to depart from the policy framework.

What is Not in Issue

150 Before identifying what issues *are* necessary for determination, it is convenient here to address a matter that is *not* necessary for determination - the motivation of the Shire for its opposition to the Structure Plan.

151 Satterley's written closing submissions included that the 'evolution of the Shire's position' over time 'demonstrates that the current objection … is largely about the Shire responding to local politics'.[95] Similar submissions were made at the hearing in opening[96] and formed the basis for questions of some witnesses.[97]

[95] Applicant's Outline, para 34.
[96] Applicant's Outline of Opening Submissions, 8 September 2025, para 22.
[97] See, for example, ts 22 - 25, 23 September 2025.

152 The Shire's submissions denied that its 'decision to refuse the Structure Plan was infected by political consideration' but said, in any event, that even if it were true, it would be irrelevant.[98]

153 We agree with the latter submission and express no view as to the former.

154 As we have already repeated more than once, our review of the WAPC's refusal to approve the Structure Plan is conducted *de novo* and our decision is made on the law and evidence as it is at the time of our decision.[99]

155 As such, the positions previously taken by the Shire, and how they differ from the present, are both irrelevant to our task, as are the motivations of individual councillors who voted in a particular way.

156 Rather, in circumstances where the Shire's involvement is limited to the making of submissions, what matters is the relevance, cogency and strength of its submissions.

Issues for determination

157 While the ultimate issue was agreed (whether the correct and preferrable decision is to approve, refuse to approve, or require the Structure Plan to be modified and resubmitted for approval), the WAPC's preferred framing of the relevant sub-issues was not agreed.

158 What follows is the WAPC's preferred expression of the relevant sub-issues. They are included by way of introduction and because they were used as the basis on which SPH was granted leave to intervene - its intervention was limited to sub-issues B1(a) - (c), B2, B5 and B6.[100]

159 In what follows, where there is a difference between the parties as to the framing of the sub-issue, we have identified that difference and explained how we have resolved it.

A. Traffic

Issue A1: Whether the TIA is reliable and accurately assesses the effects of development pursuant to the Structure Plan on the road network.

[98] Shire's Outline, paras 15 - 16.
[99] SAT Act, s 27(1) and (2).
[100] ***Satterley Property Group Pty Ltd and Western Australian Planning Commission*** [2025] WASAT 17.

Issue A2: Whether development pursuant to the Structure Plan will necessitate upgrades to the local or regional road networks, in addition to those identified in the Structure Plan.

B Bushfire

Issue B1: Whether, in the event of a bushfire, people within the Structure Plan area will be able to safely evacuate to a suitable destination.

Issue B1 involves consideration of four sub-issues:

(a) **Sub-issue B1(a)**: Whether the bushfire simulations detailed in the Bushfire Simulation Report, and the bushfire simulations utilised in the Microsimulation Modelling, are reliable and accurate and represent reasonable worst-case scenarios for a bushfire evacuation.

(b) **Sub-issue B1(b)**: Whether the methodology utilised in the Microsimulation Modelling is appropriate for determining whether people will be able to evacuate safely.

(c) **Sub-issue B1(c)**: Whether the modelling undertaken and inputs utilised in the Microsimulation Modelling are appropriate and reliable; and

(d) **Sub-issue B1(d)**: Whether the assumptions about road upgrades utilised in the Microsimulation Modelling are appropriate.

Issue B2: Whether development pursuant to the Structure Plan will increase the risk to persons, property and infrastructure in the surrounding area in the event of a bushfire.

Sub-issues B1(a), B1(c) and B1(d) are also relevant to Issue B2.

Issue B3: Whether the conclusions reached in the BMP in relation to the post-development Bushfire Hazard Levels (BHL) within the Structure Plan area are reliable and accurate.

Issue B4: Whether the Asset Protection Zones (APZs) proposed in the Structure Plan are of sufficient size and appropriately located.

Issue B5: Whether the Structure Plan is consistent with the policy objectives, outcomes and measures in the State Planning Framework, in particular SPP 3.7 and the Guidelines.

Issue B6: Whether, having regard to the precautionary principle, refusal of the Structure Plan is warranted given the bushfire risks associated with development pursuant to the Structure Plan.

C. Environment and open space

Issue C1: Whether the environmental outcomes proposed by the creation of the 'conservation reserves' are likely to be achieved, given the uncertainty as to who will own and/or manage the reserves.

Issue C2: Whether, given the environmental constraints of the Site and the extent of the proposed conservation reserves, the Structure Plan provides for sufficient active public open space (POS).

Issue C3: Whether, given the scale of development proposed and having regard to the State Planning Framework, the Structure Plan as a whole strikes an appropriate balance between managing bushfire risk and the protection of the environment.

D. In any event, modifications required before approval

Issue D1: If, contrary to the Respondent's contentions, the Tribunal determines that refusal of the Structure Plan is not warranted, what modifications are to be made prior to resubmission for approval?

Preliminary issues

160 Satterley has raised two, related, 'preliminary' issues which concern the application of the Guidelines to the particular circumstances of this case. They are:[101]

(1) Does the Structure Plan need to be assessed against Element 1: Location in the Guidelines, having regard to the planning history of the Site and cl 1.3.1 of the Guidelines?[102]

(2) If the Structure Plan needs to be assessed against Element 1: Location, then is the Site within BLT A or BLT B for the purposes of the Guidelines?[103]

161 Satterley submits that if we answer those questions in its favour (i.e. that either: (1) the Structure Plan does not need to be assessed against Element 1: Location; or (2) if Element 1: Location *does* apply, the Site is determined to be within BLT A) then issue B1 does not arise.[104]

[101] The Applicant's SIFC, at para 10, identifies three preliminary issues. However, in oral opening submissions the respondent accepted the Structure Plan did not need to be assessed against the 2015 version of SPP 3.7 (ts 123 - 124, 15 September 2025) and, therefore, the 'first' preliminary issue the applicant identified falls away.
[102] Applicant's SIFC, para 12.
[103] Applicant's SIFC, para 13.
[104] Applicant's SIFC, paras 14 - 15.

Preliminary Issue 1: Does the Structure Plan need to be assessed against Element 1: Location in the Guidelines, having regard to the planning history of the Site and cl 1.3.1 of the Guidelines?

162 Satterley contends that the second paragraph of cl 1.3.1 of the Guidelines is engaged on the facts of this matter and, as a consequence, the Structure Plan is deemed to comply with Element 1: Location.[105]

163 As previously noted, the second paragraph of cl 1.3.1 provides:

> Where a strategic planning proposal, subdivision or development application was assessed against SPP 3.7 (2015) and the Guidelines, the subsequent stage(s) of the planning process, or modification or addition to the development approval, should demonstrate compliance with SPP 3.7 (2024) and these Guidelines, with the exception of the new methodology for Element 1: Location (if required).

164 The term 'strategic planning proposal' is defined in SPP 3.7 and is set out at para [101] above. We repeat it here for convenience:

> any strategic-level planning document or proposal including regional and sub-regional frameworks, region schemes and amendments, sub-regional strategies, structure plans, local planning strategies and local planning scheme reviews, scheme amendments, but does not include structure plans where the lot layout and/or the internal road layout is known.

165 As previously noted, the parties proceeded on the basis that the Structure Plan is not a 'strategic planning proposal' because the internal road layout is known, but for this Preliminary Issue a different decision is in issue. The issue turns on the decision in 2016 to lift the Urban Deferred zoning over those parts of the Site now zoned Urban.

166 Satterley's case is that the second paragraph of cl 1.3.1 applies because that decision:

(a) was an 'amendment' to a region scheme for the purposes of the definition of 'strategic planning proposal';[106] and

(b) was made following, and in light of, DFES's assessment of a BMP (**the BMP 2016**) which had been prepared pursuant to SPP 3.7 2015 and the Guidelines 2015.[107]

[105] Applicant's Outline, paras 154 - 155.
[106] Applicant's Outline, para 157.
[107] Applicant's Outline, para 162.

167 The WAPC's answer to that submission is in two parts. It denies that its 2016 decision falls within the scope of cl 1.3.1 but it says that even if it is wrong, and the second paragraph of cl 1.3.1 is engaged, we should find that there *is* a need for the Structure Plan to be assessed against the requirements of Element 1 - Location. It says to do otherwise is untenable in the context of the present application which involves a substantial proposal for which the bushfire risk to people, absent mitigation or management measures, would unquestionably be unacceptable.[108]

168 More specifically, the WAPC submits:[109]

(a) that the strategic decision to provide for urban development on the Site was, in substance, made when the WAPC rezoned the Site from the 'Rural' to 'Urban Deferred' zone under the MRS in 2003, prior to the introduction of SPP 3.7 2015 and the Guidelines 2015;[110]

(b) notwithstanding that DFES provided comments as part of the process undertaken for the lifting of Urban Deferred zoning, there was no assessment of a 'strategic planning proposal' against the provisions of SPP 3.7 2015 or the Guidelines 2015 in or about 2016 (or since);[111]

(c) in any event, falling within the second paragraph of cl 1.3.1 does not avoid the need to demonstrate compliance with the *Outcome* of Element 1: Location. Rather, that paragraph merely exempts the need to apply the *methodology* for that Element;[112] and

(d) finally, and regardless of everything else, given the evidence before the Tribunal, and the stated objectives and intent of SPP 3.7, the broader landscape risks associated with the Structure Plan should be considered.[113]

169 We will address these submissions in turn.

[108] Respondent's Outline, para 156.
[109] Respondent's Outline, para 157.
[110] The Shire makes the same submission - Shire's Outline, para 27.
[111] The Shire makes the same submission - Shire's Outline, para 30.
[112] The Shire makes the same submission - Shire's Outline, para 28.
[113] The Shire makes the same submission - Shire's Outline, para 32.

The Lifting of Urban Deferred zoning is not a 'strategic planning proposal'

170 We agree with the WAPC that its decision to lift the Site's Urban Deferred zoning was not an 'amendment' of the MRS and does not, therefore, satisfy the definition of 'strategic planning proposal' in SPP 3.7. As such, the decision does not fall within the scope of the second paragraph of cl 1.3.1.

171 Part IV of the PD Act sets out the process for the amendment of the MRS as a 'region planning scheme'. Section 37 allows for such amendment, and s 35(3) requires compliance with the relevant procedures in Divisions 2, 3 and 4 of Part IV in respect of such an amendment.

172 Division 2 contains relevant considerations for that process and includes the requirement for referral of a proposed amendment to the EPA, its public advertising and submission to the Minister. Divisions 3 and 4 provide for submission to, and approval by, the Governor of non-minor and minor region scheme amendments respectively. The regime provides for exceptions to each of the relevant steps to be detailed in regulations.

173 By contrast, the transfer of land from the Urban Deferred zone to the Urban zone may occur by way of a resolution of the WAPC pursuant to cl 23 of the MRS itself.[114]

174 Further, by cl 56(3) of the MRS an 'applicant aggrieved' may seek review in this Tribunal of a decision 'not to transfer from the urban deferred zone to the urban zone' whereas no such right of review exists for the amendment of the MRS under Part IV of the PD Act.

175 Satterley submits, with some justification, that the reference to 'region schemes and amendments' in the definition of 'strategic planning proposal' is simply an example of a 'strategic-level planning document or proposal'.[115]

176 However, that begs the question. That is, to define the phrase 'strategic planning proposal' as a 'strategic-level planning document or proposal' is circular.

[114] As noted by Mr Stewart, this previously occurred under cl 27 of the former MRS.
[115] Applicant's Outline, para 160.

177 We accept that the WAPC's 2016 decision to lift the Urban Deferred zoning of the Site 'involve[d] the content of the MRS zoning map being amended'.[116] But, in our view, the transfer from Urban Deferred to Urban ought to be understood as other than a 'strategic-level planning proposal' for reasons closely informed by the difference in process as outlined above.

178 That is, the process involved in the rezoning of land from the Rural zone to the Urban Deferred zone illustrates that it is that decision which is the 'strategic level planning proposal'.

179 That is, whether the ultimate decision is to rezone land from the Rural zone to either the Urban or Urban Deferred zone, a strategic decision is made at that time that the land is physically and locationally suitable for urban development and that this use would be consistent with the planning framework. Whether the Urban zoning will be deferred, or not, is a question of whether all the planning, servicing and environmental requirements to support development have been met, which includes that all essential infrastructure is available, or, if not, that the developer has reached agreement with the service providers for its provision.

180 The issue in the present case was the provision of wastewater treatment infrastructure. As that had not been resolved, the WAPC deferred the Urban zone of the relevant parts of the Site.

181 Accordingly, the relevant question, in determining whether to lift the Urban deferment, was whether the outstanding matter of servicing or infrastructure had been resolved.

182 That question is much less like a strategic planning question and is much closer to an administrative question, which is reflected in the process taken for its determination.

183 For these reasons we find that a decision to 'lift' Urban Deferred zoning (i.e., to transfer the Site from Urban Deferred to Urban zone) is not an amendment of the MRS and is, therefore, not a 'strategic planning proposal' for the purposes of cl 1.3.1 of the Guidelines.

[116] Applicant's Outline, para 158.

The BMP 2016 Was Assessed Against SPP 3.7 2015 and Guidelines 2015

184 As previously noted, those parts of the Site which were proposed for urban development by the 1998 Structure Plan were, in 2003, rezoned from the Rural zone to the Urban Deferred zone in the MRS.[117]

185 As noted, the Urban zoning was deferred because the manner in which wastewater generated by development on the Site was to be treated remained unresolved.[118]

186 As such, the relevant question for determination by the WAPC in 2016, when presented with an application to lift the Urban Deferred zoning, was whether the issues related to wastewater treatment had been resolved.[119]

187 However, it is also the case that the issue of bushfire risk was addressed as part of that process.

188 Indeed, a bushfire management plan was provided to DFES for comment by the WAPC.

189 DFES's referral letter of 21 July 2016 advised that a 'revised' bushfire management plan should be provided, which addressed certain identified matters including the application of SPP 3.7 2015 and Guidelines 2015.[120]

190 The result was a revised bushfire management plan (**BMP 2016**).[121] The Background section of the BMP 2016 states that it had been prepared 'to accompany a strategic planning proposal' to lift the Site's Urban Deferred zoning and to 'meet requirements triggered under' SPP 3.7 2015, and that it had been 'prepared in accordance with' the Guidelines 2015.[122]

191 It is, however, relevant to note the very considerable difference between the Acceptable Solution for Element 1: Location under the Guidelines 2015 and the more recent (current) version of the Guidelines. Compliance with the Acceptable Solution under the Guidelines 2015 merely required that the development was in, or would

[117] MRS amendment 1019 - 33, noted in Exhibit 3.4, page 84.
[118] Exhibit 3.4, page 83 - 84.
[119] Exhibit 3.4, page 83 - 84.
[120] Exhibit 3.4, page 81.
[121] Applicant's Outline, para 166; Respondent's Outline, para 167.
[122] Exhibit 4, page 6.

upon completion be in, an area with either a moderate or low bushfire hazard level (**BHL**), or BAL 29 or below.[123]

192 In its letter of 28 September 2016 to the WAPC, DFES 'provide[d] the following comments with regard to' SPP 3.7 2015 and the Guidelines 2015:[124]

> Consideration of the broader landscape perspective provides a better understanding of the bushfire risk, and supports more consistent decision making based on the risk from the landscape beyond the site. In this instance, the type and extent of vegetation located externally to the site may result in neighbourhood-scale destruction as it interacts with the bushfire hazard on and close to the site. However, the bushfire can only approach from one aspect and the site is located within proximity of the Stoneville Townsite.
>
> Notwithstanding the above, enhanced bushfire risk management measures should be incorporated at future planning and development stages to provide improved community protection in the form of a legible access network providing safe connections within and external to the site, additional water infrastructure, emergency services and vegetation management.
>
> On this basis, DFES advises that the proponent has adequately identified issues arising from the bushfire risk assessment and considered how compliance with the bushfire protection criteria can be achieved at subsequent stages of the planning process within the submitted Bushfire Management Plan.

193 In our view, that final paragraph is instructive. It acknowledges that issues of bushfire risk have been 'adequately identified' in the BMP 2016 but also anticipates that those issues will need to be managed in future stages of the planning process. That is, it makes plain that the BMP 2016 should be seen as the start of the process, rather than its completion.

194 That was, clearly, the view taken by the author of the officer's report provided to the WAPC meeting of 25 October 2016. After noting that the DFES assessment of the BMP 2016 had occurred 'in accordance with' SPP 3.7 2015 and the Guidelines 2015, and after noting that the advice was that the BMP 2016 'provides a better understanding of bushfire risk', the officer's report says that 'the DFES's

[123] Respondent's Outline, para 168.
[124] Exhibit 3.4, page 82.

comments … relate to the subsequent[,] more detailed design stages of the planning and development process'.[125]

195 The 'Planning Assessment' section of the officer's report is focussed on wastewater matters. However, in addressing whether planning for the Site is 'sufficiently advanced to guide future development', it notes that the 1998 Structure Plan is out of date, and says that the updated plan 'will be informed by a number of updated assessments', which we consider to be framed in sufficiently broad language to include bushfire assessment. Bushfire risk is not further addressed.

196 Nonetheless, we find that the BMP 2016 'was assessed' against SPP 3.7 2015 and the Guidelines 2015. That was the purpose of the BMP 2016 (noting the DFES letter of 21 July 2016 and the Background section of the BMP 2016) and the DFES letter of 28 September 2016 expressly describes its review as having 'regard to' SPP 3.7 2015 and the Guidelines 2015. We also accept that the WAPC's decision to transfer the Site from the Urban Deferred zone to the Urban zone was informed by that assessment, albeit that the WAPC's focus at the time was the resolution of wastewater treatment.

197 However, given our previous finding, that the decision to transfer the Site from the Urban Deferred zone to the Urban zone was not a 'strategic planning proposal', our finding in this regard has no practical effects; the second paragraph of cl 1.3.1 of the Guidelines remains unengaged.

Methodology vs Outcome

198 The WAPC's third submission relies on the distinction recognised in the second paragraph of cl 1.3.1 between the *outcome* for Element 1: Location and the *methodology* for that Element.

199 That distinction is evident in the Guidelines. So, for example, as noted above, Outcome O1 for Element 1: Location is as follows:

> Avoid broader landscapes that present an unacceptable bushfire risk to life, property and infrastructure.

200 Under the heading 'Acceptable Solutions', if the land in question falls within Area 2, it provides:

[125] Exhibit 3.4, pages 90 - 91.

> Determine the Broader Landscape Type in accordance with Appendix A.1. Then proceed under A1.1a or A1.1b.

201 The relevant provisions in Appendix A.1 are at A1.4, which is headed 'Broader Landscape Assessment Methodology'. It includes a points-based system to determine the 'broader landscape type'.

202 Accordingly, we agree with the WAPC's submission that the Guidelines draw a distinction between the 'Outcome' for Element 1: Landscape and the 'methodology' used to determine the Acceptable Solution.

203 We also agree with the WAPC's submission that the second paragraph of cl 1.3.1 of the Guidelines refers to and relies upon that distinction when it provides that, where a strategic planning proposal has been assessed against SPP 3.7 2015 and the Guidelines 2015, it is not necessary for the proposal to be subsequently assessed using the Element 1: Landscape *methodology*.

204 So much is evident from the subsequent paragraphs of cl 1.3.1 which make clear that, where the circumstances are such as to bring a proposal within cl 1.3.1, the proposal must comply with the 'outcomes and/or acceptable solutions' (the fifth paragraph), that it may be necessary for the design of the proposal to be 'modified to achieve compliance with the bushfire protection criteria' (the third paragraph) and that where circumstances prevent a re-design, 'an outcomes-based approach can be 'used' but there is 'no guarantee an approval will be forthcoming' (the fourth paragraph).

205 Put another way, and as the WAPC's written closing submissions put it, the exemption provided by the second paragraph of cl 1.3.1 of the Guidelines is limited to an avoidance of the need to 'prepare a BLA'.[126]

206 That is, even where the second paragraph of cl 1.3.1 of the Guidelines applies (which, for the above reasons, is not this case), it remains necessary to achieve compliance with the Outcome for Element 1: Landscape (i.e. 'Avoid broader landscapes that present an unacceptable bushfire risk to life, property and infrastructure'). In the absence of a BLA provided as an Acceptable Solution, that would be achieved through an 'outcomes-based approach'.

[126] Respondent's Outline, para 181.

207 Indeed, even where a BLA has been carried out and the land in question has been assessed as Type B, A1.1b of Element 1: Location provides for an outcomes-based approach if it is sought to demonstrate that bushfire risk can be appropriately managed.

208 Further, as previously noted, Satterley has, in anticipation of a finding by us that the second paragraph of cl 1.3.1 does not apply here, produced a considerable volume of material by which it seeks to demonstrate an 'outcomes-based approach'.

Satisfaction with Element 1: Landscape Should be Demonstrated

209 In any event, even if we had been satisfied that:

(a) the facts and circumstances of this Site fell clearly within the scope of the second paragraph of cl 1.3.1 of the Guidelines; and

(b) the second paragraph of cl 1.3.1 of the Guidelines provided that such satisfaction allowed for the relevant proposal to avoid the need to satisfy Element 1: Landscape altogether,

we would, nonetheless, have found that it was appropriate in the circumstances of this case to assess the Structure Plan against the criteria provided by Outcome O1 of Element 1: Landscape.

210 There are several reasons for that.

211 The first is that the provisions of the Guidelines are just that, they are guidelines.

212 It is true that SPP 3.7 states that that policy 'is to be read in conjunction with' the Guidelines, but the same is said of AS 3959.[127] As we have previously indicated, the Guidelines are subordinate to SPP 3.7, which has the status of a state planning policy. That is, while SPP 3.7 is policy, the Guidelines are not.

213 But even if we are wrong (and this is the second reason), and the Guidelines have the status of a state planning policy, the obligation in s 241(1)(a) of the PD Act requires us to 'have due regard to' any relevant state planning policy; it does not require us to 'apply' or to 'act in compliance with' its terms.

[127] SPP 3.7, cl 4.

214 To 'give due regard to' state planning policy requires us to 'give active or positive consideration'[128] to its terms, but we need not give effect to them and may depart from them where there are 'cogent reasons' to do so.[129]

215 Third, we are satisfied that to proceed in a way that does not strictly comply with the second paragraph of cl 1.3.1 of the Guidelines is, in this case, entirely consistent with the policy intent of SPP 3.7 and the paramount importance it places on 'the preservation of life and the management of bushfire impact'.

216 We have reached that view due to the very considerable volume of material before us which is to the effect that the Site, within which the Structure Plan proposes the development of ~1000 lots - the equivalent of a small town,[130] sits within a broader landscape of very considerable fire risk, which requires considerable mitigation to make the Site suitable for development for residential purposes.

217 That is the broader landscape context provides the necessary 'cogent reasons' to depart from the terms of the second paragraph of cl 1.3.1 if, contrary to our findings, that paragraph both amounts to state planning policy and its terms are satisfied by the WAPC's 2016 decision to transfer the Site's Urban Deferred zoning to that of Urban.

Conclusion as to Preliminary Issue 1

218 For the forgoing reasons, the Structure Plan should be assessed against Element 1: Location in Criteria 5 of the Guidelines, including by determining the relevant Broader Landscape Type in accordance with Appendix A.1 of the Guidelines.

Preliminary Issue 2: If the Structure Plan needs to be assessed against Element 1: Landscape, then is the Site within BLT A or BLT B for the purposes of the Guidelines?

219 The second 'preliminary issue' raised by Satterley proceeds on the basis that the Structure Plan needs to be assessed against Element 1: Location. If so, Satterley asks, is the Site properly classified as BLT A or BLT B?

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[128] ***Marshall v Metropolitan Redevelopment Authority*** [2015] WASC 226, [115].
[129] ***Marshall v Metropolitan Redevelopment Authority*** [2015] WASC 226, [106] - [111]. See, also, ***Clive Elliott Jennings & Co Pty Ltd v Western Australian Planning Commission*** [2002] WASCA 276; (2002) 122 LGERA 433, [25] - [26], applying ***Re Drake v Minister for Immigration and Ethnic Affairs [No 2]*** [1979] AATA 179; (1979) 2 ALD 634, 644 - 645.
[130] ts 49, 21 October 2025.

The Relevant Provisions of the Guidelines

220 As noted above, the Guidelines provide a points-based assessment methodology to determine the BLT, which uses four criteria against which points are assigned based on descriptors.

221 The Guidelines advise that 'due to the potential for subjectivity, the final determination ultimately rests with the decision-maker'.[131] Satterley accepts that, as the decision-maker, it is for us to form a conclusion on the applicable BLT, guided by the various expert opinions.[132]

222 The relevant criteria and the points assigned to them are set out in the Guidelines in Table 3 to Appendix A as follows:[133]

1. Proximity of the planning proposal to a suitable destination is:
    (a) > 10 km (5 points)
    (b) 1 – 10 km (2 points)
    (c) < 1 km (1 point)
2. The road pattern from the planning proposal to a suitable destination is:
    (a) Complex and indirect (cul-de-sacs, and/or multiple intersections (5 points)
    (b) Mixed road patterns (2 points)
    (c) Simple and/or direct (limited intersections) (1 point)
3. The predominant vegetation pattern is:
    (a) large tracts of vegetation (contiguous vegetation) (5 points)
    (b) a mosaic pattern of vegetation (e.g. vegetation within rural living precincts) (2 points)
    (c) cleared vegetation (e.g. clearing for residential zoned urban lots) (1 point)
4. Exposure of the planning proposal to an identified external bushfire hazard (excluding Class G Grassland) is from:

[131] Exhibit 3.6, page 83.
[132] Applicant's Outline, para 194.
[133] See, also, Exhibit 3.6, page 83.

(a) Three or four aspects (5 points)

(b) Two aspects (2 points)

(c) From nil or one aspect only (1 point)

223 Table 3 further provides that a total of 0 to 11 points results in a classification of BLT A and a total of 12 to 20 points results in a classification of BLT B, where:

(a) a BLT A classification 'satisfies the policy outcome for Element 1: Location and no additional consideration is required';[134] and

(b) a BLT B location 'presents an unacceptable bushfire risk of a landscape scale bushfire resulting in impacts on people, property and infrastructure. This location does not satisfy the acceptable solution for Element 1: Location'.[135]

224 However, as previously noted, where a site is classified as a BLT B location, and/but 'the practitioner' considers that further analysis could demonstrate 'that the risks can be appropriately managed, and/or mitigated', the Guidelines allow for the preparation of an 'outcomes-based approach' to be prepared in accordance with cl 7.5 of SPP 3.7.[136]

Is a 'Post-Development' Broader Landscape Assessment Valid?

225 Although nothing turns on the point, we note that the BMP included an assessment of the Broader Landscape Type under both a 'pre-development' and a 'post development' scenario.

226 Following the expression of differing views from the various experts, the Expert Conferral Statement - Bushfire Planning included a section where the experts expressed their view as to whether a BLA should or could be undertaken for a 'pre-' or 'post-' development scenario.

227 The Guidelines do not address the issue directly, but for two reasons we find that there is no proper role to play for a 'post-development' assessment of a site's BLT.

[134] Exhibit 3.6, page 41.
[135] Exhibit 3.6, page 41.
[136] Exhibit 3.6, page 41. Further explanatory notes are provided in Exhibit 3.6, pages 106 - 110, Appendix B1 of the Guidelines.

228 The first is that a BLA is to be undertaken for the purposes of deciding whether a particular planning proposal ought to be approved. It makes little sense to assess that question by assuming that it has been approved.

229 The second is that the Guidelines make clear that a Broader Landscape Assessment is undertaken in respect of the land outside the proposed development site; it does not include the site itself. In that way, what happens on the site itself is irrelevant to the assessment. Accordingly, an assessment after the development has occurred on the site must be irrelevant.

230 We turn now to consider an overview of the evidence of the experts as to their assessment of the BLT.

The Evidence - Overview

231 The BMP concludes that the Site is within a BLT A, with a score of 11 points, being five points for Criterion 1 and two points each for Criteria 2, 3 and 4.[137] The author of the BMP was not called to give evidence.

232 Mr Rowe, however, was called to give evidence. His involvement with the BMP began with the role of 'peer reviewer'. He then provided advice to the applicant on the BMP, in an iterative manner, such that he said that the 'overall direction' of the BMP 'had a sense of his input'.[138] Given that, it is unsurprising that his evidence was consistent with the BMP's conclusion that the Site is located within a BLT A.[139]

233 The other bushfire experts take a different view. Mr Parker assigned the Site 20 points - the maximum five points for each of the four Criteria - while, both Mr Panickar and Mr McMahon assigned 17 points to the Site, for a classification as BLT B.

234 Mr Panickar assigned five points to each of the criteria, save for Criterion 2 (Road Pattern), to which he assigned two points.[140] Mr McMahon initially assigned two points to each of Criterion 2 (Road Pattern) and Criterion 3 (Predominant Vegetation). However, in the Joint Statement, he increased the overall score for the Site to 17

[137] Exhibit 2, Table 3.3: Broader Landscape Type determination - Pre-Development.
[138] ts 12 - 14, 8 October 2025.
[139] Exhibit 2, Table 3.3: Broader Landscape Type determination - Pre-Development, and Table 5.2: LSP compliance assessment against BPC 5: Structure Plan and Subdivision Applications.
[140] Exhibit 37, Witness Statement of Daniel Suresh Panickar, 14 April 2025, DSP-3.

points as a result of changing his view as to Criterion 3 (Predominant Vegetation) and assigning it five points.[141]

235 In closing, Satterley submitted that all bushfire experts assigned 5 points to the Site for Criterion 1 because each of them misconstrued the definition of 'suitable destination'. Satterley submitted that, when that term is properly understood, it is clear that the Site is within 1 - 10 km's of a suitable destination and, so, only two points should be assigned for Criterion 1.

236 Satterley also submitted in closing that the 'predominant vegetation pattern' should be considered a mosaic pattern of vegetation, and be assigned two points, as opposed to contiguous vegetation, which is assigned five points.

237 If we accept those submissions, the combination of the two reductions would reduce the total points allocated from 17 to 11 points with the result that the Site would be classified BLT A.

238 We therefore turn now to address those submissions.

Criterion 1 - Suitable destination

The Evidence

239 The BMP does not nominate a particular site or location as *the* 'suitable destination' for the evacuation of future residents of the Site. Rather, it says that Mundaring townsite is the 'nearest potential suitable destination', although it then goes on to note various difficulties with locations within the townsite.[142]

240 The BMP then identifies the Brown Park Community Centre (**BPCC**) in Swan View as the nearest site, as an alternative to Mundaring, that satisfies the relevant criteria. The BMP says that the BPCC is located 14 kms west of the Site via GEH and holds 730 persons.[143]

241 Mr Rowe agrees that BPCC is the closest 'suitable destination'.[144] Mr Parker is of the same view.[145] Mr Panickar, with whom Mr McMahon agrees in this regard, identifies the Swan Suburbs Rugby

[141] Exhibit 46, Expert Conferral Statement - Bushfire Planning, para 24.
[142] Exhibit 2, page 17.
[143] Exhibit 2, page 17 and Figure 3.1.
[144] Exhibit 46, Expert Conferral Statement - Bushfire Planning, para 16.
[145] Exhibit 46, Expert Conferral Statement - Bushfire Planning, para 16.

Union Club as a suitable destination, which is ~16.4 kms from the Site.[146]

Satterley's Position

242 Satterley's position may be summarised as follows:

(a) Properly construed, the definition of 'suitable destination' includes all evacuation centres identified as such by the local government;

(b) Properly construed, the distance of 10kms in the definition of 'suitable destination' is to be measured 'as the crow flies' between the proposed development site and the possible suitable destination;

(c) There are several evacuation centres located less than 10kms from the Site 'as the crow flies'; and

(d) Accordingly, the Site should have two points assigned to it for this criterion, rather than five.

243 For the following reasons, we disagree with each of those submissions.

The Proper Construction of the definition of 'suitable destination'

244 The definition of 'suitable destination' is contained in SPP 3.7. With respect to the draftsperson, the definition could be clearer. It is as follows:[147]

> **Suitable destination:** an area that is not designated as bushfire prone on the *Map of Bush Fire Prone Areas* or is greater than 100 metres from classified vegetation or 50 metres from Class G Grassland, as per AS 3959, and can provide protection during and after a bushfire event. A suitable destination is located within an urban area, townsite or similar. This also includes any evacuation centre, dedicated by the local government, for use during a bushfire event.

245 Satterley's first submission turns on the last sentence of the definition. It submits that:[148]

[146] Exhibit 37, Attachment DSP-3, page 13. Also, Exhibit 46, Expert Conferral Statement - Bushfire Planning, para 16.
[147] Exhibit 3.6, page 10.
[148] Applicant's Outline, para 208.

> any evacuation centre dedicated by local government falls within the scope of the 'suitable destination' definition … regardless of its location ([i.e.] something does not need to satisfy both paragraphs of the definition).

246 We do not accept that submission. In our view, the final sentence of the definition does not add a separate or alternative criterion to the two in the first sentence and the additional, third, criterion in the second sentence. Rather, in our view the final sentence should be read as clarifying that an evacuation centre will not be classified as a 'suitable destination' unless it is 'located within an urban area, townsite or similar'.

247 That is, for a site or location to fall within the definition of 'suitable destination' it must satisfy:

(a) each of the two criteria in the first sentence. That is:

(i) either it is not designated as bushfire prone on the *Map of Bush Fire Prone Areas* or it is greater than 100m from classified vegetation or it is greater than 50m from Class G Grassland, as per AS 3959; and

(ii) it can provide protection during and after a bushfire event,

and:

(b) the criterion in the second sentence. That is, it must be located within an urban area, townsite or similar.

248 In our view, the third/final sentence insists that even evacuation centres must satisfy each of those other three criteria in order to be classified as a 'suitable destination'.

249 So much follows when the second and the third sentences are read together, as we consider they should.

250 In our view, the introductory words of the second sentence makes clear that what follows is an additional requirement to those in the first sentence. That is because it repeats the term being defined, so as to remind the reader that that is what is in issue. Those words are omitted from the first sentence of the definition because those words follow immediately from the defined term itself.

251 When that is understood, the first three words of the third sentence ('This also includes') are properly read as referring to the substance of the second sentence. That is, 'any evacuation centre, dedicated by the local government…' will be a 'suitable destination' if it is 'located within an urban area, townsite or similar'.

252 We accept that the words 'This also includes' might be said to refer to the definition of 'suitable destination'. That is, the starting word 'This' might refer to the defined term. However, we do not accept that to be the proper construction for two reasons.

253 First, it would have been clearer to use the defined term, just as was done at the start of the second sentence.

254 Second, the definition as a whole is restrictive and has the effect of codifying the criteria for a 'suitable destination', which is a term used within the Guidelines for Broader Landscape Assessment. To include within that definition 'evacuation centres' that have been identified by local governments would allow those criteria to be avoided altogether (as well as require access to the relevant local government's list of dedicated evacuation centres in order to ascertain 'suitable destinations'). That appears to us to be inconsistent with the first two sentences of the definition.

10 kms is Not to be Measured 'As the Crow Flies'

255 As noted above, the Guidelines provide that Criterion 1 for a Broader Landscape Assessment is 'Proximity of the planning proposal to a suitable destination'.

256 Satterley submits that the word 'proximity' should be given its ordinary meaning, which it says is 'as the crow flies'. In support of that submission, it submits that:[149]

(a) if the intention had been for a 'distance by road' to be considered then those words could have easily been used; and

(b) such a construction is consistent with the fact that Criterion 2 concerns the complexity of the road pattern.

257 We do not agree. Applying a distance measured 'as the crow flies' has no practical relevance to the task of evacuating people from a bushfire. The evidence before us, which is entirely consistent with

[149] Applicant's Outline, paras 212 - 214.

common human understanding, is that Australians evacuate from bushfire by car or some other motor vehicle, not on foot.

258 That is so for several reasons, including that they wish to carry goods with them (several lay witnesses described preparation of a packed bag, containing clothes and treasured items amongst other things), the protection from the heat provided by a car and the greater speed provided.

259 To apply the measure of 'as the crow flies' would be entirely inconsistent with the actual human experience of bushfire evacuation, upon which we accept SPP 3.7 and the Guidelines were based.

260 In any event, we do not accept that the ordinary meaning of 'proximity' is, necessarily, 'as the crow flies'. The *Macquarie Dictionary* defines proximity as 'nearness in place, time, or relation'. Where the question is the ability to access a safe place, 'proximity' might equally be measured by travel time informed by distance travelled, which requires consideration of distance by road.

Evacuation Centres dedicated by the Local Government

261 Satterley submits that there are several evacuation centres located less than 10 kms from the Site, when measured as the crow flies.

262 In doing so, it relies on the Shire's Local Emergency Management Arrangements Evacuation Sub-Plan (**LEMAES**),[150] which 'refers to 10 recognised evacuation centres dedicated by the Shire'.

263 We find that dedication by the Shire is, by itself, insufficient to bring an evacuation centre within the scope of the third/final sentence of the definition of 'suitable destination'. That is because the last sentence of the definition requires that dedication by the local government to be *for use during a bushfire event.*

264 To construe that last sentence in the way Satterley proposes is to effectively ignore its final words. Satterley's submission assumes that all evacuation centres are suitable as a destination in a bushfire, but that begs the critical question. That question is answered positively only if the local government dedicates the evacuation centre as suitable 'for use during a bushfire event'.

[150] Exhibit 49, page 29.

265 While the LEMAES proceeds on the basis that a bushfire is the most likely event that will require the evacuation of the local population, it covers other emergencies as well - extreme weather, road transport and hazardous material emergencies are also covered.[151]

266 Appendix 4 of LEMAES identifies 10 'evacuation centres' within the Shire but none of them are dedicated for use during a bushfire event. Rather, they are simply identified as 'evacuation centres'. Further, one of two Notes at the top of the Appendix states:

> Brown Park is the Shire of Mundaring's primary evacuation centre. The other locations listed below may be utilised in relation to incidents of a low level or for other welfare and recovery purposes such as one stop shop locations or for temporary post incident administration or coordination facilities for agencies such as lifeline organisations.

267 We repeat that BPCC is 14 km west of the Site. There is nothing before us to support the view that evacuation of the Site in response to a bushfire following the Site's development, would be treated by an incident controller as a 'low level' incident such that any of the other dedicated evacuation centres might be considered appropriate under the LEMAES for utilisation.

Conclusion as to Suitable Destination

268 For the foregoing reasons, we reject Satterley's submission that only two points should be allocated to Criterion 1. None of the expert evidence before us supported the view that there are suitable destinations within 10 kms of the Site and, for the foregoing reasons, we reject each of the three arguments on which the submission is based.

269 Rather, for Criterion 1 (proximity to a suitable destination) the Site should be allocated five points.

270 Given the above findings, it is unnecessary for us to address the other criteria, as it will not change the BLT classification in this case. Nonetheless, for completeness we will do so.

Criterion 2 - Road Pattern

271 As we have previously indicated, all three witnesses allocated two points for this criterion, save for Mr Parker, who allocated five points. We do not agree with him.

[151] Exhibit 49, section 10, page 5.

272 In our view, and consistent with the criticism of Mr Parker's approach made by Mr Rowe in the Expert Conferral Statement, Mr Parker has taken into account matters which appear extraneous to the relevant considerations as provided by the relevant provisions of Appendix A of the Guidelines.

273 The Guidelines require an assessment as to whether the 'road pattern to a suitable destination' should be classified in one of the three stated ways: 'simple and/or direct (limited intersections)', 'complex and indirect (cul-de-sacs, and/or multiple intersections)' or 'mixed', which we understand to be somewhere in the middle of the other two.

274 Mr Parker has had regard to other matters:

a. The mix of Primary, Regional and Local Distributor Roads;

b. That some roads are 'curved';

c. Topography; and

d. The presence of 'extreme bushfire hazard along the routes, including John Forrest NP'.

275 As per our consideration of the *Suitable Destination* Criterion, BPCC appears to be the closest 'suitable destination' to the Site. To access it from the Site requires access to either Toodyay Road or GEH. Both are accessed most simply by one of either Roland Road to the west of the Site or Stoneville Road to the east of the Site.

276 Depending on the circumstances, access to those roads from the Site may be relatively straightforward or may be quite complex and, in part, will be determined by the construction of roads as part of the development of the Site. However, once on either Rowland or Stoneville Road, travel is simple and direct and access from those roads to BPCC could not be described as complex.

277 Accordingly, we agree with the assessment of each of the experts other than Mr Parker, and allocate only two points to Criterion 2.

Criterion 3 - Predominant Vegetation Pattern

278 As we have noted above, the Guidelines provide for five points to be allocated where the predominant vegetation type is 'large tracts of vegetation (contiguous vegetation)', while only two points are allocated

if the predominant vegetation is a mosaic pattern of vegetation (e.g. vegetation within rural living precincts).

279 The relevant provisions of the Guidelines provide limited guidance to assist practitioners in their allocation of points. They state that the relevant area 'should extend for a distance of approximately two kilometres beyond the subject site'[152] and that the vegetation within that area is to be mapped in four intercardinal quadrants in a manner that distinguishes between 'areas of low threat vegetation and non-vegetated areas', 'areas of unmanaged grassland' and 'areas of all other types of classified vegetation'. That mapping is then used to distinguish between the three types of 'predominant vegetation patterns'.[153]

280 Mr Panickar's written evidence (both in his Statement[154] and in the Joint Statement where he affirms his overall allocation of 17 points)[155] was that five points should be allocated to the Site as the predominant vegetation within the 2 km assessment area was (outside the Site) composed of 50.8% of 'large tracts of classifiable vegetation', 46.4% of mosaic pattern and 2.8% low threat vegetation. He reached that view based on mapping he carried out and which were shown as Figures 2 and 3 to DSP-3 to his witness statement.[156]

281 However, his oral evidence at the hearing was different. He said that the predominant type of vegetation was the 'mosaic' pattern, and allocated two points. He changed his mind having determined that the vegetation within the Site should not be included in the assessment.[157]

282 While we agree, for reasons previously given, that the Guidelines provide for an assessment of an area 'external to the planning proposal',[158] we disagree that the exclusion of the Site makes much difference. The figures arrived at by Mr Panickar having excluded the Site were of 51.3% being 'mosaic' and 45.6% being 'contiguous'.[159]

[152] Exhibit 3.6, page 77 - Guidelines, cl A.1.4.2 - Step One.
[153] Exhibit 3.6, page 79 - Guidelines, cl A.1.4.2 - Step Two.
[154] Exhibit 37, page 16, Witness Statement of Daniel Suresh Panickar, DSP-3.
[155] Exhibit 46, Expert Conferral Statement - Bushfire Planning, para 26.
[156] Figure 3 shows the 'post-development' scenario. For the reasons given above, we will limit our comments to Figure 2.
[157] ts 84 - 85, 6 October 2025.
[158] Exhibit 3.6, page 76.
[159] ts 86, 6 October 2025.

283 Mr Rowe's evidence in this regard amounted to a summary of, and defence of, the assessment contained within the BMP.[160] He did not carry out a standalone assessment.

284 We have some concerns with the approach taken in the BMP in this regard. In particular, we are concerned that it confuses or conflates the nature of the landholding with the vegetation pattern.

285 Table 3.1 of the BMP provides a 'Summary of the Broader Landscape Assessment'. Under the heading 'Vegetation Type', the same or very similar wording is used for each of the quadrants: 'much of the vegetation type … is areas of fragmented forest and grassland within existing rural residential lots'.

286 In the same Table, under the heading 'Vegetation Pattern', the same focus appears. That is, for each of the quadrants, the same or similar description is given: 'most vegetation is within existing rural residential lots and is assessed mosaic pattern due to fragmented nature'.

287 To focus on the type of landholding appears to us to ask the wrong question.

288 Mr Rowe's primary evidence makes the conflation of the two issues explicit. He says that the BMP's conclusion of a BLT A was 'based on the consideration of … a predominant vegetation, outside the site, having regard to the Mosaic (rural living) surrounding the site (2 points)'.[161]

289 He was cross-examined on this point and he appeared to accept that it was possible for rural residential areas to support 'large tracts of vegetation'. Nonetheless, he insisted that the relevant 'issue' is whether it is possible to provide 'treatments' by which the fire risk can be mitigated.[162]

290 In doing so, he referred to Appendix B1.1 of the Guidelines. In particular, he relied upon a paragraph that explains why Class G Grassland has been excluded from consideration as relevant (i.e., 'classified') vegetation - the explanation focuses on the ability to mitigate the risk.

[160] Exhibit 36, Witness Statement of Anthony Rowe, para 89.
[161] Exhibit 36, Witness Statement of Anthony Rowe, para 89.2.
[162] ts 88 - 89, 95 - 97, 6 October 2025.

291 While we accept that there is some logic to Mr Rowe's reliance on that paragraph, we note that the next paragraph begins with the sentence 'Landscape scale bushfires occur where there are large areas of contiguous vegetation'.[163]

292 The purpose of a BLA is to provide a means of 'quantifying the characteristics and the potential for a landscape scale bushfire in the broader landscape'.[164] In our view, that seems best addressed by focusing on the type and pattern of the vegetation rather than lot size or landholdings.

293 The Guidelines advise that, after determining the BLA area (Step One), Step Two should involve a 'desktop vegetation assessment' which uses 'up-to-date aerial imagery'.

294 The BMP provides that aerial imagery in Fig 3.2. It divides the vegetation types into three types - low threat vegetation, unmanaged grassland, and other classified vegetation. The BMP provides no quantitative representation of the proportion but, on our review, it would be difficult to say that there was much more of either 'unmanaged grasslands' or 'other classified vegetation'.

295 In stark contrast, Fig 3.3 shows 'Mosaic vegetation' to be 'the predominant vegetation pattern' by a very considerable margin.

296 The explanation for the discrepancy between the two maps appears to be the conflation of vegetation type with the type of landholding described above.

297 As such, we consider Fig 3.2 to be of considerably greater utility to the task at hand than Fig 3.3.

298 Mr Parker had regard to Fig 3.2 of the BMP for the purposes of his evidence.

299 He said that it 'excludes the rural residential area to the south-west and south-east' of the Site as non-vegetated or low threat areas.[165] While he does not identify those areas, it would appear that he is referring to the Parkerville and Stoneville townships, which are zoned residential and which provide for small, residential sized lots.

[163] Exhibit 3.6, page 106.
[164] Exhibit 3.6, Guidelines, cl A1.1, page 76.
[165] Exhibit 43, Witness Statement of Jackson Parker, para 65.

300 He further said that 'aerial images and ground truthing by DFES provide large tracts of classifiable vegetation, including treed areas with contiguous canopies'.[166] However, the aerial images he references are not provided and no details are given of the 'ground truthing'. In those circumstances we feel compelled to give this evidence no material weight.

301 His characterisation of Fig 3.2 was that it shows:[167]

> a great extent of large areas of contiguous vegetation being a mix of predominantly Class A Forest and associated Class G Grassland, which has the potential to result in multiple fire fronts and 'an area of fire', the vegetation is best described as large tracts of vegetation rather than a mosaic pattern of vegetation.

302 As we have previously noted, in our view it is difficult to say that Fig 3.2 shows a greater proportion of either 'unmanaged grassland' or 'other classified vegetation'.

303 Mr Parker appears to combine them together when he speaks of a 'great extent of large areas of contiguous vegetation, being a mix of [the two types]'.

304 That approach appears to misconstrue, or perhaps confuse, the three types of 'vegetation pattern' provided by the Guidelines.

305 The third type is 'large tracts of classified vegetation (e.g. contiguous vegetation within reserves or national parks)'.

306 Mr Parker appears to have considered that a contiguity of Class G Grassland with Class A Forest constitutes 'large tracts of classified vegetation'.

307 We have some concerns with that approach. Our concern turns on the paragraph in Appendix B1.1 of the Guidelines relied upon by Mr Rowe which appears to exclude (or at least minimise the significance of) Class G Grasslands from consideration as relevant ('classified') vegetation.

308 However, as noted in our discussion of Mr Rowe's evidence, the paragraph of Appendix B1.1 following the paragraph relied upon by Mr Rowe might be said to represent a counterpoint to the paragraph relied upon.

[166] Exhibit 43, Witness Statement of Jackson Parker, para 65.
[167] Exhibit 43, Witness Statement of Jackson Parker, para 67.

309 In short, we have some misgivings about Mr Parker's approach in regard to Class G Grassland, just as we do about Mr Rowe's approach about the same topic.

310 However, there is insufficient clarity in the Guidelines for us to express a firm view as to which we find more or less correct.

311 Moreover, as it will make no difference to the result, we consider it unnecessary to express a firm view.

312 In his oral evidence, Mr Parker also referred to the Stoneville fire of 2014, which covered about 386ha across 'predominantly rural residential properties' which, he said, demonstrates the ability of this landscape to support a landscape scale fire.[168]

313 Mr McMahon also relied upon a previous bushfire - the Wooroloo fire - as a basis to allocate five points for this criterion. It was on that basis that he changed his view from two points in his primary written evidence[169] to five points in the expert conferral.[170] He said that he did so having spoken to a number of firefighters that went to the Wooroloo fire who told him that 'even with the Asset Protection Zone, grassland maintained, it didn't slow the fire at all'.[171]

314 The Guidelines make no provision for reference to past bushfires - their existence or behaviour - as a relevant factor in the present task, but given the purpose of the task is to identify the risk of a landscape scale fire, we accept that it may be relevant without expressing a strong view either way.

315 Having had regard to all of the foregoing, we find that five points should be allocated to this criterion.

316 In doing so, we place considerable weight on the relevant maps - Fig 3.2 of the BMP and Fig 2 to DSP-3 of Mr Panickar's witness statement, the latter of which includes two maps: 'Mapped Vegetation Aspect' and 'Predominant Vegetation Pattern', both predevelopment.

317 While there are some differences between Fig 3.2 of the BMP and Fig 2 'Mapped Vegetation Aspect', they appear to, they demonstrate

[168] ts 85, 6 October 2025.
[169] Exhibit 40, Witness Statement of Gary Glen McMahon, para 52.
[170] Exhibit 46, Expert Conferral Statement - Bushfire Planning, para 24(c). Also, ts 85, 6 October 2025.
[171] ts 85, 6 October 2025.

that approximately 50% of the 2 km area surrounding the Site is occupied by 'other classified vegetation'.

318 In those circumstances, even if we exclude the Class G Grasslands, we consider the 'predominant' vegetation type is 'large tracts' of classifiable vegetation, rather than a mosaic pattern.

319 In so finding, it might be said we have 'erred on the side of caution'. Without necessarily accepting that is so, such an approach would be, in our view, consistent with the broader policy goals of SPP 3.7 as enunciated in cl 2, cl 5.1 and cl 6.1.

Criterion 4 - Exposure to an Identified External Bushfire Hazard

320 Mr Rowe's evidence was that the Site was exposed to an 'identified external bushfire hazard (excluding Class G Grassland)' from only two aspects. Accordingly, he allocated two points to this criterion.[172]

321 Each of the other three bushfire planning experts allocated five points.[173]

322 Mr Rowe explained his reasons in the joint conferral statement by saying that the exposure to a landscape fire must be achieved within the two kilometre radius. When read with the relevant parts of Table 3.1 in the BMP, we understand him to say that there is no exposure to the relevant hazard from the north-east and south-east because 'much of the vegetation' in those quadrants is contained within rural residential lots.

323 For the reasons which we have given above in para [271] - [277] as to Criterion 2, we do not agree with that approach.

324 As we said in those reasons, Fig 3.2 of the BMP and Fig 2 of Mr Panickar's DSP-3 both contain significant areas of contiguous vegetation. Further, there is no significant difference between the quadrants in that regard, notwithstanding the Parkerville and Stoneville townships.

325 Given that, we agree with the opinion of the other three experts that the Site is exposed to bushfire risk from three or four aspects and five points should, therefore, be allocated for this criterion.

[172] Exhibit 46, Expert Conferral Statement - Bushfire Planning, para 25(b).
[173] Exhibit 46, Expert Conferral Statement - Bushfire Planning, para 25.

Conclusion and Implications

326 For the foregoing reasons, the Site is properly characterised as located in a Broader Landscape Type B, BLT B, with a score of 17 points.

327 The result is that, consistent with cl 7.2 of SPP 3.7, approval of the Structure Plan should be refused unless Satterley can demonstrate that it (the Structure Plan) demonstrates 'through an outcomes-based approach that the broader landscape risk to people, property and infrastructure is acceptable'.

328 As we have previously indicated, and despite Satterley's focus on the two preliminary questions, much of the evidence upon which it relies is directed at an 'outcomes-based approach'. It is to that which we now turn.

Consideration of the substantive issues

Issue A: Traffic

329 As noted above at [159], the WAPC formulated the issues relevant to traffic as follows:

- **Issue A1**: Whether the TIA [Traffic Impact Assessment] is reliable and accurately assesses the effects of development pursuant to the Structure Plan on the road network.
- **Issue A2**: Whether development pursuant to the Structure Plan will necessitate upgrades to the local or regional road networks, in addition to those identified in the Structure Plan.

330 Satterley agrees with the formulation of Issue A2 but disagrees with the formulation of Issue A1. It says that the sub-issue should be reformulated as 'Would the Structure Plan have an acceptable impact?'

331 There is some strength to Satterley's alternative formulation. As we have already indicated, our task is to determine whether it possible and feasible to develop the Site in the manner proposed by the Structure Plan and in a manner that is consistent with relevant planning policies. In that sense, a focus on the reliability of the TIA might be said to miss the larger picture.

332 However, as will be seen, we have considerable concerns with the reliability of the TIA such that we have no confidence that the Structure Plan will have an acceptable impact.

EastLink

333 As has been noted, the Structure Plan provides for a two-stage process. Stage 1 provides for the development of 400 lots with the remaining lots to be constructed after EastLink has been completed.

334 That then begs the question as to when EastLink might be constructed. Necessarily, that involves a degree of speculation.

335 Mr Broadhurst gave very helpful evidence in that regard. He said that in the vicinity of the Structure Plan EastLink is, at present, unfunded[174] with an unknown timing for its construction.[175]

336 He also spoke of five year funding cycles, so that, as there is no funding at present, it can be confidently stated that EastLink will *not* be constructed by 2031. Mr Broadhurst described the EastLink project as requiring a 'very significant future government investment decision' and said that 'infrastructure proposals of that sort of magnitude probably need almost a 10-year timeframe from initial funding decision to completion'.[176] As a result, the earliest operational date appears to be 2036 but it seems not unreasonable to look to 2041 or even later.

337 The hearing therefore proceeded on the basis that EastLink was unlikely to be constructed before 2036 and, therefore, only Stage 1 could be developed until (at least) that date.

338 We agree with the Shire's closing submission that that situation 'begs the question whether it is appropriate to approve a structure plan to facilitate a development the majority of which cannot be commenced for at least 10-15 years'.[177]

339 That submission is consistent with Mr Stewart's evidence, which noted that the Structure Plan proposes that 60% of the proposed lots (i.e. 600 lots) will only be developed after the construction of EastLink, which is a significant piece of infrastructure, the timing of which Satterley has no control over. His view is that the Structure Plan should

[174] ts 281 - 283 and ts 299 - 300, 17 September 2025.
[175] Exhibit 17, Witness Statement of Lindsay Broadhurst, para 20.
[176] ts 282 - 283, 17 September 2025.
[177] Shire's Outline, para 14.

be limited to those elements that Satterley is capable of delivering within a ten year period.[178]

340 Given Mr Broadhurst's evidence quoted above, we have considerable sympathy for the views expressed by Mr Stewart.

341 In light of Mr Broadhurst's evidence, there appears to be a real prospect that, if the Structure Plan was approved, the lots of Village 2 (which comprise Stage 1) would remain the only ones built for an unknown period waiting for EastLink to be completed.

342 That raises concerns regarding how they will obtain the protection from bushfire provided by the Stage 2 construction of Villages 1 and 3 and the associated vegetation removal and management.

343 The staging proposed in Exhibit 48 addresses the issue to some degree.[179] It shows 400 lots in Village 2 as well as the creation of 'buffers' around that Village of low-threat vegetation and Asset Protection Zones (**APZ's**) for its protection from bushfire.

344 We agree with Mr Stewart's statement at the hearing that Exhibit 48 should have formed part of the Structure Plan, rather than being provided on the 11th day of the hearing.[180]

345 However, even with Exhibit 48, the Shire's question remains live - should a Structure Plan be approved in circumstances where 60% of the lot yield is to be delivered after the provision of major infrastructure over which the developer lacks control as to the timing of its construction.

346 Given our consideration of the TIA and the traffic evidence more broadly, it is unnecessary to answer that question.

Issue A1: Whether the TIA is reliable and accurately assesses the effects of development pursuant to the Structure Plan on the road network/ Whether the Structure Plan would have an acceptable impact [on traffic].

347 Appendix 4A of the Structure Plan is the TIA prepared for Satterley by Transcore and dated June 2024. Mr Bordbar is the

[178] Exhibit 62, Witness Statement of Alan Alexander Stewart, paras 83 - 91.
[179] See above at paras [34] - [36].
[180] ts 86, 21 October 2025.

Managing Director of Transcore; the TIA was prepared under his supervision and he endorses its content.[181]

348 The WAPC's SIFC was filed 25 October 2024. In relation to Issue A1, it contends that due to 'deficiencies in the TIA', its conclusions 'including in relation to traffic generation, traffic distribution and road upgrades, have not been demonstrated.[182] It then goes on to identify a number of those asserted deficiencies.

349 The witness statement of Mr Bordbar is dated 11 April 2025[183] - nearly six months after the WAPC's SIFC. While it responds to the WAPC's criticisms to some extent by the provision of some limited information,[184] the witness statement might reasonably be described as dismissive.

350 For example, rather than provide the information sought, Mr Bordbar simply repeats (several times) that MRWA had not objected to the Structure Plan or had not sought the information that the WAPC now complains is missing.[185] He also describes the WAPC's demands for further details as premature because, in his view, either the detail sought is unnecessary at this stage of planning (i.e. as part of the Structure Plan) or, rather, he insists that the level of detail provided is 'sufficient' for present purposes.[186] In this regard, his approach mirrors that taken by Satterley in its opening submissions. That is, he adopts a 'broadbrush' approach that suggests any difficulties can be dealt with at a later stage.

351 The conclusory paragraphs to Mr Bordbar's witness statement include the assertion that the issues raised by the WAPC 'are either speculative or vague and to date, are not substantiated by evidence'.[187]

352 Mr Levey's witness statement was filed on 13 June 2025. It included a review of the TIA, as supplemented by Mr Bordbar's witness statement. Mr Levey identified several instances of what he considered to be a failure to provide relevant information. Four examples will suffice.

[181] ts 85, 23 September 2025.
[182] Respondent's SIFC, para 256.
[183] Exhibit 22, Witness Statement of Benham Bordbar.
[184] Exhibit 22, Witness Statement of Benham Bordbar, paras 4.3, 4.4 and 4.9.
[185] Exhibit 22, Witness Statement of Benham Bordbar, paras 3.2, 4.3, 4.5, 4.7.
[186] Exhibit 22, Witness Statement of Benham Bordbar, paras 4.13 and 4.17.
[187] Exhibit 22, Witness Statement of Benham Bordbar, para 5.1.

353 First, Mr Levey notes that the TIA includes a table of traffic volumes sourced from MRWA and the Shire and refers to additional traffic surveys undertaken by Transcore. He also notes that the TIA fails to provide 'any further information or supporting data regarding the nature, extent or locations of these [additional] surveys'[188] and that, while Mr Bordbar's witness statement does provide their 'locations and dates', otherwise 'no traffic survey data for these [additional traffic survey] sites has been documented'.[189]

354 Second, Mr Levey notes that the TIA proceeds on the basis of certain road upgrades and discusses 'intersection operational analyses for external intersections' but says that 'there are no concept plans for any of these proposals'. He notes that the upgrades will need to be approved and that, therefore, 'concept plans should be prepared, and documented within the TIA report, in order to confirm that the proposed intersection layouts are acceptable and that sufficient land is available'.[190]

355 Third, Mr Levey is critical of the lack of detail as to the impact of the proposed development of the Site pursuant to the Structure Plan with respect to both traffic generation and trip distribution.[191]

356 Fourth, Mr Levey is critical of the approach taken in relation to the intersection of GEH and Seaborne Street. He says that manual adjustments have been made to the model used by Transcore to 'reduce the impact of increased traffic flows attempting to turn right' from Seaborne Street into GEH but that:

(a) the redistribution of traffic away from Seaborne Street has 'not been sufficiently explained or justified, nor [have] the number of vehicles assumed to turn left out of Seaborne Street to then do a U-turn at Craven Road'.[192]

(b) even with the manual adjustments, the right-turn out of Seaborne Street 'will operate at an unacceptable (and unsafe) Level of Service F…' and that will continue to worsen prior to EastLink's construction, such that it is 'clear that traffic from

[188] Exhibit 22, Witness Statement of Darren Levey, para 39.
[189] Exhibit 26, Witness Statement of Darren Levey, para 40.
[190] Exhibit 26, Witness Statement of Darren Levey, paras 47.
[191] Exhibit 26, Witness Statement of Darren Levey, paras 55 - 61.
[192] Exhibit 26, Witness Statement of Darren Levey, para 66.

> Stage 1 of the [Structure Plan] (with 400 lots) will not operate satisfactorily without EastLink'.[193]

357 Mr Bordbar prepared a Responsive Witness Statement, dated 2 July 2025,[194] which responded to the witness statements of Mr Levey and Mr Broadhurst. Mr Bordbar does not provide any of the information sought by Mr Levey, although in a couple of places he indicates that it can be found in electronic files provided to the WAPC.[195] More generally, his response to the matters raised by Mr Levey is to insist that no previous request for the information had been made and/or that, if it is necessary to do so, the additional information sought can be included in a future iteration of the TIA.[196]

358 The single exception to that approach was his statement that he had 'further investigated' the redistribution of westbound traffic from a right turn onto GEH from Seaborne Street to a left turn onto Toodyay Road from Roland Road. That 'further investigation' amounted to a 'google map' depicting the latter as the 'recommended route by googlemaps',[197] making it, therefore, 'the preferred route'.[198] We do not accept that that amounts to a 'further investigation'.

359 The conferral of traffic experts occurred on 7 July 2025. In the resulting Joint Statement, filed 14 July 2025, Mr Bordbar agreed that the inclusion of the information sought by Mr Levey 'will assist the process'[199] and that 'a revised TIA or structure plan will need to be reviewed and considered prior to any conclusion or decision making'.[200]

360 In our view, the approach taken by Mr Bordbar fundamentally misunderstands the role of an expert witness.

361 There are two, overlapping, aspects to that misunderstanding. One goes to the reliability of his evidence and the other goes to his ethical obligations.

362 Mr Bordbar is an experienced traffic engineer and appears regularly in the Tribunal. He declared that he has read the Tribunal's

[193] Exhibit 26, Witness Statement of Darren Levey, paras 67 - 71.
[194] Exhibit 23, Responsive Witness Statement of Benham Bordbar, 2 July 2025.
[195] Exhibit 23, Responsive Witness Statement of Benham Bordbar, 2 July 2025, paras 2.2, 2.7, 2.9.
[196] Exhibit 23, Responsive Witness Statement of Benham Bordbar, 2 July 2025, paras 2.2 - 2.9.
[197] Exhibit 23, Responsive Witness Statement of Benham Bordbar, 2 July 2025, Attachment BB2A.
[198] Exhibit 23, Responsive Witness Statement of Benham Bordbar, 2 July 2025, para 2.10.
[199] Exhibit 25, Joint Statement of Benham Bordbar and Darren James Levey, paras 5, 6, 11 and 16.
[200] Exhibit 25, Joint Statement of Benham Bordbar and Darren James Levey, paras 5 and 9.

guide for expert witnesses[201] and agreed to be bound by the expert's obligations stated therein.[202] Those obligations include a duty to impartially assist the Tribunal.[203] The focus of commentary on that obligation is often on the requirement of impartiality, but the obligation to assist the Tribunal is just as important.

363 In our view, Mr Bordbar's approach to his primary witness statement and at conferral with Mr Levey failed to provide the Tribunal with the assistance that his obligations required him to provide.

364 To agree that a further version of the TIA would assist a future decision-maker (presumably the WAPC should we require a modified structure plan be submitted to it, or this Tribunal on review of any refusal) to reach a suitable conclusion but fail to provide that document in sufficient time before the hearing to allow it to be reviewed and critiqued by us is, at best, to misunderstand the process and, at worst, is to undermine it.

365 Further, when the rules of evidence apply, the opinion of an expert witness is only admissible if, amongst other things, the expert identifies the facts and assumptions upon which their opinion is based and explains their reasoning by which their 'specialised knowledge' has been applied to those facts/assumptions so as to produce their opinion.[204]

366 In ***Lang***, Gordon and Edelman JJ explained that '[w]ithout exposure of the factual basis or foundation for the opinion, the opinion becomes a "black box" which is "insusceptible to a 'full and fair opportunity to test … in cross-examination' " '.[205]

367 Their Honours also explained that there are two reasons for the requirement that an expert explain their reasoning:[206]

> … as Sir Owen Dixon said, … "courts cannot be expected to act upon opinions the basis of which is unexplained". Fundamentally, the task of choosing whether to accept the evidence of an expert, or of choosing between competing experts, is one that will depend upon "impressiveness and cogency of reasoning". That task of assessing reliability cannot be undertaken without sufficient explanation of the

[201] *A Guide for Experts Giving Evidence in the State Administrative Tribunal*.
[202] Exhibit 22, Witness Statement of Benham Bordbar, para 2.10.
[203] See, also r 39A(b) of the *State Administrative Tribunal Rules 2004* (WA).
[204] ***Makita (Australia) Pty Ltd v Sprowles*** [2001] NSWCA 305; (2001) 52 NSWLR 705 [85]; ***Pollock v Wellington*** (1996) 15 WAR 1, 3 ***Lang v The Queen*** [2023] HCA 29; (2023) 278 CLR 323 [223].
[205] ***Lang***, [225].
[206] ***Lang***, [227] - [228]. See, also, at [15] & [17] per Kiefel CJ and Gageler J. Internal citations omitted.

> connection in expertise between the factual foundation identified and the opinion of the expert.
>
> "Sufficiency" is, however, an elastic concept. The extent of required explanation of how the opinion expressed is based upon expertise can vary and will involve issues of judgment. In some cases where expert evidence is given on a matter which is not in real dispute, the expert may not be required to expose in great detail the basis upon which the opinion is based on their expertise. But the more critical the opinion is to the matters in issue, and the more contested the opinion, the more necessary it will be that the opinion expose the expertise upon which it is based.

368 While the Tribunal is not bound by the rules of evidence, it is not uncommon for it to apply the rules of admissibility in dealing with expert evidence, including by attributing weight to the evidence in a manner which reflects its compliance or non-compliance with those rules.[207]

369 The information sought by Mr Levey included the facts upon which Mr Bordbar's opinion was based and an explanation of the basis of the opinions expressed by him. They should have been provided. Ultimately, Mr Bordbar provided a further witness statement which purported to do so.

370 On 14 August 2025, a full month after the joint conferral statement was filed, and without first obtaining leave to do so, Satterley's solicitors wrote to Mr Bordbar and asked him to prepare a supplementary witness statement.

371 The solicitor's letter to Mr Bordbar[208] asked him to prepare a supplementary witness statement to address 'some unresolved points' in relation to the TIA that were said to 'flow from the Joint Statement'.

372 The letter asks Mr Bordbar to address five points. Three of them refer to paragraphs in the Joint Statement which, the solicitor's letter says, were the first time that Mr Levey had raised the point. The letter further states that these unresolved points were matters that Mr Bordbar 'could not reasonably have anticipated' prior to the preparation of his written evidence or his conferral with Mr Levey.

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[207] *State Administrative Tribunal Act 2004* (WA), s 32(1). See, for example, ***Medical Board of Australia v Woollard*** [2012] WASAT 209, [88]; ***Hordyk and Wanslea Family Services Inc*** [2022] WASAT 117; (2022) 107 SR (WA) 164 [57]; ***Avila and Main Roads Western Australia*** [2023] WASAT 79, [194] - [196].
[208] Exhibit 24, the letter is at Attachment BB1B to Mr Bordbar's Supplementary Witness Statement.

373 We strongly disagree. Each of the matters had previously been raised by Mr Levey.

374 Mr Bordbar went on to prepare a supplementary witness statement filed 28 August 2025 - just two weeks prior to the hearing.

375 The WAPC submitted that the information included in Mr Bordbar's Supplementary Witness Statement was 'information Mr Levey required to properly review the TIA'.[209] We agree. It should have been provided months earlier.

376 At the hearing, Mr Levey accepted that, in light of the information provided to him, the primary issue of concern remaining was the intersection of GEH and Seaborne Street.[210] Nonetheless, he was critical of the information provided in Mr Bordbar's Supplementary Witness Statement which, he said, not only did not explain matters but, in fact, 'actually complicates it'.[211] Having taken us to an example,[212] we agree with his analysis.

377 The example concerns a discrepancy between the modelled results on pages 1 and 2 of attachment BB4B to Mr Bordbar's Supplementary Statement. Page 1 shows the modelled results for the AM peak period in Stage 1 (i.e. after the development of 400 lots without EastLink). It shows 20% of traffic travelling from the Structure Plan area to Mundaring Town Centre via Richardson Road.

378 However, page 2 of BB4B, which applies to the AM peak period in Stage 2 (i.e. after the development of 1000 lots and with EastLink completed) shows no traffic on this route at all.

379 Mr Levey explained that an understanding of the redistribution of the previous traffic can be obtained by interrogating other results pages. Mr Bordbar agreed with Mr Levey's analysis in this regard.[213]

380 Two matters of considerable significance arise. First, Mr Levey should not have had to do that work; Mr Bordbar's obligations required him to explain what had occurred.

381 Secondly, the confusion described by Mr Levey goes to understanding the results only. As the WAPC submitted in closing,

[209] Respondent's Outline, para 75.
[210] ts 166 - 167, 24 September 2025.
[211] ts, 74, 23 September 2025.
[212] ts 70 - 74, 23 September 2025.
[213] ts 75, 23 September 2025.

Mr Bordbar has provided no explanation at all for *why* the discrepancy exists.[214]

382 At the hearing, Mr Bordbar described as an 'assumption' that, after Stage Two is constructed, 'nobody from the local structure plan [area] is going to Mundaring town centre via Richardson Rd anymore' because EastLink would be a more attractive route.[215] That assumption is neither identified nor explained in the written material.

383 As noted previously, Satterley's ultimate submission is that we should require the Structure Plan to be modified and resubmitted to the WAPC for determination. Its closing submissions included various proposed 'modifications' to the TIA. In our view, the comprehensive nature of those proposed modifications amounts to an acknowledgement of the fundamental inadequacy and unreliability of the TIA.

384 However, that acknowledgement has come very late and only after Mr Bordbar repeatedly asserted, in effect, that the information provided was adequate.

385 In short, given the number and nature of the proposed modifications and the inadequacies of Mr Bordbar's evidence, we have no confidence that a revised TIA can be prepared that will be capable of demonstrating that the Site can be feasibly developed in accordance with the Structure Plan, with acceptable traffic impacts.

Issue A2: Whether development pursuant to the Structure Plan will necessitate upgrades to the local or regional road networks, in addition to those identified in the Structure Plan

386 The issue, as formulated above, proceeds on the basis that the Structure Plan clearly identifies those upgrades necessary for its approval, and that other upgrades may be identified by the evidence as necessary.

387 Unfortunately, the various upgrades proposed appear as items in lists in different places in the materials which are, in some cases, materially different and are, in any event, difficult to reconcile.

388 At section 4.10.3 of the Structure Plan, five intersections are identified for upgrades which, it is said, 'are proposed to improve

[214] Respondent's Outline, para 79.
[215] ts 75, 23 September 2025.

vehicular movement generally and facilitate safe and efficient bushfire evacuation'. It is said that they will be funded by 'the developer' and 'completed as a requirement' for the development of Stage 1.

389 Unfortunately, that list is not the same as that identified in the MEMR,[216] which constitutes Appendix 4B to the Structure Plan and, arguably, therefore forms part of it. The upgrades identified here are, it is said, necessary either to enable the evacuation of the existing population of the modelled area or to enable the evacuation of the population of the Structure Plan area, post development.

390 Appendix BB7 to Mr Bordbar's primary witness statement[217] sought to identify road upgrades under five headings, including upgrades proposed by the Shire 'that the TIA has relied upon', upgrades established as necessary as a result of the MEMR and upgrades proposed by the TIA.

391 That list is different from that in the Structure Plan and that in the MEMR. To confuse matters further, one of the upgrades identified in Appendix BB7 as proposed by the TIA was, in fact, established as necessary by the MEMR.[218]

392 Amongst other things, Appendix BB7 identifies that the TIA relies upon the need for a roundabout at Roland Rd/Richardson Rd/Byfield Rd and the realignment of Brooking Rd, neither of which are identified in either the Structure Plan or the MEMR.

393 Mr Bordbar's evidence at the hearing about the material impact on the TIA of these upgrades was confusing. He said these were upgrades proposed by the Shire and were included in the TIA analysis. Amongst other things, he first said that the failure to proceed with the roundabout and the realignment would have no material impact on the TIA,[219] but he later, in cross-examination, accepted that the 'process needed to be updated'.[220]

394 Appendix BB7 also identifies that 'All [Structure Plan] external access intersections on Roland Road [&] Cameron Road' will need to be upgraded, only some of which had previously been identified in the Structure Plan. It also identified the need for an upgrade to

[216] Exhibit 1, Annexure 4B, page 48 and Appendices A and B.
[217] Exhibit 22.
[218] ts 40, 23 September 2025.
[219] ts 55 and 59, 23 September 2025.
[220] ts 61, 23 September 2025.

the Stoneville Rd/Brooking Rd intersection, although in cross-examination, Mr Bordbar was unable to confirm whether that should have been a reference to the Stoneville Rd/Woodlands Rd intersection.[221]

395 To confuse matters further, at the hearing Mr Bordbar also referred to a set of plans which were tendered as Exhibit 27. They do not identify the Roland Rd/Richardson Rd/Byfield Rd roundabout or the realignment of Brooking Rd, they show only two roundabouts to external access intersections on Roland Road and they do not show the upgrade of Stoneville Rd/Brooking Rd (or Stoneville Rd/Woodlands Rd) intersection.

396 To his credit, Mr Shaw's attempt to collect the various road upgrades from different parts of the TIA appears to have collated all of the upgrades otherwise identified in the documents referred to thus far.[222] His list appears to match Appendix BB7, which means that it includes upgrades not included in Exhibit 27 or the MEMR.

397 We note that our ability to confirm that Mr Shaw's list correlates with that of Mr Bordbar in BB7 is, to some extent, reliant on taking a broad view of the latter, in that BB7 does not specifically identify each of the intersections located on the perimeter of the Site but, rather (as we have noted at para [394] above), collects them all in a group described as 'All LSP external access intersections …'

398 In that regard we note that Exhibit 48 identifies three further road upgrades/connections which, it is said, are also required to enable Stage 1, including construction of a proposed central access intersection on Roland Road.

399 As we have said, Exhibit 48 was introduced well into the hearing such that the traffic engineers were deprived of the opportunity to comment on it. We are therefore unaware of what, if anything, they would have been made of the suggested upgrades.

400 Ultimately, despite the confusion, the focus of the hearing was on the GEH/Seaborne Street intersection, which is the only intersection upgrade we address in what follows.

401 That is, we make no findings about any of the other upgrades. Given our finding that we should refuse to approve the Structure Plan it

[221] ts 176 and 184, 24 September 2025.
[222] Exhibit 63, para 65 and Table 1.

is not necessary to do so. Our finding also has the result that the question whether a particular upgrade should or should not proceed is a matter for others at another time. More specifically, whether they are required for the development of the Site under a future structure plan is a matter for the developer and its various advisers.

The Proposed MRWA Upgrade of the GEH/Seaborne Street intersection

402 Mr Broadhurst's evidence was to the effect that this intersection will be upgraded by MRWA regardless of the progress of the Structure Plan.[223] He provided plans of the proposed upgrade[224] and said that construction would likely occur in the 2026/2027 financial year.

403 Mr Bordbar's evidence was that the upgrade proposed by MRWA is 'almost identical to what was documented in the TIA'.[225]

The Evidence of Unacceptable Delays at the GEH/Seaborne Street Intersection

404 Mr Levey's evidence was to the effect that, even if that upgrade to the intersection occurs, the increase in traffic caused by the development of the Site pursuant to Stage 1 of the Structure Plan will cause an unacceptable delay for right turn traffic movements out of Seaborne Street into GEH until EastLink is completed.

405 In his primary witness statement, he said that, despite the unexplained and unjustified manual adjustments made to the Transcore model which were designed to divert traffic away from this intersection, the TIA shows that for Stage 1 (i.e. for 400 lots without EastLink) the 'right-turn out of Seaborne Street will operate at an unacceptable (and unsafe) LOS [Level of Service] F during the 2028 AM peak hour, with an average delay of 145 seconds per vehicle'.[226]

406 That statement refers to Table 13 of the TIA, which shows an average delay in turning right from Seaborne Street to the median of 18.4 seconds and a further average delay of 127.4 seconds for the movement from the median into the west-bound lane of GEH. The sum of those figures provides Mr Levey's 145 seconds average delay per vehicle.

[223] ts 283 - 287, 17 September 2025.
[224] Exhibit 18.
[225] ts 61, 23 September 2025.
[226] Exhibit 26, Witness Statement of Darren Levey, para 67.

407 While the precise relationship between LOS and 'average delay' was not spelled out with precision in the hearing, it was clear that they were closely related. So much is evident from the passage from Mr Levey's primary witness statement quoted above.

408 Equally, in cross-examination, Mr Levey said that the average delay for a right turn from Seaborne Street to GEH should not exceed 45 seconds. He said that that delay was 'midway within the bracket of level of service E'.[227]

409 The considerable exceedance of the average delay identified in the TIA (i.e., 145 seconds versus 45 seconds) provided the basis for Mr Levey's conclusion that it is 'clear that traffic from Stage 1 of the [Structure Plan] (with 400 lots) will not operate satisfactorily without EastLink'.[228]

410 That the intersection would 'fail' during the AM Peak following the construction of 400 lots (absent EastLink) was, to some degree, acknowledged in Table 13 of the TIA by its 'score' of LOS F.

411 We say 'to some degree' for two reasons.

412 First, in the Joint Statement, Mr Bordbar asserted that a Level of Service F could be 'acceptable', justifying that opinion with the unsupported assertion that such a level was 'not unusual for right turn movements onto regional roads during peak periods'.[229] His view is, we find, inconsistent with the Transport Impact Assessment Guidelines, which are discussed in some detail below.[230]

413 Second, in section 7.5.3 of the TIA it is stated that, despite a LOS of F for the intersection, the 'reality' is that 'drivers would probably choose smaller gaps to enter [GEH] … with a few of these vehicles making left-turns from Seaborne Street first and then performing a U-turn at Craven Road'.[231]

[227] ts 113, 24 September 2025.
[228] Exhibit 26, Witness Statement of Darren Levey, para 71.
[229] Exhibit 25, Joint Statement of Benham Bordbar & Darren Levey, para 18.
[230] Exhibit 24, Supplementary Witness Statement of Benham Bordbar, Annexure BB7B (incorrectly labelled BB67): Transport Impact Assessment Guidelines, page 31, Table 3.
[231] TIA, section 7.5.3, page 50.

414 As Mr Levey noted in his evidence at the hearing, that 'reality' was not modelled or otherwise assessed. As Mr Levey put it '[t]he analysis showed that the intersection failed, and he [Mr Bordbar] left it there'.[232]

415 Further, and as we have previously identified, Mr Levey's concerns about the intersection were only cursorily addressed by Mr Bordbar in his Responsive Statement and the Joint Statement, and he was invited to address them by Satterley's solicitors in his Supplementary Statement.

416 He did so in two ways:

(a) by proposing an 'acceleration lane' to be added to the westbound carriageway of GEH for right turning traffic from Seaborne Street; and

(b) by suggesting that, even without the addition of an acceleration lane, by adjusting the 'gap acceptance' and 'follow up headway' factors, the delay for turning traffic could be shown to be acceptable.

417 While the idea of an acceleration lane was new, as we have indicated, the TIA had previously expressed the view that 'in reality' drivers would 'probably choose smaller gaps'.[233]

418 We will address the two issues below, but before we do it is necessary to address the status of the Transport Impact Assessment Guidelines.

Transport Impact Assessment Guidelines

419 Although he did not refer to it in his primary witness statement, Mr Levey's conclusion that the average delay of 145 seconds for traffic turning right from Seaborne Street into GEH was unacceptable and unsafe, was based on the WAPC's *Transport Impact Assessment Guidelines - Volume 3 Subdivision.* That was made explicit in the Joint Statement.[234]

420 A copy of those Guidelines, and of *Transport Impact Assessment Guidelines - Volume 2 Planning Schemes, Structure Plans and Activity Centre Plans* were attached as Annexures BB7B[235] and BB6B

[232] ts 119, 24 September 2025.
[233] TIA, section 7.5.3, page 50.
[234] Exhibit 25, Joint Statement of Benham Bordbar & Darren James Levey, para 23.
[235] Incorrectly marked as 'Attachment BB67'.

respectively to Mr Bordbar's Supplementary Witness Statement. We will refer to the two volumes collectively as the **TIA Guidelines** with the addition of **Vol 2** or **Vol 3** as appropriate.

421 The TIA Guidelines Vol 3, at Table 3, provides that the 'Guideline threshold' for a 'Priority Intersection' (roundabout, give way or stop) for the average delay of 'any individual vehicle' is '<45 secs'.

422 Mr Bordbar took issue with Mr Levey's approach in applying the <45 secs 'threshold' to the present application. He raised three issues:

(a) the status of the TIA Guidelines as a 'guideline';

(b) the application of the TIA Guidelines Vol 3 (Subdivision) to the present application, rather than Vol 2 (Structure Plans); and

(c) whether the delay associated with each of the two movements to turn right onto GEH should be added together.

423 We will address each in turn.

TIA Guidelines as 'Guidelines'

424 Mr Bordbar's evidence was that the TIA Guidelines are just that - guidelines. He said their role is 'just providing guidance for practitioners' and that the weight given to them should reflect that status.[236] Mr Levey disagreed. He said that the TIA Guidelines are used as a 'hard document' and that 'one of the first criticisms' made of a TIA concerns questions of its 'compliance' with the relevant TIA Guidelines.[237]

425 The matter was not pursued in cross-examination and Satterley did not pursue Mr Bordbar's position in this regard in its closing submissions.

426 Rather, Satterley submits that the TIA Guidelines Vol 3, which deals with subdivisions, do not apply to the present Structure Plan. We deal with that submission below. However, we note that in pursuing that approach, Satterley's submissions proceed on the basis

[236] ts 114, 24 September 2025.
[237] ts 116, 24 September 2025. Also, Exhibit 25, Joint Statement of Benham Bordbar & Darren Levey, para 12.

that, if the TIA Guidelines Vol 3 apply in this case, then the parameter of 45 seconds as an 'acceptable delay' is a 'requirement'.[238]

427 Accordingly, it does not appear necessary for us to say much in this regard. Nonetheless, it is convenient to briefly record our views.

428 First, generally speaking, by endowing a document with the title of 'Guidelines' the author or publisher strongly suggests that its contents should be applied with a degree of flexibility.[239] Nonetheless, such a title should not be understood as allowing for mere lip service to be given to it. Rather, documents such as the TIA Guidelines are developed, as Mr Bordbar acknowledged,[240] for the guidance of practitioners as to what is likely to be considered acceptable. Practitioners should, therefore, be prepared to engage rigorously with them and be prepared to properly explain any proposed departure from them.

429 Second, even within a document titled 'Guidelines', the text and context will often provide a guide to the circumstances in which a proposal may depart from the provision and the nature of, and extent to which, a proposed departure may be acceptable.

430 That is, despite the title, the text and context of some provisions will be indicative of the need for close compliance, while that of others will not.

431 Put another way, we do not accept Mr Bordbar's suggestion that we should give the TIA Guidelines little weight simply because they are 'guidelines'.

432 The text of those paragraphs which introduces and explains Table 3 strongly supports a strict, yet not inflexible, application of the thresholds contained in Table 3.

433 Table 3 is located within section 7.10.6 of the TIA Guidelines Vol 3. Immediately under the heading (Roads and intersections) are three dot points each of which commences with an imperative; either 'Determine' or 'Demonstrate'. The third is relevant - 'Determine the intersection controls required … to accommodate the [relevant] design traffic flows'. Each of the four paragraphs that follow use the word 'should'; relevantly, the final paragraph provides that the:

[238] See, for example, Applicant's Outline, paras 85 - 86.
[239] In this regard we note our previous discussion of the states of the Guidelines to SPP 3.7 as 'guidelines'.
[240] ts 114, 24 September 2025.

> intersection analysis should demonstrate that the delays would be less than shown in Table 3. If they are not, the proponent should propose suitable improvements to the intersection layout and/or the method of control …

434 In those circumstances, while the 'thresholds' do not appear to represent 'absolute' limits, they are clearly intended to represent a threshold which, if exceeded, indicates a need for 'suitable improvements' to the intersection layout or the method of control of the intersection.

Do the TIA Guidelines Vol 2 and/or Vol 3 Apply to the Present Case?

435 As previously indicated, Satterley notes that the <45 secs 'threshold' is contained in Vol 3 of the TIA Guidelines, which concern subdivisions, whereas Vol 2 is concerned with structure plans (amongst other things). It submits, therefore, that the <45 secs does not apply to the present case.[241]

436 As we have previously noted, Mr Bordbar's evidence was that an assessment of traffic impacts at this stage of the planning process should be 'broadbrush'.[242]

437 That language has its origin in Vol 2 of the TIA Guidelines. A paragraph in section 10.11.5 of the TIA Guidelines Vol 2 describes the assessment of the adequacy of roads and intersections as 'a broadbrush assessment that should be reviewed and revised as required at the later subdivision and individual development transport assessment stages'.[243] Mr Bordbar specifically identified that paragraph in his evidence at the hearing.[244]

438 However, that paragraph amounts to commentary regarding the requirement which commences that section and which provides that the relevant practitioner must:[245]

> Assess whether the existing road cross-sections, for example, two lanes or four lanes, would be adequate to accommodate the design traffic flows. If not, indicate what improvements would be required.

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[241] Applicant's Outline, paras 82 - 86.
[242] ts 117 and 159, 24 September 2025.
[243] Exhibit 24, Transport Impacts Assessment Guidelines, Vol 2, in Attachment BB6B to Supplementary Witness Statement of Benham Bordbar.
[244] ts 117, 24 September 2025.
[245] Exhibit 24, Transport Impacts Assessment Guidelines, Vol 2, in Attachment BB6B to Supplementary Witness Statement of Benham Bordbar.

439 As Mr Levey noted in his evidence at the hearing, the first paragraph of commentary to the above quoted requirement, requires an assessment of adequacy of the 'existing intersection controls'.[246] He then said this:[247]

> … the only way to identify whether an existing intersection control that's impacted by a structure plan is going to be able to accommodate the design flows is to analyse it. And to analyse it, you then need to be able to assess it against some criteria to determine whether it can accommodate it or not. So I find Mr Bordbar's approach there a little bit backwards in that he says he did an analysis. The analysis showed that the intersection failed, and he left it there.

440 That must be correct and yet neither Mr Bordbar nor Satterley identified any other standard or criterion against which such an assessment can be made.

441 Indeed, as we have previously noted, despite criticising Mr Levey's reliance on the <45 secs threshold, Satterley's closing submissions 'assumed' that the <45 secs threshold applies and insisted that the Structure Plan is 'capable of achieving' it 'subject to appropriate staging and intersection upgrades'.[248]

442 In the absence of any other alternative standard proffered by Mr Bordbar or Satterley, and in circumstances where the <45 secs 'threshold' will clearly need to be met at the next stage of development (i.e. subdivision stage), we consider it an appropriate tool to be used in assessing the adequacy of an intersection at the structure plan stage.

443 That is not to endorse, let alone prescribe, its application, strict or otherwise, in all future circumstances. Context, including the existence of other relevant criteria, may require otherwise. Rather, on the evidence before us, and in the absence of any other standard, we find it to be an appropriate and relevant threshold for application in this case.

Calculation of Average Delay where Turn is Constituted by Two Movements

444 As noted previously, to turn right from Seaborne Street into GEH requires two movements - first to the median and then into GEH proper. As also noted previously, Mr Levey added together the average delay for each movement for the total of 145 seconds.

[246] ts 119, 24 September 2025.
[247] ts 119, 24 September 2025.
[248] Applicant's Outline, para 86.

445 In his evidence at the hearing, Mr Bordbar queried whether that approach was appropriate.[249] That is, he suggested that the average delay of *each* movement should be assessed, rather than the cumulative.

446 In response, Mr Levey said that Mr Bordbar's evidence was 'the first time' such an approach has been suggested to him and that the SIDRA user manual 'specifically refers to adding the two parts of the delay together to get a single delay, and to then assess the level of service on that basis'.[250]

447 To justify his query, Mr Bordbar referred to the Note to Table 3 in the TIA Guidelines Vol 3,[251] which explains that the average delays cited in the Table 'equate to the upper limit delay of Level of Service D for intersections as a whole and the middle of Level of Service E for individual movements'.

448 However, that note clearly interacts with Table 3 itself, which distinguishes between the 'average delay for all vehicles' and the 'average delay for any individual vehicle'; the 45 secs average is for an individual vehicle moving through the intersection, not for an individual movement by a vehicle.

449 There is no merit in Mr Bordbar's suggestion.

Acceleration lane

450 We turn now to the matters raised by Mr Bordbar in his Supplementary Witness Statement as matters which, he said, would 'address' the issues associated with the right hand turn from Seaborne Street to GEH.

451 In his Supplementary Witness Statement, he proposed an 'acceleration lane within the median for the right turn' from Seaborne Street to GEH. This, he said, would 'address the Right Turn Stage 2 Level of Service'.[252]

452 By 'Stage 2' in that quote Mr Bordbar is not referring to Stage 2 of the development of the Structure Plan, i.e. after the construction of EastLink. Rather, he is referring to the second of the two movements

[249] ts 114, 24 September 2025.
[250] ts 115, 24 September 2025.
[251] ts 114, 24 September 2025.
[252] Exhibit 24, Supplementary Witness Statement of Benham Bordbar, para 2.4.

necessary to turn right from Seaborne Street to GEH; i.e. from the median into the GEH westbound carriageway.[253]

453 Mr Bordbar provided a concept plan of this upgrade at Attachment BB2B.[254] However, despite MRWA recommending in its 2 August 2023 response to a previous version of the TIA that a future version should 'include an assessment of the potential operation and feasibility of a median acceleration lane for vehicles turning right from Seaborne Street into Great Eastern Highway'[255] no such assessment has been carried out.[256]

454 As we understand it, the purpose of the 'acceleration lane' is to allow cars turning right from Seaborne Street to accelerate from the median to a sufficient speed to facilitate merging left into traffic already traveling at speed westbound on GEH.[257]

455 Mr Levey raised three concerns with the proposed acceleration lane. The first was, somewhat misleadingly, described in the hearing as an 'economic' issue,[258] the second concerns safety and the third is its length.

'Economic' Concerns with the Acceleration Lane

456 The 'economic' issue arises as a consequence of results modelled by Mr Levey as to the operation of the Seaborne Street/GEH intersection under various scenarios. His evidence was that he undertook that modelling after he (finally) received sufficient information to understand the process undertaken by Transcore and the inputs it used.[259]

457 Mr Levey modelled the usability of the Seaborne Street/GEH intersection under 10 scenarios, including the impact of the acceleration lane and the construction of EastLink.[260]

458 One of those modelled results - Model 7 - looks at the usability of the intersection in 2031 if (amongst other things) Stage 1 of the Structure Plan is developed (400 lots), together with the additional

[253] Exhibit 24, Supplementary Witness Statement of Benham Bordbar, paras 2.3 - 2.4.
[254] Exhibit 27, Stoneville Structure Plan - Proposed Intersection Modification and Acceleration Lane - Seaborne Street and Great Eastern Highway, Transcore drawing t25.002.sk08b, page 7.
[255] Exhibit 3.1, page 1232.
[256] ts 158, 24 September 2025.
[257] ts 102, 23 September 2025.
[258] ts 139, 24 September 2025.
[259] ts 91 - 92, 23 September 2025.
[260] Exhibit 28. This shows 11 models; however Model 1 is the 'Existing Situation'.

background traffic that will develop to that point, and assumes that EastLink is not constructed.

459 Mr Levey's modelled result for Model 7 showed an average delay for the right turn from Seaborne Street into GEH at the AM peak to be an unacceptable 59.3 seconds.[261]

460 By adding the acceleration lane (Model 8), the average delay reduces to an acceptable 31 seconds.[262]

461 However, by adding another five years (to 2036) of background growth - that is, without adding any further developed lots under the Structure Plan - the average delay is back to 49.5 seconds: Model 9.[263]

462 Model 10 involved removing the acceleration lane and adjusting downwards the number of lots developed as Stage 1 (Model 10). By doing so, Mr Levey identified that the average delay for a right turn into GEH from Seaborne Street (without an acceleration lane) at the AM Peak remained acceptable if Stage 1 is developed with about 145 lots, rather than 400 lots.

463 Given all of that, Mr Levey said that, in his view:[264]

> [there's] no point building an acceleration lane for a short-term stage 1 scenario if it's not required as part of the long-term plan. It just becomes a white elephant of some expensive road infrastructure that you built that you don't actually need once the other piece of expensive road infrastructure has been built.

464 In cross-examination Mr McQueen suggested to Mr Levey that the question of cost was one for 'the developer'.[265]

465 While there is some strength to that suggestion, it ignores the reality that a major piece of infrastructure, regardless of who pays for it in financial terms, still represents costs incurred by the community in at least three ways.

466 First, there are real opportunity costs in that the resources used in its construction cannot be used elsewhere. That includes raw materials, workers associated with the production and transport of those raw materials, workers involved in the construction of the acceleration lane

[261] ts 99, 23 September 2025.
[262] ts 100, 23 September 2025.
[263] ts 100, 23 September 2025.
[264] ts 101, 23 September 2025. Also, ts 139, 24 September 2025.
[265] ts 139, 24 September 2025.

itself, the time and other resources of public servants of various kinds to assess the project and so on.

467 A second cost to the community is the inevitable disruptions of various kinds that the project will cause, including disruption to traffic flows on GEH.

468 And thirdly, the community will bear the costs of maintenance and management of infrastructure, including after its necessary utility has passed.

469 In our view all of those matters are relevant considerations. That is, we disagree that the 'cost' of an acceleration lane is solely a matter for the 'developer'.

470 Another matter that is related to, but not limited to, the issue of cost, is that the plans for the acceleration lane show seven power poles that are 'potentially' impacted.[266] That is, up to seven power poles may need to be moved if the acceleration lane was to be built. Plainly the need to move any number of power poles, let alone seven of them, would increase the financial cost to the developer, the amount of community resources, as well as the level of community disruption.

471 In short, we agree with Mr Levey that there are real 'economic' concerns associated with the possible construction of an acceleration lane if the need for it will be short lived.

Safety Concerns with the Acceleration Lane

472 Mr Levey raised two concerns with the safety of the proposed acceleration lane, both of which were associated with Robinson Road, which is located to the west of Seaborne Street and on the other side of GEH. The proposed acceleration lane is shown as finishing close to the point at which Robinson Road meets GEH.

473 Mr Levey's first concern is that a vehicle turning right out of Seaborne Street into GEH, which then wanted to turn left into Robinson Road, would need to weave across GEH before it got up to speed.[267]

474 He accepted that one solution to the problem would be to close Robinson Road to left turns from GEH.[268] Mr Broadhurst also

[266] See, for example, Mr Levey's evidence regarding this at ts 103 - 104, 23 September 2025.
[267] ts 102 - 103, 23 September 2025. Also, ts 139 - 140, 24 September 2025.
[268] ts 103, 23 September 2025. Also, ts 139 - 140, 24 September 2025.

indicated that the closure of Robinson Road might resolve the safety issues that he foresaw from his brief review of the acceleration lane.[269]

475 We accept that such a closure may well be possible, although as the Shire points out, there is no evidence as to whether that will be acceptable (to the road's users, the Shire or MRWA), or of what the consequences flowing from such a closure might be. We agree that residents and other road users may well have strong views against the closure of Robinson Road.[270]

476 The second concern, assuming Robinson Road is not closed, is even more problematic. It is that a vehicle turning left out of Robinson Road will do so at the 'exact same location' where vehicles in the right hand lane of GEH are starting to merge with vehicles exiting (to their left) out of the acceleration lane.[271] Mr Levey said that, in order to avoid merging with vehicles coming out of the acceleration lane, the vehicles in the right hand lane of GEH are likely to move into the left hand lane, which is precisely where any vehicle turning left out of Robinson Road will be.[272]

477 He also noted that this second concern is exacerbated by the presence of a u-turn lane a little further west of Robinson Road, which represents a target for vehicles turning left out of Robinson Road that wish to travel east on GEH - they will need to weave right across GEH at the same point at which vehicles in the right lane are attempting to move into the left lane.[273]

478 Mr Bordbar's response to Mr Levey's safety concerns were twofold. First, he described the risk of conflict with vehicles turning left out of Robinson Road as of 'low probability'. He reached that view as a result of looking at a Google Maps image of the area which, he said, showed that Robinson Road 'is a road that goes to nowhere. It's a very short length road.'[274]

479 The WAPC's submission about this evidence - that it 'was not supported by any traffic data or video analysis'[275] - is generous in its understatement. Mr Bordbar's evidence in this regard was entirely without a factual basis. That was, in effect, acknowledged when

[269] ts 289 - 290, 17 September 2025.
[270] Shire's Outline, para 100(c).
[271] ts 103, 23 September 2025. Also, ts 140, 24 September 2025.
[272] ts 103, 23 September 2025. Also, ts 140, 24 September 2025.
[273] ts 103, 23 September 2025. Also, ts 140, 24 September 2025.
[274] ts 149, 24 September 2025.
[275] Respondent's Outline, para 121.

Mr Bordbar said that he 'would guess that the traffic volumes coming in and out of Robinson [Road] is very low because it only serves a bunch of rural-type properties'.[276]

480 His second response to the safety concerns raised by Mr Levey was to note that those turning left out of Robinson Road must, by law, give way to those on their right.[277] That might be so, but it hardly provides a useful basis on which to assess safety; more than strict compliance with the law is necessary to demonstrate that an intersection will operate satisfactorily.

The Length of the Acceleration Lane

481 Mr Levey's criticism of the proposed acceleration lane also included that it was too short - he said that it 'actually needs to be a little bit longer if you go by Main Roads standards'.[278]

482 Mr Bordbar disagreed[279] and referred to a document titled *Main Roads Supplement to the Austroads Guide to Road Design, Part 4A, Unsignalised and Signalised Intersections*.[280] In particular, he referred to Table 5.5. which forms part of section 5.3.2 of that document and is concerned with the length of acceleration lanes.

483 Table 5.5 has five columns. The first is 'design speed of road entered'.

484 Mr Bordbar and Mr Levey agreed that, for the purposes of Table 5.5, the 'design speed' of GEH is 90km/h, being its signed maximum speed of 80km/h plus 10km/h.[281]

485 Mr Bordbar relies upon the final column of the Table, which is headed 'Min. desirable length 4 sec + Tm'.[282] For a design speed of 90km/h, the figure in the final column is 250m, which is 40m less than the distance of the acceleration lane proposed by Mr Bordbar.

486 Mr Levey's evidence is that Mr Bordbar has misread and misapplied Table 5.5. There are two aspects to that evidence.

[276] ts 150, 24 September 2025.
[277] ts 150, 24 September 2025.
[278] ts 103, 24 September 2025.
[279] ts 141, 24 September 2025.
[280] Exhibit 29.
[281] ts 142 - 143, 24 September 2025.
[282] 'Tm' is the taper length - ts 143, 24 September 2025.

487 First, he says that the second column of the Table, rather than the fifth column, applies. The second column provides for the length of the acceleration lane to be determined by the interaction of the design speed of the road entered (the first column) and the design curve of the speed at which the vehicle enters the road. As the latter increases, the length of the acceleration lane reduces.[283]

488 Mr Bordbar has not identified what the design speed of the entry curve might be on the designed acceleration lane, but Mr Levey estimated it at between about 20 - 40km/h.[284] At those speeds, the second column provides that the acceleration lane would need to be 350 - 375m long. It is on this basis that Mr Levey says the acceleration lane is not long enough.

489 Critical to Mr Levey's evidence is what he says is the role of the fifth column; he says that it applies only if the relevant parts of the second column are coloured green. [285]

490 As we have noted, the design speed of GEH in this case is 90km/h and Mr Levey says that the design speed of the entry curve is 20 - 40km/h. Applying those figures to the second column achieves figures of 375m and 350m respectively. Neither of those figures are shaded in green. However, the figures associated with a design speed of entry curve of 70km/h and 80km/h *are* shaded green. So too are other figures.

491 Note 4 to Table 5 says that for figures shaded green, one must 'adopt the minimum desirable length (4 sec + Tm)', which is the figure in the fifth column.

492 We find that Mr Bordbar has misread, or misunderstood, Table 5.5.

493 The key is in the title to the fifth column the 'min[imum] desirable length'. The purpose of that column, evident in its title, is to impose a minimum length for certain design speeds so that where the lengths shown in the second column are less than the minimum, they are increased to it.

494 Mr Bordbar's construction would allow a greater length in column two to be reduced to the figure in column five. That seems most

[283] ts 143, 24 September 2025.
[284] ts 145, 24 September 2025.
[285] ts 143, 24 September 2025.

unlikely given that some of the figures in column two exceed those in column five by hundreds of metres.

495 Having said that, we did not understand anyone to suggest that the acceleration lane could not be built longer than its current suggested length of 290m, albeit that that would involve even greater costs and disruption.

496 In short, and putting to one side the further concerns it raises about Mr Bordbar's credibility, the major issues regarding the acceleration lane are those concerning cost and safety.

Gap Acceptance and Follow Up Headway

497 As we have previously noted, the TIA records the right turn out of Seaborne Street into GEH as having a LOS F for the AM peak but then goes on to say that 'in reality … drivers would probably choose smaller gaps' to enter GEH westbound.[286]

498 As also noted at para [416] above, Mr Bordbar returned to that suggestion in his Supplementary Statement, adding the concept of 'follow up headway'.[287]

499 Mr Bordbar explained those two factors as follows: [288]

(a) 'gap acceptance' is 'a measure of what levels of gaps a driver may feel comfortable to make a right turn'; and

(B) 'follow up headway' is 'the gap between the second vehicle that follows the first vehicle performing the right turn'.

500 That is, as we understand it, 'gap acceptance' for a driver turning right from Seaborne Street to GEH is the gap in the traffic on GEH that the driver feels comfortable moving into, while 'follow up headway' in the same scenario is the delay between vehicles making the same manoeuvre.[289]

501 Mr Bordbar's evidence was that there are default values for both gap acceptance and follow up headway and that MRWA 'generally do not support any changes' to them.[290]

[286] Exhibit 1, TIA, section 7.5.3, page 50.
[287] Exhibit 24, Supplementary Witness Statement of Benham Bordbar, paras 2.6 - 2.11 and 3.4.
[288] Exhibit 24, Supplementary Witness Statement of Benham Bordbar, para 2.6.
[289] ts 129, 24 September 2025.
[290] Exhibit 24, Supplementary Witness Statement of Benham Bordbar, para 2.6.

502 He advised that the default values are '7 and 4 respectively' (i.e. for gap acceptance and follow up headway respectively) and that, based on video surveys carried out by Transcore in 2020 and 2024, he carried out a 'sensitivity analysis' which showed that with a gap acceptance and follow up headway of 4 and 2 respectively, the level of service for the intersection was acceptable even without the need for the acceleration lane. He opined that those adjusted values were 'appropriate factors'.[291]

503 There are two fundamental difficulties with Mr Bordbar's expressed opinion that those adjusted values are appropriate. First, it relies upon unproven facts and assumptions, and secondly, Mr Bordbar has not explained his reasoning.[292]

504 In this case, the video surveys have not been provided. Those videos provide the 'raw data' which Mr Bordbar relied upon to make the adjustments but they have not been made available.[293]

505 Neither has Mr Bordbar sought to explain the reasoning by which he, relying on that 'raw data' concluded that the factors might reasonably be adjusted from MRWA's default position and yet remain 'appropriate'.

506 We note here that at no stage was it explained what the gap acceptance factors of 7 or 4 represented, either in absolute or relative terms; do they represent time (perhaps 7 or 4 seconds) or something else? Either way, what relationship does 4 have to 7 - is the relationship linear, logarithmic or something else?

507 Further, even if we were to accept that there was a proper basis to find that those adjusted values were appropriate, there is no clarity as to how Mr Bordbar applied them to the model.[294]

508 So, as an example, in answer to a question from Mr Levey, Mr Bordbar said that he had adjusted the gap acceptance in the second movement (from the median to GEH) but not the first movement (from Seaborne Street to the median).[295] However, the correctness of that answer was doubted by Mr Levey following further answers from Mr Bordbar.[296] Indeed, we found Mr Bordbar's evidence in this regard

[291] Exhibit 24, Supplementary Witness Statement of Benham Bordbar, paras 2.7 - 2.11.
[292] See our discussion above at paras [365] - [368].
[293] ts 129, 24 September 2025.
[294] ts 130 - 138, 24 September 2025.
[295] ts 133, 24 September 2025.
[296] ts 137 -183, 24 September 2025.

most unsatisfactory, while Mr Levey appeared to be in command of both his own material and that of Mr Bordbar.

509 We are deeply troubled by Mr Bordbar's approach in this regard.

510 It is self-evident or, perhaps more accurately, common experience, that in heavy traffic, as wait times lengthen and frustration grows, drivers will become increasingly willing to accept smaller gaps.

511 We presume that it is that understanding which lies behind MRWA's reluctance to allow adjustments to be made to gap acceptance in SIDRA analysis.

512 In those circumstances, and given our task, we find it extraordinary that a traffic engineer of Mr Bordbar's experience would effectively ask us to accept that the gap acceptance factor could be reduced from a factor of 7 to one of 4 without any explanation of what those factors represent and without any justification as to why he considers such a reduction to be appropriate.

513 One aspect of that lack of justification is Mr Bordbar's failure to liaise with MRWA in this regard. By his own evidence, MRWA is reluctant to allow adjustments.[297] In those circumstances it seems a prudent step, if not a necessary one, to obtain some indication that such an adjustment is likely to be acceptable to MRWA before seeking to persuade us that we should find that this intersection will be able to operate safely if the Structure Plan is developed.

The Acceptable Number of Lots for Stage 1

514 We have previously outlined Mr Levey's evidence of the modelling he undertook.

515 The results included that if EastLink is not developed by 2036 (as previously noted, the hearing progressed on that basis) the Seaborne Street/GEH intersection will be unsafe:

(a) even with the MRWA upgrade, if more than about 145 lots are constructed by that time.[298]

(b) even with the proposed MRWA upgrade *and Mr Bordbar's acceleration lane* if the proposed 400 lots are constructed by that time.[299]

[297] Exhibit 24, Supplementary Witness Statement of Benham Bordbar, para 2.6.
[298] Exhibit 28, Model 10.

516 This modelling relies, as all modelling does, upon certain assumptions, but as we understand it, Mr Levey used information provided to him by Mr Bordbar[300] and only made certain, identified, adjustments.[301]

517 Mr Levey's modelling results were not seriously challenged by either Mr Bordbar during their concurrent evidence or by Mr McQueen in cross-examination.

518 At the hearing, Mr Bordbar relevantly deferred to Mr Levey's modelling saying that he had, during the previous evening, run the model using Mr Levey's inputs with an adjustment to the gap acceptance factor and advised that 200 lots could be supported without the upgrade of the intersection.[302]

519 However, as the WAPC pointed out in closing, the SIDRA tables that might support such a conclusion were not provided.[303] For that reason, and those given previously as to Mr Bordbar's evidence about adjustments to gap acceptance more generally, we do not accept his evidence in this regard.

520 Under cross-examination by Mr McQueen, Mr Levey agreed that the acceleration lane made it possible for 'almost' 400 lots to be developed without the intersection becoming unsafe absent EastLink.[304]

521 In Satterley's written closing submissions, it is said that the Tribunal:[305]

> … should therefore support the Structure Plan being developed to between 135 and 200 lots prior to Eastlink without an acceleration lane at the GEH Intersection, and to between 350 to 400 lots prior to Eastlink with an acceleration lane at the GEH Intersection, with development of the Structure Plan to be staged accordingly.

522 Its written closing also included a schedule of proposed modifications to the Structure Plan, which included a staging plan that reflects those numbers.[306]

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[299] Exhibit 28, Model 9.
[300] Respondent's Outline, para 112. So, for example, he used Mr Bordbar's preferred (and lower) figure of 1.5% growth in background traffic volumes. See Application's Outline, para 64.
[301] So, for example, he assumed that 50% of relevant traffic will turn right onto GEH and 50% onto Toodyay Road. See Application's Outline, para 66; Respondent's Outline, para 112(c).
[302] ts 128, 24 September 2025.
[303] Respondent's Outline, para 93.
[304] ts 157, 24 September 2025.
[305] Applicant's Outline, para 96.

523 Of course, that submission (and the proposed modifications) proceeds on the basis that an acceleration lane would be safe.

524 In that regard the evidence of Mr Levey, upon which Satterley relies for the above submission, was expressed subject to the caveat that any acceleration lane would need to be approved by MRWA and that such approval may require closure of Robinson Road, which would necessarily involve community consultation.[307]

525 In those circumstances, we consider it inappropriate to approve the Structure Plan on the basis that not more than 135 lots could be developed without the acceleration lane.

526 Put simply, we have no confidence that the acceleration lane would, in fact, be built, with the risk that such lots would be the only ones built until the construction of EastLink at some stage after 2036, or 2041, if it is built at all.

527 In any event, as we have noted, on Mr Levey's evidence any acceleration lane would be rendered redundant upon construction of EastLink. As we have previously found, the application of considerable resources to enable the construction of a significant piece of infrastructure which will become redundant if EastLink is built is a concern not only to the 'developer'.

528 In short, while we accept the approach pressed on us by Satterley is open to us, it would be irresponsible to adopt it.

Conclusion as to Traffic

529 For the foregoing reasons, we are satisfied that approval of the Structure Plan should be refused.

530 The TIA is, in our view, unreliable, despite Mr Bordbar's late provision of information.

531 In that regard, we note Mr Levey's evidence to the effect that the principal matter of concern is the Seaborne Street/GEH intersection. However, despite that somewhat assuring statement he went on to raise further concerns.

532 Given the number and nature of the problems with the TIA, and of Mr Bordbar's evidence, we have no confidence that the TIA can be

[306] Applicant's Outline, Annexure A, Modifications #3 and #13.
[307] ts 156, 24 September 2025.

'made good' by the application of modifications; work on a new TIA should commence afresh.

533 We also have no confidence that the Seaborne Street/GEH intersection can be made to operate at an appropriate level of service prior to the construction of EastLink, should the Site be developed.

534 Accordingly, approval of the Structure Plan should be refused.

B. Bushfire

Issue B1: Whether, in the event of a bushfire, people within the Structure Plan area will be able to safely evacuate to a suitable destination.

535 Satterley's SIFC contended that Issue B1, as formulated by the WAPC, does not arise unless the two preliminary issues were determined in a particular manner.[308] Given our findings as to those preliminary issues, Issue B1 arises and, in those circumstances, we understand Satterley to accept the WAPC's formulation of it.[309]

536 The Structure Plan includes, as annexures, two reports relevant to Issue B1 - the BSMR (Appendix 9 to the Structure Plan), which outlines the results of bushfire simulation modelling and the MEMR (Appendix 4B to the Structure Plan), which outlines the result of microsimulation (traffic) evacuation modelling.

Sub-issue B1(a): Whether the bushfire simulations detailed in the Bushfire Simulation Report, and the bushfire simulations utilised in the Microsimulation Modelling, are reliable and accurate and represent reasonable worst-case scenarios for a bushfire evacuation

Scope of Consideration

537 While this sub-issue is framed by reference to both the bushfire simulation and the microsimulation modelling, in what follows we have focused our consideration on the bushfire simulation, principally because, as we will go on to set out in relation to sub-issue B1(b), the flaws associated with the microsimulation modelling mean that it is unnecessary to address it in this context as well.

[308] Applicant's SIFC, paras 8 - 16.
[309] Applicant's SIFC, para 16.

Relevant Provisions of the Guidelines

538 Appendix B of the Guidelines is concerned with an 'Outcomes Based Approach' for Element 1 - Location.

539 At B1.2.2, the Guidelines discuss 'bushfire scenario planning', which is said to be a 'useful way to examine the potential impact a bushfire will have around or within the planning proposal.'

540 The recommended output of 'bushfire scenario planning' are maps, and the Guidelines identify 12 matters which, it is said, such maps 'should spatially identify'.

541 Those dot points include certain matters which might be identified through bushfire simulation modelling, although the Guidelines do not require such modelling to be undertaken.

Utility of Consideration of the Bushfire Modelling Evidence

542 Satterley submitted in closing both that there is no requirement for bushfire modelling to consider reasonable worst-case scenarios and that the BSMR 'does provide reasonable worst-case bushfire scenarios, in terms of the potential impact on the road network of a bushfire evacuation involving future residents of the Structure Plan'.[310]

543 Indeed, that is the standard applied in the BSMR - it says that the 'simulated bushfire scenarios represent the worst credible case bushfires for a 1:50 year weather event', although they do not purport to represent a 'perfect storm' of historically rare conditions.[311]

544 We agree with the first proposition - there is no requirement for bushfire modelling to consider reasonable worst-case scenarios. Nonetheless, as the second proposition indicates, much of the evidence proceeded on the basis that that was the relevant standard.

545 Much of the evidence of Mr Parker, and the WAPC's questions of the witnesses and its submissions, are concerned with the question whether the BSMR was sufficiently conservative.

546 In that regard, we note that in the joint statement of the experts, Mr Power agreed that new information had become available since the modelling had been completed and said that 'it is now difficult to determine if the bushfire scenarios are reasonably worst-case, primarily

[310] Applicant's Outline, para 337.
[311] Exhibit 1, Appendix 9, page 4.

due to the uncertainty of what constitutes reasonable worst-case climate change informed fire weather as an input to the models…'.[312]

547 This provides a good example of the speed at which knowledge and technology in this field appears to be developing rapidly. There are other such examples in what follows.

548 In this context there is a live question as to how a decision-maker decides whether the information relied upon by a proponent is sufficiently 'current'.

549 We have not found it necessary to reach a view in that regard.

550 Indeed, given our findings as to the traffic evidence (above) and the microsimulation evidence (below), there is no need for us to consider the bushfire modelling evidence at all - our findings as to traffic and microsimulation are sufficient to warrant a refusal to approve the Structure Plan.

551 As a result, any future development of the Site will occur pursuant to a new and different structure plan, if at all.

552 It will be necessary for whoever it is that decides to pursue a future structure plan to consider whether, in light of the regulatory regime in place at that time, it should be informed by, or rely upon, bushfire modelling, in which case the knowledge and technology at the time should be utilised.

553 Notwithstanding the foregoing, we have determined to review the BSMR and associated evidence. Considerable time, effort and resources were given to the task by the parties and their experts and, given the nascent nature of the evidence and limited discussion in fora such as this, we have determined to address the issues as best we can.

The Course of the Bushfire Modelling Evidence

554 It is useful to briefly note the course of the bushfire modelling evidence, as it informs the manner in which we address some of the issues in question.

555 As noted at para [39] above, the Structure Plan includes the BSMR as Appendix 9. That report is dated 16 May 2024.

[312] Exhibit 56, Joint Statement of Anthony Power & Jackson Parker & Ken Strahan, para 6.

556 Mr Power's primary witness statement was filed on 14 April 2025: Exhibit 50. Two months later in June 2025, Mr Parker (Exhibit 43) and Dr Strahan (Exhibit 34) filed their primary witness statements, and Mr Parker filed his Supplementary Statement (Exhibit 44).

557 Dr Strahan's primary witness statement was critical of the use in the microsimulation modelling of Vesta Mk 1, a bushfire behaviour and 'rate of spread' model. He noted that in his work with modellers in Victoria, the subsequent model - Vesta Mk 2 - was used which he considered 'more sophisticated'.[313]

558 Mr Power's Responsive Statement of 2 July 2025 agreed that, and explained why, the Vesta Mk 2 model was 'likely to be an advancement' of the Vesta Mk 1 model, and explained that Vesta Mk 2 had been unavailable for the modelling described in the BSMR.[314]

559 He also referred to the National Bushfire Intelligence Capability (**NBIC**) system,[315] which he said was not available at the time of the modelling, that other approaches had been used, and that the results achieved had subsequently been analysed against the NBIC and found to be 'fit for purpose, accurate and reliable' and 'not entirely inconsistent with the findings of the NBIC'.[316]

560 Mr Parker's Responsive Witness Statement of 2 July 2025 included a comparison of the results of modelling carried out by DFES using the two versions of Vesta, which showed that the use of the later version 'results in an increased spread distance of between 7% and 26% and an increased burnt area of between approximately 14% and 42%.[317] Mr Parker confirmed in his evidence at the hearing that the modelling was carried out for comparative purposes only and was not intended to be an alternative to Mr Power's modelling.[318]

561 All three experts agreed at their conferral that the 'simulation modelling could be updated to reflect more recent developments in fire modelling since it was completed' including the use of the Vesta Mk 2

[313] Exhibit 34, Witness Statement of Kenneth Strahan, para 29.
[314] Exhibit 51, Responsive Witness Statement of Anthony Lyle Power, paras 26 - 32.
[315] In their Joint Statement (Exhibit 56) at para 6 the experts describe the NBIC as 'a platform developed through extensive research to provide annual recurrence intervals of fire weather (represented as the Forest Fire Danger Index) across Australia using baseline historical weather reanalysis date sets combined with climate change projected global climate models'.
[316] Exhibit 51, Responsive Witness Statement of Anthony Lyle Power, para 9.
[317] Exhibit 45, Responsive Witness Statement of Jackson Andrew Parker, paras 5 - 10.
[318] ts 383, 9 October 2025.

model 'for which base code was not available to the applicant at the time of [*sic*] the modelling was completed'.[319]

562 The experts also referred in their joint statement to the NBIC as a source of information that might inform 'climate change informed Forest Fire Danger Index (FFDI)', although they noted that version 2 of the NBIC platform was not, at that stage, publicly available and would not be released until August 2025.

563 In his Further Responsive Witness Statement, Mr Power described the results which accrued when he re-ran the modelling using, amongst other things, the Vesta Mk 2 model and, significantly, all but the bushfire weather inputs which Mr Parker advised had been used by DFES as inputs to the modelling it ran. Table 1 to that statement compared the various inputs.[320]

564 In his evidence at the hearing, Mr Parker confirmed that he was 'comfortable' with these later simulations performed by Mr Power and that the difference between the modelled outcomes are as a result of the different fire weather inputs.[321] Mr Power agreed that the 'only difference' is the fire weather.[322]

The Bushfire Modelling Witnesses

Mr Power

565 We found Mr Power to be an impressive witness. He was clearly very familiar with both the inputs to the model and the manner in which various aspects of the model operated. He gave his evidence in a careful and thoughtful manner.

566 As the foregoing should make clear, he acknowledged where more recent information or technology had overtaken work previously done and made other appropriate concessions, including those that flowed from that subsequent modelling.

567 He also sought to analyse the modelled work reported in the BSMR against the more recent data (as to the NBIC) and re-ran the simulation using the more recent Vesta Mk 2 model. In that way, we are satisfied that he sought to assist us to arrive at the correct and

[319] Exhibit 56, Joint Statement of Anthony Power & Jackson Parker & Ken Strahan, para 6.
[320] Exhibit 52, Further Responsive Witness Statement of Anthony Lyle Power, para 21.
[321] ts 384, 9 October 2025.
[322] ts 121, 8 October 2025.

preferable decision by seeking to ensure that his opinion evidence was informed by the most recent and reliable publicly available information.

568 Satterley's closing submissions included that Mr Power 'did not resile from any of the conclusions contained' in the BSMR[323] and that the BSMR may therefore be taken as reliable and may be used to inform any assessment of an outcomes-based approach under SPP 3.7 and the Guidelines.[324]

569 The difficulty with that conclusion is that, as we have just outlined, both the data and technology have continued to develop at what appears to be quite rapid speed. Indeed, Satterley's written closing describes bushfire modelling as a 'young and evolving science'.[325]

570 As such, while we accept Mr Power's evidence and are not critical of the modelling he conducted, as he himself acknowledged, the changing data and technology means that it is already out of date.

571 The speed of change may well present a challenge for any future proponent but, in the present circumstances, it is unnecessary to say any more about it, save to repeat that we accept Mr Power's evidence and, for those reasons and those that follow, prefer his evidence to that of Mr Parker where they have disagreed.

Mr Parker

572 In its written closing submissions, Satterley were critical of Mr Parker's approach to his evidence, submitting that he 'failed to discharge his duties as an expert witness' and that 'his apparent focus was on doing what he thought was necessary to persuade the Tribunal to refuse the Structure Plan, rather than on assisting the Tribunal to objectively assess the relevant bushfire issues'.[326]

573 That criticism was not limited in its scope to his evidence in relation to the BSMR, although we consider it appropriate to address it here.

574 The starting proposition is that Satterley did not challenge Mr Parker's expertise. We agree that he has relevant knowledge and

[323] Applicant's Outline, para 338.
[324] Applicant's Outline, para 339.
[325] Applicant's Outline, para 340.
[326] Applicant's Outline, para 130.

experience and that he has brought that expertise to bear in his evidence.

575 Specific to this context, he used that expertise to raise matters relevant to the modelling carried out by Mr Power. In particular, he raised matters concerning the inputs used in that modelling. In that regard, his concern was that the inputs used were not sufficiently conservative. In doing so, he acknowledged that he lacks expertise in the task of modelling itself.[327]

576 That concession was not the only one he made. Most relevantly, Mr Parker accepted that Mr Power's modelling using the Vesta Mk 2 model should be accepted, save for the bushfire weather inputs.[328]

577 Having said that, the bushfire weather inputs remained contentious, and, in some exchanges, it might fairly be said that Mr Parker appeared unwilling to concede that there may be another, alternative, view to his own.

578 He also referred to, and relied upon, two sources of information that were not, and are not, publicly available but to which he has access: the Gooseberry Hill Automatic Weather Station (**AWS**) weather data and version 2 of the NBIC.

579 In both cases, they were brought into evidence late, giving Mr Power limited opportunity to respond. We will address these matters in more detail below.

580 However, we did not find his approach such as to warrant wholescale criticism. In particular, we do not consider that he acted inconsistently with his ethical obligations.

581 To the extent that it is necessary to choose between the evidence of Mr Power and that of Mr Parker, we prefer the former but that reflects our favourable view of Mr Power, particularly his knowledge and expertise in the practical application of the relevant inputs to the relevant models, rather than as a criticism of Mr Parker.

Dr Strahan

582 The evidence of Dr Strahan in the Joint Statement is largely consistent with Mr Power and Mr Parker, to the extent of his expertise.

[327] Applicant's Outline, para 343.
[328] Applicant's Outline, para 344.

Dr Strahan appropriately acknowledged that his expertise 'does not extend to the technical aspects' of bushfire simulations.[329] Saying that, it was Dr Strahan, drawing from his work with modellers in Victoria, who identified the need to update the BSMR to consider and incorporate the latest developments in fire modelling.[330] This was readily accepted by Mr Power and Mr Parker, and this evidence assisted us. Given the limitations of his expertise, and despite his participation in the joint conferral, he did not give concurrent evidence with Mr Power and Mr Parker.

Topics of Consideration

583 In what follows, we consider certain issues that were the focus of the WAPC's closing submissions. In effect, they concern inputs to the model which the WAPC submits were insufficiently conservative.

584 As we have said, given the subsequent modelling carried out by Mr Power, the only real matter of disagreement concerned the modelled bushfire weather and it is that topic which occupies most of what follows. The topics to be addressed are, in order, as follows:

(a) The design bushfire scenarios;

(b) Fuel characteristics;

(c) The Rate of Spread models;

(d) The modelled bushfire weather; and

(e) The conservatism of the modelling.

The Design Bushfire Scenarios

585 The objective of the bushfire simulation modelling was stated in the BSMR as 'to inform the evacuation analysis' by determining the time it will take various design bushfires to impact upon both the study area for the traffic modelling (which is bounded by main public roads) and the Site itself.[331]

586 It was Transcore, as developers of the microsimulation modelling, who identified the four bushfire scenarios 'that could result in closure of

[329] Exhibit 34, Witness Statement of Kenneth Strahan, para 28.
[330] Exhibit 34, Witness Statement of Kenneth Strahan, para 29.
[331] Exhibit 1, Appendix 9, section 5.1 page 18. See, also, pages 1 and 5.

one of the major evacuation corridors, namely GEH and Toodyay Road.[332]

587 Accordingly, four bushfire scenarios were developed: one each with an ignition point to the south-west, south-east, north-west and north-east.[333]

588 The BSMR goes on to state that, in each case, the ignition point needed to be 'sufficiently far' from the Site to impact the relevant main road and to enable the bushfire to be 'of sufficient size to warrant full evacuation' of the Site and its surrounding area.[334]

589 In their expert conferral, Mr Power and Mr Parker agreed that the ignition locations selected in the BSMR 'represent the most credible worst-case scenarios for disrupting the road network and impacting the development'.[335]

590 In its closing submissions, the WAPC was critical that no closer ignition points were chosen, given that a closer ignition point would have resulted in a fire that reached the Site earlier than that of the modelled fire.[336] In that regard, Mr Power acknowledged that a fire from the south-west with an ignition point closer than that chosen could have been 'sufficiently wide to warrant evacuation of the Site'.[337]

591 To the extent that that evidence might be considered inconsistent with the agreed position of Mr Power and Mr Parker in the joint statement, it is inadmissible.[338]

592 The WAPC's closing submissions were also critical of the lack of modelled fires with more than one ignition source.[339]

593 All three experts agreed that the potential for more than one ignition location, such as may occur due to lightning or arson events, has not been modelled.[340] They further agreed that that was a 'limitation' that should be noted by those interpreting the simulations

[332] Exhibit 1, Appendix 9, section 5.1 page 18.
[333] Exhibit 1, Appendix 9, section 5.1 page 18.
[334] Exhibit 1, Appendix 9, section 5.1 page 18.
[335] Exhibit 56, Joint Statement of Anthony Lyle Power, Jackson Andrew Parker and Kenneth Strahan, para 10.
[336] Respondent's Closing, para 270.
[337] ts 355 - 357. 9 October 2025.
[338] *State Administrative Tribunal Rules 2004* (WA), r 39B(6).
[339] Respondent's Outline, para 271.
[340] Exhibit 56, Joint Statement of Anthony Lyle Power, Jackson Andrew Parker and Kenneth Strahan, para 10.

and that the modelling could be updated to provide, among other things, additional ignition points.[341]

594 We agree. The evidence to be that future iterations of any modelling should consider whether scenarios with multiple ignition points should be modelled.

Fuel Characteristics

595 The nature of the fuel available for a bushfire to burn is, plainly, a relevant input to a model being used to simulate possible fires. The BSMR adopted three land use classifications with corresponding fuels - Forest, Grass and Built Areas.

596 Mr Power and Mr Parker agreed that the characteristics of fuel in areas identified as Forest used in the modelling reported in the BSMR were 'appropriate', although Mr Power expressed the view that they 'add conservatism' because it is 'unlikely that fuel across the relevant area will uniformly be at such peak values'.[342] He was not cross-examined on that view, which we therefore accept.

597 The BSMR applied an input for Grass fuel described as 'Cut/Grazed' and with a 'curing' rate of 90%. Mr Parker's evidence was that the figure should be 100%.[343] He pursued that position in the expert conferral, at which Mr Power defended the application of 90%.[344]

598 However, in Mr Power's subsequent simulation using the Vesta Mk 2 model, the rate of 100% was applied.[345] We therefore understand Mr Power to accept that that rate should be used.[346] There does not appear to us to be any controversy about this issue.

599 As to 'Built Areas', the fuel load was determined by Mr Power by reference to two historic fires.[347] In cross-examination, Mr Power was asked to assume that, if those two historic fires had been suppressed by

[341] Exhibit 56, Joint Statement of Anthony Lyle Power, Jackson Andrew Parker and Kenneth Strahan, paras 6 and 10.
[342] Exhibit 56, Joint Statement of Anthony Lyle Power, Jackson Andrew Parker and Kenneth Strahan, para 19.
[343] Exhibit 43, Statement of Jackson Andrew Parker, para 45.
[344] Exhibit 56, Joint Statement of Anthony Lyle Power, Jackson Andrew Parker and Kenneth Strahan, para 20.
[345] Exhibit 52, Further Responsive Statement of Anthony Lyle Power, para 21.
[346] ts 383, 9 October 2025.
[347] ts 358 - 360, 9 October 2025.

firefighters, the fuel load determined from those fires would, therefore, reflect that suppression.[348]

600 Those questions reflected Mr Parker's evidence[349] and the agreement between the experts that the simulations should not assume any suppression.[350]

601 However, Mr Power did not agree with the assumption, saying that it was 'really difficult to say' whether such suppression would have reduced the rate of spread. Neither did he agree that, if the historic fires' rate of spread had been suppressed, the fuel load used in the model for Built Areas would be 'too low', saying that that would '[n]ot necessarily' be the case 'because there could be other combinations of inputs that would be affecting it'.[351]

602 We understand the logic inherent in Mr Parker's evidence, but Mr Power's evidence was to the effect that that logic may be too simplistic. He was not further challenged on the answers he gave and, given his command of both the data and the modelling methodology, to which we have previously referred, we accept his evidence. That is, we are not satisfied that the Built Areas fuel load input was anything less than suitably conservative.

603 In that regard, we note the Satterley submission that the assumption of no suppression is 'unrealistic'[352] or, to put it another way, the modelled assumption of no suppression brings with it a considerable conservatism in that any significant bushfire in the vicinity of the Site is likely to be subject to suppression measures. We accept the logic in the submission but also note the uncertainty in Mr Power's answers noted in para [601] above.

Rate of Spread Models

604 The WAPC's written closing submissions include that, '[h]ad the BSMR modelling been undertaken using more severe fire weather inputs and Vesta Mk 2, it would have resulted in significantly larger and faster fires being modelled'.[353]

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[348] ts 361, 9 October 2025.
[349] Exhibit 43, Statement of Jackson Andrew Parker, paras 35 - 41; Exhibit 56, Joint Statement of Anthony Lyle Power, Jackson Andrew Parker and Kenneth Strahan, paras 18 - 23.
[350] Exhibit 56, Joint Statement of Anthony Lyle Power, Jackson Andrew Parker and Kenneth Strahan, para 18.
[351] ts 360 - 361, 9 October 2025.
[352] Applicant's Outline, paras 356 and 357.
[353] Respondent's Outline, para 322.

605 Mr Power accepted something very similar in his Further Responsive Witness Statement.[354] Indeed, the significance of the bushfire weather was something emphasised by both Mr Power and Mr Parker. We address that in considerable detail below.

606 The WAPC's written closing also includes submissions regarding the 'build up phase' of the modelled bushfire.[355]

607 Mr Parker and the WAPC are critical of the assumptions used in the 'build up phase'.[356]

608 However, as the WAPC notes, at the expert conferral the experts agreed that a build-up phase is not necessary where multiple simultaneous point ignition fires occur in proximity. They also agreed that the modelled scenarios could be updated by including multiple ignition points.[357]

609 Indeed, no 'build up phase' was included in the later modelling which Mr Power described in his Further Responsive Witness Statement.[358]

610 Again, we do not see such a concession as a basis for criticism of Mr Power; quite the contrary.

611 As we have previously noted, we understand the evidence to be to the effect that any future modelling should include scenarios which adopt or incorporate scenarios with multiple ignition points.

Bushfire Weather

612 Plainly, the inputs to the model that concern the applicable weather conditions are critical to any assessment of its conservatism. It is also plain that 'bushfire weather' covers a range of factors, each of which are likely to impact on the model's conservatism.

613 The WAPC is critical of four factors. It is also critical of the use of an FFDI of 74.9 when compared against two other figures. We address each of those five matters in turn, after briefly providing some context.

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[354] Exhibit 52, Further Responsive Statement of Anthony Lyle Power, para 66.
[355] Respondent's Outline, paras 323 - 326.
[356] Respondent's Outline, para 324; Exhibit 43, Witness Statement of Jackson Andrew Parker Primary Statement, paras 35 - 41.
[357] Exhibit 56, Joint Statement of Anthony Lyle Power, Jackson Andrew Parker and Kenneth Strahan, paras 6 and 11.
[358] Exhibit 52, Further Responsive Witness Statement of Anthony Lyle Power, para 21, Table 1.

Context[359]

614 Central to the question of bushfire weather is the concept of a FFDI - 'Forest Fire Danger Index'.

615 An FFDI is not a direct input into a bushfire model. Rather, relevant weather inputs - wind speed, relative humidity and temperature - which are derived from the FFDI are used as inputs to the model.

616 FFDI is an index derived from a combination of air temperature, relative humidity, wind speed and a 'drought factor' (long-term and short-term drought effects, being soil dryness, evaporation and rainfall). FFDI is calculated using an equation. The drought factor used in that equation is a maximum of 10, and can be an assumed figure, or may be calculated. Different combinations of weather inputs can be used to calculate the same FFDI.

617 In broad terms, the approach taken in the BSMR involved:

(a) determining the highest historical FFDIs based on weather, primarily from the Bickley AWS.

(b) undertaking a generalised extreme value (**GEV**) analysis to calculate the FFDI under various annual exceedance probability (**AEP**) scenarios, including a 1:50 year AEP.

(c) undertaking a 'moving GEV analysis' to determine the FFDI based on a 1:50 AEP for climate change projections of 25 years and 50 years. The calculated FFDI for a 25-year projection was 74.9.

(d) deriving weather inputs for a day with a peak FFDI of 74.9 based on the weather profile experienced at the Bickley AWS on 14 December 2019.

Was the FFDI of 74.9 sufficiently conservative?

618 The WAPC submits that the FFDI used to inform the bushfire weather was insufficiently conservative. As noted above, the FFDI used was 74.9. The WAPC submits that that is 'lower than the FFDI of 80 which is required for BAL assessments' in this State pursuant to AS 3959.

[359] In this 'Context' sub-section, we have relied heavily on the relevant submissions of the WAPC. We have done so on the basis that they are based entirely on the evidence of Mr Power and, as we understand it, are uncontroversial.

619 The evidence that an FFDI of 80 is used for BAL assessments was given by Mr Panickar.[360] He gave that evidence on 7 October 2025 as part of the joint evidence of the bushfire planning witnesses, together with Messrs Rowe, McMahon, Strahan and Parker. The following day, Mr Power was sworn in and he gave his evidence jointly with Mr Parker on 8 and 9 October 2025.

620 However, as best as we can determine, the conservatism of an FFDI of 74.9, when assessed against the use of an FFDI of 80 for BAL assessments under AS 3959 was not put to Mr Power in cross-examination.

621 Neither was any explanation provided by any witness as to the role played by an FFDI in BAL assessments under AS 3959 which might allow us to understand whether there is a difference in the way an FFDI is used in each function and what implications that difference might have for the current situation.

622 In those circumstances, we are unable to conclude that, because of the use of a FFDI of 80 in BAL assessments, Mr Power was wrong to have used weather inputs to the model that were derived from an FFDI of 74.9.

623 The WAPC is also critical of Mr Power's reliance of a FFDI of 74.9 given the NBIC calculated an FFDI for the Site of 77 or 78.

624 It was Mr Power's Responsive Witness Statement that identified the difference,[361] after Mr Parker referred to the NBIC in his primary witness statement.[362]

625 In his Responsive Witness Statement, Mr Power notes that the NBIC was not made public until 2023, after the bushfire simulation modelling was undertaken.[363] He also says that the 'similarities' in the FFDIs 'validate the overall values of FFDI adopted in 2022 … for use in the simulations'.[364]

626 He went on to opine in his Responsive Witness Statement that he does not consider 'adjusting the simulation weather profile to achieve a

[360] ts 23 - 24, 7 October 2025.
[361] Exhibit 51, Mr Power's Responsive Witness Statement, para 15.
[362] Exhibit 51, Mr Power's Responsive Witness Statement, para 7.
[363] Exhibit 51, Mr Power's Responsive Witness Statement, para 7.
[364] Exhibit 51, Mr Power's Responsive Witness Statement, para 16.

two or three FFDI point increase would have a material impact on the simulations already completed.[365]

627 However, he subsequently participated in the joint conferral with Mr Parker and Dr Strahan and, later, re-ran the modelling in a manner which utilised the inputs used by DFES. In Table 1 to his Further Responsive Witness Statement, he notes that in its modelling DFES utilised a Peak FFDI of 82, while both his models applied an FFDI of 74.

628 At the hearing, he was asked whether, having compared the outputs to those two models,[366] which applied all the same inputs except for fire weather, he maintained his previous position.

629 Contrary to his previous position, he agreed that, all other things being equal, an increase in the FFDI of two or three 'could have a significant impact on the simulation'.[367]

630 Given the development of the evidence, we do not consider that concession to reflect poorly on Mr Power. On the contrary, his willingness to change his mind when presented with new evidence reflects well on him.

631 Indeed, on the evidence before us, we remain unconvinced that Mr Power ought to be criticised for his decision to apply a FFDI of 74.9. As we have indicated, there is nothing to suggest that either the data or the methodology used were inappropriate at the time.

632 Further, it would appear that when new data became available after the modelling had been completed, he applied a suitable rigour in testing the veracity of his modelling inputs to ensure the adequacy and accuracy of his decision.

633 It is unsurprising that there should be differences of opinion as to the value of an FFDI. Reasonable people acting in good faith will invariably come to different views about such matters.

634 However, as Mr Power acknowledged, the model he used appears sensitive to small changes in FFDI sourced weather data.

[365] Exhibit 51, Mr Power's Responsive Witness Statement, para 16.
[366] Exhibit 52, Further Responsive Witness Statement of Anthony Lyle Power, 25 August 2025, Attachment AP-7.
[367] ts 122, 8 October 2025.

635 That lends support to the WAPC's submission that modelling of a 'broader range of reasonable worst-case scenarios that might plausibly affect the area' should have been undertaken, 'to inform the assessment of risk and appropriate mitigation measures'.[368]

636 Equally, future modelling, if undertaken, should include sensitivity testing, about which we will say more shortly.

637 In summary, the evidence does not allow us to find that the FFDI of 74.9 used by Mr Power was inappropriate *per se*. However, we are satisfied that, had sensitivity testing been undertaken, it may have demonstrated that there was merit in running models using inputs derived from a range of FFDI's rather than relying on one value only.

Which weather station data should be used?

638 The appropriate bushfire weather inputs were derived from data obtained from the Bureau of Meteorology's (**BoM**) Bickley AWS.[369]

639 In Mr Parker's primary witness statement, he expressed the view that the Perth Airport AWS should have also been used because, he said, it is a 'similar distance' from the Site and has 'a longer weather record'.[370]

640 Mr Parker also referred, in his primary witness statement, to recent work done by Mr Rowe for a site in Pickering Brook that used the Perth Airport AWS.[371] He said that 'the projected 1:50 AEP maximum FFDI to 2049 is approximately 89 at Perth Airport'.[372]

641 However, at conferral the experts agreed that a 'new approach' was available for accounting for climate change and fire weather, which included the use of the NBIC. They agreed that 2024 NBIC modelling:[373]

> shows Perth Airport and Bickley with similar 2% AEP (1:50 year ARI) FFDI values, comparable to the FDI values calculated by the applicant using the AWS approach completed in 2023.

[368] Respondent's Outline, paras 265 - 267.
[369] Exhibit 1, BSMR, Appendix H Bushfire Weather Analysis, page 59.
[370] Exhibit 43, Witness Statement of Jackson Andrew Parker, para 16.
[371] Exhibit 43, Witness Statement of Jackson Andrew Parker, para 17.
[372] Exhibit 43, Witness Statement of Jackson Andrew Parker, para 18.
[373] Exhibit 56, Joint Statement of Anthony Power & Jackson Parker & Ken Strahan, para 13.

642 That is, there was agreement that under the 'new approach', the FFDIs for Bickley and Perth Airport were similar and comparable to those calculated by Mr Power using data from the AWS's.

643 Despite that agreement, Mr Parker continued to hold the view in the joint statement that weather observations from both Bickley and Perth Airport 'should be analysed in such a manner to inform representative, reasonable worst-case weather profiles'.[374]

644 Mr Power's corresponding view in the joint statement was that Bickley AWS was more suitable 'given the similarity in landform (topography and elevation) … to the study area [i.e. the Site], the results of a sensitivity analysis … and the endorsement of this AWS [pursuant to a peer review] …'.[375]

645 The issue was also addressed in Mr Power's Responsive Witness Statement, which predated the joint statement. He said, amongst other things, that:

(a) the 'weather analysis methodology' used by him had been subject to a 'retrospective analysis' completed on 1 July 2025 pursuant to a peer reviewed methodology, which confirmed that it was 'fit for purpose, accurate and reliable';[376] and

(b) other potential AWS's had been considered for application, including Perth Airport, but they had all been considered 'less suited' due to their lower elevations.[377]

646 Subsequent to the joint statement, and filed on 12 September 2025, the first day of the hearing, was a Further Supplementary Witness Statement of Mr Parker.[378]

647 In it, Mr Parker said that 'since preparing his primary statement', which we note was filed on 13 June 2025, he had 'become aware of the Gooseberry Hill AWS'.[379] He said that the Gooseberry Hill AWS 'has similar siting issues to the Bickley AWS' but has a longer weather record than the Bickley AWS.

[374] Exhibit 56, Joint Statement of Anthony Power & Jackson Parker & Ken Strahan, para 13, also para 16.
[375] Exhibit 56, Joint Statement of Anthony Power & Jackson Parker & Ken Strahan, para 13.
[376] Exhibit 51, Responsive Witness Statement of Anthony Lyle Power, para 9.
[377] Exhibit 51, Responsive Witness Statement of Anthony Lyle Power, para 11.
[378] Exhibit 54, Further Supplementary Witness Statement of Jackson Andrew Parker. A second, redacted, version was filed on 23 September 2025, the fifth day of hearing and 11 days after the hearing began.
[379] Exhibit 54, Further Supplementary Witness Statement of Jackson Andrew Parker, para 6.

648 However, in a subsequent statement addressing the issue of the Gooseberry Hill AWS, Mr Power identified that weather data from the Gooseberry Hill AWS was (and remains) unavailable for use other than for internal BoM purposes.[380]

649 We do not consider it appropriate for Mr Parker to have raised the issue of the Gooseberry Hill AWS so late in the day.

650 It is one thing for an expert in Mr Parker's position, with access to information that is not publicly available, to bring that information to the attention of the opposing witness in sufficient time to allow that other person to assess it against their evidence to that point and consider whether it is such as to warrant a material change to their opinion.

651 To take such an approach appears to be consistent with an expert's obligation to ensure that the Tribunal has all of the relevant material before it and to ensure that the evidence is accurate and up to date.

652 However, that must be done in sufficient time to allow a proper consideration of the material.

653 That is because no criticism can be reasonably levelled at the creator of the original work for failing to incorporate material into their original work which was not available to them. Rather, the only legitimate use of restricted material can be as a reality check or similar, which requires reasonable time to complete.

654 In the event, Mr Power was able to compare the Gooseberry Hill AWS data with weather data from the Bickley AWS and the Perth Airport AWS against another data set - the BARRA C2 data set.[381] He did so using a 'Root Mean Squared Error' (**RMSE**) analysis.[382] The results of that analysis showed Perth Airport AWS as the 'least reliable of the three AWS's for use in fire modelling' at the Site.[383]

655 The WAPC says that limited weight should be given to Mr Power's RMSE analysis for reasons that include that no such analysis was previously undertaken, and that the first time it appeared was in Mr Power's statement filed 7 October 2025.

[380] Exhibit 53, Additional Further Responsive Witness Statement of Anthony Lyle Power, paras 10 - 12.
[381] Exhibit 53, Additional Further Responsive Witness Statement of Anthony Lyle Power, paras 17 - 23.
[382] Exhibit 53, Additional Further Responsive Witness Statement of Anthony Lyle Power, para 20.
[383] Exhibit 53, Additional Further Responsive Witness Statement of Anthony Lyle Power, para 23.

656 Other criticisms are levelled at Mr Power in this regard, including his use of the BARRA C2 dataset, a lack of detail as to the calculations undertaken and a lack of clarity as to whether the variation between the two datasets was positive or negative (the RMSE ensures that any negative variations are rendered as positive).

657 Those criticisms would carry more weight if Mr Power was not seeking to understand and assess material that he could not possibly have accessed previously and in a very short period of time as a result of Mr Parker's very late introduction of that material.

658 In the end result, we note that the WAPC's final submission in this regard is to the effect that it does *not* submit that data from Bickley AWS should be excluded nor that data from Perth Airport AWS or Gooseberry Hill AWS *only* should have been used. Rather, it says that a 'more robust and reliable assessment would have taken into account the additional data that *prima facie* indicates a higher FFDI'.[384]

659 As we have already indicated, data from Gooseberry Hill AWS could not have been used, except through access to it via someone like Mr Parker.

660 As for the Perth Airport AWS data, we are not satisfied that its inclusion would have made any material difference. We have reached that conclusion based on the following matters:

(a) Mr Power's evidence that he considered Perth Airport AWS as well as other AWS's and excluded them due to their lower elevations;

(b) The agreement between the experts that the FFDI's calculated by the 'new approach' were similar between Bickley and Perth Airport and 'comparable' to that calculated by Mr Power from the Bickley AWS data;

(c) Mr Power's 'check' using the BARRA C2 data, notwithstanding the limitations of that evidence acknowledged above; and

(d) Our general finding that Mr Power presented as a very impressive witness.

[384] Respondent's Outline, para 290.

Analysis of Generalised Extreme Values

661 The BSMR explains that a GEV analysis was undertaken, using maximum FFDI values derived from the Bickley AWS data, to establish the AEP of FFDI for application to bushfire events.[385]

662 The result of the GEV analysis was a projected 1:50 years AEP FFDI of 74.9 based on a 25 year projection and of 85.5 for a 50 year projection.[386]

663 The WAPC submits that the analysis undertaken 'does not reflect reasonable worst case fire weather conditions' for two reasons.[387]

664 First, it is said that, because the Bickley AWS data set only covers 23 years, there is necessarily uncertainty with the GEV analysis. Mr Power acknowledged that was so.[388]

665 However, both the extent of that uncertainty and its significance is most unclear.

666 The BSMR states that the methodology applied to the BSMR as a whole recommends using a '20 year moving window'. However, a 10 year moving window was used due to the limited data set from Bickley.

667 The BSMR states that '[a]s the data set is not over a sufficiently long enough timeframe to use 20 year moving windows, it will contain inherent errors.'[389] It also states that a 20 year moving window is 'considered to have 5% error, but a 10 year moving window increase[s] to at least 10% error.'[390]

668 The WAPC's written closing submits that, due to the potential for error, the calculated FFDI may be 'up to 82.4 [for a 25 year projection] and 94 [for a 50 year projection] respectively'.[391] Those figures simply add 10% to each of the FFDI figures reported in the BSMR.

669 However, when that proposition was put to Mr Power, he demurred, saying that it was 'more complicated, because you need to choose different windows and with different windows you can

[385] Exhibit 1, BSMR, page 57, Appendix H.
[386] Exhibit 1, BSMR, page 61, Appendix H, Table 18.
[387] Respondent's Outline, paras 295 - 299.
[388] ts 107, 8 October 2025.
[389] Exhibit 1, BSMR, page 60, Appendix H.
[390] Exhibit 1, BSMR, page 60, Appendix H.
[391] Respondent's Outline, para 298.

potentially get different outcomes …'.[392] The issue was taken no further in cross-examination.

670 Second, the WAPC says that, while (as above) a 1:50 AEP FFDI has been calculated for both a 25-year and a 50-year projection, only the former has been applied. The WAPC says that the 'proposed development will clearly exist for substantially more than 25 years' and, therefore, 'consideration should have been given to fires occurring under a FFDI projected to occur at least 50 years in the future. [393]

671 Again, Mr Power demurred when this was put to him saying, in effect, that the changes that can occur to land and its uses over 50 years materially decreases the certainty of any model attempting to show what a fire will do so far into the future.[394] Again, that issue was not further pursued but, in any event, Mr Power's answer accords with common experience - a model's accuracy is likely to reduce the further into the future it attempts to predict.

Weather Inputs Utilised in the Modelling

672 The WAPC submits that the weather inputs used in the model were insufficiently conservative.[395]

673 As noted above, a FFDI may be achieved by more than one combination of weather variables. In order to ensure that the FFDI chosen has a suitable combination of those variables, the predicted FFDI's were 'proportionally altered against a "real" weather profile from a high FFDI day, which provided the relative distribution of the variables…'.[396]

674 The high FFDI day chosen was 14 December 2019 at Bickley AWS.[397]

675 In the joint statement, Mr Parker expressed the view that a day should have been chosen with extended FFDI periods, rather than shorter peaks.[398] The latter is the situation with the chosen day at Bickley.

[392] ts 110, 8 October 2025.
[393] Respondent's Outline, para 299.
[394] ts 110 - 111, 8 October 2025.
[395] Respondent's Outline, para 301.
[396] Exhibit 1, BSMR, section 6.6.4, page 29.
[397] Exhibit 1, BSMR, section 6.6.4, page 29.
[398] Exhibit 56, Joint Statement of Anthony Power & Jackson Parker & Ken Strahan, para 17.

676 However, in the same paragraph of the joint statement, Mr Power points to an analysis of the top 20 FFDI's at Bickley AWS which shows short peaks of FFDI. He also refers to a comparison of the simulation FFDI profile against that for the Wooroloo fire with both of them showing a 'double peak'.[399]

677 In his Further Supplementary Witness Statement, filed after the joint statement, Mr Parker compares the duration of the FFDI at both Gooseberry Hill AWS and Perth Airport AWS. He notes that the FFDI at Gooseberry Hill was higher and lasted longer than at Bickley AWS. He also noted that the peak wind speed at Gooseberry Hill AWS was higher than at Bickley AWS.[400]

678 As we have noted, Mr Parker filed that statement very late and the data from Gooseberry Hill AWS was not, and is not, publicly available. Given that, we are not satisfied that either Mr Power or the BSMR can reasonably be criticised for not referring to it.

679 In any event, Mr Power's evidence clearly demonstrates that he brought a thoughtful and rigorous approach to the task of identifying a suitable FFDI day, based on comparison of various days and 'checking' his outcome against a suitable comparator (i.e. the Wooroloo fire).

680 Further, while it may be that the Perth Airport AWS can be shown to have a higher FFDI, we are satisfied for reasons already given that Mr Power's selection of Bickley AWS was suitably conservative.

681 The second reason why the WAPC submits that the weather inputs recorded in the BSMR were not sufficiently conservative is that, it submits, 'temperature and humidity were "prioritised" in achieving the selected FFDI over windspeed'.[401]

682 The BSMR describes the process undertaken as 'proportionally adjusting the FFDI, temperature and relative humidity [to 'peaks' determined by reference to the conditions at Bickley AWS on 14 December 2019], then altering wind speed to achieve the peak FFDI'.[402]

683 Mr Parker's evidence in the joint statement was that 'peak FFDI days driven by higher wind strengths will result in higher rates of

[399] Exhibit 56, Joint Statement of Anthony Power & Jackson Parker & Ken Strahan, para 17.
[400] Exhibit 54, Further Supplementary Witness Statement of Jackson Andrew Parker, paras 14 - 17.
[401] Respondent's Outline, para 304.
[402] Exhibit 1, BSMR, section 6.6.4, page 29.

spread for the same FFDI value'.[403] He sought to explain that in the hearing by stating that newer models are more sensitive to variations in wind speed than earlier models.[404]

684 Mr Power was asked whether the Vesta Mk 2 model was 'particularly sensitive' to variations in wind. He agreed but said it was also sensitive to variations in humidity. He said that he had favoured variations to temperature and humidity due to advice on the effects of climate change.[405]

685 Neither witness was seriously challenged in cross-examination on this topic. Although we have previously said that in cases of disagreement, we prefer the evidence of Mr Power, in this case we are unable to prefer the evidence of either of them over the other.

686 In circumstances where, as we have noted, the science is both new and rapidly developing and where no guidelines have been developed, the two opposing approaches both appear to be reasonable. The result is that we see no reason to be critical of the approach adopted in the BSMR.

Sensitivity of the Modelling to Changes in Fire Weather Inputs

687 The WAPC submits that it 'has not been demonstrated that the modelling is robust to reasonable changes in weather inputs'.[406]

688 In support of that submission, it points to the differences in modelled fires as mapped in AP-7 to Mr Power's Further Responsive Statement[407] where the only material differences in the inputs are weather inputs.

689 In that statement, Mr Power expressly, and extensively, addresses the sensitivity of the models to differences in fire weather.[408] As he points out, he acknowledged that sensitivity in the Joint Statement.[409]

690 As we have previously noted, at the hearing Mr Power agreed that a change in FFDI of two or three could have a significant impact on the simulation.

[403] Exhibit 54, Joint Statement of Anthony Power & Jackson Parker & Ken Strahan, para 17.
[404] ts 117 - 118, 8 October 2025.
[405] ts 116, 8 October 2025.
[406] Respondent's Outline, para 306.
[407] Exhibit 52, Further Responsive Statement of Anthony Lyle Power, Annexure AP-7.
[408] Exhibit 52, Further Responsive Statement of Anthony Lyle Power, paras 48, 54 - 57, 61, 63, 66.
[409] Exhibit 52, Further Responsive Statement of Anthony Lyle Power, para 48.

691 That acknowledgment came late in the day - at the hearing following the preparation of comparative modelling in late August.

692 He had previously, in June, responded to Mr Parker's primary witness statement, which raised the FFDI value generated by the NBIC system. We have found no reason to criticise that response, which found a difference of 2 or 3 to represent a 'close similarity' such that making that adjustment would not 'have a material impact'.[410]

693 Nonetheless, the subsequent testing *did* demonstrate a material sensitivity such that, as we have already indicated, should bushfire modelling be included in or relied upon by a future structure plan, it might reasonably be expected to include sensitivity testing and to produce a number of predictions based on a range of variables and inputs.

Conservatism of the Bushfire Modelling

694 The WAPC's final submission as to bushfire modelling is, in effect, that it was insufficiently conservative. That submission has two limbs.

695 First, it is said that the various inputs are insufficiently conservative. To a large degree, those matters have been addressed above.

696 Second, it is said that 'factors and scenarios that were not considered … weigh against the simulations being considered conservative'.[411] There are three that are mentioned.

697 The first is that there was no scenario modelled which includes the potential for wind change under extreme fire weather conditions. The WAPC relies upon the evidence of Mr Parker and Mr McMahon to the effect that, if such conditions occur, they can 'cause the flank of the fire to become the head of the fire'.[412]

698 Mr Power acknowledged the danger of a change in wind direction but spoke of the difficulties associated with modelling such a scenario.

699 Amongst other things, he said that 'filtering the weather dataset' to identify when and how a wind change might occur at a particular

[410] Exhibit 51, Responsive Witness Statement of Anthony Lyle Power, 2 July 2025, para 16.
[411] Respondent's Outline, para 328.
[412] Respondent's Outline, para 329. ts 19 - 21, and 22 - 23, 7 October 2025; ts 353, 9 October 2025. See, also, Mr Panickar's evidence - ts 24, 7 October 2025.

location is particularly difficult, and that he was not aware of anyone doing so, 'other than taking known examples'.[413] No challenge was made to that answer and we are therefore unable to criticise the lack of such scenarios in the modelling.

700 The second concerns 'long distance spotting', which can occur up to 5 km ahead of the fire front, causing ignitions. In its written closing, the WAPC acknowledged that such spotting 'cannot currently be modelled' but said that it 'should be taken into account when assessing the risks associated with an evacuation'.[414]

701 We agree that the limitations of the model must be properly understood in seeking to understand the total 'risk',[415] although that limitation does not seem to be properly described as a lack of conservatism in the modelling.

702 The WAPC also noted in its written closing that the simulations 'do not consider the impact of bushfire-generated weather which can further drive the progression of a fire'.[416] Mr Parker gave evidence to that effect.[417]

703 Mr Power acknowledged that these 'types of events' are 'worth considering' but opined that they were unlikely to occur in this particular landscape and, in any event, that it could not be modelled.[418]

704 In short, we are not satisfied that the modelled scenarios included in the BSMR were inadequately conservative for the purpose of supporting the Structure Plan.

705 Rather, we are satisfied that the modelling was carefully and thoughtfully developed, using appropriate technology and publicly available data suitable for the task. We are also satisfied that the BSMR was, at the time of its completion, sufficiently robust to provide an indication of the likely time it will take for a bushfire to impact the local road network and reach the Site.

706 However, as we have noted several times already, both the data and technology have progressed since the modelling was undertaken, a matter which Mr Power acknowledged and, indeed, embraced.

[413] ts 353 - 354, 9 October 2025.
[414] Respondent's Outline, para 331.
[415] See, also the Shire's Outline, paras 51 - 52.
[416] Respondent's Outline, para 332.
[417] ts 365 - 366, 9 October 2025.
[418] ts 366, 367 - 368, 9 October 2025.

Any future modelling will need to reflect this and any further progress and, indeed, acknowledge that further changes are likely to continue into the future.

Conclusion as to the Bushfire Modelling

707 In short, for the preceding reasons, we do not accept the majority of the criticisms made of the modelling carried out by Mr Power.

708 Rather, we agree with the Shire's summary of the evidence - the modelling 'was a fair attempt to model what might be described as a reasonable worst-case bushfire scenario'.[419]

709 In particular, we are satisfied that the modelling utilised suitably conservative inputs chosen by the application of a careful, thorough and rigorous methodology.

710 Further, we are satisfied that, when challenged with new data and technology, Mr Power responded in a suitable manner, by seeking to understand the new information and test it against his own.

711 Of course, there are limitations to the modelling, which must be kept carefully in mind when applying its results to understand bushfire risk. So much could be said about any model.

712 One limitation is that it appears sensitive to changes in bushfire weather inputs. Any future bushfire modelling relied upon to support a future structure plan might do well to consider the benefits of modelling a range of scenarios to address this issue.

Sub-issue B1(b): Whether the methodology utilised in the Microsimulation Modelling is appropriate for determining whether people will be able to evacuate safely.

713 Central to Satterley's outcomes-based approach is the provision of, and reliance upon, the traffic microsimulation modelling which it submits demonstrates that the future residents of the Site, if developed pursuant to the Structure Plan, will be able to evacuate from a bushfire in a timely manner.

714 Such an approach is anticipated by Appendix B of the Guidelines, Table 8 of which gives examples of possible mitigation measures under

[419] Shire's Outline, para 52.

various headings. Under the heading 'Access and egress (evacuation)', three suggestions are given, the first of which is as follows:[420]

> The capacity of the on-site and surrounding road network can support evacuation processes, either in leaving early or in an emergency, in conveying people to a safe location (note: traffic analysis may be required to demonstrate this risk mitigation measure).

715 The 'example' given is of a 'traffic analysis [which] demonstrates vehicles will not be standing on the road network at the time of fire front arrival'.[421]

716 The 'traffic analysis' relied upon by Satterley consists of 'microsimulation modelling' performed by Dr Rasouli (also of Transcore), whose MEMR constituted Appendix 4B of the Structure Plan.

717 Dr Rasouli also prepared three written witness statements dated 10 April 2025 (Exhibit 30), 2 July 2025 (Exhibit 31) and 29 August 2025 (Exhibit 32). He also contributed to the Joint Statement of Experts dated 14 July 2025 (Exhibit 33).

718 For the following two reasons, we do not accept that Dr Rasouli's evidence, which includes the MEMR, provides a basis to conclude that future residents will likely be able to safely evacuate from the Site in the event of a bushfire emergency.

719 The first reason goes to the reliability of Dr Rasouli's evidence.

720 As we have noted previously, the rules of evidence condition the admissibility of the opinion evidence of an expert witness upon the identification of the factual basis upon which it is founded and the explanation of how the specialised knowledge of the expert witness was applied to those facts so as to derive the expert opinion. While the Tribunal is not bound by these rules, it may, and often does, apply them in determining the weight that should be given to expert evidence.

721 The evidence was to the effect that the modelled outcome achieved by Dr Rasouli was the result, in part, of very many manual adjustments that he made to the model.

[420] Exhibit 3.6, page 108.
[421] Exhibit 3.6, page 108.

722 While Dr Rasouli has provided a broad explanation as to the *type* of the adjustments that he made, he has neither identified nor explained or justified any of the individual interventions.

723 As such, the facts and assumptions upon which the modelling rests have not been established. Neither has Dr Rasouli explained the process by which he reached his conclusions.

724 In our view, the present case is an example of when it is appropriate for the Tribunal to apply the rules of evidence to determine the weight to be attributed to an expert opinion. The failure to identify the manual adjustments made and to otherwise explain his reasoning has the result that the MEMR and Dr Rasouli's evidence is a 'black box', 'insusceptible to a full and fair opportunity to test … in cross-examination'.[422]

725 Dr Rasouli's evidence is central to, critical to, Satterley's case that the bushfire risk associated with the Structure Plan can be acceptably managed. Consistent with the quoted passage from ***Lang*** at para [367] above, that centrality increases the requirement that any reasoning provided be 'sufficient' to explain the connection between the factual foundation and the opinion expressed.

726 As such, Dr Rasouli's failure to explain the basis for his opinion must, in our view, result in it being accorded limited weight.[423]

727 Secondly, and in any event, the model does not, in our view, demonstrate that all residents of the Site would be able to safely evacuate in all (or even most) circumstances.

728 Rather, the model used can only demonstrate a safe evacuation in the particular circumstances modelled. Put another way, we find that the model used is ill-suited to its stated purpose.

729 That is because the number of variables in a bushfire emergency, including as to the development of the modelled fire, and the manner in which people respond to it, are too great to allow any model to demonstrate, in an absolute sense, that future residents will be able to safely evacuate from the Site in the event of a bushfire.

[422] ***Lang***, [225].
[423] ***Lang***, [227].

730 Rather, given that infinite variety, a model can only ever demonstrate relativities between different modelled scenarios; it cannot provide a single answer that safe evacuation is possible in all scenarios.

731 If the model developed by Dr Rasouli is to be used again in subsequent applications, it should not be relied upon as it was by Satterley, to provide a single answer to the question whether residents can safely evacuate. Rather, it should be used as one of several tools used by a suitably qualified expert to express a view as to whether the chances of evacuation over several modelled scenarios are sufficiently safe to be described as 'acceptable'.

732 In what follows we explain our reasons in a little more detail.

A Brief Description of The Traffic Microsimulation Modelling

733 The microsimulation modelling undertaken by Dr Rasouli applies traffic modelling software to the modelled/simulated bushfire scenarios which were the subject of Mr Power's evidence and which we have previously described.

734 Dr Rasouli did not suggest that the work done reflects a real bushfire situation.[424]

735 The model[425] considers a Traffic Modelling Area which is considerably larger than the Site,[426] upon which several modelled bushfire scenarios (from different directions but using an even rate of spread) were applied to the road network. Relevantly, the road network includes background traffic and it also proposes some network upgrades, which were identified as necessary by early runs of the model.

736 Onto that background, the model adds incremental volumes of traffic to reflect an orderly evacuation of residents ahead of a modelled fire front.

737 In that regard, all residents are assumed to evacuate.

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[424] ts 19, 25 September 2025.

[425] The traffic microsimulation model was developed using the Aimsun version 8.4.0 platform. There was no real controversy that that platform was suitable for the purpose.

[426] The area is bounded by Toodyay Road to the north, Great Eastern Highway to the south, John Forrest National Park to the west and Leschenaultia Conservation Park to the east. There was no suggestion that the modelled traffic area was not appropriate.

738 Dr Rasouli claims that that creates a degree of conservatism, given the evidence of Dr Strahan to the effect that not all residents of an area will evacuate.[427] While there is some logic to that contention, it is also true that the model assumes an orderly, incremental and linear evacuation which is at odds with Dr Strahan's evidence, and which appears to have the potential to overwhelm any such 'conservatism'. In any event, given our other findings, it is not necessary for us to say more about this contention.

739 The MEMR describes the model methodology as follows:[428]

> The microsimulation model details the incremental trip generation of the evacuees in response to bushfire progression and visually presents the fire front's geographical location compared to queue location of evacuees throughout the simulation period. This will enable the modeller to trace the location of the fire front and back of queue during the evacuation. It is expected that for a satisfactory and safe evacuation, the back of evacuation queue should always be ahead of the fire front.

740 The conclusion reached in the MEMR, which we take as an expression of Dr Rasouli's opinion, is as follows:[429]

> The microsimulation models undertaken indicates that with the proposed road network upgrades the existing and future residents would be able to evacuate satisfactorily in the event of a bushfire and the back of queue during the evacuation would be away from the fire front under all modelling scenarios.

741 Similarly, his conclusion in his witness statement was that:[430]

> The proposed Structure Plan may lead to an increase in the population within the modelling study area, but it also includes sufficient road network upgrades to ensure that both the existing and future populations can evacuate satisfactorily.

742 We understand that when Dr Rasouli says that existing and future populations can 'evacuate satisfactorily', he does so by reference to two criteria:

(a) that vehicles in the Traffic Modelling Area can safely evacuate ahead of the fire front for each of the four modelled fire scenarios; and

[427] ts 99 - 100, 25 September 2025.
[428] Exhibit 1, Appendix 4B, page 7.
[429] Exhibit 1, Appendix 4B, page 49.
[430] Exhibit 30, Witness Statement of Mohammad Rasouli, para 11.3.

(b) that all vehicles can evacuate within a three-hour window.[431]

743 The first criterion appears to have its origin in Table 8 to Appendix B of the Guidelines. The origin of the second criterion is derived from the Bushfire Simulation Modelling and explained in the MEMR.[432] The duration was accepted by Mr Levey as appropriate, while Dr Strahan offered no comment to this question.[433]

744 Three main scenarios were modelled.[434]

745 The first was a 2021 scenario, which represents the existing road network and existing population/dwelling numbers within the Traffic Modelling Area.

746 Having run that model, it was determined that the current road network is unsafe for current residents of the Traffic Modelling Area (i.e. before any development of the Site). Road upgrades were then identified as necessary to allow safe evacuation within the current scenario and the model was then re-run. The necessary road upgrades are:[435]

(a) A dedicated left turn lane on Stoneville Road with approximately 100 metre merge on Toodyay Road; and

(b) A dedicated left turn lane on Roland Road with approximately 500 metre merge on Toodyay Road.

(2021 Upgrades)

747 The second scenario modelled was for 2031, which assumed that, as well as the 2021 Upgrades, the Structure Plan has been developed for Stage 1 (i.e. 400 lots). This scenario also assumes growth in the general population and associated traffic in the Traffic Modelling Area.

748 The third modelled scenario was for 2038. This scenario purports to reflect the fully developed Structure Plan (i.e. 1001 lots), the 2021 Upgrades, as well as the completed EastLink on top of further growth in the general population and associated traffic in the Traffic Modelling Area.

[431] Exhibit 30, Witness Statement of Mohammad Rasouli, para 6.2. ts 25 September 2025, page 20.
[432] Exhibit 1, Appendix 4B, pages 14 - 15.
[433] Exhibit 33, Joint Statement of Mohammad Rasouli, Darren James Levey and Kenneth Strahan, para 17.
[434] Exhibit 1, Appendix 4B, pages 13 - 14.
[435] Exhibit 1, Appendix 4B, page 13 and Appendix A.

The Problem(s) of Intervention

What has Occurred - The Interventions Made and the Denied Requests for Information

749 The evidence was that, in carrying out the modelling, Dr Rasouli intervened manually so as to adjust or alter the manner in which the model behaved.

750 In the Technical Note attached to his Supplementary Witness Statement, Dr Rasouli identified and explained each of the three different types of interventions/adjustments:[436]

(a) Traffic management - adjustments were made in the model to close roads and restrict traffic at intersections so that, for example, the model did not have traffic 'evacuating' through the modelled fire.

(b) Assignment/Route Management - modelled evacuation routes were adjusted 'to control the back of queue on the routes that were closer to the fire'.

(c) Trip distribution to External Zones - Dr Rasouli intervened to alter the modelled destination to which evacuating traffic was directed.

751 As we have noted, despite identifying and explaining each of the three types of intervention, Dr Rasouli has not identified or explained each of the individual adjustments made.

752 That is despite repeated requests from the WAPC, both directly and through Mr Levey, for him to do so to allow Mr Levey to understand what has been done and to check whether the interventions have been made consistently and otherwise consider whether they are reasonable.

753 The WAPC's concern was raised early and consistently. In cross-examination, Dr Rasouli accepted that he was aware of Mr Levey's concern, and the WAPC's request for the interventions to be documented, by no later than the time of the WAPC's refusal to approve the Structure Plan on reconsideration in December 2023.[437]

[436] Exhibit 32, Supplementary Witness Statement of Mohammad Rasouli, Attachment MR-2B, pages 1 - 3 of 35; ts 68, 25, September 2025.
[437] ts 31, 26 September 2025.

754 He also accepted that the concerns were also raised in Mr Levey's witness statement in June 2025[438] and in the Joint Statement of 14 July 2025. In the latter, Mr Levey opined that he:[439]

> believes that the traffic management assumptions should be fully documented and presented, to ensure that these manually applied modelling decisions have been applied consistently between scenarios.

755 In response, Dr Rasouli stated:[440]

> … while documenting and presenting the traffic management assumptions for different scenarios and intervals is possible, it would lead to numerous appendices that could be challenging to document and review. …

756 On 14 August 2025, the same day that they wrote to Mr Bordbar, Satterley's solicitors also instructed Dr Rasouli to prepare a supplementary witness statement to, among other things, document and explain the assumptions used and explain any manual interventions made to the model and why they were made.[441]

757 Dr Rasouli's Supplementary Witness Statement, to which reference has already been made, was filed on 29 August 2025, the same day as Mr Bordbar's Supplementary Witness Statement and just two weeks prior to the start of the hearing on 12 September.

758 As we have previously indicated, while Dr Rasouli described in broad outline the three *types* of interventions he had made, and provided a brief explanation of them in the Technical Note attached to his Supplementary Witness Statement, he said that the time and resources necessary to document each intervention or adjustment, 'is beyond the scope and timeframe of this technical note'.[442]

759 Under cross-examination Dr Rasouli conceded he was given 'every opportunity to provide the documentation and justification to explain the work that [he] did',[443] but maintained that it would be a very 'expensive and time-consuming exercise' to do as asked[444] saying that it would amount to 'hundreds and hundreds of pages probably'.[445]

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[438] ts 32, 26 September 2025.
[439] Exhibit 33, page 11.
[440] Exhibit 33, page 10. See, also ts 33, 26 September 2025.
[441] Exhibit 32, Supplementary Witness Statement of Mohammad Rasouli, Attachment MR-1B.
[442] Exhibit 32, Supplementary Witness Statement of Mohammad Rasouli, Attachment MR-2B, pages 1 of 35.
[443] ts 33, 26 September 2025.
[444] ts 34, 26 September 2025.
[445] ts 33, 26 September 2025.

760 That may be so, but that is precisely what should have happened.

761 That is, for the two related requirements of admissibility for expert opinion evidence that we have previously described - an expert's opinion must be based on proven facts and assumptions, and the expert must explain the reasoning by which they arrived at their opinion.

762 As we have noted, Gordon and Edelman JJ in ***Lang*** explained why an expert must disclose the facts upon which their opinion is based and why an expert must 'sufficiently' explain their reasoning. They also explained why 'sufficiency' is an elastic concept, and that 'the more critical the opinion is to the matters in issue, and the more contested the opinion, the more necessary it will be that the opinion expose the expertise upon which it is based'.[446]

763 It should have been self-evident to both Dr Rasouli and Satterley's solicitors that the evidence of Dr Rasouli was both highly critical to the matters in issue and highly contested. As a result, for it to be given any material weight, Dr Rasouli's evidence should have documented all of the manual interventions and explained or provided justification for them.

Dr Rasouli's Evidence and the MEMR Should not be Accepted

The Opinion Lacks a Factual Basis and is Unexplained

764 The failure by Dr Rasouli to document and explain each of his manual interventions means that Mr Levey was unable to consider whether the interventions have been made consistently and whether they are reasonable in all of the circumstances. We are in the same position. As a result we are, in effect, asked to simply accept on faith Dr Rasouli's conclusion that the model demonstrates that residents of the Site are able to safely evacuate a bushfire.

765 To take the issue of assignment/route management, Dr Rasouli's evidence was that, in effect, he observed the model as it ran and, when he noticed that queues were extending, intervened to re-assign traffic to other destinations via different routes.[447] In his Supplementary Witness Statement he said:[448]

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[446] ***Lang***, [228].
[447] ts 69 - 70, 25 September 2025.
[448] Exhibit 32, Supplementary Witness Statement of Mohammad Rasouli, Attachment MR-2B, pages 2 - 3 of 35.

> The Microsimulation Model, without route management, assigns traffic to the shortest path between origin and destination zones. However, if the back of the queue on one route extends to the fire, drivers in reality will avoid that route. The Microsimulation Model does not recognize that this route has become unattractive due to the fire. Therefore, the modeler must manage evacuation routes to prevent traffic from passing through the fire. In reality, people do not choose evacuation routes solely based on travel time/ shortest path; they prioritize safety and will select routes that minimize their risk.

766 While that passage explains the type of intervention and explains why it was done, Dr Rasouli has neither identified each of the adjustments he has made, nor sought to justify them.

767 As a result, it is not possible to know whether those adjustments were made consistently and neither is it possible to interrogate them at an individual level to understand, for example, whether it was reasonable to make them. Equally, it is not possible to understand the impact of those adjustments on the model more generally.

768 In that regard, Mr Levey expressed concern that no 'sensitivity testing' has occurred, by which he meant using the model to see what happens if different patterns of evacuation behaviour occur or if the assumptions used are varied.[449] Dr Rasouli conceded that no sensitivity testing was performed.[450]

769 It is necessary to focus briefly on the question of reasonableness.

770 The reasonableness of each manual adjustment must be assessed, at least, against what a hypothetical 'reasonable person' might do given the situation presented by the model.

771 So, for example, in the quoted passage set out above, Dr Rasouli justifies his interventions on assignment/route management by saying that:

> In reality, people do not choose evacuation routes solely based on travel time/shortest path; they prioritize safety and will select routes that minimize their risk.

772 However, he made no reference to evidence in support of that assumption. Indeed, the evidence called by SPH was inconsistent with it - that amongst other 'irrational' behaviour, people will return towards

[449] ts 2 - 3 and 52 - 53, 25 September 2025.
[450] ts 29, 25 September 2025.

the fire for a range of reasons, including to collect belongings and animals and to assist other people.[451]

773 Further, Dr Rasouli's assumption relies upon a further assumption - that each evacuee has access to the same information as is known by the modeller; that the fire is progressing from a certain direction at a certain speed, that certain roads are unacceptably congested and that other, less congested, routes are available.

774 There was no evidence to support such an assumption. Indeed, again, the evidence called by SPH as to the ability to access useful and reliable information during a bushfire was inconsistent with such an assumption.[452]

775 Further, the hearing proceeded on the basis that that there are an almost infinite number of variable inputs that will affect how a bushfire will behave and how a community and its members will respond.[453]

776 Dr Rasouli's oral evidence was to the effect that he did not assess the reasonableness or otherwise of any of the interventions made. Rather, his approach was one of trial and error designed to identify whether there was capacity on the road network as a whole.[454]

777 It is necessarily implicit in that evidence that, if the choices made by the modeller are not reflected in decisions made by real life evacuees, there is an unquantified possibility that those evacuees will not be safe - that the fire front will overtake the tail of the queue.

778 For these reasons, we find that the opinions expressed by Dr Rasouli, that the microsimulation model provides a suitable foundation to understand evacuation traffic from the Site in a bushfire and that, should the Structure Plan be approved, 'existing and future populations can evacuate safely' should be given very little weight.[455] They are based on unexposed facts and assumptions, and upon reasoning that has not been explained.

The Model is Unsuited

779 The foregoing also explains why the model is ill-suited for its stated purpose of demonstrating that residents of the Site, if developed

[451] Exhibit 34, Witness Statement of Kenneth Strahan, para 51.
[452] Exhibit 34, Witness Statement of Kenneth Strahan, paras 24 and 42.
[453] Exhibit 31, Responsive Witness Statement of Mohammad Rasouli, paras 2.18 and 3.3.
[454] ts 65, 25 September 2025.
[455] Exhibit 30, para 11.3.

pursuant to the Structure Plan, will be able to safely evacuate in the event of a bushfire.

780 To repeat, Dr Rasouli's evidence was to the effect that he made adjustments as the model ran until the model showed that all those present were able to evacuate satisfactorily. That is, he made adjustments in order to achieve that outcome.

781 However, there is no basis on which an inference may be drawn that the same result would occur if one or more of those adjustments were *not* made, or if one or more of the adjustments were made differently.

782 Rather, Dr Rasouli's evidence simply shows that satisfactory evacuation is possible if *each* of his adjustments is made.

783 There appears to be little value in demonstrating that a particular road network is adequate to allow evacuation from a modelled bushfire if (and only if) particular decisions are made as to road closures, traffic assignments and traffic distributions.

784 That is because of the huge number of variables that will arise in each of the vast number of possible bushfire scenarios. Given those variables, the modelled result does not allow a conclusion to be reached more generally about whether or not the population of the Site, developed under the Structure Plan, will be able to satisfactorily evacuate.

785 Indeed, while we accept that the model may have *a* role to play in assessing whether residents of the Site, if developed under the Structure Plan, are able to safely evacuate, we consider it unsuited for use as the only tool used.

786 That is because, as we have indicated, an absolute conclusion as to safe evacuation can only be drawn if one assumes that precisely the same decision, each and every time, is made in reality as was made by the modeller.

787 Rather, we agree with Mr Levey that the model may be best suited for use in demonstrating relativities across a range of possible factual scenarios - whether one scenario is safer than another - rather than to demonstrate an absolute conclusion.[456]

[456] Exhibit 33, Joint Statement of Mohammad Rasouli, Darren James Levey and Kenneth Strahan, paras 7 - 8.

788 If such an approach is to be pursued, then it seems necessary for each of the different factual circumstances to be identified and interrogated to allow a genuine comparison to be drawn between them.

789 Should the model to be used to compare different scenarios, it would then be available as one of the tools used by a suitably qualified expert to express a view as to the likelihood of satisfactory evacuation from a bushfire.

790 As to those scenarios, there should, in our view, be close integration between various bushfire scenarios modelled and the traffic simulation modelling which also should, as best as is possible, demonstrate consideration of HBIF, in addition to the effect of identified road upgrades.

791 In our view, such an approach should be given careful consideration by any future proponent seeking to pursue a further structure plan for the Site.[457]

The Consequences of Not Accepting the MEMR

792 As we have already noted, we give little weight to the opinions expressed by Dr Rasouli and, further, we find that the model was ill-suited for its task.

793 In closing, Satterley made submissions as to Dr Rasouli's evidence that, amongst other things, sought to minimise its significance. We will address each of the five submissions in turn.

794 First, it is said that there was, and is, no requirement or obligation on Satterley to provide something akin to the MEMR.[458]

795 That is so, however, given our finding that the Site is located within a BLT B landscape, it was necessary for Satterley to provide an 'outcomes-based approach' to demonstrate that the Structure Plan does not present an unacceptable bushfire risk. By the MEMR and Dr Rasouli's evidence, Satterley sought to demonstrate that, should the Site be developed pursuant to the Structure Plan, the residents will be able to safely evacuate, if certain road network upgrades are carried out.

796 We have found that that evidence does not have that effect and there is no other evidence that allows such a conclusion to be reached.

[457] We note that Dr Rasouli conceded that, in reaching his conclusions in the MEMR, he did not speak with a risk assessor - ts 20, 25 September 2025.
[458] Applicant's Outline, 20 November 2025, paras 364 - 365, 399.

797 Secondly, Satterley submits that the MEMR addresses the three points in the relevant row of Table 8 of Appendix B to the Guidelines but does not purport to predict how a bushfire would, in reality, 'play out'.[459]

798 For the reasons already given we do not accept that the MEMR demonstrates that the Structure Plan 'does not create bottleneck situations' or that 'vehicles will not be standing on the road network at the time of the fire front arrival'.[460]

799 Rather, what it shows is that, if a bushfire eventuates that is the same as the modelled scenario, and real-life people make precisely the same decisions as was modelled, then bottleneck situations will not eventuate and that vehicles will not be overrun by the fire. That is quite a different proposition.

800 Thirdly, Satterley identifies each of the concessions Mr Levey made as to the adequacy or otherwise of the modelling and argues for its adequacy.[461]

801 While we accept that Mr Levey made several concessions as to various aspects of Dr Rasouli's modelling, he was steadfast in his view, with which we agree, that Dr Rasouli's failure to document and explain all of his interventions, means that the model has little, if any, meaningful value.

802 Fourthly, Satterley seeks to excuse Dr Rasouli's failure to document and justify the interventions.[462]

803 This submission has two limbs and neither of them should have been pursued. They are wrong in fact and seek to shift blame for the inadequacies in Dr Rasouli's evidence to the Tribunal.

804 The first limb is to the effect that Dr Rasouli's Supplementary Witness Statement amounts to an attempt to address what is described as the 'unresolved point of difference' as to the lack of identification and explanation of his interventions 'in the limited time available between expert conferral and giving evidence'.

[459] Applicant's Outline, paras 366 - 381.
[460] Exhibit 3.6, page 108.
[461] Applicant's Outline, paras 383 - 388, 395 - 399.
[462] Applicant's Outline, paras 389 - 394.

805 Dr Rasouli describes the issue as an 'unresolved point' but that does not warrant Satterley's adoption of it as an accurate description; it fundamentally misunderstands or misstates the issue. It was Dr Rasouli's obligation to identify the facts and assumptions upon which his opinion is based and to properly explain his reasoning. Mr Levey's critique identified the failings in Dr Rasouli's approach and it is to misunderstand the critical issue to reduce the point to a simple difference of opinion between experts.

806 Further, there was not 'limited time available' between expert conferral and giving evidence - there was more than two months.[463] Much more importantly, however, as we have described above, Dr Rasouli accepted that he was aware of the WAPC's view that he should fully identify and explain his interventions as early as December 2023.

807 Finally, as we have previously described, Dr Rasouli did not 'attempt to address' the inadequacy in his Supplementary Witness Statement. Rather, he sought to avoid it by identifying and explaining the *type* of adjustments he had made, rather than do what the WAPC and Mr Levey had, quite correctly, asked for.

808 By the second limb, Satterley submits that it 'sought additional time during the hearing for Dr Rasouli to fully document and explain all of the manual interventions and also sought to play a video prepared by Dr Rasouli 'to illustrate the manual interventions … however the Tribunal declined both requests…'.[464]

809 That submission fails to acknowledge that leave was sought only after we raised the issue and the relevant principle with Satterley's counsel.[465]

810 It also fails to recognise that leave was refused on case management and procedural fairness grounds. They included that Satterley is the applicant for review, that the proceedings have been on foot for many years, and Satterley has had more than enough time to adequately prepare. Further, had we granted leave, on Dr Rasouli's own evidence, the time required to carry out the task would have been

[463] The expert conferral occurred on 8 July 2025, the joint statement was filed on 14 July 2025, Lavan's letter of instruction was dated 14 August 2025, Dr Rasouli's Supplementary Witness Statement was dated 29 August 2025, the hearing started on 12 September 2025, and Dr Rasouli and Mr Levey gave evidence on 25 September 2025.
[464] Applicant's Outline, para 392.
[465] ts 5 - 12, 25 September 2025.

substantial and Mr Levey would have been entitled to consider the additional information provided, almost certainly necessitating an adjournment.

811 Satterley's final submission is to the effect that the MEMR is 'adequate' for assessing the capacity of the road network in a 'bushfire evacuation context', 'identifying any traffic bottlenecks that might occur' and 'proposing road upgrades to address those bottlenecks' and otherwise ensure capacity.[466] The submission goes on to say that any 'refinements and improvements' to the MEMR can be achieved through modifications.[467]

812 We have already expressed findings that are inconsistent with the first part of the submission; the MEMR is *not* adequate for assessing the capacity of the road network in a bushfire evacuation context.

813 However, we are open to the suggestion that the model may be useful to identify traffic bottlenecks and to propose road upgrades. The evidence is to the effect that such bottlenecks were one of the bases for Dr Rasouli's manual interventions. The bottlenecks which appeared, and the particular interventions which were made as a result are not before us, and we are therefore unable to make a finding either way, but the model may well have some utility in this regard.

814 Those matters preclude acceptance of Satterley's ultimate submission that the MEMR can be modified by 'refinements and improvements'. In our view, the MEMR does not provide us with any comfort that the development of the Site pursuant to the Structure Plan can occur in a manner that would allow residents to safely evacuate from a bushfire.

815 As we have already explained, while the model may be a useful tool, if used to understand the relative relationships between different scenarios, to assist someone else opine as to whether future residents of the Site, developed pursuant to the Structure Plan, will be able to safely evacuate, the model does not appear capable of providing that answer on its own.

816 Given that, we are firmly of the view that it would be inappropriate to require modifications be made to the MEMR and have Satterley resubmit the Structure Plan to the WAPC.

[466] Applicant's Outline, para 399.
[467] Applicant's Outline, para 400.

817 Rather, our findings are such that approval of the Structure Plan should be refused on this basis alone.

Sub-issue B1(c): Whether the modelling undertaken and inputs utilised in the Microsimulation Modelling are appropriate and reliable

818 Our discussion and findings in relation to Sub-issue B1(b) overlaps with at least some of the matters which are the subject of this sub-issue and, in any event, our findings under Sub-issue B1(b) mean that it is unnecessary to consider Sub-issue B1(c).

819 As a result, we have limited our consideration of this sub issue quite considerably.

820 In what follows we have sought to respond to some of the WAPC's submissions (using its headings) about the inputs used by Dr Rasouli. To the extent that they are addressed by what was said in relation to Issue B1(b) we have not said any more.

821 Moreover, in what follows we make no factual findings. Rather, we have largely limited ourselves to expressing a sympathy or preference for certain approaches to assist future modellers.

Evacuation trip generation and distribution

822 The difference in the position taken by the parties in this regard is the extent to which the 'messy' behaviours of evacuees can be modelled and whether the 'linear' and incremental approach adopted by Dr Rasouli is conservative or not.

823 The second point has been addressed, somewhat, above at paras [737] - [738].

824 As to the former, Dr Rasouli's evidence was to the effect that the vagaries of human behaviour cannot be modelled[468] while Dr Strahan said otherwise.[469]

825 The extent to which either approach is adopted in future modelling exercises will, it seems to us, depend upon the purpose/s for which the modelling is undertaken.

[468] Exhibit 31, para 3.3.
[469] Exhibit 34, paras 29 - 30; Exhibit 33, paras 11 and 12.

Bushfire Inputs and Assumptions

826 The WAPC is critical of certain inputs concerning the nature of the bushfire against which the modelled traffic is assessed in the MEMR.[470]

827 In particular, the WAPC submits that the location of ignition points and the rate of spread were not representative of 'worst-case scenarios'.[471]

828 Given our findings about both the MEMR and the BSMR it is not particularly helpful to address these points in any detail.

829 Rather, we will limit our comments to the observation that any future modelling might benefit from integration with other modelling undertaken.

830 To explain that a little further, we note that Dr Rasouli does not appear to have used the precise modelled location of particular modelled fires at particular points of time.[472]

831 That appears to represent a missed opportunity.

The Condition and Operation of the Local Road Network

832 The WAPC is also critical that the MEMR fails to consider the condition of the local road network.[473]

833 Plainly, real-life local road conditions may provide a level of complexity that would be unknown if the model inputs are limited to a schematic map.

834 However, it also appears reasonable to surmise that those local conditions may be subject to quite considerable change at short notice - roadside vegetation may be removed, roadside shoulders may be widened, intersections improved or upgraded etc.

835 As a result, while it seems reasonable to suggest that a model may be improved by the inclusion of local road conditions, it may depend on the nature and purpose of the modelling and should therefore, be a matter considered by the modeller both as an input and as, perhaps, a limitation noted in any report.

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[470] Respondent's Outline, paras 20 - 23.
[471] Respondent's Outline, paras 301, 304 - 305, 389 - 392.
[472] Respondent's Outline, para 385.
[473] Respondent's Outline, paras 399 - 408.

Other matters not Considered

836 The WAPC is also critical of the failure of the microsimulation modelling to acknowledge the possibility of multiple trips as part of the same evacuation to, for example, return home after evacuating to collect possessions or pets.[474]

837 It is also critical of the assumption that only passenger vehicles are used by evacuees.

838 To some extent, those criticisms are valid, in that the reality is (as demonstrated by the lay evidence and that of Dr Strahan) that evacuees will sometimes undertake multiple journeys and vehicles other than motor cars will be used to flee a fire.

839 However, the impact of the failure to model those matters appears likely to depend on the purpose of the modelling.

840 No model will accurately replicate the real world. That must be acknowledged and account for. Depending on the circumstances, the omission of multiple trips and vehicles other than cars may or may not be of significance.

Sub-issue B1(d): Whether the assumptions about road upgrades utilised in the Microsimulation Modelling are appropriate

841 The WAPC's SIFC contends that the microsimulation modelling assumes that the '2021 Upgrades' are implemented for both the 2031 and 2038 scenarios.[475]

842 The 2021 Upgrades are those roadworks shown in Appendix A to the MEMR. We have previously described (and defined them) at para [746] above.

843 The MEMR says that the 2021 Upgrades are necessary to ensure that the *current* population of the Traffic Modelling Area is able to safely evacuate from a bushfire.

844 The WAPC submits that the bases for that conclusion (i.e. the inputs and methodology) are, in effect, unreliable for the same reasons that renders unreliable the MEMR's conclusions more generally.[476]

[474] Respondent's Outline, para 410.
[475] WAPC SIFC, para 308.
[476] Respondent's Outline, paras 364 - 370.

845 We agree. As we understand Dr Rasouli's evidence at the hearing, the 2021 Upgrades were the result of an iterative approach whereby the model was run with the current population, the result of which was that the 2021 Upgrades were recognised as required to allow safe evacuation.[477]

846 Accordingly, the same conclusion must follow as we reached in relation to Dr Rasouli's opinions more generally. That is, we find the modelled result that the 2021 Upgrades will allow the safe evacuation of the current population to be unreliable and should be given little weight.

847 The WAPC's SIFC also contends that Satterley has not demonstrated that the 2021 Upgrades are 'feasible',[478] although that does not appear to be a matter pursued by the WAPC in its closing submissions.

848 The final matter raised in this regard in the WAPC's SIFC is the possibility that EastLink may be delayed until after 2031.[479]

849 That is a matter addressed under Issue B1(a). Mr Broadhurst's evidence is such that we find it almost certain that EastLink will not be built before 2031.

850 As we have previously noted, that gives rise to concerns for the timing of Stage 2 (given Satterley does not control EastLink's timing) and the risk that as few as 135 lots may be developed in Stage 1, which provide another reason for refusal to approve the Structure Plan.

[477] ts 64 - 66, 25 September 2025.
[478] WAPC SIFC, para 309(b).
[479] WAPC SIFC, para 310.

Issue B2: Whether development pursuant to the Structure Plan will increase the risk to persons, property and infrastructure in the surrounding area in the event of a bushfire

Issue B3: Whether the conclusions reached in the BMP in relation to the post-development BHL within the Structure Plan area are reliable and accurate

Issue B5: Whether the Structure Plan is consistent with the policy objectives, outcomes and measures in the State Planning Framework, in particular SPP 3.7 and the Guidelines

851 We will address Issues B2, B3 and B5 together, below, and then return to address Issue B4.

852 In addressing Issues B2, B3 and B5, we will have regard to matters which also arise in the context of Element 3 (Vehicular Access) and Element 4 (Water Supply) of section 5 of the Guidelines.

853 The WAPC, in its written closing, accepts that upon a strict interpretation, the Structure Plan satisfies Element 3 (Vehicular Access).[480]

854 It submits, however, that that Element ought to be construed more broadly.[481] Without accepting the correctness of that submission, if it is correct, the Element has been addressed in our consideration of Issue B1(b).

855 In its written closing, the WAPC also accepted that, with modification, the Structure Plan could satisfy Element 4 (Water Supply).[482]

856 As to Element 2 (Siting and Design), we will address this when we deal with Issue B4.

Refocusing the Issue

857 The Structure Plan will significantly increase the number of people who live within the boundaries of the Site. In addition to the associated residences, development of the Site pursuant to the Structure Plan will result in a considerable increase in facilities and

[480] Respondent's Outline, paras 623 - 627.
[481] Respondent's Outline, para 624. See, also, the Shire's Outline, paras 86 - 90.
[482] Respondent's Outline, para 633.

infrastructure, including the development of schools and a 'Local Centre'.

858 Accordingly, all of the bushfire 'planning' experts agree that the development of the Site pursuant to the Structure Plan will increase the bushfire risk to persons, property and infrastructure.[483]

859 In some respects, that answers Issue B2, but that answer does not assist very much under the current policy regime.[484] Equally, Issue B3 has fallen away due to changes in the policy regime.

860 Rather, the relevant question is that posed by Issue B5 and, as should by now be apparent, that question is whether the bushfire risk posed to life, property and infrastructure by the Structure Plan is 'acceptable'.

861 Given our findings regarding the two Preliminary Issues, Satterley must seek to demonstrate that it *is* acceptable by way of 'an outcomes-based approach'.

862 In such a case, cl 7.5 of SPP 3.7 and cl 2.2.1(b) of the Guidelines are relevant. They are in very similar, but not quite identical terms. What follows is taken from the policy. It requires that Satterley explain how:[485]

(a) 'the design considers bushfire risk and where additional or alternative bushfire risk management measures have been included to reduce the risk';

(b) 'how the policy outcomes have been achieved'; and

(c) 'why approval is warranted by the decision-maker in this instance'.

863 In that regard, Satterley relies upon Appendix H of the BMP.[486]

[483] Exhibit 46, Expert Conferral Statement - Bushfire Planning, para 9.3.
[484] The issue had more relevance under the previous, 2015 SPP 3.7, Policy Objective 5.1 of which was to the effect that any increase in risk was to be avoided.
[485] Exhibit 3.6, page 22.
[486] Applicant's Outline, para 258. See, also, the BMP's Executive Summary which states that, despite the view that compliance with Element 1 is unnecessary due to section 1.3.1 of the Guidelines, the BMP has 'voluntarily undertaken' an outcomes-based approach for Element 1, which is contained in Appendix H.

The Methodology of Appendix H

864 The methodology adopted in Appendix H of the BMP is a Risk Vulnerability Assessment.

865 For each of the four modelled bushfire scenarios, assessment is made of the risk that life and property will be impacted at five locations within the Site: Village 1; Village 2; Village 3; an 'onsite bushfire refuge building/open space'; the High School; and the recycled wastewater treatment plant.[487]

866 In each case an assessment is made against the following three criteria, using the following ratings respectively:

(a) Likelihood - Almost Certain; Likely; Possible; Unlikely; Rare;[488]

(b) Vulnerability - Extreme; High; Moderate; Low; Very Low;[489] and

(c) Consequence - Catastrophic; Major; Moderate; Minor; Insignificant.[490]

867 The resulting assessment for the combined criteria is a total 'risk' which is assessed as Very Low (1-3); Low (4-6); Medium (7-8); High (9-11); or Extreme (12-13).[491]

868 That process has been undertaken for two scenarios; 'Inherent' and 'Residual'.

869 The *inherent* risk level is that assessed as arising if the Structure Plan is developed with the 'existing risk controls' described in section 3.4 of Appendix H[492] but with no additional 'risk treatments', which are those identified in section 7.

870 The *residual* risk level is that assessed as arising if the Structure Plan is developed with the existing risk controls *and* the additional risk treatments.

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[487] Exhibit 2, BMP, Appendix H, Section 4.
[488] Exhibit 2, BMP, Appendix H, Section 5.3.1.
[489] Exhibit 2, BMP, Appendix H, Section 5.3.2.
[490] Exhibit 2, BMP, Appendix H, Section 5.3.3.
[491] Exhibit 2, BMP, Appendix H, Table 5.4.
[492] The existing risk controls include the Guidelines, AS3959, the Australian Warning System and the Firebreak Notice.

871 There are seven additional 'risk treatments' set out in section 7 of Appendix H. Each is described in a sub-section, the headings of which are as follows:

(a) Siting and suitable destination/onsite bushfire refuge building/s and open space;

(b) Vegetation modification and management;

(c) Vehicular access (external to the Structure Plan);

(d) Vehicular access (within the Structure Plan);

(e) Water supply (including bushfire fighting supply);

(f) Bushfire construction requirements; and

(g) Community bushfire preparedness and response.

872 Table 5.5 of Appendix H shows the 'inherent' risk as either 'Extreme' or 'High' while the 'residual' risk is, in each case, determined as 'Low'.

873 Rather unusually, each of the risk ratings are then 'translated' (our term) into the terminology of 'in/tolerable' or 'un/acceptable'.[493] So, an Extreme rating is said to be 'Intolerable'; High is 'Intolerable (Tolerable in rare cases)'; Medium is 'Tolerable'; Low is 'Acceptable (Tolerable in rare cases); and Very Low is 'Acceptable'.[494] We address this unusual step in a little more detail below, at paras [877] to [885].

Risk Assessment Methodology

874 In what follows, we identify some of the inadequacies of the risk assessment that are such as to render it inadequate for Satterley's intended purpose.

875 Each of those inadequacies concern the *content* of the risk assessment. That is, they do not concern the risk assessment methodology itself.

876 In that regard, we note that the Guidelines do not prescribe a particular methodology and, indeed, none of the witnesses criticised the

[493] Exhibit 2, BMP, Appendix H, Section 6.
[494] Exhibit 2, BMP, Appendix H, Table 6.1.

use of a risk assessment *per se.* In a general sense, we accept risk assessment as a legitimate methodology to be utilised in this context.

Acceptability vs Tolerability

877 We do, however, take issue with the final step applied in the risk assessment, by which the risk ratings are 'translated' into the terminology of 'in/tolerable' or 'acceptable'.

878 As we have noted several times, the language used in SPP 3.7 and the Guidelines is that of 'acceptability'. SPP 3.7 does not use the term 'tolerable' at all and the Guidelines do so only once, in cl 8.1.4 which concerns Vulnerable Land Uses which is irrelevant for present purposes.

879 Mr Rowe was unable to advise of the origins of the 'tolerable' classifications, although he suggested that they may derive from the Office of Bushfire Risk Management.[495] Nothing in support of that suggestion was put before us.

880 A more likely source is the definition of Tolerable in the Guidelines, which is as follows:

> Tolerable: the willingness to live with a risk to secure benefits and achieve objectives, on the understanding that it is being properly controlled. 'Tolerability' does not mean 'acceptability'. Tolerating a risk does not mean that it is regarded as negligible, or something we may ignore, but rather as something that needs to be kept under review and reduced further.

881 Without referencing that definition, section 6.1 of Appendix H includes the statement that some risk ratings:

> … are considered ***Tolerable*** where there is a willingness to live with a risk to secure benefits and achieve objectives. Tolerating a risk does not mean that it is regarded as negligible, or something we may ignore, but rather as something that needs to be kept under review and, where possible, reduced further.[496]

882 What should be immediately apparent from that passage is the absence of the second sentence of the definition: 'Tolerability' does not mean 'acceptability'.

883 We can only assume that omission was deliberate.

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[495] ts 41 - 42, 6 October 2025.
[496] Original emphasis.

884 In circumstances where the policy language is that of acceptability, there is no role for the language of tolerability outside the limited scope of Vulnerable Land Uses, which is not relevant here. We agree with the WAPC's submission that it is 'difficult to see' how a risk that is not 'acceptable' could be consistent with the policy intent of SPP 3.7, regardless of an assessment that the risk is, nonetheless, 'tolerable'.[497]

885 We strongly disagree with the inclusion of the concept of tolerability in Appendix H. It only confuses matters.

There is no Explanation of How Risk Treatments Reduce the Risk Level

886 More fundamentally, Appendix H contains almost no explanation as to how the additional treatments in the Residual scenario are said to have reduced the risk from that assessed in the Inherent scenario and neither is there any analysis as to how much they have done so.[498]

887 As we have noted at para [93] above, the Guidelines require that an outcomes-based assessment must describe 'how the policy outcomes have been achieved'.

888 In our view, a risk assessment which concludes that certain 'treatments' will reduce risk to an acceptable level must include an explanation as to 'how' those treatments makes things safer, including an analysis of the extent to which that will occur.

889 It is convenient to demonstrate the lack of explanation and analysis by way of an example.

890 Section 6.2 of Appendix H is headed 'Risk acceptance/tolerability analysis'. In each of the four subsections, the four design bushfire scenarios are assessed. In section 6.2.1, Design bushfire scenario 1 is described. In the first three paragraphs the Likelihood, Vulnerability and Consequence for that scenario are described in turn.

891 In each case the paragraph expresses the opinion that the additional treatments will alter the risk. While for *some* treatments an explanation is given as to why it will make things safer, at no time is an explanation given to justify the particular risk rating chosen; that is, there is no explanation given for why the particular treatment makes things safer to the extent assessed.

[497] Respondent's Outline, para 450.
[498] Respondent's Outline, para 435.

892 So, for example, as to Vulnerability, the paragraph states:[499]

> It is considered that if only the current controls were implemented, and the community not provided with the proposed bushfire mitigation measures … that the community would be significantly more susceptible to landscape-scale bushfire impact. An Extreme risk rating has therefore been applied to the inherent risk. Implementation of the proposed treatments is expected to much better prepare the community to any bushfire impact (including landscape-scale) and as such, a Low risk rating has been applied to the residual (post-development) risk.

893 In that paragraph, the proposed treatments that are said to 'much better prepare' the community are not even identified. As we have noted, the treatments are described in Section 7 of Appendix H, but in that section the treatments are merely described, there is no analysis of their effect.

894 The paragraph gives no explanation as to how the treatments will improve the community's preparation (let alone to a 'much better' standard) and, equally, there is no attempt to explain why that improved preparation results in a reduction of the rating from 'Extreme' to 'Low', rather than to, say, 'Moderate' or 'High'.

895 The final two paragraphs of section 6.2.1 describe the residual risk as follows:

> The residual risk is significantly reduced due to the proposed bushfire treatments being provided to protect property through use of APZs and bushfire resilient building construction, while increased APZs at the interface with the Conservation POS provide additional reduction in radiant heat flux at buildings to address any potential elevated fire behaviour. Life safety risk is reduced by providing a coherent vehicular access network to enable offsite evacuation, while also providing contingency for onsite shelter response, should it be required, through creation of bushfire refuge building/s and open space.
>
> The risk assessment demonstrates that following the construction of the development and implementation of the bushfire risk management measures, the residual risk to people and property is reduced to Low, which is considered Acceptable as per Table 6.1.

896 Those two paragraphs identify the additional treatments which are relied upon to justify a reduction in the residual risk assessment from

[499] Exhibit 2, BMP, Appendix H, Section 6.2.1.

the Inherent risk. Further, some explanation is given as to how the APZ's will protect property.

897 However, it is simply assumed that the 'coherent vehicular access network' will 'enable offsite evacuation'. No explanation is given in those paragraphs (or in sections 7.3 and 7.4, which merely describe the treatment, not its effect). Rather, the stated effect of the risk treatment is assumed. For the reasons we have previously given in relation to Dr Rasouli's microsimulation evacuation modelling, that assumption is unsafe, but that is not the point - there is no explanation for the reduction or its extent.

898 Equally, the provision of a 'refuge' within the Site is said to provide a 'contingency' but no explanation is given as how it will reduce risk, let alone to the extent assessed.

899 We accept that the assessment of risk in a general sense, and the assessment of how certain treatments will affect risk more particularly, is likely to be highly subjective.

900 However, 'subjective' is not the same as 'arbitrary'. Neither is it sufficient in such circumstances for an expert to rely solely on their expertise as a basis to declare that something is so. As we have already noted, regardless of the application of the rules of evidence as to the admissibility of expert opinion, where an 'outcomes-based approach' is used, cl 7.5 of SPP 3.7 requires, among other things, an explanation of 'how the policy outcomes have been achieved' - that is, how the risk will be reduced to an acceptable level.

901 That has not occurred and the risk assessment is, therefore, inadequate for its purpose.

The Proposed Refuge Is Not an Appropriate 'Treatment'

902 The first of the additional 'treatments' relied upon to reduce the 'Inherent' risk to 'Residual' risk is the provision of 'sufficient cleared land and managed POS [Public Open Space] vegetation within the Structure Plan area, to result in creation of significant areas of Low BHL/BAL-Low land, particularly within Village 2', which is said to 'enable parts of the Structure Plan to be considered a "suitable destination" as defined in the Guidelines'.[500]

[500] Exhibit 2, section 7.1. The Applicant's Reply to the Shire of Mundaring's Closing Submissions at para 39 submits that the 'treatment' described in Section 7.1 is the creation of a 'large internal areas' of very low

903 It is said that the 'suitable destination' will include the construction of 'onsite bushfire refuge buildings and collocated open space refuge area/s in the first stage of the subdivision to enable safe onsite shelter …'.[501]

904 There are several significant difficulties with this proposed 'treatment'.

905 The first is a lack of policy support.

906 Satterley's submissions acknowledge that a passage in the Guidelines is to the effect that 'on-site refuges are not supported for residential development'.[502] However, its submissions then assert that the 'intention' behind the relevant passage is 'essentially' that on-site refuges are 'not supported as a standalone compliance measure' but that it is not intended to exclude their consideration 'in a residential context as a contingency measure'.[503]

907 We do not accept that submission.

908 The passage referred to (page 118 of the Guidelines) forms part of cl B.5 to Appendix B, which is headed 'Vulnerable land uses'.

909 That term is not defined but cl B.5.1 is headed Types of Vulnerable Land Uses and lists four such uses none of which are relevant to the present proceeding.

910 The Guidelines also anticipate the possible use of on-site shelters in the context of tourism uses. Element 3: Vehicular Access provides that, for vulnerable tourism land uses, an on-site shelter may be demonstrated to be appropriate 'as a last resort option'.[504] Again, that passage has no application to the present case

911 Further, cl B.3.2 of Appendix B of the Guidelines (Access to a suitable destination(s)) states, in part, as follows:

> A suitable destination should not be confused with an on-site shelter provided for tourism land uses. On-site shelters are a last resort option,

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bushfire risk. On one view, that is so but read as a whole, Section 7.1 provides for a refuge or shelter. In any event, even if we are wrong, the more fundamental criticism that there is no explanation as to how the risk treatment will reduce the risk applies regardless.

[501] Exhibit 2, section 7.1.

[502] Applicant's Outline, para 302.

[503] Applicant's Outline, para 302.

[504] See, for example, Appendix B.3 of the Guidelines, page 102.

> purpose built and designed, and are supported in limited circumstances to facilitate tourism within remote and/or heavily vegetated areas.
>
> On-site shelters are not supported for residential land-uses.

912 That last statement could not be more clearly expressed and we find that the proposal (such as it is - see below) for an on-site shelter or refuge would be inconsistent with the Guidelines.

913 Of course, we are not bound by policy,[505] but Satterley did not submit that there was a proper basis to depart from the relevant provisions of the Guidelines. In any event there are no 'cogent reasons' to do so.[506]

914 The next significant difficulty for Satterley as to the proposed on-site refuge is the considerable lack of certainty as to what is proposed.

915 The WAPC's closing submissions are critical of the lack of detail as to 'the form and operation' of any such refuge,[507] construction standards or the type of building that might be used,[508] how it might operate[509] and its management.[510]

916 It is unnecessary to address them all. The example of 'form and operation' will suffice.

917 In that regard, the WAPC submissions accurately describe a 'fundamental lack of clarity as to capacity' and note that Mr Rowe's evidence was to the effect that 'this uncertainty existed because it has not yet been determined how many people would be safer in a refuge as compared to their home'.[511]

918 We agree with the WAPC's subsequent submission that, unless there is an understanding of what risk the refuge is actually seeking to

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[505] ***Clive Elliott Jennings & Co Pty Ltd v Western Australian Planning Commission*** [2002] WASCA 276, [26], citing ***In Re Drake v Minister for Immigration and Ethnic Affairs (No 2)*** (1979) 2 ALD 634, 644-5. See, also, in the context of 'orderly and proper planning' ***Marshall v Metropolitan Redevelopment Authority*** [2015] WASC 226, [182].

[506] ***Clive Elliott Jennings & Co Pty Ltd v Western Australian Planning Commission*** [2002] WASCA 276, [26], citing ***In Re Drake v Minister for Immigration and Ethnic Affairs (No 2)*** (1979) 2 ALD 634, 644 - 5.

[507] Respondent's Outline, paras 474 - 476.

[508] Respondent's Outline, paras 477 - 482.

[509] Respondent's Outline, paras 483 - 486.

[510] Respondent's Outline, para 487.

[511] Respondent's Outline, para 475.

mitigate, there can be no clarity as to how the proposal for a refuge might be said to reduce risk.[512]

919 Satterley's closing submissions accept that 'the BMP does not currently set out any detail in relation to the design or intended management of the proposed on-site shelter'. However, they insist that that 'does not matter, given that all that really needs to be achieved as part of the Structure Plan is to identify the proposal for an on-site refuge as a bushfire mitigation measure, with precise details to be confirmed at the subdivision stage'.[513]

920 We do not accept that submission. We also reject Satterley's submission that an on-site refuge is not 'fundamental' but is, rather, a 'discretionary additional measure'.[514]

921 The concept of an on-site shelter or refuge is put forward by Satterley as one of seven 'treatments' by which the risk to life and property on the Site posed by bushfire will, it says, be reduced to an acceptable level if development occurs pursuant to the Structure Plan.[515]

922 It is self-evident that the extent to which such a refuge contributes to such a contended reduction must be assessed and that such assessment can only occur if sufficient details are provided as to its location, design, capacity, purpose (i.e. circumstances in which it would operate) and proposed management. Absent such details any attempt at assessment would occur in a vacuum. Accordingly, the submission that the details can be sorted out later makes no sense.

923 In that regard, we note the WAPC's submission that, rather than facilitate a reduction in the bushfire risk, an on-site refuge may in fact *complicate* matters.[516]

924 The evidence of both Mr Kuchel[517] and that of Dr Strahan[518] supports that conclusion.

925 Given our previous findings, it is not necessary to address the submission, or the evidence, in any great detail. We raise it here,

[512] Respondent's Outline, para 475.
[513] Applicant's Outline, para 303.
[514] Applicant's Outline, para 310.
[515] Exhibit 2, BMP, Appendix H, sections 6.2.5 and 7.1.
[516] Respondent's Outline, paras 494 - 506.
[517] Exhibit 19, Witness Statement of Clinton John Kuchel, para 62. ts, 318, 319, 17 September 2025.
[518] ts 4 - 5, 8 October 2025.

however, because the evidence of those witnesses, which was not seriously challenged, demonstrates both the complexity of the issue and Satterley's failure to engage with that complexity in any real way.

926 In short, we reject the proposed risk treatment of an on-site refuge as one which might materially reduce bushfire risk due to its lack of policy support and lack of detail, the latter of which precludes the assessment of its efficacy.

Difficulties Associated with Vegetation Modification and Maintenance on Private Lots

927 The second of the 'treatments' identified in Appendix H is that of 'vegetation modification and management'.[519]

928 The first dot point under that heading describes the proposed treatment as the creation of a 'significant managed interface between proposed residential development and retained vegetation'.[520]

929 One of the 'strategies' designed to create that outcome is the 'targeted establishment and maintenance of low threat landscaping with [*sic* - within] lots and POS'.[521]

930 There are two preliminary points to make at this stage.

931 First, while the WAPC's written closing submissions state that Appendix H proceeds on the basis that vegetation on *all* 1001 of the proposed private lots will be maintained in a low threat state in perpetuity,[522] that does not appear to be expressly stated in Appendix H.

932 It *is* expressed in relation to the 42 'Natural Living Lots', each of which are >1ha in size and will be located within the proposed Rural Residential zone, as a transition to existing larger lots beyond the boundary of the Site.[523]

933 As to the other lots, the evidence of Mr Rowe was that all other lots will be of such a size that the APZ of neighbouring lots will overlap.[524]

[519] Exhibit 2, Appendix H, section 7.2.
[520] Exhibit 2, Appendix H, section 7.2.
[521] Exhibit 2, Appendix H, section 7.2.
[522] Respondent's Outline, para 508. Applicant's Outline, para 314.
[523] Exhibit 2, Appendix H, section 7.2, page 6.
[524] ts 10, 6 October 2025.

934 Second, there remains some considerable uncertainty as to what, precisely, will be required to achieve a 'low threat state'. We agree with the WAPC's closing submissions that '[c]onsiderable time' was spent during the hearing 'trying to decipher precisely what level of clearing and ongoing management' this risk treatment would involve.[525]

935 To that end, the evidence was that the concept of a 'low threat state' is defined in AS3959,[526] although that document was not included in the (vast) volume of material tendered into evidence. Mr Panickar's evidence was that AS3959 lacked detail, leaving room for interpretation, although the requirements of an APZ are much more particular.[527]

936 It is not necessary to make findings as to what, precisely, a low-threat state would require. Rather, we will limit our findings to the following three matters.

937 First, consistent with the foregoing, we have considerable concern at the ability to communicate what, precisely, is required to achieve a 'low-threat state' beyond the requirements of an APZ, to the owners or occupiers of lots.

938 Secondly, to the extent that the requirements of an APZ are relied upon, the achievement of a condition of low-threat state cannot be considered as a 'treatment' that, either separately or taken with other 'treatments', might reduce the bushfire risk from unacceptable for the 'inherent' to acceptable for the 'residual'.[528]

939 That is because for lots up to 5,000m^2 in size, which is all of them save for the 42 Natural Living Lots (i.e. 959 lots or 95.8%), compliance with the Shire's annual Firebreak Notice would be sufficient to achieve an APZ state.[529]

940 Section 3.4. of Appendix H describes the issue of a Firebreak Notice as an 'existing risk control'[530] and Mr Rowe agreed that the Inherent scenario assumes that a Firebreak Notice is in place.[531] As such, it cannot be considered as a 'treatment' by which the risk under

[525] Respondent's Outline, para 510.
[526] ts 4, 6 October 2025.
[527] ts 25 - 26, 6 October 2025.
[528] Respondent's Outline, para 517.
[529] ts 11, 6 October 2025; ts 30, 7 October 2025. See, also, Exhibit 47.
[530] Exhibit 2, page 5.
[531] ts 33 and 35, 6 October 2025.

the Residual scenario will be reduced so it is lower than that in the Inherent scenario.

941 The third difficulty concerns enforceability.

942 We accept the evidence to the effect that there will likely be difficulties with enforcement of the Shire's Firebreak Notice, including the Shire's limited resources.[532] However, as the Shire is a local government, it has the benefit of a statutory function and statutory powers, and the *Bushfires Act 1954* (WA) identifies a not insignificant penalty ($5,000) for failure to comply.

943 In our view the greater difficulty arises with enforcing any 'requirement' that the Natural Living Lots achieve a low-threat state.

944 Mr Rowe's evidence was that while the Firebreak Notice will apply to the Natural Living lots, compliance with it will not achieve a 'low-threat state'.[533]

945 There was no evidence that contradicted that evidence and we therefore accept it. A question then arises as to how it is that the owners or occupiers of those lots might be made to maintain their lot in a low-threat state, whatever that might mean.

946 We agree with Mr McMahon's evidence that residents are likely to want to plant vegetation, including trees and shrubs, in order to provide screening between residences.[534] That is likely to be the case on all lots, but all the more so on larger ones.

947 In his primary witness statement, Mr Rowe said that a 'landscape covenant' can provide a means by which low threat vegetation can be prevented from returning to a 'classified state'. He described the benefit of such a covenant as being an 'awareness at purchase and a continuous transfer of the expectation when subsequent sales occur'.[535]

948 In other words, by placing a 'covenant' on title, the requirement for vegetation to be kept in a low-threat state is brought to the attention of the purchaser of the land.

[532] Exhibit 40, Witness Statement of Gary Glen McMahon, para 89; ts 20 - 23, 6 October 2025.
[533] Exhibit 38, Responsive Statement of Anthony James Rowe, para 54.
[534] Exhibit 40, Witness Statement of Gary Glen McMahon, para 88.
[535] Exhibit 36, Witness Statemen of Anthony James Rowe, para 128.

949 At the hearing, Mr Rowe used the language of a restrictive covenant.[536] He also expressed the view that the requirement to maintain vegetation in a low-threat state could be expressed in negative terms,[537] which is a necessary attribute of an enforceable covenant.[538]

950 We have some considerable concerns about those matters.

951 First, we note our previous observations (at paras [934] to [935] above) as to the lack of certainty as to what, precisely, is involved in managing vegetation to a 'low-threat state'. Given those observations, we have some considerable doubt that any obligation can be drafted that is sufficiently precise, understandable and enforceable.

952 Secondly, we accept the WAPC's submission that the obligation to maintain vegetation in a low-threat state 'would unavoidably entail some positive obligations, for example, by clearing, thinning or pruning' which 'could only be achieved by a positive covenant'.[539]

953 Satterley's submissions included that a restrictive covenant could prohibit vegetation of a particular type or size.[540] That is so, but only to some extent. That is because the test whether a covenant is negative looks to substance not to form.[541]

954 So, while we accept that an obligation that imposes a 'no planting zone', or that prohibited the planting of certain types of vegetation, would be in substance a negative requirement, we are less certain about an obligation that, for example, prohibited vegetation of a certain size. Such a requirement might reasonably be seen as one that imposed a positive obligation to prune or remove vegetation to ensure the height limit is maintained.

955 More fundamentally, however, such enforcement must occur by the commencement of proceedings in the Supreme Court.[542]

956 Mr Rowe's evidence was to the effect that the threat of losing insurance coverage would be sufficient to motivate a landowner to bring legal action to require their neighbour to maintain the vegetation

[536] ts 28, 6 October 2025.
[537] ts 84, 7 October 2025.
[538] See ***Maio v City of Stirling [No 2]*** [2015] WASC 189, [47] and the cases cited therein.
[539] Respondent's Outline, para 539.
[540] Applicant's Outline, para 319.
[541] ***Westpoint Corporation Pty Ltd v The Registrar of Titles*** [2004] WASC 189, [52].
[542] Such proceedings are not common. A reasonably recent example in this State is ***Miller v Evans*** [2010] WASC 127.

on their lot in a low-threat state, consistent with a restrictive covenant.[543]

957 While an interesting hypothesis, no evidence was put before us to support it, and we do not accept it. Put bluntly, we find it unlikely that a landowner would put themself to the considerable time, expense and stress associated with Supreme Court litigation (to say nothing of the risk of an adverse costs order if unsuccessful) in order to enforce a covenant directed at ensuring vegetation is maintained in a low-threat state.[544]

958 By s 129BA of the *Transfer of Land Act 1893* (WA) ('**TLA**') a restrictive covenant may be created and made binding for the benefit of a local government (or other public authority).[545] The Town Planning Appeals Tribunal held that the consent of the local government is not required for the creation of such a covenant, although it said that to impose one without such consent would be 'unusual and poor practice'.[546] Without expressing a final view as to the legal question, we agree with the latter observation and note that the Shire's consent does not appear to have been requested, let alone given. In any event, the difficulties associated with the enunciation of the requirement and the need for it to be negative in substance remain.

959 Other possible forms of enforcement were raised. We agree with the WAPC[547] that development approval will not be required for the construction of most dwellings within the Site[548] and that subdivisional conditions, while they might require the clearing of vegetation, are incapable of requiring the ongoing management of vegetation.

960 We also agree that a Local Development Plan would be unable to impose such obligations on lot owners/occupiers[549] and that a notification on title pursuant to s 70A of the TLA cannot provide an enforcement mechanism.[550]

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[543] ts 23 - 24, 6 October 2025; ts 70 - 71, 8 October 2025.
[544] So much was, in effect, acknowledged by Satterley in its application for leave to reopen its case, made in February 2026: ***Satterley Property Group Pty Ltd and Western Australian Planning Commission*** [2026] WASAT 39, [41(b)].
[545] Applicant's Outline, para 323; Respondent's Outlines, paras 529 - 534.
[546] ***Koltasz Smith & Partners v Western Australian Planning Commission*** [2000] WATPAT 1.
[547] Respondent's Outline, paras 545 - 546.
[548] Assuming compliance with the R-Codes - cl 61 of the Deemed Provisions. Although, see Part 10A of the Deemed Provisions.
[549] Part 7 of the Deemed Provisions, esp cl 46 and 56.
[550] Shire's Outline, para 82.

Difficulties Associated with Vegetation Modification and Maintenance on Public Open Space

961 Section 7.2 of Appendix H also provides for the management of both the Conservation POS and the Recreation POS.

962 As to the Conservation POS, it provides that 'perimeter roads and APZs' will be provided at interfaces to allow 'adjoining habitable development to achieve the intended BAL of 19 or 29'. The APZs are shown at Fig 5.1.

963 Section 7.2 provides that the Recreation POS, which follows the course of a creek, is 'largely expected to comprise low threat vegetation'.

964 It also notes that 'careful consideration will be required' for the creek line, 'given revegetation is likely to occur'. That is, there is a tension between the need to maintain a low-threat state and the usual approach for creek lines to be revegetated.[551]

965 That tension also exists in relation to the Conservation POS. The Conservation Area Management Plan (**CAMP**)[552] speaks of 'retention, enhancement and conservation of vegetation'.[553]

966 The WAPC expressly refrained from submitting that that tension would prevent achievement of the maintenance of a low-threat state.[554]

967 We accept that that tension will not prevent such achievement.[555] Nonetheless, there is a fundamental barrier which prevents acceptance that the ongoing maintenance of vegetation to a low-threat state amounts to a 'treatment' which may be relied upon to reduce the unacceptable Inherent risk to an acceptable risk in the Residual scenario. That barrier is the lack of agreement with the Shire (or, indeed, anyone else) as to who will manage the area.

[551] Consistent with, for example, SPP 2.9 clauses 5 and 5.1(iii).
[552] The Applicant is required to implement the CAMP by condition 23 of the approval granted under the EPBC Act by which permission is, in effect, granted to clear habitat for Black Cockatoos and Chuditchs.
[553] Exhibit 3.3, page 851.
[554] Respondent's Outline, para 569.
[555] We note that while the Shire's submissions included (at 114) that the 'balance' between the retention of vegetation and bushfire safety has not been achieved, and (at 78) that there were 'numerous and obvious' difficulties with proposed risk treatment 7.2, it did not assert that the low threat state could not be achieved due to the need for revegetation or conservation. See, also, paras [1001] - [1058] below.

968 Mr Cole's evidence was that the land would be ceded to the Crown and vested with the Shire for public purposes.[556] But the Structure Plan is silent on the issue and the hearing proceeded on the basis that no agreement for that to occur had been reached.

969 In such circumstances, the Guidelines provide that the area should not be excluded as low threat vegetation.[557] Again, Satterley made no submission that we should depart from the Guidelines, and we are unaware of any 'cogent reasons' why we should do so.

Vehicular Access

970 We have previously referred to Sections 7.3 and 7.4 of Appendix H, which respectively describe the 'treatments' of vehicular access external and internal to the Structure Plan.

971 Both are concerned to ensure that relevant populations are able to safely evacuate the area in the event of a bushfire.

972 On its face, the treatment described in Section 7.4, Vehicular Access within the Structure Plan, proposes no more than what is required by the Guidelines.

973 As such, it provides nothing over and above what is proposed for the Inherent scenario and cannot, therefore, contribute to any reduction of risk in the Residual scenario.

974 Satterly submits that the traffic treatments external to the Site (described in Section 7.3) are 'highly significant' and are in addition to what would be required in order to comply with the Guidelines.[558]

975 Perhaps, but given our findings about Dr Rasouli's evidence, we reject the submission that they demonstrate that the bushfire risk is reduced at all, let alone to an acceptable level.

Water Supply

976 Section 7.5 of Appendix H provides for the 'anticipated' supply of firefighting water as an extension of the proposed reticulated water supply. If that is 'not possible' it states that 'strategic or individual lot water tanks will be considered'.

[556] ts 84, 21 October 2025.
[557] Exhibit 3.6, pages 36 - 37.
[558] Applicant's Reply to the Shire of Mundaring's Closing Submissions, 28 November 2025, para 66.

977 The Outcome for Element 4: Water Supply of the Guidelines, is:

> Ensure that sufficient water is available and accessible for emergency services, to enable people, property and infrastructure to be defended from bushfire.

978 The hearing proceeded on the basis that that Outcome could be achieved and we accept, on the evidence before us, that that Outcome can be satisfied through compliance with the Acceptable Solutions, which includes provision of dedicated hydrants within the Structure Plan.[559]

979 However, Section 3.4 of Appendix H to the BMP identifies 'the Guidelines' as an 'existing risk control'. As such, we agree with the WAPC[560] and the Shire[561] that the provision of firefighting water cannot, therefore, be relied upon to reduce the relevant risk.

980 To the extent that other upgrades to the provision of water were suggested during the hearing, we accept that they may well go beyond the requirements of the Guidelines,[562] but their impact has not been assessed in any way and cannot therefore, be relied upon, in support of a submission to the effect that the Residual risk is acceptable.

Construction Standards

981 We make similar findings about the proposed 'treatment' described in section 7.6 of Appendix H.

982 That section provides for the construction of all buildings within the Site to occur in compliance 'with bushfire construction requirements of the National Construction Code' save that *all* residential buildings will be constructed to a minimum of BAL-12.5, regardless of whether they are in a designated bushfire prone area and regardless of whether they are assessed as BAL-Low.

983 This 'treatment' cannot be relied upon as one which reduces the bushfire risk in the Residual scenario.

984 That is for two reasons. First, again, there are difficulties associated with ensuring that the 'treatment' will be implemented under

[559] ts 97, 26 September 2025; ts 65 - 66, 6 October 2025 and Exhibit 46, Expert Conferral Statement - Bushfire Planning, para 38.
[560] Respondent's Outline, para 583.
[561] Shire's Outline, para 92.
[562] Satterley's Reply to the Shire of Mundaring's Closing Submissions, 28 November 2025, para 77.

the planning regime, save where development approval is required under, for example, Part 10A of the Deemed Provisions.[563]

985 We agree with the WAPC's submission[564] that subdivisional conditions, which must be 'cleared' before the issue of titles, could not mandate the achievement of construction standards. Equally, we agree that the Structure Plan would not bind a permit authority under the *Building Act 2011* (WA),[565] and a notification on title would not impose a requirement on a lot owner.[566]

986 So much concerns the enforceability of the treatment under the planning regime. No such difficulties arise under the building regime because the National Construction Code requires compliance with AS3959 in bushfire prone areas.

987 As such, compliance with AS3959 forms part of the 'existing risk controls' that are assumed to occur for the 'inherent' risk assessment. Indeed, so much is acknowledged in section 3.4 of Appendix H.

988 In any event, Mr Rowe's evidence was that the difference the treatment makes would 'not [be] that great'.[567] We agree. As the Shire submitted, it is difficult to see how constructing the dwellings which are at the lowest risk (i.e. those within a BAL-Low rated area) to a higher standard can justify any, or any material, reduction in the risk profile for the Structure Plan.[568]

Community Bushfire Preparedness

989 Section 7.7 of Appendix H speaks of a resident information package being provided to 'all landowners upon purchase of their lot'.

990 There is no evidence as to whether or how such information will differ from the 'public education initiatives' noted in section 3.4 as an 'existing risk control'. As such, we do not accept that this 'treatment' can be relied upon to reduce the bushfire risk in the Residual scenario.

[563] See, in particular, cl 78E(1). The provisions of a Local Development Plan might inform the decision maker if a development approval is required, but it otherwise would not bind a landowner.
[564] Respondent's Outline, para 587.
[565] Respondent's Outline, para 589.
[566] Respondent's Outline, para 590.
[567] ts 69, 6 October 2025.
[568] Shire's Outline, para 92.

Telecommunications

991 In addition to those 'treatments' listed in section 7 of Appendix H, Satterley refers to and relies upon 'additional measures that have been proposed in response to the evidence in this matter and that can be incorporated into the Structure Plan by way of modification'.[569]

992 That is, there are certain matters that do not form part of Appendix H, or the Structure Plan more broadly, which Satterley now says ought to be considered as supporting a conclusion that the bushfire risk is acceptable or, perhaps more accurately, might be considered as acceptable once its impact has been assessed.

993 Satterley, in its closing submissions, refers to a suggested upgrade of telecommunications infrastructure.[570]

994 Both Mr Rowe[571] and Mr Cole[572] referred to such a proposal in their evidence at the hearing, although neither of them referred to it in their written evidence and, as noted, such a proposal does not appear anywhere in the Structure Plan, whether the BMP or otherwise.[573]

995 The evidence of the lay witnesses included difficulties with telecommunications,[574] as did that of Mr Panickar.[575]

996 As such, we agree that improvements to the telecommunications infrastructure may improve bushfire safety, but that agreement is subject to significant caveats.

997 First, there was no evidence as to what improvements to telecommunications are possible and whether a private entity such as Satterley might be able to facilitate such improvements.

998 Second, the evidence included the risk of damage to telecommunications infrastructure from bushfire.

999 In any event, as this suggested improvement was not included in Appendix H, its impact on bushfire risk has not been assessed and it cannot, therefore, be said with any confidence that, whether alone or in combination, it would reduce bushfire risk to an acceptable level.

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[569] Applicant's Outline, para 260.
[570] Applicant's Outline, para 261.
[571] ts 38, 6 October 2025.
[572] ts 75 - 76, 21 October 2025.
[573] ts 38, 6 October 2025.
[574] ts 223, 232, 243, 268 - 269, 16 September 2025.
[575] Exhibit 37, Witness Statement of Daniel Suresh Panickar, para 45(d).

Conclusion as to 'Acceptability' of the Structure Plan

1000 For the above reasons, we find that the risk assessment contained in Appendix H of the BMP, which Satterley relies upon to demonstrate that its 'outcomes-based approach' satisfies Element 1; Location of the Guidelines, does not achieve its intended purpose.

1001 That is, it does not demonstrate that the bushfire risk, should the Site be developed pursuant to the Structure Plan, would be acceptable.

Issue B4: Whether the APZ's proposed in the Structure Plan are of sufficient size and appropriately located?

1002 The Acceptable Solutions to Element 2: Siting and Design to Section 5 of the Guidelines address, among other things, the APZ requirements relevant to this issue.

1003 Acceptable Solution A2.1 requires that each proposed lot 'contains a sufficient development site that can achieve a radiant heat impact not exceeding 29 kW/m^2 (BAL-29)'.

1004 Acceptable Solution A2.2 addresses APZ requirements where a development site cannot be wholly located within an area with a radiant heat impact not exceeding BAL-29 in its predevelopment state. In these circumstances an indicative APZ is to be provided which meets three requirements which it is not necessary to describe.[576]

1005 Acceptable Solution A2.3 addresses clearing of native vegetation and requires that a structure plan avoids, or, where unavoidable minimises, the clearing of native vegetation. This aspect is a source of some tension in this case and we address it at Issue C3.

1006 The WAPC accepts that the evidence of each of the bushfire experts is such that compliance with Element 2: Siting and Design is 'capable of being demonstrated subject to some modifications to the Structure Plan'.[577]

1007 Having had regard to the relevant evidence of Messrs Panickar, Rowe and McMahon, we agree.[578] Mr Parker raised relevant concerns in the Expert Conferral Statement however, under cross-examination, he accepted that with modification to the Structure Plan, Element 2 can

[576] Exhibit 3.6, pages 41 - 42.
[577] Respondent's Outline, para 611.
[578] Exhibit 46, Expert Conferral Statement - Bushfire Planning, para 33 and ts 95 - 98, 7 October 2025.

be satisfied.[579] Mr Kuchel and Dr Strahan acknowledge this aspect is beyond their expertise.[580]

1008 We are therefore satisfied, and find, that subject to the modifications identified by the bushfire experts, the APZ's in the Structure Plan can be of sufficient size and appropriately located.

1009 We are also satisfied that the APZ's required to enable Stage 1 of the Structure Plan, as shown in Exhibit 48, can be achieved.

1010 The evidence of the bushfire experts (Messrs Panickar,[581] Rowe[582] and Parker[583]) is that the 100 metre wide staging buffers align with the requirements of AS3959 and achieve BAL-Low. Mr McMahon and Dr Strahan did not raise concerns with the proposed staging buffers.

Issue B6: Whether, having regard to the precautionary principle, refusal to approve the Structure Plan is warranted given the bushfire risks associated with development pursuant to the Structure Plan

1011 Clause 6.11 of SPP 3.7 2015 stated that:

> Where a landowner/proponent has not satisfactorily demonstrated that the relevant policy measures have been addressed, responsible decision-makers should apply the precautionary principle to all strategic planning proposals, subdivision and development applications in designated bushfire prone areas. …

1012 However, the current (2024) version of SPP 3.7 makes no reference to the precautionary principle.

1013 The Guidelines, however, include it at cl 1.4 as a 'guiding principle'. It provides that:

> Based on the application of the precautionary principle, a strategic planning proposal, subdivision or development applications should not be supported where -
>
> - it does not satisfy the bushfire protection criteria through compliance with the acceptable solutions and/ or an outcomes based approach;
>
> - there is inadequate known or available information; and

[579] ts 98, 7 October 2025.
[580] Exhibit 46, Expert Conferral Statement - Bushfire Planning, para 33.
[581] ts 60, 7 October 2025.
[582] ts 93, 7 October 2025.
[583] ts 9, 8 October 2025.

- an understanding of the consequences of a bushfire has not been available by the proponent to the decision-maker.

1014 Satterley's closing submissions were to the effect that the precautionary principle has no application in this case. It seeks to limit the application of the principle to cases of environmental risk[584] and submits that the Structure Plan should be assessed against the compliance requirements of the Guidelines alone.

1015 Given the findings we have already made, there is no need for an extensive consideration of this issue. Nonetheless, we make the following six observations.

1016 First, we note the Tribunal's previous findings in ***WA Developments Pty Ltd*** in which it was held that, by the reference in s 3(c) of the PD Act to the 'sustainable use and development of land in the State' as a purpose of that Act, the precautionary principle forms part of the planning framework in this State.[585] Further, as the Tribunal noted in ***Wattleup***, the precautionary principle is also implicitly recognised in SPP 1.[586]

1017 Second, we note that the principle discussed in those cases was concerned with the risk of serious or irreversible environmental damage, which is not the issue with which the Guidelines is concerned.

1018 As this Tribunal has previously noted, in the absence of a definition of the precautionary principal in the relevant policy document which purports to adopt or apply the principle, there is a risk of uncertainty as to what is meant by the term.[587]

1019 Third, even where the principle has no direct application, it can serve as an analogy for the taking of a 'cautious' approach.[588] The Shire's closing submissions endorsed this approach.[589]

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[584] Applicant's Outline, paras 416 - 417.
[585] ***WA Developments Pty Ltd and Western Australian Planning Commission*** [2008] WASAT 260, [37] - [41].
[586] ***Wattleup Road Development Company Pty Ltd and Western Australian Planning Commission*** [2011] WASAT 160, [47].
[587] ***Paspaley Pearling Company Pty Ltd and Delegate of The Chief Executive Officer of The Department of Primary Industries and Regional Development [No 2]*** [2024] WASAT 108; (2024) 116 SR (WA) 1 [189] - [212].
[588] ***Bridgetown/Greenbushes Friends of the Forest Inc v Department of Conservation and Land Management*** (1997) 18 WAR 102, 118 - 119.
[589] Shire's Outlines, para 97.

1020 Fourth, we note the ambiguity implicit in the relevant guiding principle set out in cl 1.4 of the Guidelines quoted at para [1013] above.

1021 In our view, the 'and' which comes at the end of the second dot point of cl 1.4 should not be seen as conjunctive. That is, the clause should not be read as requiring all three of the dot points to be satisfied in order to warrant a refusal to approve the Structure Plan.

1022 To construe it in that way would, we find, be inconsistent with the rest of the Guidelines which are to the effect that a proposal which (merely) fails to satisfy the bushfire protection criteria (i.e. the first of the three dot points) should not be supported.

1023 Accordingly, the 'and' should be read as disjunctive. That is, the clause should be read as warranting refusal where any one of the three dot points is satisfied. In that way, a lack of information (2nd dot point) or a lack of understanding of the consequences of a bushfire on the proposed development (3rd dot point) would warrant refusal. Such an approach is consistent with the traditional understanding of the precautionary principle as it applies to environmental protection.

1024 Fifth, we disagree with the submission made by SPH to the effect that the precautionary principle requires that Satterley must demonstrate that development pursuant to the Structure Plan could survive a 'reasonable worst-case' scenario.[590]

1025 The effect of the precautionary principle is to urge caution in the absence of a lack of evidence as to the likely effect of a proposal - where there is a risk of serious or irreversible harm, it encourages the decision-maker to err on the side of protecting against that risk, rather than by approving a proposal on the basis that the evidence does not positively demonstrate that such harm will occur.

1026 Such an approach falls well short of insisting that certain standards of proof should be met before an approval will be granted.

1027 Finally, and consistent with the foregoing, as we have previously found that the Structure Plan does not satisfy the bushfire protection criteria through compliance with the acceptable solution or the outcomes-based approach for Element 1, the refusal to approve the Structure Plan is consistent with cl 1.4.

[590] SPH Outline, para 26.

C: Environment and open space

Issue C1: Whether the environmental outcomes proposed by the creation of the 'conservation reserves' are likely to be achieved, given the uncertainty as to who will own and/or manage the reserves

1028 The Structure Plan contemplates the creation of three conservation reserves[591] - two of which are located either side of Village 1 and which occupy much of the northern third of the Site and the third of which is located to the east of Village 2 and to the south of Village 3, on the southern boundary of the Site.

1029 In its closing submissions, Satterley acknowledged that no government body has agreed to assume management responsibility for the conservation reserves,[592] which reflects evidence given by Mr Newsome.[593]

1030 However, it submits, in effect, that there is plenty of time for such agreement to be reached, because condition 23 of the approval under the EPBC Act requires it (i.e. Satterley) to manage the proposed conservation reserves in accordance with the CAMP for twenty years.[594]

1031 The WAPC points to the Shire's submission that it lacks the capacity to take on the management of the conservation reserves[595] and submits that this lack of certainty 'adds to the uncertainty surrounding the implementation of the Structure Plan and the ability to achieve its intended outcomes'.[596]

1032 The Shire's submissions are more forcefully put. It submits that the obligations of management of the conservation reserves are 'significant' and include 'weed control, feral animal management, access controls, revegetation/rehabilitation, prescribed burning and maintenance of zones to low threat vegetation'. Given that onerous burden, it submits that 'it is important to be clear at this stage that a suitable manager can be found. A failure to identify a suitable manager puts the required outcomes at risk'.[597]

[591] Applicant's Outline, para 444.
[592] Applicant's Outline, para 445.
[593] ts 20 - 21, 23 September 2025.
[594] Applicant's Outline, para 446. The EPBC Act approval is located at Exhibit 3.3, page 1324.
[595] Respondent's Outline, para 69.
[596] Respondent's Outline, para 670.
[597] Shire's Amended Opening Submissions, para 122.

1033 The Shire submits that it lacks the capacity to take on the management of the conservation areas which, it submits, local governments do not usually manage.[598]

1034 We accept that the absence of agreement creates a degree of uncertainty as to who will ultimately manage the Conservation Reserves. However, in our view that uncertainty is not such as to require us to find that the environmental outcomes proposed by the creation of the conservation reserves are unlikely to be achieved, such that approval of the Structure Plan should be refused.

1035 Plainly, however, a degree of certainty as to who will manage the reserves is, at the very least, desirable before a decision is made as to whether the Structure Plan should be approved, or approval refused. Given that we will refuse approval of the Structure Plan on other grounds, there is more time for agreement to be reached and we encourage all involved to work towards an agreed position ahead of the submission of any future structure plan.

Issue C2: Whether, given the environmental constraints of the Site and the extent of the proposed conservation reserves, the Structure Plan provides for sufficient active POS

1036 In its closing submissions, Satterley accurately notes that this Issue is concerned with the adequacy of *active* POS.[599]

1037 It then submits that the focus of the issue is the Shire's desire for a 'senior sized oval' and that, 'in order to take this issue off the table' it is prepared to accept a modification to the Structure Plan to provide for a senior sized oval.[600]

1038 That concession was somewhat consistent with the evidence of Mr Cole at the hearing, who accepted that such an oval *could* be provided, although he did not go so far as to accept that it *should*.[601]

1039 Both Mr Stewart[602] and Mr Shaw[603] were of the view that a senior sized oval should be provided.

[598] Shire's Amended Opening Submissions, para 123.
[599] Applicant's Outline, para 458.
[600] Applicant's Outline, paras 460 - 461.
[601] ts 84 - 85, 21 October 2025.
[602] Exhibit 62, Witness Statement of Alan Alexander Stewart, paras 214 - 226; ts, 84, 87 - 88, 21 October 2025.
[603] Exhibit 63, Statement of Ryan James Shaw, para 267; ts 89, 21 October 2025.

1040 Satterley submitted that no one had identified anything within the planning framework that required a senior sized oval.[604] That is so, although as Mr Stewart noted in his evidence at the hearing,[605] cl 3.1.3 of the WAPC's *Development Control Policy 2.3 - Public Open Space in Residential Areas* (**DC 2.3**) provides that the WAPC:

> favours an overall balance between incidental open space, readily accessible to all residents, and recreational open space in larger units suitable for active leisure pursuits. In this regard it will seek the advice and comment of the relevant local government. …[606]

1041 Considering the above, we accept that the Shire, through its 'Recreation Facilities Informing Strategy' in 2019, identified that a new oval would be required of approximately 4.5 hectares which is the area needed to accommodate a senior sized oval.[607] Therefore, we accept the Shire's position that, in a proposed development of this size, it is reasonable to expect the provision of an oval of such a size.

1042 The other matter addressed in closing submissions is the question whether land zoned Rural under the MRS could be utilised for POS.

1043 While not strictly relevant to the question posed by the Issue, it is convenient to consider it here.

1044 In short, Mr Stewart takes the view that the inclusion of land zoned Rural under the MRS should not be included in any calculation of POS. He refers to DC 2.3 and to cl 22(a) of the MRS in that regard and says that if one excludes the Rural zoned POS, the proposed contribution of POS under the Structure Plan is only 4.5%.[608]

1045 Mr Shaw and Mr Cole both took a more pragmatic approach.

1046 Mr Shaw expressed the view that the POS calculations should be calculated upon the Site as a whole, rather than only that part of it zoned Urban under the MRS. He did so by reference to its 'development' zoning under LPS 4. In doing so, he accepted that the approach was 'unorthodox'.[609] Adopting that approach, he recalculated the proposed POS and found it sufficient.

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[604] Applicant's Outline, para 461.
[605] ts 88, 21 October 2025.
[606] Exhibit 3.6, page 168.
[607] Exhibit 62, Witness Statement of Alan Alexander Stewart, paras 216 and 222.
[608] Exhibit 62, Witness Statement of Alan Alexander Stewart, paras 195 and 196.
[609] Exhibit 63, Statement of Ryan James Shaw, para 247.

1047 Mr Cole accepted Mr Shaw's approach, agreeing that his calculations demonstrated that the Structure Plan would provide sufficient POS.[610]

1048 Given the Site's unusual combination of zonings, we find Mr Shaw's pragmatic approach to be acceptable, despite its unorthodoxy.

1049 Nonetheless, we should not be seen as endorsing such an approach, regardless of context, for a future structure plan. Such an approach, if repeated, will need to be considered in light of all of the facts and circumstances at the time.

Issue C3: Whether, given the scale of development proposed and having regard to the State Planning Framework, the Structure Plan as a whole strikes an appropriate balance between managing bushfire risk and the protection of the environment

1050 As previously noted, Mr Newsome was the only expert called to give environmental evidence. In answer to a direct question, he answered that he thought the correct balance had been struck.[611] However, he subsequently agreed to a question in cross-examination, that he had not carried out a comprehensive analysis of the proposal against the planning framework.[612]

1051 Nonetheless, we find his evidence that the State EPA has chosen not to assess the proposed development of the Site on 'multiple' occasions to be persuasive in this regard.[613] Further, to the extent that the development of the Site pursuant to the Structure Plan concerns matters of national environmental significance, approval has been obtained under the EPBC Act.

1052 As previously noted, Mr Newsome agreed that there was a tension between the maintenance of vegetation in a low-threat state and the enhancement of vegetation in certain areas of the Site, particularly along the north-south creek line that runs along the western side of Village 2.[614]

1053 We have also previously noted that the WAPC expressly submitted that it 'does not contend' that it is impossible to achieve

[610] ts 90, 21 October 2025.
[611] ts 18, 23 September 2025.
[612] ts 34, 23 September 2025.
[613] ts 14, 23 September 2025.
[614] ts 28, 23 September 2025.

relevant environmental objectives if the low-threat state is achieved. Rather, it emphasised the need for 'careful design and careful planning'.

1054 We agree. That is, we are satisfied that the environmental objectives of both SPP 3.7 (Policy Objective 5.4) as well as more general objectives associated with SPP 2 and SPP 2.8 can be met, notwithstanding the need for the bushfire threat to be managed by the maintenance of certain areas in a low-threat state.

1055 In that regard, we rely on the evidence referred to above, regarding the approach taken by relevant environmental regulators, as well as the evidence of each of the town planners which, in essence, accepted an appropriate balance had been struck.[615]

1056 Having said that, we are conscious of the tension referred to previously, between the exigencies of bushfire management and 'environmental' policy objectives, particularly, but not only, those concerned with the revegetation of riparian corridors.

1057 In our view, that tension would likely be best addressed in a future structure plan by way of a Landscape Management Plan (**LMP**).

1058 The issue of the need for, or suitability of an LMP as part of the Structure Plan was the subject of considerable evidence.[616] Despite that, the issue of an LMP was the subject of only limited comment in closing submissions,[617] although Satterley's second proposed modification was for an LMP to be included.[618]

1059 An LMP would, if the result of careful consideration and consultation, explore and explain the resolution, to the extent possible, of the tension between the need to remove or manage vegetation to achieve an acceptable bushfire risk and those policies that encourage the retention of native vegetation.

[615] Exhibit 61, Witness Statement of Duane John Cole, para 128; Exhibit 62, Witness Statement of Alan Alexander Stewart, paras 227 - 228; Exhibit 63, Witness Statement of Ryan James Shaw, para 278.
[616] ***Satterley Property Group Pty Ltd and Western Australian Planning Commission*** [2026] WASAT 39, [28] - [35].
[617] Respondent's Outline, para 570.
[618] Applicant's Outline, Annexure - *Applicant's Consolidated List of Proposed Modifications*, item 2.

D: If refusal of the Structure Plan is not warranted, what modifications are required prior to approval of the Structure Plan

Issue D1: If, contrary to the Respondent's contentions, the Tribunal determines that refusal of the Structure Plan is not warranted, what modifications are to be made prior to resubmission to the respondent for approval?

1060 Given our findings to the effect that we will refuse to approve the Structure Plan, it is unnecessary to address the proposed modifications. Indeed, to do so would only confuse matters and we will therefore refrain from doing so.

1061 We will also refrain from expressing our views on the question raised by the Shire[619] as to whether the power in cl 22(1)(b) of the Deemed Provisions to require modifications to 'the plan' includes the power to require modifications to annexures to the plan - that is, the scope or extent of the term 'plan' in that clause. The question should, it seems to us, wait to be decided in the context of a dispute with real-world consequences, rather than the present, somewhat hypothetical scenario.

Conclusion

1062 In his evidence, Mr Cole spoke of an 'imperative' to 'deliver housing for our expanding community…'.[620]

1063 We do not doubt that there is a 'housing crisis', although both its causes and any solutions appear multi-faceted.

1064 But that 'imperative' must, in this case, be addressed by assessing the Structure Plan against the provisions of relevant policy, particularly SPP 3.7 and the Guidelines.

1065 Section 2 of SPP 3.7 provides that the preservation of life and the management of bushfire impact are 'paramount' and, as we have been at pains to reiterate, SPP 3.7 and the Guidelines require the management of bushfire risk, where it cannot be avoided altogether, to an acceptable level.

1066 For the foregoing reasons, we find that the Structure Plan does not demonstrate that that can be done on the Site.

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[619] Shire's Outline, paras 135 - 139. See, also Applicant's Outline, paras 8 - 25.
[620] ts 66, 21 October 2025.

1067 Indeed, in our view the Structure Plan proceeds on the basis of such basic flaws that it cannot be 'saved' by the making of modifications.

1068 Accordingly, we will make orders that approval of the Structure Plan is refused.

I certify that the preceding paragraph(s) comprise the reasons for decision of the State Administrative Tribunal.

DM
Associate

23 SEPTEMBER 2026